EXPERIENCES OF UPWARD BOUND ALUMNI:
INFLUENCE OF UPWARD BOUND ON STUDENT PERSISTENCE

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INFLUENCE OF UPWARD BOUND ON STUDENT PERSISTENCE

A Thesis

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Date: 8-4-09

Department of Educational Leadership and Policy Studies
Abstract

EXPERIENCES OF UPWARD BOUND ALUMNI:
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Brief Literature Review

“With major strides in access to postsecondary education…it is tempting to assume that such progress has erased disparities in college enrollment and completion” (Engle & Tinto, 2008, p. 2). However, disparities still loom. For low-income, first-generation students, only 34% will earn degrees from public four-year institutions compared to 66% of their peers (Engle & Tinto, 2008). Yet, the plight towards educational attainment is often halted far before ever entering college.

Low-income, first generation students are more likely to fall out of the academic pipeline due to inequality of educational resources, low educational aspirations, and poor academic preparation. (Choy, 2001; Gandara, 2001; Hsiao, 1992; Saenz, Hurtado, Barrera, Wolf, & Yeung, 2007). College preparation programs at the federal, state and local level provide support often not readily available (Hagedorn & Tierney, 2002).

Statement of the Problem

This study explored Upward Bound and the impact the program has on college persistence. The following research questions were addressed:
1. What has been the impact of Upward Bound on student persistence at UC Davis?

2. How can Upward Bound be enhanced to improve the persistence of low-income, first-generation students within the university?

3. What components of Upward Bound create an environment conducive for developing educational resiliency?

Methodology

A mixed method approach was used for this study and purposive sampling was used to select participants. A ten-question survey was emailed to participants, and the researcher conducted individual, structured interviews to reinforce findings allow for the emergence of new information.

Conclusions and Recommendations

For the participants in this study, Upward Bound had a positive impact on student persistence in the areas of academic preparation, adjustment to the university setting and persistence. Furthermore, positive student-staff relationships, a message of high expectations, and opportunities for leadership engagement created environments conducive for developing educational resilience. Most notably, the summer program had a lasting impact on student persistence, as the program prepared students for college life, instilled strong work ethics, and challenged students to think critically.

Edmund W. Lee, Ed. D.
Committee Chair

August 4, 2009
DEDICATION

This thesis is dedicated to my husband, Jose, and my children, Gene and Amaya.

- Jose, you have shown nothing but unwavering support throughout this entire process. Without your words of encouragement, your flexibility and understanding, and your acceptance of the many, many extra roles and long nights this would not have been possible. Thank you for allowing me the time and space to move forward in my educational endeavor!

- Gene and Amaya, you quickly had to learn what it meant for mama to be going to school. Thank you for your patience and understanding during the many days and nights that I was not home, unable to attend school activities and games, and unable to put you to bed at night. Despite the hard times of being away from each other, I hope that I am an example to you of the importance of education and through me you see that one day you can achieve your educational aspirations!

I would also like to dedicate this thesis to all my family and friends who have provided support throughout this process.

- Mom, through your own educational journey you have shown me that you can go to school and raise two kids! Thank you for the many times you took care of Gene and Amaya so that I could attend class, meet with study groups, or just stay late at work to get things done. I know this was something that was not always a luxury during your own educational process, and I do appreciate all the extra time spent with the kids.

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• Franchesca, in your own way you have supported me and encouraged me along in this process. Thank you also for being there when I needed someone to take care of Gene and Amaya.

• Mari and Manuelito, I hope that in some way my accomplishment has motivated you to continue to strive high to meet all your educational goals!

• Manuel, you have always shown me so much love and support. I appreciate your interest and enthusiasm in my education!

• To my family and friends, thank you so much for always asking me about school and how I was doing. Your care and interest motivated me along when I needed it the most!
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- Dr. Carlos Nevarez, thank you for your hard work and dedication in creating a program so that I could continue to learn and grow in the field of educational leadership! Thank you also for your time and critical eye during the last steps of my culminating experience.

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- Michele Dyke, Candace McGee, and Candice Palaspas, thank you for your support and encouragement. Our Saturday meetings got me on track and pushed me to see this thesis to completion!

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Chapter 1

INTRODUCTION

Background

Over the last thirty-five years, the student population has changed from a predominately White male undergraduate to include students from various genders, ethnic, and socioeconomic backgrounds (Pryor, Hurtado, Saenz, Santos, & Korn, 2007; Snyder, Dillow, & Hoffman, 2008). Women now hold the majority of seats of college freshman and students from other racial and ethnic backgrounds have shown an overall increased representation on college campuses (Pryor et al., 2007). The demographic shifts of colleges represent demographic shifts in the U.S. population, changes in admission criteria, and variables in access and opportunity for various groups (Pryor et al., 2007).

Asian American students in particular, have nearly doubled in representation each decade representing 0.6% of full-time freshman in 1971 to 8.6% in 2006. As well Latino students enrolling in baccalaureate institutions has increased, despite the likelihood of this group to begin higher education at a community college (Pryor et al., 2007). African American students, while showing slight declines over time, have inevitably shown increased representation when compared to 1971 statistics (Pryor et al., 2007). Table 1 demonstrates the demographic shifts amongst first-time college freshman.
Table 1
Demographic Shifts in Freshman Enrollment

<table>
<thead>
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<th>Racial/Ethnic Groups</th>
<th>Percent In...</th>
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<tbody>
<tr>
<td>White/Caucasian</td>
<td>90.9</td>
</tr>
<tr>
<td>African American</td>
<td>7.5</td>
</tr>
<tr>
<td>American Indian</td>
<td>0.9</td>
</tr>
<tr>
<td>Asian</td>
<td>0.6</td>
</tr>
<tr>
<td>American/Asian</td>
<td></td>
</tr>
<tr>
<td>Latina/o</td>
<td>0.6</td>
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</table>

With the increase in diversity of the undergraduate population, outreach and retention efforts must take into account the unique needs and experiences of students from low-income and first-generation backgrounds (Pascarella, Pierson, Wolniak, & Terezini, 2004).

From the onset, students whose parents did not attend college have lower educational expectations. Ninety-one percent of eighth grade students whose parents obtained a bachelor’s degree desired to attend college as compared to only 55% of first-generation college bound students (Choy, 2001). Low educational aspirations can be attributed to the student’s environment. For some students, attending college after high school is expected and is the next logical step in their educational journey. For others, high school is the avenue to prepare for college and solidify their goals. Still for some
students, deciding to attend college does not become firm until late in their high school career. At this point it is often too late in the process to adequately prepare (Choy, 2001). Unfortunately, first-generation college bound students more often than not fall into the latter category. In addition, low-income, first-generation college bound students are more likely to take time off after high school graduation, attend a two-year university, enroll in school only part-time, and work full-time, all factors which impact lower baccalaureate attainment rates (Tym, McMillion, Barone, & Webster, 2004; Choy, 2001; Warburton, Bugarin, & Nunez, 2001). Designed to raise the level of awareness, expectations, and requirements for college eligibility, the goal of college preparation programs is to provide fundamental support and preparation for students from low-income, first-generation backgrounds to enter higher education institutions (Swail & Perna, 2002).

Students exposed to higher education opportunities early in their educational career aspire to attend college, understand the requirements and process of attending a university, and are more aware of the transition from high school to college (Tym et al., 2004). On the other hand, low-income, first-generation college bound students have limited information and support to prepare for admission, enrollment, and completion at a higher education institution. Research indicated that low-income and first-generation college bound students are less likely to be prepared for college, less knowledgeable of college application processes and financial aid opportunities, and have more difficulty in acclimating to the university setting than their student counterparts whose parents attended college (Choy, 2001; Thayer, 2000; Tym et al., 2004; Vargas, 2004). College preparation programs at the federal, state, and local level provide fundamental support to
prepare students for access and success in postsecondary education (Swail & Perna, 2002).

According to Gullatt and Jan (2003), "outreach efforts that increase students aspirations, expose them to the rigors of college at an early age, and provide interventions to improve academic performance have been instrumental in revealing the barriers to equitable opportunity for higher education" (p. 57). Upward Bound, a federally-funded program, provides college admissions information and assistance, motivational activities and mentoring, academic enrichment and support and counseling and advising services to low-income, first-generation students (Gullatt & Jan, 2003). Students participating in Upward Bound are four times more likely to earn an undergraduate degree than other similar students who have not participated in a TRIO program (Fields, 2001).

Upward Bound is one of the original Federal TRIO Programs enacted under the Higher Education Act of 1965. The program, along with Educational Talent Search and Student Support Services created a seamless support system for students from middle school to high school to college. Today, with the addition of the Upward Bound Math Science Program, Upward Bound Veterans Program, Ronald E. McNair Post-baccalaureate Achievement Program, and the Educational Opportunity Centers, Federal TRIO Programs provide support for students and adults from middle school to postgraduate education. Currently there are over 960 Upward Bound programs serving 65,000 students. The primary goal of Upward Bound is to increase the rate at which participants complete secondary education and enroll in and graduate from institutions of postsecondary education (U.S. Department of Education [DOE], 2008).
Upward Bound programs, funded on four- to five-year grant cycles, are evaluated based on four mandated objectives. For each objective, project directors determine the percentage of students who will meet the objective goal. The objectives are:

1. **Academic Improvement on Standardized Tests:** For the designated percentage of all UB participants, who at the time of entrance into the project had an expected high school graduation date during the school year, will have achieved at the proficient level during high school on state assessments in reading/language arts and math.

2. **Project Retention:** For the designated percentage of 9th, 10th, and 11th grade project participants served during each school year will continue to participate in the Upward Bound Project during the next school year.

3. **Postsecondary Enrollment:** For the designated percentage of all UB participants, who at the time of entrance into the project had an expected graduation date during the school year, will enroll in a program of postsecondary education by the fall term immediately following the expected graduation date from high school.

4. **Postsecondary Persistence:** For the designated percentage of UB participants who enrolled in a program of postsecondary education during the fall term immediately following high school graduation will be enrolled for the fall term the second academic year.

Under the current grant cycle, Objective 4 requires Upward Bound programs to monitor and record the number of Upward Bound alumni entering their second year of
postsecondary education. Generally Upward Bound services are limited to a participant’s high school years, assisting students with the college application and preparation process. Given the mandate to track postsecondary persistence, Upward Bound must not only provide academic enrichment and skill building opportunities that enable participants to enroll in higher education institutions but equip them with the tools to ensure college persistence as well.

Statement of the Problem

Higher education reaps benefits for individuals, families, and society. While some college experience adds value, attainment of a baccalaureate degree creates immense opportunities for low-income, first-generation students (Institute for Higher Education Policy [IHEP], 2005). With the potential to increase their earning potential, a bachelor’s degree gives many low-income, first-generation individuals the ability to overcome their economic circumstance (Engle & Tinto, 2008). Furthermore, a bachelor’s degree creates big returns for society reducing the cost of poverty, unemployment, crime, and health services (Baum & Ma, 2007).

Over the past 35 years the overall enrollment in United States colleges and universities has grown, as has the enrollment of low-income, first-generation students (Engle & Tinto, 2008). Unfortunately in the case of low-income, first-generation students enrollment does not always lead to graduation. From 1970 – 2005, the degree attainment rate of high-income students increased from 40% to 73% while low-income, first-
generation students saw only a 6 percentage point increase from 6% to 12% during this same time period (Engle & Tinto, 2008).

With changes in the demographic make-up of the United States and an increasing number of low-income, minority youth, and children living in poverty, degree attainment rates are expected to decline as these groups historically have been the least likely to obtain a degree (Kelly, 2005). The United States would fare well to consider the needs of low-income, minority youth as the global market becomes increasingly competitive (Engle & Tinto, 2008). "Simply put, it is in our shared national interest to act now to increase the number of students who not only enter college, but more importantly earn their degrees" (Engle & Tinto, 2008, p. 5). In this regard, action must take into account the unique needs of low-income, first-generation students (Pascarella et al., 2004).

Low-income, first-generation students face distinct disadvantages in entering postsecondary institutions and remaining enrolled until graduation (Choy, 2001). The first set of challenges begins on the path to college, which generally requires five steps: (1) aspiring to earn a degree, (2) becoming academically prepared, (3) taking college entrance exams, (4) completing the application process, and (5) gaining admission to the university (Choy, Horn, Nunez, & Chen, 2000). Students from educationally and economically disadvantaged backgrounds fall short in each of these areas with low educational aspirations, poor academic preparation, and minimal familial support in navigating the college application process (Choy, 2001; Hsiao, 1992; Swail, 2000). Once students enter the university, persistence to the second year and ultimately graduation is impacted by parent’s educational attainment levels, educational expectations, initial
commitment, and in-college experiences, amongst other factors (Choy, 2001; Lohfink & Paulsen, 2005; Nunez & Cuccaro-Alamin, 1998). College preparation programs, designed to help educationally and economically disadvantaged students prepare for access and success in postsecondary education, in part, provide information, resources, and support not readily available in the homes and communities of low-income, first-generation students (McCants, 2004). Furthermore, college preparation programs have the potential of developing educational resiliency in students; a theory based on the notion that despite risk factors caused by environmental conditions and experiences, children are able to achieve educational success (Wang, Haertel, & Walberg, 1997).

Educational resilience is an ecological phenomenon developed by interventions which enhance learning and develop competencies that protect against environmental adversities (Brooks, 2006; Wang, Haertel, & Walberg, 1997). Researchers identified three key protective factors fostered by families, schools, and communities that develop resiliency in youth: (1) care and support, (2) high expectations, and (3) opportunities for participation (Bernard, 1991, 1993; Brooks, 2006; Wang, Haertel, & Walberg, 1997). Additionally, Herbert (1999) found other indicators of resiliency including extracurricular activities, Saturday and summer enrichment opportunities, challenging educational experiences, and a network of achieving peers. In environments where protective factors thrive, youth demonstrate resilient attributes including social competence, problem-solving skills, autonomy, and a sense of purpose (Bernard, 1991, 1993; Brooks, 2006; Bryan, 2005; Wang, Haertel, & Walberg, 1997).
While the literature on educational resiliency has mainly focused on the family, school and community, college preparation programs potentially provide much of the same environments necessary to develop resiliency in youth. Consequently supplemental services provided by college preparation programs could greatly impact the number of students entering and graduating from institutions of higher education by providing the tools needed to navigate through the college preparation process and developing the personal qualities necessary to succeed in the college environment. Limited research has been conducted on specific components of college preparation programs linked to college access and persistence (Gullatt & Jan, 2003; Lohfink & Paulsen, 2005).

This study will explore one college preparation program, Upward Bound, and the impact the program has on college persistence. In Fiscal Year 2009, Upward Bound funding allocations totaled $313,300,000, with an average award of $324,786 for the 964 programs. The average cost per participant was $4,804 (DOE, 2008). The program has been praised by some researchers as providing strategically timed intervention efforts and criticized by others as having no impact on student success (Gullatt & Jan, 2003; McElroy & Armesto, 1998). In any case, Upward Bound is designed to provide an avenue and system of support for students to successfully enroll and graduate from postsecondary institutions (DOE, 2008). To add to the research on Upward Bound specifically and college preparation programs generally, this study will explore the influence Upward Bound has on the persistence of Upward Bound students entering their second year at the University of California, Davis (UC Davis). The following research questions will be addressed:
1. What has been the impact of Upward Bound on student persistence at UC Davis?
   a. What Upward Bound services and activities best prepared students for the academic rigor of a university education?
   b. What Upward Bound services and activities assist students in becoming adjusted to the university environment?
   c. What Upward Bound services and activities contributed to the successful completion of the first year of study at UC Davis?

2. How can Upward Bound be enhanced to improve the persistence of low-income, first-generation students within the university?

3. What components of Upward Bound create an environment conducive for developing educational resiliency?

Definition of Terms

College Preparation Programs: Programs designed to assist underserved students prepare for, access and succeed in postsecondary education.

Continuing-Generation Student: Student where at least one parent has earned a baccalaureate degree.

First-Generation Student: A student where neither parent has earned a baccalaureate degree.

Low-Income Student: Students whose family is low-income. In this case, students of low-income students meet the federal low-income guidelines.
**Persistence**: Refers to the student's ability to proceed from year to year in a higher education institution.

**Upward Bound**: A Federal TRIO program serving low-income, first-generation college students with the goal of increasing the rate at which participants complete secondary education and enroll in and graduate from postsecondary institutions.

**Significance of the Study**

The findings of the study will contribute to the literature on low-income, first-generation college bound students. Currently the research for this population of students falls into three main categories, studies that compare demographic characteristics, secondary school preparation, college choice and expectations, studies that describe the students' transition from high school to college, and studies that focus on the persistence and graduation of low-income, first-generation college bound students (Pascarella, et al., 2004). In addition, studies that focus on college preparation services are limited in describing the scope in which specific services impact a student's enrollment and success in postsecondary institutions (Gullatt & Jan, 2003). This study links together two of the major categories, preparation and persistence, and seeks to understand which types of services are most beneficial for supporting low-income, first-generation students in postsecondary enrollment and completion. Additionally, this study explores the role of college preparation programs in developing educational resiliency in students.
Organization of the Remainder of the Study

Chapter 2 will discuss and review literature on the demographic landscape of higher education, the history and goals of college preparation programs, and the unique needs of low-income, first-generation college bound students. Chapter 3 will present the methodology and data collection utilized in this research. Chapter 4 will review the analysis of the findings and Chapter 5 will summarize the research and offer recommendations for future studies.
Chapter 2

REVIEW OF RELATED LITERATURE

Introduction

"With major strides in access to postsecondary education for all students in recent decades, it is tempting to assume that such progress has erased disparities in college enrollment and completion in the United States" (Engle & Tinto, 2008, p. 2). Approximately 24% of the undergraduate population is low-income, first-generation, signs of increasing access to higher education, but for this group the path to degree completion will be long and indirect (Engle & Tinto, 2008). Low-income, first-generation students are nearly four times more likely to leave college within the first year compared to their college counterparts. After six years, nearly half of low-income, first-generation students will leave without ever earning a degree, an 11% degree attainment rate; a stark contrast to the 55% of their more advantaged peers who will earn a degree (Engle & Tinto, 2008). The low rate of low-income, first-generation students earning a degree from four-year institutions specifically, contributes to the attainment gap. Only 34% and 43% of low-income, first-generation students earn degrees from public and private not-for-profit four-year institutions, in contrast to 66% and 80% of their peers (Engle & Tinto, 2008).

" Nearly half of all school children, the future college-going population, come from low-income families" (Engle & Tinto, 2008, p. 5). As a result of changing demographics, attention must be given to populations who have been previously
underrepresented in higher education, namely low-income, first-generation students (Engle & Tinto, 2008). To remain competitive in the global economy, the United States must be concerned over the disparities in access and success for low-income, first-generation (Engle & Tinto, 2008). For society, degree attainment provides tax revenue and reduces the burden on social services like unemployment and health benefits. On an individual level, attainment of a four-year degree increases earning capacity, community involvement, and the overall well being of the individuals and their families (Baum & Ma, 2007, IHEP, 2005). According to Engle and Tinto (2008), “improving postsecondary access and success among underrepresented populations, such as low-income first-generation students, is paramount” (p. 4).

This review of related literature will begin by describing the shift in demographics at higher education institutions and discuss the benefits of earning a baccalaureate degree. It will be followed by an overview of college preparation programs outlining key program goals and strategies for meeting the needs of educationally and economically disadvantaged students. The literature will document persistence issues among low-income, first-generation students and the role of college preparation programs in increasing educational success and discuss the establishment of Federal TRIO programs. Lastly, the literature will document the current research that describes the development of educational resiliency.
The Higher Education Landscape

Trends in enrollment data show students are increasingly applying and enrolling in institutions of higher education. Over the last three decades, increases in enrollment have occurred despite the relatively constant rate of high school graduates and overall decreases in the number of college-age adults (Hudson, 2002). Between 1985 and 1995, enrollment in degree-granting institutions increased by 16% (Snyder et al., 2008). Over the course of the following ten years from 1995-2005, enrollment increased 23% from 14.3 million students to 17.5 million students (Snyder et al., 2008). Overwhelmingly, increases in enrollment rates were fueled by the increase in female enrollment. Female enrollment rose 27% as compared to 18% for the male student population (Snyder et al., 2008).

Along with differences in gender distribution, the face of the American student has changed since the 1970s as well. In 1970 the average college student was a White male, under the age of 24, attending school full-time (Hudson, 2002). Reports by the Higher Education Research Institute show that 90.9% of first-time freshman were White (Pryor et al., 2007). Today, the average college student fits much of the same characteristics in enrollment status and age, but is female and attends school with a much diverse student body. White freshman enrollment has decreased to 76.5%, an indicator of shifts in U.S. demographics and increases in enrollment of students from other racial and ethnic backgrounds (Hudson, 2002; Pryor et al., 2007). Enrollment of minority populations doubled from 15% in 1976 to 31% in 2005.
While some groups saw an increase in enrollment relative to the increase in the college-going population, enrollment for other groups was fueled by an increased number of individuals at the college-going age (Hudson, 2002). For Latino students, the latter is true. Latino student enrollment increased from 0.6% in 1971 to 7.3% in 2006 (Pryor et al., 2007). However, shifts in the demographic distribution of the population accounts for much of this increase. For the Asian and Asian American student population, enrollment nearly doubled each decade amounting to a 0.6% enrollment rate in 1971 to 8.6% rate in 2006 (Pryor et al., 2007). Today, African, African American, and Black students are entering the university at higher rates than their 1971 counterparts. Yet, in the years from 1980-2006, rates decreased from 12.1% to 10.5%, a reflection of U.S. population shifts, changes in college admissions criteria, and other access variables (Pryor et al., 2007). Nonetheless, colleges enrolled more Asian and Pacific Islander students, more Hispanic students, and more Black students overall during the thirty year time period (Snyder et al., 2008).

In addition to changes in the racial and ethnic make-up of the student population, college and universities are enrolling students from various socioeconomic and educational backgrounds. Results from the Cooperative Institutional Research Program Freshman survey, administered by the University of California, Los Angeles for the last four decades, revealed that one in six undergraduate students were first-generation college students, where neither parent had earned a bachelor’s degree (Capriccioso, 2006). Of the total number of first-generation-college students, 30% were low-income coming from families with annual incomes of under $25,000. This percentage is in
comparison to only 9.2% of non-first-generation students whose families earned incomes of less than $25,000 (Capriccioso, 2006). Overall, research spanning over the past forty years shows that more individuals are taking advantage of the opportunities afforded by higher education (Hudson, 2002; Pryor, Hurtado, Saenz, Lindholm, Korn, & Mahoney, 2006; Snyder et al., 2008).

Benefits of Higher Education

Higher education reaps benefits for individuals and society as whole. Engagement in diverse university settings leads to positive learning outcomes and prepares students for meaningful roles in society (Gruin, Dey, Hurtado & Gruin, 1999). Results from an extensive survey of students at the University of Michigan, found students from racially and ethnically diverse backgrounds and their non-minority peers, gained cognitive benefits from studying in diverse educational settings (Gruin, Dey, Hurtado & Gruin, 1999). In formal classroom settings and informal interactions, students showed growth in intellectual engagement and academic skills, and demonstrated active thinking processes (Gruin, Dey, Hurtado & Gruin, 1999). Furthermore, diversity experiences in college, equip students to better participate in heterogeneous, complex communities in the future (Gruin, 1999). Upon graduation, attainment of a higher education degree amounts to further benefits for the individual and society at large.

Individuals with a higher education degree earn up to 60% more income over the course of their lifetime. For those pursuing advanced degrees the financial benefits can be two to three times more in overall earnings then high school graduates (Baum & Ma, 2007). Increased income at an individual level amounts to increased financial return for
the larger society as higher earnings generate higher tax payments at the local, state and federal level (Baum & Ma, 2007; IHEP, 2005). Higher education attainment can be associated with lower poverty and unemployment rates, which decreases dependence and spending on public assistance programs (Baum & Ma, 2007; IHEP, 2005).

Beyond the financial return, improvements in the quality of life benefit individuals and the society as well. A higher percentage of individuals holding a bachelor degree report excellent, very good, or good health conditions compared to individuals with only a high school diploma (IHEP, 2005). The personal well-being of individuals decreases insurance expenses, unreimbursed medical expenses and other costs associated with health issues (IHEP, 2005). In addition, college-educated adults are more likely to be civically engaged by voting and volunteering and are more open to differing opinions. The added value of a bachelor's degree transcends to children of college graduates who are exposed more often to variety of cultural and education activities (Baum & Ma, 2007). Table 2 depicts the individual and societal benefits accrued from earning a postsecondary degree.

Table 2
Benefits of Degree Attainment

<table>
<thead>
<tr>
<th>Personal Benefits</th>
<th>Societal Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Income</td>
<td>Increased Tax Revenue</td>
</tr>
<tr>
<td>Lower Poverty and Unemployment</td>
<td>Decreased Dependence on Public Assistance</td>
</tr>
<tr>
<td>Better Health Conditions</td>
<td>Decreased Insurance and Medical Expenses</td>
</tr>
<tr>
<td>Greater Civic Engagement</td>
<td>Increased Volunteerism</td>
</tr>
<tr>
<td>Greater Opportunities for Children</td>
<td>Greater Outlook for Future Workforce</td>
</tr>
</tbody>
</table>
Across all areas, individuals with a college degree benefit greatly and pass those benefits onto society (Baum & Ma, 2007, IHEP, 2005). Yet, some students are not as privy to the benefits of higher education facing more challenges and lower educational attainment rates than other groups of students. In particular, first-generation and low-income students are at a distinct disadvantage in postsecondary access, attendance, and persistence (Choy, 2001; Pascarella et al., 2004; The Pell Institute for the Study of Opportunity in Higher Education, 2005; Swail, 2000). As a result, many college preparation programs have focused their efforts towards this group of students (Choy, 2001; Swail & Perna, 2002).

College Preparation Programs

Higher education has been considered the great equalizer, creating opportunities for individuals regardless of education and economic status. Yet, students who could benefit the most from educational opportunities receive the least amount of support and opportunities to pursue such goals (Hagedorn & Tierney, 2002). Many private nonprofit agencies, university-based organizations, government-sponsored programs, and K-12 entities have established programs to help fill the gap between those students where educational opportunities are readily available and those where they are not (Hagedorn & Tierney, 2002).

College preparation programs motivate and prepare students for opportunities in higher education through a variety of services from college informational workshops, campus field trips, and individualized advising meetings (Gandara, 2001; Swail & Perna,
These programs assist students in navigating through the college admissions process and prepare students for success in postsecondary education. Some programs begin preparation services as early as elementary school and continue providing support through high school graduation. Some programs work in conjunction with school site staff to infuse college information into classroom curriculum. Other programs supplement classroom learning by providing college informational workshops during the school day or after school (Gandara, 2001; Swail & Perna, 2002). Regardless of the approach, each program’s primary goal is to help students get to college and ultimately graduate. The most widely discussed programs include the federal TRIO Programs, Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP), Advancement Via Individual Determination (AVID), Mathematics, Engineering and Science Advancements (MESA), and I Have A Dream (IHAD) (Gandara, 2001; Swail & Perna, 2002).

At the federal level, government initiatives originated from the philosophy that the federal government had an obligation to create equal opportunities for all citizens (Gandara, 2001). The most well known federally sponsored programs began under the Lyndon B. Johnson administration as part of the War on Poverty programs. During this time the federal TRIO programs were established to assist educationally and economically disadvantaged students in middle school, high school and college (Gandara, 2001). Later, Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) was established as a cohort progression model. As a school-based
intervention program, GEAR UP provides professional development to create a college-going culture at the school site (Gandara, 2001; Gullatt & Jan, 2003).

Many states have funneled resources into state-sponsored college preparation programs to create a college-going culture and increase the educational opportunities and the advancement of individuals. This investment is seen as a means to fuel the economy and solve societal problems (Gandara, 2001). An example, Advancement Via Individual Determination (AVID), provides services for educationally disadvantaged and underachieving secondary school students to succeed in rigorous curriculum and increase their opportunity to enroll in four-year institutions (California Department of Education [CDE], 2007). Students are enrolled in AVID classes, which are taught by a school-site teacher. Classroom instruction includes college information, as well as college success skills like time management, note taking, and critical reading skills. AVID programs are operated in more than 2,300 schools nationwide (CDE, 2007).

College and universities invest personnel, funds and resources to implement college preparation programs. The reason behind such an investment is twofold. As public entities, many Americans feel that an investment to students even prior to entering college is an obligation. The demographic landscape of college campus should represent the overall demographic landscape and universities have a role in that process (Gandara, 2001). Second, colleges and universities need students to enter the university prepared for college-level work. Preparing high school students with skills needed to succeed in the university setting is fundamental (Gandara, 2001).
Established in 1970, Mathematics Engineering Science Achievement (MESA) supports educationally disadvantaged students to excel in math and science with an ultimate goal of students graduating with engineering, science and technology degrees (UC Regents, 2008). MESA students develop academic and leadership skills to increase educational performance and gain confidence (UC Regents, 2008). Administered by the University of California, MESA programs are a collaborative effort between the University of California, California State University, California Community College, Independent Colleges and Universities and school districts across the state (UC Regents, 2008).

Foundations and corporate agencies sponsor college-going programs in an effort to better prepare educationally and economically disadvantaged students for college. Usually there is a particular investment in a community where funds are channeled to support program services and possible student scholarships (Gandara, 2001). This is the case for the most commonly discussed I Have A Dream (IHAD) program. IHAD began in 1981 when businessman Eugene M. Lang returned to his elementary school in East Harlem to motivate students to work hard to succeed. After being informed by the principal that three-quarters of the students would not graduate high school, Lang encouraged the students to graduate from high school promising college tuition to every student who graduated and attended college (I Have A Dream Foundation [IHAD], 2008). Since 1981, over 200 IHAD programs have existed supporting low-income students to achieve higher education by providing guaranteed tuition support and skills to enter and succeed in higher education. A program that began with entrepreneur’s goal of
motivating school children to graduate high school and pursue college has impacted over 15,000 students nationwide (Gandara, 2001; IHAD, 2008).

Program Goals and Service Models

Despite the myriad of operating entities, college preparation programs most commonly focus on three main goals, promoting college awareness, expanding college exposure, and increasing college enrollment (Swail & Perna, 2002). However, a more exhaustive list includes:

- Improving and increasing access for educationally and educationally disadvantaged groups;
- Providing opportunities for underachieving students with the potential to succeed academically;
- Collaborating with schools to make school-based change;
- Creating partnerships between school district and higher education institutions; and
- Preparing students for college placement tests and admissions processes (Swail & Perna, 2002).

The most common program components of college preparation programs include counseling, academic enrichment, parental involvement, personal enrichment and social integration, mentoring and scholarships (Gandara, 2001).

Most often the counseling services focus on college and career information. Programs infusing counseling components do so on an individual basis or sometimes in a group setting. Counseling sessions help students understand college opportunities and the
college search process. In addition, informational sessions assist students with college applications and financial aid applications (Gandara, 2001). On the other hand, academic enrichment refers to tutoring components with some programs offering supplemental courses or a college course experience. Skill building workshops and SAT/ACT preparation programs are also categorized as academic enrichment services (Gandara, 2001). Overall, programs providing rigorous academic preparation for college through supplementary workshops, courses, tutoring and assistance with accessing advanced courses are most effective in preparing students for postsecondary opportunities (McCants, 2004).

Engaging parents is a critical element of college preparation programs, though not all programs are able to implement such services. Those programs that do may do so in the form of a contract between the program, the students and the parent describing services to be rendered. Other programs implement a more involved approach by inviting parents to workshops on financial aid, college requirements and information to help students excel in school (Gandara, 2001).

College preparation programs provide the information for students to choose, apply and enroll in institutions of higher education. However, it is just as important for the programs to implement elements that will ensure students are successful at the college level. In this case, programs emphasize leadership development, goal setting, and motivational components to enrich students personally. Field trips and cultural trips expose students to the university setting and mentors create connections to the university (Gandara, 2001). Mentoring relationships established between the student and a peer,
volunteer or university staff provides a supportive environment for students to learn about the university, ask questions about college and prepare for a university education. The most effective programs nurtured strong, lasting relationships between a student and an informed adult mentor (Gandara, 2001). For low-income students worried about college expenses, scholarships help ease the concern of paying for college (Gandara, 2001).

Reviewing pre-college programs, Heather Oesterreich (2000) found that programs that reach students early and focus on readiness, not remediation, are most effective in preparing students to navigate the academic pipeline. A focus solely on college preparation courses, test preparation workshops, and assistance in completing college admissions and financial aid applications is limited and does not provide students with the fundamental elements necessary for college success (Oesterreich, 2000). Programs must infuse these activities into the program along with summer enrichment programs, individual and group counseling, tutoring, mentoring and college visits to provide a comprehensive program and services resulting in a greater impact on college access for underserved students (Oesterreich, 2000). Development of peer support groups, a demonstrated appreciation of student cultures through staff hiring and culturally relevant programming, and financial assistance were also indicators of effectiveness (McCants, 2004). In all cases, programs that provided services over a long period of time were more effective than short-term intervention projects.

Building upon previous research, Tierney, Corwin, and Colyar (2005) reemphasize these elements in a collection of articles which outline what is described as the nine elements of effective outreach. Included are elements shared by Gandara (2001),
the role of family involvement, counseling, mentoring, and the importance of academic preparation. Tierny, Corwin, and Colyar (2005) introduce other elements, including the role of culture and peer groups, involvement in co-curricular activities and the timing of college preparation program efforts as effective efforts.

Meeting the Needs of Educationally and Economically Disadvantaged Students

According to Choy, Horn, Nunez, and Chen (2000), there are five steps in the pipeline to college. First, students must aspire to earn a bachelor's degree early in their education to meet the necessary college requirements. Second, students must be academically prepared. Third, students must take the college entrance exams. Fourth, students must complete the application process for the colleges of their choice, and lastly, students must gain admission to the university and enroll in a particular institution. Students from educationally and economically disadvantaged backgrounds pose unique needs in their college preparation and are more likely to fall out of the pipeline to college (Choy et al., 2000; Hsiao, 1992).

The earlier students solidify their educational aspirations, the more likely they are able to prepare and meet college admission requirements. Students whose parents did not attend college often establish their college goals late in their high school career, and often decide on low educational objectives (Choy, 2001). Low educational aspirations can often be attributed to limited information and resources about college opportunities (Saenz, Hurtado, Barrera, Wolf, & Yeung, 2007). Educationally and economically disadvantaged students require the most attention and resources in this area, yet they receive the least amount of college information and support (Swail, 2000). College
information and preparation are supplemental activities in their schools, whereas in high-performing schools, college preparation is embedded into the core curriculum (Swail, 2000). Students are prepared for the rigor of college and courses required for college eligibility match high school graduation requirements.

For many students, a rigorous course-taking pattern determines eligibility and enrollment in a four-year institution. Students whose parents did not attend college lack the academic preparation required for admission to a four-year university when compared to their counterparts who come from college-going families (Choy, 2001; Hsiao, 1992). In the area of mathematics, which has been coined as one of the gatekeepers for higher education attainment, students whose parents have not attended college are less likely to enroll in algebra courses in 8th grade and less likely to continue along the advanced mathematics track in high school (Choy, 2001; Choy et al., 2000). With the strong correlation between enrollment in algebra in 8th grade and progressing to advanced mathematics, students who enroll in algebra in 8th grade and progress to advanced mathematics in high school are more likely to enroll in college after high school graduation (Choy et al., 2000). Beyond the disparities in the math course-taking patterns, first-generation college bound students are part of a widening gap in writing abilities, time spent studying, and good grades in high school (Saenz et al., 2007).

Progression through the college pipeline is often halted at the application process; where first-generation college bound students receive less support from their parents in navigating the application (Choy, 2001). Students who are accepted to the university consider their family greatly in deciding which institution to attend and often choose a
campus within fifty miles of their home to stay in close proximity to their family (Saenz et al., 2007). This is in contrast to non-first-generation college students who consider the academic preparation of the university and options for graduate education as key elements of their decision process (Saenz et al., 2007).

Family considerations and obligations do not end at the onset of a students' college career. Students who are the first in their family to attend college deal with conflicting obligations of balancing familial responsibilities with college responsibilities and new friends (Hsiao, 1992). Their experiences involve social, cultural, and academic transitions (Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996). Families who have not experienced college life may be unsupportive of the college demands placed on their child. Students must learn to balance all aspects of their life, home, school, work and friends, in order to persist to college graduation.

A synthesis of pre-collegiate academic outreach programs offers ten principles that impact the college-going rates among underrepresented students (Gullatt & Jan, 2003). Some of the principles (adult role models, long-term investment in students, scholarship assistance, peer support) surface as effective measures across many studies. Other strategies indicate that high standards for program students and staff, personalized attention, K-12 program integration, strategically timed interventions, and school-society bridges are also important elements which positively impact the college attendance of underrepresented students (Gullatt & Jan, 2003). In all cases, rigorous evaluation and collection of empirical data is most essential in continually assessing the effectiveness of program services on student outcomes (Gullatt & Jan, 2003).
Retention Issues of Educationally and Economically Disadvantaged Students

Despite academic and social barriers, educationally and economically disadvantaged students are increasingly enrolling in higher education institutions (Hsiao, 1992; Terenzini et al., 1996; Pascarella et al., 2004). Yet, students from these backgrounds are more susceptible to attrition. Low-income, first-generation students are four times as likely to leave college by their second year when compared to students from families with higher socioeconomic levels and whose parents had a baccalaureate degree (Engle & Tinto, 2008). Persistence to graduation is directly impacted by the amount of education earned by parents. Only 55% of first-generation college bound students continued their enrollment or attained their degree, as compared to 65% for students whose parents had some college, and 76% of students whose parents had a bachelor’s degree (Nunez & Cuccaro-Alamin, 1998). Overall students from first-generation and low-income backgrounds are among the least likely to attain a degree (Thayer, 2000).

Nearly one-fourth of first-generation students who enter 4-year institutions do not return for the second year (Cushman, 2007). Many factors influence a student’s decision to leave college. Most stem from feeling like an outsider, facing culture shock and either low expectations about academic preparation or not being academically prepared (Cushman, 2007).

In a study comparing first-generation college students and continuing-generation college students, students who had at least one parent with a degree, five factors were hypothesized to affect first-to-second year persistence background characteristics, pre-college achievement, initial commitment, institutional variables and in-college
experiences (Lohfink & Paulsen, 2005). Background characteristics included marital status, gender, primary language, total income, race, and degree expectations. Pre-college achievement, in this particular study, focused on SAT scores, rigorous high school course taking, and delayed entry into postsecondary education. A student’s academic, social and financial reasons for considering a certain school were categorized as initial commitment. Institutional variables were based on a student’s decision to attend a university considering institutional size and attendance status. A student’s first-year grade point average, satisfaction with school prestige and intellectual growth were used to measure in-college experiences (Lohfink & Paulsen, 2005).

Previous research found that first-generation students are disproportionately non-White, low-income and female (Choy, 2001; Nunez & Cuccaro-Alamin, 1998). Comparing first-generation and continuing generation students, first-to-second year persistence decreased for students who were Hispanic, lower-income, or female (Lohfink & Paulsen, 2005). Higher persistence levels were found for first-generation students who choose a particular institution based the ability to live at home and faculty reputation. In contrast, for continuing-generation basing their college selection on a school’s reputation and lower tuition expenses led to higher persistence. Furthermore, first-generation students exhibited higher levels of persistence from the first-to-second year at larger institutions as opposed to smaller private institutions (Lohkink & Paulsen, 2005). While this study did not assess the reasons for such a response, explanations may include the availability of resources and support at larger institutions, a more diverse student population, and the opportunity to stay connected to home.
Once students enter the university setting involvement in campus life was a strong indicator for persistence amongst first-generation college students. Faculty validation, ensuring students in their ability to complete college level work, was an important indicator as well (Lohfink & Paulsen, 2005). Receiving grant aid lessened the attrition of first-generation students who tend to drop out more than continuing-generation students due to the accumulation of debt. Across the board, academic performance in the first-year was an indicator of persistence for both groups of students (Lohfink & Paulsen, 2005). As was the opportunity for work-study employment provided monetary benefits and a connection with campus staff. On the other hand, academic achievement in high school was not significantly related to persistence for either group in this particular study, creating a need for additional research to explore how pre-college programs influence persistence (Lohfink & Paulsen, 2005).

The Role of College Preparation Programs in Persistence

With an increasing number of educationally and economically disadvantaged students entering college, college preparation programs are becoming increasingly important in ensuring students enter the university academically and emotionally prepared for the rigors of a university education. A recent study by the Pell Institute conducted focus groups of first-generation college bound students currently enrolled or about to enroll in two- and four-year colleges and universities in Texas. The interviews with the first-generation college bound students uncovered three themes that influenced a successful transition from high school to college: raising aspirations for college,
navigating the college admissions process, and easing the initial transition to college (Engle, Bermeo, & O'Brien, 2006).

Many first-generation college bound students have little or no aspirations to attend college or feel it is entirely impossible because of their economic status. Involvement in pre-college programs can shift these perceptions. Students identified the following activities that helped to raise their aspirations for college:

- Activities connecting college to possible jobs and career interests.
- Information regarding financial aid and campus visits for college exposure.
- Addressing gaps in preparation by providing tutoring and academic counseling.
- Engaging students with role models to show them it is possible to succeed.
- Being persistent about the college process and possibility to attend college.

Navigating the college admissions process is always a difficult experience for students who do not have parents who can provide guidance in this area. Students in this study shared that the following key factors were critical to easing their minds regarding admissions: starting the process early, taking the process step-by-step, explaining and providing college and financial aid information, involving the family in the process, and connecting students to resources (Engle et al., 2006). Finally easing the initial transition to college was a most important area for first-generation college bound students.

Academic preparation in the form of tutoring and supplemental workshops assisted, in some part, in preparing students for a college education. Acclimating students to the college environment was an important area to help the students feel comfortable on a new campus accomplished through summer bridge programs, students' connection with peers
Beyond the initial transition phase, more must be done to support the success of first-generation students. Higher institutions have created avenues of support to help ease students into the university environment. The establishment of first-year seminars and learning communities support students in the transition to college. However, secondary educators can equip students with the tools to be successful as well. Cushman (2007) outlines five methods to increase the persistence of first-generation college bound students: inform, supplement, support, connect, and encourage.

Informing students on the potential obstacles that may be faced is a critical component of student support (Cushman, 2007). Often students are provided with the information about college options, resources to assist with the application process and possibly information about college life. However, students are uninformed about the systematic obstacles that may be faced with class registration, fees or perhaps financial aid. To assist student success, secondary educators can inform students about the potential barriers so that students are aware and prepared.

Another key element of student success is academic preparedness. Many students are not academically prepared for the rigor of a university education, especially first-generation, low-income students who often have limited resources and challenging experiences at their high school (Cushman, 2007). Secondary educators can ensure that high school courses include critical thinking, analyzed reading and writing components (Cushman, 2007). In addition to the supplemental material, secondary educators can
encourage and help students take college level courses towards the end of their high school years, as well as encourage participation in summer programs like Upward Bound where students are able to live and study on a college campus.

Support should be geared towards students who have the least amount of knowledge and information about college (Cushman, 2007). Showing students how to research colleges using the Internet is an important component as well as keeping parents informed throughout the guidance process.

As students prepare for the college experience, a connection to the college campus assists students in a smooth transition from high school to college. Linking high school students to recent graduates provides a unique perspective on the process and transition from high school to college (Cushman, 2007). Exposing students to college campuses by going on field trips also creates a connection to the university. Lastly, encouraging students has an impact on student persistence. Students will rise to expectations if given the encouragement and motivation to do so. Providing opportunities for student to think like a college student prepares students for future expectations (Cushman, 2007),

Drawing from a larger qualitative study of first-generation college students, Reid and Moore (2008) explored the perceptions of first-generation college students in regards to their preparation for postsecondary education. Emerging from the student stories were elements that contributed to their academic success and skills they lacked in being prepared for college. Areas the students felt they needed improvement were opportunities to take more challenging academic courses to adequately prepare them for college-level
expectations, a stronger development of study skills, and a greater understanding of how to effectively manage time (Reid & Moore, 2008). Amongst the areas influencing academic success; encouragement from others and involvement in college preparation programs (Reid & Moore, 2008). College preparation programs provide avenues of support and encouragement for students entering college. Established to support students to reach their full academic potential, college preparation programs have the potential to provide students with the elements necessary for academic success.

The Higher Education Act and the Establishment of Federal TRIO Programs

During his administration, President Johnson proposed and enacted several domestic programs, which were collectively known as The Great Society. The intent of the Great Society programs was to broaden educational opportunities for all Americans. Johnson's primary legislative instruments for advancing this agenda were the Elementary and Secondary Education Act (ESEA) for the K-12 educational system and the Higher Education Act (HEA) designed to benefit postsecondary students (Cervantes, Creusere, McMillion, McQueen, Short, Steiner, & Webster, 2005). Through the programs and support provided by the Higher Education Act, President Johnson's plan was that every person willing to work for and receive a postsecondary education would have the assistance to achieve their goals. This in turn, would lead to increased earning potential and an improved standard of living. In addition to decreasing the poverty of individuals, President Johnson believed that additional higher quality schooling would benefit the country by providing a supply of educated Americans needed for the country's economic
prosperity (Cervantes et al., 2005). The Higher Education Act of 1965 signed into law on November 8, 1965, provided opportunities for lower- and middle-income families, program assistance for smaller colleges, library resources, and utilization of college and university resources to deal with national problems like poverty and community development (National TRIO Clearinghouse, 2003).

With the establishment of the Higher Education Act (HEA) of 1965 the federal government became an important player in higher education policy. At the time of its creation, removing college price barriers became federal policy. Since 1965, the HEA has been reauthorized to renew existing programs and policies and develop and implement new programs and policies for higher education. Among the many student support programs created as part of the Higher Education Act was the establishment of the Federal TRIO programs (Cervantes et al., 2005).

The establishment of what was to become TRIO actually began in 1964 in the midst of President Johnson’s War on Poverty. It was during this time that President Johnson signed the Economic Opportunity Act, which gave rise to the Office of Economic Opportunity (OEO) and its Special Programs for Students, later coined TRIO (McElroy & Armesto, 1998). Upward Bound, the first TRIO initiative managed by OEO, began with 18 pilot programs. These programs reached 200,000 students allowing them to live on a college campus, attend academic, cultural, and recreational activities, and gain an understanding of college life (Cervantes et al., 2005). Next to follow, Talent Search was established under the Higher Education Act 1965. Similar to Upward Bound, Talent Search serves low-income, first-generation college bound middle school and high
school students in their pursuit of higher education. Last of the original three, Student Support Services, was established in the 1968 Reauthorization of the Higher Education Act and supports first-generation college bound students during their undergraduate career.

Since this time, TRIO programs have expanded to include Educational Opportunity Programs serving adults reentering college, TRIO Training Programs created to provide training and professional development opportunities for fellow TRIO personal, and Ronald E. McNair programs providing support to students pursuing post-baccalaureate opportunities. In addition, the Upward Bound Math/Science Program and the Upward Bound Veteran Program exist to encourage students to pursue careers in math and science and meet the unique needs of veteran students (DOE, 2008). Despite the expansion of programs, the TRIO name remains.

**Upward Bound**

Nationally, there are approximately 70,000 students served by over 970 Upward Bound programs in every state and U.S. territory. Upward Bound provides fundamental support for participants in their preparation for college with an ultimate goal of increasing the rate at which participants enroll in and graduate from higher education institutions (DOE, 2008). Upward Bound programs reach this goal by providing classroom instruction in the core subjects of math, laboratory science, and English, as well as instruction in writing, study skills, and other subjects for success in higher education. Upward Bound also provides academic, financial, and personal counseling, tutorial services, mentoring programs, assistance in completion of admissions applications and
financial aid (DOE, 2008).

Over the course of the years, Upward Bound has been studied to evaluate its effectiveness. An early study on Upward Bound conducted by RTI International found the program to have an impact on educational aspirations, postsecondary progress and persistence (McElroy & Armesto, 1998). The longitudinal study conducted from 1973-1978 linked participation patterns to greater rates of entry into postsecondary education. Overall the study found Upward Bound meeting its mandated objective to provide participants with the skills and motivation to successfully enter and do well in postsecondary education (McElroy & Armesto, 1998). Eighteen years later, in a most notable study, the Education Department commissioned Mathematica Policy Research in 1991 to conduct a longitudinal study to evaluate the effectiveness of Upward Bound.

The Mathematica study was two-fold, evaluating program implementation issues and measuring the effects of Upward Bound on student outcomes. In 1997, the first of a series of Mathematica reports was released. This report evaluated and documented the operation of Upward Bound. Two years later, Myers and Schirm (1999), released a second report evaluating the program’s short-term effect on student outcomes, and in 2004, a third study, presented follow-up information on student outcomes and results of new research on student’s postsecondary experience.

In the third study, Myers, Olsen, Seftor, Young, and Tuttle (2004), addressed three research questions measuring the effects of Upward Bound on postsecondary persistence, the relationship between student outcomes and length of participation in Upward Bound, and students who benefit the most from Upward Bound. Four major
findings emerged for the average Upward Bound student. For this particular group of students there were no significant increases in the number of high school credits earned in the core subjects including science, English, social students or foreign language, and only limited increases in the number of credits earned in math (Myers et al., 2004). In addition, there was not a significant increase in enrollment in postsecondary institutions when defined broadly to include two-year institutions, four-year institutions, and vocational training programs (Myers et al., 2004). However, the study revealed that Upward Bound did have an impact on high school credits earned and increases in postsecondary enrollment for students with lower educational expectations, a more notable finding.

Students entering the program with lower educational expectations showed an increase in the number of high school credits earned. For students expecting to complete less than a baccalaureate, Upward Bound raised the number of math and foreign language credits completed from 19 to 21 or two more high school courses (Myers et al., 2004). In addition, students were found to enroll in additional honors and Advanced Placement courses. As students pursued postsecondary education, enrollment in four-year institutions increased from 18% enrollment to 38% enrollment for students with lower educational expectations. Once entering the university, students earned additional college credits. Again, this was not a significant case for students with higher educational expectations.

The study also researched postsecondary engagement and found that participation in Upward Bound made a slight difference in the frequency of use of support services on
college campuses. Students reported increased uses of personal counseling services, learning skills centers, and tutoring services during their first year of college (Myers, et al., 2004).

The Mathematica study results have led to a series of mixed conclusions. For some the study revealed that Upward Bound had no impact on students’ academic preparation or grades, an important element of the program’s mandated goals and objectives (McElroy & Armesto, 1998). According to Larry Oxendine (as cited by Field, 2007), former Director of the Federal TRIO Programs, the Mathematica study indicated that Upward Bound programs continually serve students who would succeed without the program. Despite the criticism, Upward Bound continues to serve students and for many researchers exemplifies a model college preparation program.

The Upward Bound model exemplifies a model of strategically timed intervention efforts, effective evaluation designs, and long-term individualized investment resulting in student success (Gullatt & Jan, 2003). Operating within performance-based, measurable objectives, the Upward Bound model has resulted in positive student outcomes. Upward Bound participants are four times more likely to earn an undergraduate degree than similar students not serviced by the program (Fields, 2001). Much of Upward Bound’s success is attributed to the ability to work with small groups offering individualized attention, and opportunities for participants to visualize themselves on a college campus (Gullatt & Jan, 2003). As Upward Bound strives to meet current mandated objectives, it is important to understand if individualized attention and intervention efforts influence participant success on college campuses.
Educational Resiliency

According to Wang, Haertel, and Wahlberg (1997) educational resilience is the "heightened likelihood of educational success despite adversities brought on by environmental concerns and experiences" (p. 4). Previously only studied by psychiatrists, psychologists, and psychopathologists, resiliency theory has now become a phenomenon within the educational arena (Wang, Haertel, & Wahlberg, 1997). The research moves beyond the risk factors that cause problematic behavior and instead focuses on protective factors, which shield against life's challenges and facilitate the development of healthy children (Bernard, 1991, 1993; Wang, Haertel, & Wahlberg, 1997). Through positive interactions in the family, school, and community environment, resilient children develop four specific attributes, social competence, problem-solving skills, autonomy, and a sense of purpose (Bernard, 1991).

Resilient children exhibit social competence allowing them to be more flexible and responsive, an important quality in challenging situations (Bernard, 1991). In addition, children identified as resilient develop stronger communication skills, a sense of humor, and show empathy and care (Bernard, 1991). Another key element is the ability to establish positive relationships in their family, school and community, a development, which usually begins early on in childhood (Bernard, 1993).

Similar to the qualities defined by social competence, resilient children develop problem-solving skills, giving them the ability to consider alternate solutions, think critically, and become flexible in problem situations (Bernard, 1991). Furthermore, resiliency is evident in the children's capacity to plan, placing them in control of the
situation, and their sense of resourcefulness, which allows the young children to seek help from others when necessary (Bernard, 1993).

The third attribute of resilient children, autonomy, has varying definitions, but ultimately is the notion that youth have the capability to act independently and exert control over their own environment (Bernard, 1991). Lastly, resilient children demonstrate a sense of purpose and future. Considered to be one of the most powerful indicators of positive outcomes, resilient children show goal-directedness, achievement motivation, educational aspirations and persistence (Bernard, 1991). Overall, resilient children have a strong sense of hope that leads to positive outcomes.

Educational resiliency is an ecological phenomenon developed through continuous interaction with family, school, and the larger community (Bernard, 1991; Brooks, 2006). Specific protective factors fostered within these environments have been identified as developing resiliency within children, a caring and supportive environment, a message of high expectations, and opportunities for meaningful participation (Bernard, 1991; Wang, Haertel, & Walberg, 1997).

Within caring and supportive environments, children are able to develop the qualities associated with resiliency. Often the connection with just one parent, one teacher or one mentor will be enough to direct a student towards a positive outcome (Bernard, 1991). Positive relationships with peers and friends are important components of the school and community environment as well and should not be overlooked (Bernard, 1993).
Youth thrive in environments of high expectations. Research on successful programs for youth indicate that high expectations placed on students reduce academic failure and increase the number of college bound students (Bernard, 1991). An important facet of this component is that students are given the necessary support to fulfill the high expectations (Bernard, 1993).

Research shows that the family, school, and community backgrounds of resilient children are characterized by opportunities of meaningful participation (Bernard, 1991). The responsibility of being a contributor to the family, school, and community creates a sense of purpose and direction for young children establishing a feeling of value and worth (Bernard, 1991). Students that are given opportunities to actively participate in activities see themselves as valued members of the school, community and home environment. They learn cooperative learning strategies and develop closer relationships with their peers (Brooks, 2006).

Schools utilizing resilience-building efforts strengthen resilience in children, ultimately developing life-long skills for success (Brooks, 2006; Bryan, 2005). In a study of urban schools specifically, high-performing schools with high-poverty and high-minority populations express high expectations for all students, ensure all students are participate in a rigorous curriculum, provide support when necessary, and create meaningful partnerships with families and communities (Bryan, 2005). Of the partnerships described, partnerships with enrichment programs give students the option to participate in after-school enrichment programs and tutoring programs, both identified as successful measures of fostering academic achievement and resiliency (Bryan, 2005). In
all studies, relationships between the school, home and community were essential elements of building resiliency.

Utilizing educational resiliency theory as a framework for development, college preparation programs can contribute to the efforts to build resiliency in youth by providing caring and supportive environments, sending a message of high expectations, and creating opportunities for students to become involved (Brooks, 2006).

Rationale for the Study

The research on persistence reveals that most students leave between the first and second year (Ishler & Upcraft, 2005). While some college attendance adds value to individuals and society, the full benefits of higher education attainment are reached with a degree (IHEP, 2005). Low-income, first-generation students depart at much higher rates than their higher-income, continuing generation student counterparts (Choy, 2001; Engle & Tinto, 2008; Lohfink & Paulsen, 2005). Many factors influence persistence, background characteristics, socioeconomic status, educational expectations, academic achievement, both in high school and college, and social adjustment (Choy, 2001; Nunez & Cuccaro-Alamin, 1998). Researchers have explored the factors influencing persistence, but most often report numerical data on student characteristics and outcomes (Green, 2006). Implementing surveys and interviews can provide a more complete picture of the attitudes, behaviors and resources that impact academic achievement for educationally and economically disadvantaged students (Green, 2006). Exploring support services assisting student access and college success would be valuable.
One avenue of support are college preparation programs created to prepare students for opportunities in higher education through a variety of services from college informational workshops, campus field trips, and individualized advising meetings (Gandara, 2001; Hagedorn & Tierney, 2002; Swail & Perna, 2002). Most commonly these programs assist students by promoting college awareness, expanding college exposure, and increasing college enrollment (Swail & Perna, 2002). Rigorous evaluation of college preparation programs has been limited (Gullatt & Jan, 2003). Upward Bound is no exception, with the research conducted by Mathematica being the only longitudinal comprehensive study to date. Little is known about specific program components, which assist students entering college (Gullatt & Jan, 2003). As research continues to explore the determinants of persistence, the role of college preparation programs must be explored to assess the influence college preparation programs have on increasing persistence among educationally and economically disadvantaged students (Lohfink & Paulsen, 2005).

**Summary**

Research shows that educationally and economically disadvantaged students are making strides in educational attainment. Yet, students from these backgrounds experience distinct disadvantages in the process to and completion of postsecondary education (Choy, 2001). Parental educational attainment and expectations, minimal knowledge of college options and the college process, low academic preparedness and family obligations are all factors which halt students from pursuing their educational
goals (Choy, 2001; Choy et al., 2001; Hsiao, 1992). For students who are able to navigate the college application process and are prepared to enter the university, additional obstacles may stand in their way. Again, parents' educational attainment is linked to student attrition, where one-fourth of first-generation students do not return for the second year (Cushman, 2007). The first-year experience could also negatively impact persistence (Lohfink & Paulsen, 205).

College preparation programs were established to create a bridge for educationally and economically disadvantaged students to enter higher education institutions. Federal, state, and local programs provide a myriad of services to promote college awareness, expand college knowledge, and increase college enrollment (Swail & Perna, 2002). As a bachelors degree continues to prove beneficial for individuals and society at large, college preparation programs are becoming increasingly important in ensuring students are prepared for the academic and social expectations of the university, ultimately leading to graduation. Few studies have studied the specific components of college preparation programs that impact student persistence.

This research focuses on Upward Bound, a Federal TRIO program, in an effort to explore the impact of college preparation programs on student persistence. In addition, this study seeks to discover the role of college preparation programs in the development of educational resilience, a theory in which Bernard (1991) explains that all humans are born with resilient traits. Given positive interactions in the school, home and community, children have the capacity to develop social competence, problem-solving skills, autonomy, and a sense or purpose, creating the ability to reach educational success.
Chapter 3
METHODOLOGY

Introduction

The purpose of this study was to explore the impact of Upward Bound on the persistence of Upward Bound alumni at the University of California, Davis (UC Davis). Upward Bound, a federally funded TRIO program, provides services to low-income, first-generation students to enroll and graduate from postsecondary institutions. Similar to other college preparation programs, Upward Bound provides college and career information, academic support services, mentoring support and other enrichment opportunities, including a summer component. By understanding the impact Upward Bound has on student persistence the researcher hoped that specific activities and services would be identified as best practices to support the enrollment and persistence of low-income, first-generation college students. This study addressed the following research questions:

1. What has been the impact of Upward Bound on student persistence at UC Davis?
   a. What Upward Bound services and activities best prepared students for the academic rigor of a university education?
   b. What Upward Bound services and activities assist students in becoming adjusted to the university environment?
c. What Upward Bound services and activities contributed to the successful completion of the first year of study at UC Davis?

2. How can Upward Bound be enhanced to improve the persistence of low-income, first-generation students within the university?

3. What components of Upward Bound create an environment conducive for developing educational resiliency?

An analysis of data collected from a survey and interviews with Upward Bound alumni provided mixed methods data for this study. This chapter includes information about the research methodology and specifically the population and sample of the study, the design of the study, data collection, instrumentation, and data analysis procedures.

Setting of the Study

The University of California is among the most competitive higher education institutions in the state enrolling the top one-eighth of graduating high school students (University of California [UC], 2006). While competitive, the University is committed to achieving, on each campus, a student body that reflects the cultural, racial, geographic and social diversity of California (UC, 2006). Thus, the University’s admission process includes a Comprehensive Review component which allows a review of students based on their academic achievement and promise and their potential to contribute to the educational environment and intellectual vitality of the campus (UC, 2006). At the University of California, Davis (UC Davis), one of ten campuses in the UC system, the
Undergraduate Admissions office participates in Comprehensive Review to select and offer admission to the next incoming freshman class.

Like other UC campuses, admissions at UC Davis is heavily based on academic factors including grade point average, scores on college entrance exams, number of a-g courses taken, amongst other factors (UC Davis Undergraduate Admissions [UCD], 2009). However, factors such as demonstrated leadership, special talents, achievement in spite of adversity, and first-generation and low-income status are also considered (UCD, 2009).

In Fall 2007, 33% and 36.9% of UC Davis freshman admits were low-income, first-generation students respectively (University of California Office of the President, n.d.). A total of 33,107 California residents applied for admission to UC Davis, 394 of which self-identified as Upward Bound alumni, indicated on the University of California system-wide application (Pon & OwFook, 2008; University of California StatFinder, 2009). Admissions offers were sent to 19,484 students resulting in a 58.9 percent admit rate. Two-hundred ninety-eight Upward Bound alumni were offered admission to UC Davis, a 76 percent admit rate. In the end, 4,793 freshmen enrolled at UC Davis in Fall 2007, 98 of which had participated in Upward Bound in high school.

Population and Sample

The population for this study was Upward Bound alumni enrolled in their second year of study at UC Davis. Upward Bound alumni at UC Davis were identified through the University of California application. However, because not all Upward Bound alumni explicitly checked the box on the UC application, indicating their involvement in the
program, the total number of Upward Bound alumni at UC Davis is unknown. According to a report generated by the UC Davis Undergraduate Admissions, ninety-eight Upward Bound alumni submitted a Statement of Intent to Register for Fall 2007.

The sample chosen for this study was a purposeful sample including Upward Bound alumni enrolled in their second year of study at UC Davis. According to a report generated by UC Davis Undergraduate Admissions 98 Upward Bound alumni entered the University in Fall 2007, however, only 39 students authorized directory release information. This research was conducted utilizing the information from these 39 students. In addition, the Undergraduate Admissions report was cross-referenced with the UC Davis Upward Bound Alumni database. It was found that seven additional Upward Bound alumni were enrolled at UC Davis in Fall 2007. The additional seven students were added to the sample population. However, it was found that four Upward Bound alumni who enrolled in Fall 2007 were no longer enrolled in Fall 2008 leaving a sample size of 43 participants.

Survey responses were received from 29 students. Ten students elected to participate in the interview process. Eight were selected to meet for an interview.

Research Design

The researcher utilized a mixed methods approach for this study. A mixed methods approach makes use of a diverse collection of data in order to best understand the research problem (Creswell, 2003). With this approach the researcher began with a broad survey and followed up with open-ended interviews to obtain specific information.
and perspectives regarding the topic (Creswell, 2003). There are three general strategies most often used with a mixed methods approach, sequential procedures, concurrent procedures, and transformative procedures (Creswell, 2003). The researcher used concurrent procedures collecting both quantitative and qualitative data, which was analyzed collectively to provide a comprehensive analysis.

Data Collection

A request for a report of Upward Bound alumni attending UC Davis in Fall 2007 was sent to the UC Davis Undergraduate Admissions office. The report generated a list of 39 potential research participants. In addition, a request to the UC Davis Upward Bound Director found an additional seven students meeting the research requirements. After accounting for students who were no longer enrolled at UC Davis in Fall 2008 or had incorrect e-mails on record, 43 participants were identified for this study.

A Likert-scale survey was developed for this study and created on Survey Monkey, a web-based survey software. Prior to the initial launch of the survey, the researcher field-tested the survey by sending the questionnaire to a former UC Davis Upward Bound participant currently in her fourth and final year of study at UC Davis. The survey, created in a Microsoft Word document, was sent via email for feedback regarding the structure and design of the questions. Feedback was given and the survey was modified before the first launch on Survey Monkey.

Utilizing the tools on Survey Monkey, the researcher uploaded all name and email address information and generated a message requesting participation in the study. While
the message was created and sent via Survey Monkey, the email message itself was sent from the researchers email address. All email correspondence was sent back to the researcher’s email address. All students were sent the request to participate in the study to their campus-based email. One potential participants email was invalid.

The first request to participate was sent out on Monday, March 9, 2009. The email message included information regarding the study, the statement of consent, and a personal survey link. The link was connected to their personal information, which was shown on the report only and not utilized in the analysis. Students were given two weeks time to complete the survey. The email was sent to 43 Upward Bound alumni, one respondent’s email was invalid leaving 42 potential participants in the study.

Within the first few days of the active survey, one respondent notified the researcher via the comment field that respondents were able to select each option only once. For example, if a respondent selected “prepared well” for a particular activity, this option could not be selected again. As this was not the intent of the researcher, the error was fixed, however nine respondents had already completed or partially completed the survey. To allow the respondents to accurately complete the survey an email message was sent to the respondents explaining the issue and directing students again to the survey link.

After one week, the researcher sent a reminder email to all participants who had not responded at all. Thirty-two students were included in this correspondence. For those individuals who had begun, but not yet completed the survey, an email message was sent asking each student to please complete the survey by the deadline. With two days
remaining, a final email was sent to the 23 students who had not responded to the survey request. In an attempt, to increase the rate of responses, students were given an additional week to complete the survey. Of the 14 students who were sent a follow-up email, only one additional student responded.

In order to solicit students to participate in the interview portion of the survey, the last question of the survey included an option to participate in a follow-up interview. Interested students were asked to provide their name and contact information. Again, this information was not utilized in the data analysis, but only used to select potential interview candidates. Ten students indicated an interest to participate in the interview portion of the study. Of the ten students, two were participants of an Upward Bound Math/Science program. Since the focus of this study was of the Upward Bound program, these two students were not contacted to participate in an interview. All other eight students were contacted to schedule an interview.

The eight students were first contacted via phone to schedule a meeting time. When students were unavailable messages were left and follow-up phone calls were made. The researcher also emailed potential interviewees to confirm participation and schedule the interview. As a result of the phone calls and emails, six students were scheduled to meet with the researcher.

Interviews took place on the UC Davis campus. A tape recorder was used during the interview. The researcher also utilized an interview protocol for recording information during the interview. The protocol included the following elements: a
heading, the opening statements, key research questions, transition messages, space for recording comments, and space for recording reflective notes (Creswell, 2003).

Instrumentation

The survey and follow-up interviews focused on the following areas:

1. The influence of Upward Bound in raising academic preparedness among low-income, first generation students;
2. The influence of Upward Bound in easing the adjustment to college for low-income, first generation students;
3. The influence of Upward Bound on the persistence of low-income, first-generation students;
4. The enhancement of Upward Bound to further contribute to higher persistence rates among low-income, first-generation college students;
5. The contribution of Upward Bound towards the development of educational resilience in low-income, first-generation students.

Ten survey questions and ten interview questions based on these five areas were developed. The survey and interview protocol are contained in the appendix.

The survey consisted of seven sections. The first section, Informed Consent, explained to the respondents that their continuation with the survey indicated their understanding and consent to participate in the study. Section 2 gathered demographic information from the respondents, including name of their Upward Bound program, and the number of years they were involved in Upward Bound. Sections 3-5 utilized a five-
point Likert-scale and sought to gather responses for research questions 1 and 2, gathering information about the impact of Upward Bound in the areas of academic preparation, adjustment to UC Davis, and persistence at UC Davis. Respondents were also given a comment field in each category to indicate additional services not listed that assisted in their persistence at UC Davis.

Section 3 included items for respondents to rate based on how well the activities prepared students for the academic rigor of UC Davis. The responses were “1-did not prepare,” “2-prepared somewhat,” “3-prepared,” “4-prepared well,” “5-not offered or did not attend.” Activities such as “Tutoring,” “Academic Instruction in English,” “Academic Instruction in Math,” and “College Level Writing Workshops,” were included in this section. An additional question in this section allowed respondents to include other activities, which prepared students for the academic rigor of UC Davis.

Section 4 included 10 items for respondents to rate based on how well the Upward Bound activity helped students adjust to the university environment. Possible responses included “1-not helpful,” “2-somewhat helpful,” “3-helpful,” “4-very helpful,” “5-not offered or did not attend.” Services such as “College Student Panels,” “Introduction to College Support Services Personnel,” and the “Summer Program” were included in this section. A second question in this section allowed participants to include additional services, which helped with their adjustment to UC Davis.

Section 5 included 11 items for respondents to rate based on how well the activity helped the students persist at UC Davis. Responses for Section 5 were the same as
Section 4. Respondents were given space to include additional services that assisted with persistence in this section as well.

In the sixth section, respondents were asked to rate the overall impact of Upward Bound on their persistence at UC Davis on a scale of 1-5. The final section, asked the respondents to provide contact information indicating their desire to participate in the interview portion of the study.

Open-ended research questions were used in the interview process to allow respondents to express their own views regarding the activities that impacted or could have further impacted their persistence at UC Davis. The interviews conducted sought to reinforce the findings from the survey and allowed for emergence of new information, particularly in the area of building educational resiliency. A total of ten questions were developed for the interviews. Questions 1 and 2 gathered information about the participants' initial experiences in Upward Bound focusing on the students' college goals prior to Upward Bound and the ways the program helped to define or redefine previous college aspirations.

The second portion of the interview focused on the students' Upward Bound experience. Additionally the three questions in this section, questions 3, 4 and 5, collected information regarding Upward Bound services and support as a means of developing educational resiliency. Question 3 asked participants to describe the environment of their Upward Bound program. Question 4 asked participants to describe the relationship between staff and students and peer relationships. Lastly, question 5
asked participants to discuss their level of engagement in the program, specifically in regards to leadership opportunities.

In the third section of the interview, participants were asked to share specific activities that assisted in the transition to college, academic success (as measured by completion of the first year), and persistence (as a second-year student at UC Davis). Questions 6, 7 and 8 gathered information in these areas.

Questions 9 and 10 allowed respondents to share ideas to improve Upward Bound and an opportunity to share any additional information about their experience in the program.

Major points were identified which reinforced the findings from the survey. Responses were organized based on the following categories: activities impacting academic rigor, activities impacting college adjustment, overall influence of Upward Bound on persistence, and factors contributing to educational resilience.

Data Analysis Procedures

Available via Survey Monkey, the researcher was able to review both the raw data and a summary of data for each response. Indication of how many respondents selected a particular response was available both in raw numerical form and through a percentage. In addition, the researcher utilized descriptive statistics, specifically crosstabulations. The results from Survey Monkey were transferred to an Excel Spreadsheet, which was then imported into the Statistical Package for the Social Sciences (SPSS) program. Data was analyzed using Crosstabs correlating a participant’s years of participation in Upward
Bound to the survey questions. Responses to the open-ended questions within the survey were collected and reviewed for similarities and major themes, as were the responses collected from the interviews. Responses, which were much different than the general response, were identified as well and will be discussed in Chapter 4.

Limitations

This study examined the impact of Upward Bound on student persistence in higher education. Since this study was limited to UC Davis, some of the factors impacting student persistence may not be generalized to other Upward Bound alumni attending other postsecondary institutions. In addition, the students participating in the research may not have represented the views of all Upward Bound alumni. The study focused on the ways Upward Bound has contributed to student persistence and did not focus on other factors influencing student success.
Chapter 4
DATA ANALYSIS AND FINDINGS

Introduction

This chapter will describe and summarize the data collected from the survey and interviews. The researcher will discuss any statistical relationships in the form of percentages and provide a graphical view of the data analysis. The results begin with demographic information about the research participants. Data from the survey and interview are presented by order of the research questions beginning with a discussion regarding the overall impact on student persistence, identification of specific activities which academically prepared students for a university education, exploration of elements which assisted in the transition to college, and a discussion of specific activities that impact persistence from year one to year two. Suggested improvements for Upward Bound are shared, as well as the potential of Upward Bound to create an environment conducive to developing educational resiliency. This chapter concludes with a discussion of the data.

Presentation of the Data

Background and Demographic Information

In Fall 2007, 95 Upward Bound alumni enrolled at the University of California, Davis (UC Davis) as self-identified from the University of California system-wide application. Obtained from a report from the UC Davis Undergraduate Admissions Office
and the UC Davis Upward Bound Director, 43 students were identified as potential research participants and were emailed a request to complete a survey. Of the 43 surveys emailed, one student's email address was invalid leaving 42 possible respondents. Twenty-nine students submitted a response to the survey request, a 69% response rate.

Respondents were asked to participate in a follow-up interview. Twelve students expressed interest in the interview portion of the study. Ten students were contacted to meet for an interview resulting in interviews with six students.

Table 3 describes the research participants' gender and years in Upward Bound. Overall, research participants consisted of 55% female and 45% male students. The majority of students participated in Upward Bound for three and four years while in high school with 10 students selecting each of these options. Five students were involved in Upward Bound for two years of high school and four students where in the program for just one year.

Table 3
Demographic Information of Survey Participants (n=29)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Descriptor</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>16</td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>13</td>
<td>45%</td>
</tr>
<tr>
<td>Years in UB</td>
<td>1</td>
<td>4</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>5</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>10</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>10</td>
<td>34%</td>
</tr>
</tbody>
</table>
The research participants represented Upward Bound programs in Southern California, the Bay Area and Northern California. The majority of respondents were alumni of the UC Davis Upward Bound Program with 28% being former participants. Two students were participants of the California State University, Fresno Upward Bound program and an additional two were participants of the California Lutheran Upward Bound Math/Science program. Two participants identified as alumni of the University of California, Berkeley, one as a participant of the Upward Bound program, and a second with the Upward Bound Math/Science program.

In total Upward Bound alumni represented 12 programs throughout California, 33% of which were California State University programs, .08% Community College programs, 25% Private/Independent College and Universities, and 33% from a University of California program. Seven respondents did not provide specific information regarding their program affiliate and used terms such as TRIO and Upward Bound Program in responding to the question. The following programs were represented in the research study:

- California Lutheran University Upward Bound Math/Science
- California State University, Chico Upward Bound
- California State University, East Bay Upward Bound
- California State University, Fresno Upward Bound
- California State University, Monterey Bay Upward Bound
- National Hispanic University Upward Bound
- Pitzer College Upward Bound
Six students participated in the interview portion of the study. Interview participants consisted of 50% female and 50% male. Table 4 shows the following demographic information of the interview participants: gender, Upward Bound program, and the number of years involved in the program. Participants will be referred to as “Participant # (number)” in the discussion to protect the identity of the students.

Table 4

Demographic Information of Interview Participants (n=6)

<table>
<thead>
<tr>
<th>#</th>
<th>Gender</th>
<th>Program</th>
<th>Years in UB</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>University of California, Davis</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Male</td>
<td>California State University, Chico</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Female</td>
<td>University of California, Davis</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Female</td>
<td>National Hispanic University</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Male</td>
<td>California State University, Monterey Bay</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Female</td>
<td>California State University, East Bay</td>
<td>4</td>
</tr>
</tbody>
</table>
Survey and Interview Results

**Student Persistence**

The underlying intent of this research was to assess the impact of Upward Bound on student persistence. For low-income, first-generation students the road toward earning a baccalaureate degree poses many challenges (Choy, 2001). Low-income, first-generation students exhibit low educational aspirations, lack of academic preparation and minimal familial support in navigating the college admissions process (Choy, 2001; Hsiao, 1992; Swail, 2000). Upon entering the university persistence to the second year and graduation is impacted by parent’s educational level, educational expectations and initial commitment (Choy, 2001; Lohfink & Paulsen, 2005; Nunez & Cuccaro-Alamin, 1998). College preparation programs are designed to provide the tools, information and support to assist students in navigating the college system and generate the skills and motivation that lead to graduation (McCants, 2004). To better understand the factors impacting persistence, participants were asked to share information regarding their college aspirations prior to enrolling in Upward Bound. Students were then asked to explain how Upward Bound helped to define or redefine college goals.

Of the six Upward Bound alumni interviewed 50% did not see college as an option prior to their involvement in Upward Bound. Participant #1 shared, “Well before UB, I wasn’t really thinking about college.” As a student whose parents did not graduate from high school, and in his mother’s case did not graduate from high school, college was not necessarily in his horizon. He explained, “Before UB I was just thinking, well I’m going to high school so I go to get out of high school and get a job later.” Despite his
parents’ push to go to college, opportunities and information to see this goal to reality were not present.

Another student shared similar comments. For Participant #5 high school and cultural expectations limited his potential to dream big.

Pre-Upward Bound I did not know if college was an option just because at my high school they didn’t have many high expectations and I come from a culture where just graduating, well just attending high school and getting a high school diploma is acceptable.

Even with his mother’s encouragement, simply graduating from high school would prove he was smart and accomplishing his goals.

While the other three students interviewed expressed desires to attend college even before enrolling in Upward Bound, each shared the major role Upward Bound played in making these aspirations reality. For Participant #3, Upward Bound had been in her family for so long that that next logical thing was for her to enroll in the program and later apply for college, yet she still shared, "If Upward Bound was not around I don’t know where I would have gone to get help for college considering the environment that I grew up in." Two other students interviewed expressed similar desires to attend college, but looked to Upward Bound for the information and resources to accomplish their goals. Participant #2 spoke of the ease Upward Bound made of the college process. "They made it seem really easy as part of the process to get into college. So if it seemed that easy, of course you could do it.” Participant #6 commented on the help received by Upward
Bound, "Oh they did everything. Everything from just letting me know what my options were ... They helped us a lot. Not just academic wise but overall."

Regardless of the college aspirations or lack thereof, each student interviewed commented on the support and information received from Upward Bound to reach their goals of higher education. Responses from Participants 1 and 5 highlight the overall sentiments from the group:

- They gave us a guide about what we have to do in order to get into college .... repeating what you have to do in order to be competitive in order to get in a good school. Just telling me all this information is what really changed my aspect of how I was looking at education and my future. (Participant #1)
- Just going to that program showed me that I was capable of doing this. [Upward Bound] encouraged and motivated me to keep going forward. (Participant #5)

Apparent from the comments, Upward Bound provided information and resources assisting students to consider, apply and enroll in college. However, just as important or perhaps more so, as this research sought to discover, was to learn about what services were provided by Upward Bound that impacted persistence from year one to year two. In response to this question, research participants expressed staff expectations as an underlining factor impacting persistence. Participant #2 commented on the staff’s love for the program and the students: “You can see that they love the program and how they like to see the students succeed. I know they believe in me so I'm going to believe in myself too.” Participant #6 further expressed the motivation driven by staff, “The motivation; the
drive that they instilled in us. It's not a matter of wanting to succeed. It's a matter of making yourself succeed."

The researcher sought to further uncover elements of Upward Bound that helped students become academically prepared for the university, adjust to the university setting and persist overall. The findings specific to these areas are discussed.

\textit{Preparation for the Academic Rigor of a University Education}

Research respondents were asked to rate how well Upward Bound prepared them for the academic rigor of UC Davis. Eight activities were identified by the researcher, including \textit{Tutoring Services, Study Skills Workshops, College Writing Workshops, Academic Instruction in Math, Academic Instruction in English, Saturday Academy, Summer Program, Bridge Program} and respondents were asked to rate each activity using the following Likert Scale: "1-did not prepare," "2- prepared somewhat," "3-prepared," "4-prepared well," and "5-not offered or did not attend." Presentation of the following data can be found in Table 5.

Demonstrated in the responses, Upward Bound alumni indicated that services provided by Upward Bound prepared them for the academic rigor of UC Davis by choosing "prepared well" as the highest selection for each activity. For each of the eight services, participants selected "prepared well" 42% - 76% of the time (see Table 5). In areas where "prepared well" was not the majority selection, as was the case for \textit{Tutoring Services} with 48% of students indicating this selection and \textit{Study Skills Workshops} with a 44% selection, "prepared" was the next highest selected option. In the case of \textit{Saturday Academy}, "prepared" was not the next highest indicated response. Instead, "not offered or
did not attend” received 30% selections. This is not a surprising indication as some Upward Bound programs do not have an intensive Saturday Academy model, but instead offer weekly after-school Upward Bound sessions.

The highest rated indicator of academic preparation was the *Summer Program* with 76% of the participants indicating this activity as preparing them well for the academic rigor of UC Davis. *Academic Instruction in Math* and *Academic Instruction in English* were followed with 65% and 63% respectively. The responses in the interviews expressed a similar sentiment. Upward Bound alumni described the summer classes as preparation for their first year in college. Participant #1 reflected back to a particular Upward Bound class, “I remember my Calculus class my first year [at Davis] … I could relate back to Martin’s class [an Upward Bound summer course].” He goes on to share I think it would have to be the classes because, I mean they really pushed you to get your work done. When I was here [in Upward Bound over the summer] I felt more was expected of me so I tried harder than I did in high school. Now I think about the same thing. I try to remember back to when I was in UB. The [Upward Bound] classes got me going for my first two years here. They gave you a small experience of what college could be like.

Lower response rates of “did not prepare” or “prepared somewhat” were often indicative of the number of years a participant was involved in Upward Bound. More often then not selections in these two categories were correlated with participant involvement of only 1 and 2 years. When viewing the results through the lens of participant involvement, Upward Bound alumni participating in the program for 3 and 4
years of their high school experience rated each activity as "prepared" or "prepared well" 78% of the time. However, there were four-year participants who rated some of the activities as "did not prepare" or "not helpful". These responses will be further discussed in Chapter 5.

Table 5

Preparation for the Academic Rigor of UC Davis

<table>
<thead>
<tr>
<th>Service</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutoring Services</td>
<td>0%</td>
<td>4%</td>
<td>44%</td>
<td>48%</td>
<td>4%</td>
</tr>
<tr>
<td>Study Skills Workshops</td>
<td>4%</td>
<td>8%</td>
<td>40%</td>
<td>44%</td>
<td>4%</td>
</tr>
<tr>
<td>College Writing Workshops</td>
<td>4%</td>
<td>15%</td>
<td>23%</td>
<td>50%</td>
<td>8%</td>
</tr>
<tr>
<td>Academic Instruction in Math</td>
<td>8%</td>
<td>4%</td>
<td>19%</td>
<td>65%</td>
<td>4%</td>
</tr>
<tr>
<td>Academic Instruction in English</td>
<td>4%</td>
<td>11%</td>
<td>19%</td>
<td>63%</td>
<td>4%</td>
</tr>
<tr>
<td>Saturday Academy</td>
<td>0%</td>
<td>4%</td>
<td>23%</td>
<td>46%</td>
<td>27%</td>
</tr>
<tr>
<td>Summer Program</td>
<td>0%</td>
<td>4%</td>
<td>12%</td>
<td>76%</td>
<td>8%</td>
</tr>
<tr>
<td>Bridge Program</td>
<td>8%</td>
<td>15%</td>
<td>11%</td>
<td>42%</td>
<td>23%</td>
</tr>
</tbody>
</table>

In addition to the eight services listed, respondents had an option of listing additional services, which impacted their preparation for the academic rigor of UC Davis. Thirteen respondents answered this question listing services such as time management workshops, essay formatting workshops, resume writing and interview skills, financial aid information, and college trips.
Adjustment into the University Environment

Interested in Upward Bound’s ability to assist students in adjusting to the university setting, the researcher identified ten services offered by Upward Bound programs, and asked respondents to rate the level of helpfulness. Possible selections for each activity included “1-not helpful,” “2-somewhat helpful,” “3-helpful,” “4-very helpful,” and “5-not offered or did not attend.” Of the ten activities listed “very helpful” was the majority selection for nine of the activities. Table 6 depicts the results for this area of research.

For the Bridge Program, a summer transitional program for graduating seniors, “very helpful” was selected 34% of the time preceded by a 37% selection rate of “not offered or did not attend.” Upward Bound seniors are encouraged to attend the Bridge program at their future college, and as such a higher response rate in the “not offered or did not attend” category is expected.

The Summer Program was selected as an important element for adjusting into the college setting with 81% of the participants indicating “very helpful” for this activity. College Visits were rated as “very helpful” 69% of the time and over 50% of respondents choose “very helpful” for services related to college support services and the development of relationships with college staff and students (see Table 6).
Table 6
Adjustment to UC Davis

<table>
<thead>
<tr>
<th>Service</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Visits</td>
<td>0%</td>
<td>12%</td>
<td>19%</td>
<td>69%</td>
<td>0%</td>
</tr>
<tr>
<td>College Student Panels</td>
<td>4%</td>
<td>12%</td>
<td>31%</td>
<td>31%</td>
<td>23%</td>
</tr>
<tr>
<td>Study Skills Workshops</td>
<td>0%</td>
<td>19%</td>
<td>27%</td>
<td>50%</td>
<td>4%</td>
</tr>
<tr>
<td>Time Management Workshops</td>
<td>0%</td>
<td>12%</td>
<td>39%</td>
<td>46%</td>
<td>4%</td>
</tr>
<tr>
<td>Workshops on College Support</td>
<td>0%</td>
<td>4%</td>
<td>39%</td>
<td>53%</td>
<td>4%</td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to College Support</td>
<td>0%</td>
<td>4%</td>
<td>35%</td>
<td>58%</td>
<td>4%</td>
</tr>
<tr>
<td>Services Personnel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to Current College</td>
<td>0%</td>
<td>8%</td>
<td>30%</td>
<td>50%</td>
<td>15%</td>
</tr>
<tr>
<td>Students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturday Academy</td>
<td>0%</td>
<td>12%</td>
<td>30%</td>
<td>31%</td>
<td>31%</td>
</tr>
<tr>
<td>Summer Program</td>
<td>0%</td>
<td>8%</td>
<td>8%</td>
<td>81%</td>
<td>4%</td>
</tr>
<tr>
<td>Bridge Program</td>
<td>0%</td>
<td>11%</td>
<td>19%</td>
<td>33%</td>
<td>37%</td>
</tr>
</tbody>
</table>

As expressed in the interviews, involvement in the Upward Bound Summer Program greatly impacted the students' transition from high school to college. Living in the residential halls for six weeks in the summer, helped students adjust to college life and become acclimated to the college campus even before enrolling in college as an
undergraduate student. When asked about specific activities that helped in the transition from high school to college, respondents shared the following:

- The Bridge program was really I think ... the biggest help to transition into my first year. (Participant #1)
- The dorm experience for six weeks. Talking to RA's [residential advisors] about what I should expect. (Participant #2)
- I would say living in the dorms. The fact that I came to Davis, and just knowing where to go. (Participant #3)
- Those experiences in the dorms and those experiences taking college courses while in the summer. I became more prepared to go to college and experience college life. (Participant #4)

Participant #5 spoke about the emotional support during the first year in college and friends made in Upward Bound who assisted. "I knew that the friends I made in Upward Bound carried forward. I knew that if I had questions I could always just contact them and I wouldn't feel awkward. Overall [it was a] smooth transition into college."

First Year Persistence

The goal of Upward Bound is to increase the rate participants' complete secondary education and enroll in and graduate from institutions of postsecondary education (DOE, 2008). Enrollment in the second year of college is one indicator towards reaching this goal, thus it was important to identify services offered by Upward Bound, which support student persistence. Table 7 outlines the rate of which research participants believed activities impacted student persistence.
The most notable service provided by Upward Bound, which impacts student persistence, according to the research participants, is Motivation to Continue Your Education. The survey revealed that 88% of respondents felt this was “very helpful” in persisting into the second year at UC Davis. Information on Financial Aid was an important service as well, with 68% of participants selecting “very helpful” in this category. Encouragement to Seek Out College Support Services and Tutoring Services received a selection rate of 50% and over in the “very helpful” category. Responses for College Level Writing Workshops was split with 33% each for “helpful” and “very helpful” and 17% of respondents expressing this activity was only “somewhat helpful.” Interestingly, the interview respondents commented on college level writing workshops as an area where Upward Bound could improve. Study Skills Workshops and Workshops on Effective Strategies for Student-Professor Interaction were shown to be helpful (see Table 7).
### Table 7

#### Services Impacting Student Persistence

<table>
<thead>
<tr>
<th>Service</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Instruction in Math</strong></td>
<td>4%</td>
<td>13%</td>
<td>33%</td>
<td>46%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Academic Instruction in English</strong></td>
<td>4%</td>
<td>25%</td>
<td>21%</td>
<td>46%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>College Level Writing</strong></td>
<td>4%</td>
<td>17%</td>
<td>33%</td>
<td>33%</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Workshops</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study Skills Workshops</td>
<td>0%</td>
<td>20%</td>
<td>42%</td>
<td>33%</td>
<td>4%</td>
</tr>
<tr>
<td>Workshops on Student-Professor</td>
<td>0%</td>
<td>21%</td>
<td>42%</td>
<td>33%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Interaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encouragement to Seek Support</td>
<td>0%</td>
<td>8%</td>
<td>33%</td>
<td>54%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encouragement to Seek Tutoring</td>
<td>0%</td>
<td>13%</td>
<td>33%</td>
<td>50%</td>
<td>4%</td>
</tr>
<tr>
<td>Relationships with College</td>
<td>0%</td>
<td>4%</td>
<td>38%</td>
<td>54%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationships with Campus Staff</td>
<td>0%</td>
<td>29%</td>
<td>46%</td>
<td>25%</td>
<td>0%</td>
</tr>
<tr>
<td>Information on Financial Aid</td>
<td>0%</td>
<td>4%</td>
<td>24%</td>
<td>68%</td>
<td>4%</td>
</tr>
<tr>
<td>Motivation to Continue your Education</td>
<td>0%</td>
<td>0%</td>
<td>13%</td>
<td>88%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Discussions with Upward Bound alumni revealed additional activities that impacted persistence at UC Davis. Four of the six interviewees discussed the structure of
the Upward Bound Summer Program, specifically referring to the time management skills learned and the mandatory study hours imposed during the summer session. “[In my first year, I] could relate to those workshops that helped us prepare for time management.” (Participant #1) Another participant shared, “Time management, something I still continue during my academic year. [It’s] the only way I could have survived.” (Participant #3) Mandatory study hours during the Upward Bound Summer Program have resulted in strong studying techniques in college. Participant #2 explained, “You just had to sit at your desk and study for a straight hour. It kept you disciplined. I know I can go and do that for 3-4 hours now.” Participant #5 expressed the same sentiments regarding the impact of the mandatory Upward Bound study hours.

First thing that comes to mind is that during the summer we would meet Saturdays in the library and for like 4 to 5 hours on Saturday study and back in high school you never studied on a Saturday. So that just really helped me get into the study mood of college. Now I study 5 days a week, Saturday and Sunday. So that really just helped me get into that mentality of trying hard to accomplish and succeed and do well in these classes.

Another area that helped the Upward Bound alumni persist was learning the importance of office hours. Participant #6 expressed the importance of seeking help for first year success.

Upward Bound got me in the mentality that if you can't necessarily ask in class, ask in a smaller setting and that's where office hours come into play.
They always drilled that into our heads...go to office hours, go to office hours, go to the tutoring. I did use that my first year.

*Improvements in Upward Bound Services*

To gather information regarding the enhancement or creation of new services, research participants were asked in the interview how Upward Bound could be improved to impact student persistence. For each student the response was a difficult answer. After posing a follow-up question asking students to reflect on areas where they may have struggled in their first year, respondents then shared some areas that could be improved.

Two students commented on the Upward Bound writing program noting improvements could be made to better prepare students for the skills required for college level writing. Research Participant #1 shared his experience taking two quarters of a pre-college writing course to get his skills up to par. “A more rigorous writing program might help students that could be in my situation. In the summer there could be more advanced classes. Also, more workshops towards writing during the school year to improve student's writing [could be offered].” Participant #3 further shared, “having a more intense writing class,” as an area of improvement to prepare students for writing expectations in college.

Reemphasizing the importance of time management and preparing students for the first year of college were areas where Upward Bound could be improved. Recognizing that the program already teaches time management through workshops and the structure of the program, a participant shared the importance of this component for student success within the first year and beyond as students balance school, jobs, clubs
and other activities. Upward Bound students must understand the challenges ahead in college and the importance of working hard to stay on track. One student shared, "getting in is the first step. After your first quarter, you understand that it's not that easy to stay."

(Participant #1)

Possibly a continued connection with Upward Bound staff once in college could provide the support students need to continue their educational success as Participant #5 explained:

Most of the time I knew they were there if I needed help, but they didn't actively pursue me. They did leave me with other people that were from the program that were here at Davis, but from staff directly [I] did not get much.

Even with the improvements suggested, Upward Bound was a program that helped the students' progress through the educational pipeline. Many of the students shared of a positive Upward Bound experience with "no complaints" (Participant #3) and "overall a good experience" (Participant #5).

Educational Resiliency

Educational resiliency, developed through positive interactions in the family, school, and community, yield four attributes in children, social competency, problem-solving skills, autonomy, and a sense of purpose (Bernard, 1991). Four protective factors have been identified to foster educational resilience in children, a caring and supportive environment, a message of high expectations, and opportunities for meaningful participation (Bernard, 1991; Wang, Haertel, & Walberg, 1997). Research participants
were asked a series of questions regarding their Upward Bound experience to find out if the factors conducive for developing educational resiliency are present in Upward Bound.  

*Caring and Supportive Environments*

Creating a strong connection with a mentor and developing positive relationships with peers are often enough to direct students toward a positive outcome. Upward Bound alumni participating in this study shared an overwhelmingly positive response in this area. Every student interviewed referred to Upward Bound as a family. The program provided a support network and an environment where students felt they could be themselves, seek advice, and grow academically. Participants 2, 3, 5 and 6 spoke of their experience:

- I would say it was really more of a family. I knew I could come to them for anything, any problems I had personal or school wise. (Participant #2)

- It's like being friends. Even though staff, you're still their friends. (Participant #3)

- Definitely someone that I could look up to. Encouraging and the ones that motivated me to go forward. They were the ones that were always there. (Participant #5)

- Family. That's what I would call it … you got there and this was your second mom and your second dad. You respected them. You took their advice seriously. They definitely had a great influence on us and they were very well respected. (Participant #6)

Relationships developed and friendships made with other students in the program encouraged students to move forward as well. Participant #5 commented, “It was very
friendly, kinda homey feel to it just because they had a lot of students that were going through the same things that I was going through." He continued to share, "... you get this encouragement with one another to keep moving forward." Another student expressed the ability to turn to others for support, "You can really trust each other and count on each for just about anything" (Participant #1). Yet another, Participant #6, expressed similar sentiments, "[The students] went through so many things together, [you] learned a lot and built up trust." Not one of the students interviewed expressed negative experiences regarding staff and peer-to-peer relationships. Instead the experiences in Upward Bound resembled a family setting where students could turn to staff and fellow students for support and motivation. Furthermore, Upward Bound staff served as role models for the participants representing similar educational and cultural backgrounds as the students.

A Message of High Expectations

Research shows that students strive to high expectations. An environment of high expectations reduces academic failure and increases college participation (Bernard, 1991). Equally as important is the support necessary to fill the high expectations. Based on the participants' experiences, Upward Bound creates an environment of high expectations and provides the support to reach those goals. Participant #3 explained, "It's a really close-knit environment, family-oriented and friendly, but [there are] still expectations of focusing on school because it is an academic program." Another student goes on to share, "My Upward Bound was pretty strict. The strictness of our Upward
Bound leads more to achieve the goals. [The program is] focused for the students to go to college” (Participant #4).

Asking questions was an important element of expressing high expectations as Participant #6 explains

They had high expectations: ‘Why are you doing bad in school?’ ‘Why aren't you seeking help when there's help here?’ They were very assertive and that's good because when you're trying to get the students motivated you can't be passive.

You have to be in there, you have to be involved and they definitely were.

*Opportunities for Meaningful Participation*

Students engaged in programs feel valued. They are able to develop cooperative learning strategies, problem-solving skills, and develop the ability to become independent (Bernard, 1991). Every one of the Upward Bound alumni interviewed was given an opportunity to take on additional roles and responsibilities within the program. Many of the students were involved in their program’s student council board representing the voice of the Upward Bound students. In fact, 5 of the participants were members of the Upward Bound student leadership board, with 3 carrying roles of Vice-President and President. In addition two students sought out the directors of the program to discuss opportunities to become more involved. Their efforts resulted in tutoring positions

- I know Upward Bound has given a lot [so] I wanted to give back. I offered to be a tutor. (Participant #4)

- I really enjoyed the program and I talked to the person in charge. I told him [the] program was amazing and [I] wanted to give a helping hand. Thankfully there
was a position open as a tutor. [I] helped other people as a source of encouragement to move forward. (Participant #5)

Students involved in Upward Bound felt the responsibility of being role models for younger participants. Participant #1 shared experiences at the after-school tutoring sessions where many new students attended: “I felt like I had to step-up.” This same student expressed that during the summer program many students would seek him out for advice: “I felt that responsibility of having to be there for them.” Another student understood her role as an older participant sharing her involvement recruiting new students to be part of the program and making sure that new students felt comfortable. Opportunities to become more involved in the daily activities of Upward Bound improved the students’ skills making them overall stronger leaders.

Discussion

Upward Bound alumni agreed participation in the program had an impact on defining their college aspirations, their initial transition into college and their persistence into the second year. The relationship with program staff was the underlying component, which enabled students to gain valuable information about college options. Further, staff relationships encouraged students to strive towards their educational goals. Students felt a sense of obligation to excel for Upward Bound staff, which resulted in positive outcomes.

Involvement in the summer program assisted in the persistence of students on multiple fronts. Living in the dorms, discussing college life with residential advisors and feeling like a college student made students comfortable on the college campus. For
students who participated in the UC Davis Upward Bound program, the summer program gave familiarity of not only the campus layout but availability of support services as well. Overall, the summer program allowed students to experience college life prior to enrolling, easing the transition from high school to college.

In the classroom, Upward Bound taught students the importance of working hard, completing homework and seeking help when necessary. Reflecting on his Upward Bound experience, Participant #1 commented, “I try to remember back when I was in UB. I think about it so I get my homework done.” Participant #6 spoke of a Teen Psychology class where students where challenged to discuss, share opinions and broaden perspectives; all essential elements for college success. As students understood the expectations of college, one student shared her desire to have a conscious awakening in high school, an area where Upward Bound could possibly focus more effort. Nonetheless, once in college, some students could reflect on specific concepts learned, while others on skills learned, all which impacted academic success.

From the perspective of alumni, Upward Bound has created a framework for impacting student persistence. When asked how Upward Bound has contributed to their continued education at UC Davis, 48% of participants gave the program a 5 indicated that Upward Bound has greatly contributed, followed by 36% selecting 4 on the scale of 1 to 5. There was a 0% response rate for selection 1 which would have indicated Upward Bound has not contributed to their continued education.

Experiences of Upward Bound alumni demonstrate the program exhibits an environment conducive for developing educational resiliency. Participants' expressed
extremely positive relationships with staff and peers. They spoke of strong messages of high expectations and shared leadership engagement opportunities. As Upward Bound continues to work with low-income, first-generation students it may prove beneficial to further explore this area to make a concerted effort to develop educational resiliency in students impacting educational outcomes. Recommendations in this area are further discussed in Chapter 5.
Chapter 5
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The purpose of this study was to explore the impact of Upward Bound on student persistence. Additionally, the research sought to discover whether Upward Bound has the potential to create an environment conducive for educational resiliency. The study addressed the following research questions:

1. What has been the impact of Upward Bound on student persistence at UC Davis?
   a. What Upward Bound services and activities best prepared students for the academic rigor of a university education?
   b. What Upward Bound services and activities assist students in becoming adjusted to the university environment?
   c. What Upward Bound services and activities contributed to the successful completion of the first year of study at UC Davis?

2. How can Upward Bound be enhanced to improve the persistence of low-income, first-generation students within the university?

3. What components of Upward Bound create an environment conducive for developing educational resiliency?
This chapter will discuss conclusions and recommendations for this study identifying best practices in the area of student persistence and suggesting recommendations for programmatic improvements and further research.

Summary

College student departure occurs most often between the first and second year with students from educationally and economically disadvantaged backgrounds departing at much higher rates than their college counterparts (Ishler & Upcraft, 2005; Engle & Tinto, 2008). In addition to educational and economic background characteristics, academic achievement and social adjustment impact persistence as well (Choy, 2001; Nunez & Cuccaro-Alamin, 1998). College preparation programs, designed to assist students in navigating through the college admissions process and prepare students for success in postsecondary education, have the potential to greatly impact student persistence.

For Upward Bound, one of the Federal TRIO programs, understanding services which impact continuation in college is of utmost importance, as the program must document the rate at which alumni enter into their second year of study. Yet, the program, like many other college preparation programs, does not provide direct services to students after high school graduation. Thus, the program must pay close attention to the services provided to participants, which positively impact college continuation and completion.
Conclusions

Through responses from 29 surveys and 6 interviews, this study explored the experiences of Upward Bound alumni enrolled in their second year of study at the University of California, Davis (UC Davis) seeking to uncover elements of Upward Bound, which impact student persistence. Specifically, the research explored services, which impacted academic preparation, adjustment to the university setting and persistence from year one to year two. In all areas, Upward Bound had a positive impact on student persistence. Furthermore, the program possesses attributes that create environments conducive for developing educational resiliency, a phenomenon that despite adversities students can attain educational success.

Upward Bound alumni expressed a deep recognition towards the program in assisting with their transition and success at UC Davis. Primarily, involvement in the summer program effected their preparation for the academic expectations of the university. Upward Bound classes instilled strong work ethics, study habits, and the ability to think critically, all crucial elements for success in college. Additionally, involvement in the summer program resulted in a positive transition to college allowing students the opportunity to explore college services and discuss college expectations with current students. Exploration of college campuses also eased the transition from high school to college with 69% of survey respondents rating this activity as very helpful.

Educational resiliency is usually viewed through interactions in the home, school, and community. Upward Bound, and other college preparation programs, has the potential of impacting educational resilience in students. As expressed by participants in
this study, the program fosters positive relationships with staff and students, expresses high expectations to meet educational goals, and provides opportunities for leadership engagement. Alumni shared experiences of a family environment that encouraged success. For participants in this study, Upward Bound defined college aspirations and provided tools to enter and progress at the university. Yet, as with any program, Upward Bound could always use improvement.

In the overall assessment of persistence from year one to year two, participants rated 7 of the 11 activities with high selections in the “somewhat helpful” category. Academic services like Academic Instruction in English (25%), Workshops on Student-Professor Interaction (21%), and Study Skills Workshops (20%), received low scores in this area. Perhaps services were not essential for student persistence or quality in these areas was poor. In either case, an area to be explored in future studies.

Students also expressed a concern for ensuring students embrace the program. Participant #2 shared, "The hardest thing to do is to get students to embrace it. Find a way to captivate the students.” Further exploration in this area may shed light as to why students enrolled in the program for 4 years rated services as “not helpful” or “did not prepare”. Two four-year participants indicated College Writing Workshops and Academic Instruction in English as not helpful in their academic preparation for UC Davis. In the area of persistence, a four-year participant again indicated College Writing Workshops as “not helpful”. Perhaps an indication of a student not fully embracing the program or an issue of quality, when coupled with comments by the interview respondents. Nonetheless, Upward Bound demonstrates the potential of college preparation programs to greatly
impact the rate at which educationally and economically disadvantaged students enter and graduate from postsecondary institutions.

Recommendations

Recommendations from this study may guide college preparation programs in making a concerted effort to impact student persistence and the development of educational resiliency. Most notable, is the continuation and improvement of the Upward Bound Summer Program, which positively impacts student progression in college. With the program offering students an opportunity to experience college life and prepare for the expectations of college be it academic or personal, it proved the most beneficial in student persistence by participants in this study. However, given monetary constraints of Upward Bound reevaluating and improving the types of services offered during the academic year are just as important.

Upward Bound programs operating Saturday Academy and after-school sessions can consider incorporating a more rigorous writing program into the curriculum of services. Discussions of time management and useful study techniques for college students surfaced as important factors for balancing and adjusting to the first year of college. Furthermore, stressing the importance of seeking out college support services, tutoring centers and professors during office hours were shared as important contributors to persistence.

Additionally involving families in the college process is critical (Gandara, 2001; Tierney, Corwin, & Colyar, 2005). Families involved in the college exploration and
selection process become more comfortable in their child’s transition to college. One respondent shared experiences regarding Upward Bound college trips. The campus tours to various locations in California and the East Coast eased parent’s worries about their children going off to college.

It helped our parents open up to the idea of letting us go. ‘Hey, if these are really good schools and they have the possibility of getting in and we can afford it then they should go.’ I think Upward Bound opened up that mentality. (Participant #6)

Parent workshops were also offered to explain college options and financial aid opportunities. Implementing a structured family program could improve the effectiveness of Upward Bound.

Apparent through this study, college preparation programs have the potential of developing educational resiliency in students. A concerted effort in this area could positively impact students’ ability to develop strong social competence, problem-solving skills, autonomy and a sense of purpose. College preparation program staff must understand the factors of educational resilience and the desired outcomes. With information in this area, staff can make informed decisions when planning activities and providing services.

Suggestions for Future Research

Through experiences of Upward Bound alumni, the researcher explored the impact of college preparation programs on student persistence, specifying specific activities that lead to continued education. Future studies of other college preparation
programs in this area could enhance the literature related to student persistence and further outline the role college preparation programs play in contributing to the educational success of educationally and economically disadvantaged students, measured by attainment of a baccalaureate degree.

Continuing to explore the role Upward Bound plays in contributing to student success would add to the minimal evaluations of the program. Future studies of the program could capture a greater sample of Upward Bound alumni enrolled in institutions of higher education. In this study, the researcher had access to a limited number of Upward Bound alumni enrolled at UC Davis. Future studies could solicit Upward Bound alumni enrolled at UC Davis from Upward Bound directors who must track the college enrollment of previous participants. In addition, gaining perspectives from Upward Bound alumni attending other four-year and two-year institutions would add to the discussion.

Educational success in this study was measured by a students’ enrollment in their second year of study at UC Davis. However, student academic records were not viewed to determine if students were on academic probation or subject to dismissal. While students may be enrolled in their second year of study, being on academic probation or subject to dismissal suggests the students were not academically prepared for the rigors of the university. Thus, assessing success in light of this information may uncover a different picture of student persistence and could possibly uncover specific areas of improvement to adequately prepare students for postsecondary institutions.
Final Statements

College preparation programs provide a gap in the educational pipeline for students from low-income and first-generation backgrounds. The programs provide information, resources and support for students to enter postsecondary institutions. With a baccalaureate degree an essential component for future opportunities in the global market, college preparations programs must also ensure students are provided with the tools to not only enter the university, but also successfully graduate. The researcher hopes that this study will open the door to further explore the impact college preparation programs have on student persistence. In addition, the researcher looks forward to future studies on the phenomenon of educational resiliency and the critical role college preparation programs play in fostering environments for students to thrive.
APPENDIX A

LETTER OF CONSENT

Dear UC Davis Student,

My name is Diana Garcia and I currently work for the UC Davis Educational Talent Search Program, a sister TRIO program to Upward Bound. I am requesting your assistance to participate in a research study which will be conducted as part of my thesis for the Master of Arts in Education: Higher Education Leadership program at Sacramento State. The purpose of this study is to explore the influence of Upward Bound on the persistence of Upward Bound alumni at UC Davis.

I am requesting that you complete a voluntary, online survey questionnaire through Survey Monkey about your experience in Upward Bound with regards to the extent the program prepared you for the academic rigor of a university education, becoming adjusted to the university environment, and the overall impact of the program on your persistence at UC Davis. The survey should take no more than 20 minutes of your time.

There are no risks to you for participating in this study. Your responses to the survey will be anonymous and confidential.

You will not receive any compensation for participating in this study. Although you may not personally benefit from participating in this research, it is hoped that the results of this study will be beneficial in strengthening services offered to current and future Upward Bound students preparing for postsecondary education.

In addition to the survey, I am requesting that those interested volunteer to participate in an interview. The interview will take place on the UC Davis campus at a time convenient for you. If you are interested in participating in the interview portion of this research, please indicate so in question #10 of the survey.

If you have any questions about this research, you may contact me at PHONE NUMBER or by e-mail at EMAIL ADDRESS.

To begin the survey, please click on the link or copy and paste the URL into your browser’s address line. <SURTVEY LINK>

Your completion of the survey indicates that you have read this email and agree to participate in the research. Please complete the survey no later than Friday, March 20, 2009.

Thank you!
Diana Garcia
APPENDIX B

UPWARD BOUND SURVEY

Informed Consent
Your continuation with this survey indicates you have read the letter of consent sent to you via email and understand and agree to all terms of this research.

Upward Bound Program and Participant Information
1. What Upward Bound Program were you a participant of? If you were a participant of more than one Upward Bound Program, please list the program that you spent the majority of time and refer to that program when answering the remainder of the questions.

2. How many years were you a participant of Upward Bound?
   a. 1 year
   b. 2 years
   c. 3 years
   d. 4 years
   e. 5 years

Preparation for the Academic Rigor of UC Davis
3. Please rate the following activities based on how well they prepared you for the ACADMEMIC RIGOR of UC Davis.

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<thead>
<tr>
<th>Activity</th>
<th>Did Not Prepare</th>
<th>Prepared Somewhat</th>
<th>Prepared Well</th>
<th>Not Offered or Did Not Attend</th>
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<td>Academic Instruction in English</td>
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<td>Academic Instruction in Math</td>
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<td>Bridge Program</td>
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<td>College Writing Workshops</td>
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<td>Study Skills Workshops</td>
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<td>Summer Program</td>
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<td>Tutoring Services</td>
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4. Please list any additional activities offered by your Upward Bound Program that helped prepare you for the academic rigor of UC Davis.
   a. Other Activity One ______________________
   b. Other Activity Two ______________________
   c. Other Activity Three ______________________

Adjustment to UC Davis

5. Please rate the following activities based on how well they helped you become ADJUSTED to the university environment.

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<thead>
<tr>
<th>Activity</th>
<th>Not Helpful</th>
<th>Somewhat Helpful</th>
<th>Helpful</th>
<th>Very Helpful</th>
<th>Not Offered or Did Not Attend</th>
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<td>Bridge Program</td>
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<td>College Student Panels</td>
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<td>College Visits</td>
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<td>Introduction to College Support Services Personnel</td>
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<td>Introduction to Current College Students</td>
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<td>Saturday Academy</td>
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<td>Study Skills Workshops</td>
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<td>Summer Program</td>
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<td>Time Management Workshops</td>
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<td>Workshops on College Support Services (i.e. Educational Opportunity Program and the Learning Skills Center)</td>
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6. Please list any additional activities offered by your Upward Bound Program that helped you become adjusted to the UC Davis environment.
   a. Other Activity One ______________________
   b. Other Activity Two ______________________
   c. Other Activity Three ______________________
**Persistence at UC Davis**

7. Please rate the following activities based on how well they helped you persist into your second year of study at UC Davis.

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<tr>
<th>Activity</th>
<th>Not Helpful</th>
<th>Somewhat Helpful</th>
<th>Helpful</th>
<th>Very Helpful</th>
<th>Not Offered or Did Not Attend</th>
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<tr>
<td>Academic Instruction in English</td>
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<td>Academic Instruction in Math</td>
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<td>College Level Writing Workshops</td>
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<td>Encouragement to Seek out Tutoring Services</td>
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<td>Information on Financial Aid</td>
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<td>Motivation to your Education</td>
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<td>Relationships with Campus Staff</td>
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<td>Relationships with College Students</td>
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<td>Study Skills Workshops</td>
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<tr>
<td>Workshops on Effective Strategies for Student-Professor Interaction</td>
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8. Please list any additional activities offered by your Upward Bound Program that helped you complete your first year at UC Davis.
   a. Other Activity One
   b. Other Activity Two
   c. Other Activity Three
**Overall Upward Bound Experience**
9. On a scale of 1 to 5 with 1 = has not contributed to 5 = greatly contributed, please rate how well your Upward Bound experience has contributed to your continuing education at UC Davis.
   a. 1  
   b. 2  
   c. 3  
   d. 4  
   e. 5

**Option to Participate in a Follow-Up Interview**
In addition to this survey, this research will also include follow-up interviews with Upward Bound alumni at UC Davis. The interviews will take place on the UC Davis campus at a convenient time and location and will take no more than 30 minutes. Please be assured that all responses to this survey, as well as responses during the interview will be kept anonymous.

10. If you are interested in participating in a follow-up interview to further discuss how Upward Bound has impacted your persistence at UC Davis, please complete the following information.
Name: ________________________________
Email Address: ________________________
Phone Number: ________________________
APPENDIX C

INTERVIEW QUESTIONS

1. To begin, I would like you to think back prior to your Upward Bound experience, what were your thoughts about college?

2. How did Upward Bound define or redefine your college aspirations?

3. How did you describe the culture of your Upward Bound program? For example, did Upward Bound foster a supportive; perhaps create an environment of high expectations?

4. Can you please describe your relationship with the Upward Bound staff? What about your relationship with fellow Upward Bound students?

5. Please describe experiences that allowed you to become more engaged with the Upward Bound program? Were you given the opportunity to take on a leadership role in the program?

6. As you began your first year of college, what specific Upward Bound services helped in your transition from high school to college?

7. Academically, which specific Upward Bound services helped you successfully complete your first year of college and enroll in your second year?

8. If you had to select just one aspect of Upward Bound that helped you get to where you are today, what would it be?

9. How could Upward Bound be improved to better prepare students for the academic rigor and expectations of the university?

10. Is there anything else you would like to share about your Upward Bound experience?
APPENDIX D

INTERVIEW RESPONSES

Initial Experiences in Upward Bound

Q1. To begin, I would like you to please think back prior to your Upward Bound experience, what were your thoughts about college?

- "Well before UB, I wasn't really thinking about college." Parents did not go. Dad semester or 2, mom did not go to HS. Parents wanted us to go, but never told us opportunities, what tests or things you had to do. "Before UB I was just thinking, well I'm going to high school so I got to get out of high school and get a job later."

- "I always decided I was going to college cause that was my parents, that was their goal. You know go to college so I was going to go." Always my mindset just wanted extra assistance from UB.

- The problem is that Upward Bound has been in my family for so long so it was kinda the thing to do." Growing up they were off to Upward Bound. One day it was going to be my turn. "College was just always the thing to do for me. It wasn't something that I decided to do it was just something that I need to do."

- Came here when I was 13. I was a freshman. Mom told about scholarships and Upward Bound. At first I was scared to explore new things. "Before Upward Bound I was really not aware of going to college."

- "Pre-Upward Bound I did know if college was an option just because at my high school they didn't have many high expectation and I come from a culture where just graduating well just attending high school and getting a high school diploma is acceptable and you have all these different students with lots of potential that don't really go beyond college because of this cultural experience and expectations that the teachers have of you. So growing up you know my mom always said I was smart and you know I figured if I do graduate from high school and get a high school diploma then I am smart and I will be accomplishing those goals." Fit into the norm and expectations that people have of me. College was not a feasible option, expensive because growing up with a single parent. So goal was just to graduate from high school and go from there.

- "Well I definitely wanted to go. I wasn't sure how to get to college because my parents neither went to college. Actually they only did primary school so I wasn't sure how but I knew I wanted to." Accepted to GATE program. They were always telling me you could do well, you have potential.

Q2. How did Upward Bound help you define or redefine your college aspirations?
"Basically what UB is here for. They gave us a guide about what we have to do in order to get into college." During 2nd year, really started grasping everything. Drilling into heads, repeating what you have to do in order to be competitive in order to get in a good school. "Just telling me all this information is what really changed my aspect of how I was looking at education and my future."

"Staff they really helped a lot. They showed a lot of interest in their students and they wanted them to succeed and you knew that. It was like you didn't want to let them down. It was like you wanted to do well so you could show them you were doing well." Made it possible. Showed you, you could get scholarships, financial aid. They made it seem really easy as part of the process to get into college. "So if it seemed that easy of course you could do it."

"If Upward Bound was not around I don't know where I would have gone to get help for college considering the environment that I grew up in." They aren't a lot of resources provided. My parents didn't know what to do. Even though I had like all my siblings had done it before. I don't know for some reason it never occurred to me to ask them. "I think because I had Upward Bound helping me it wasn't necessary."

"It helped me remember the reason why I go to school in high school." Helped me become aware and what is going to be college here in the States." What tests I need to take to get to college.

The whole UB experience, living in the dorms and experiencing the college courses. Never spent a week away from the dorms or college courses. "Just going to that program showed me that I was capable of doing this." Encouraged and motivated me to keep going forward. Information about scholarships, people out there to help and break out of the norm and encouraged me to go forward.

"Oh they did everything. Everything from just letting me know what my options were from a JC to a State college, UC, private college." Defined not just how hard to get into any of those levels, but how much it would cost cause that's really important when you're coming from a low-income family. Also the trips, extremely important. Paid $500 but that's nothing, like airfare. Out-of-state college trip every year. Tour Ivy Leagues and other private schools, NYU. "That really opened up my eyes. Not just because of the colleges but to see the difference between the private, Ivy's, but also just culturally. I hadn't been exposed to the east coast culture." Helped with so many opportunities, even etiquette. Sometimes not part of your culture - dining etiquette, firm hand shakes. You want to give a good impression. "They helped us a lot. Not just academic wise but overall. They made us well-rounded students."
Q3. How would you describe the culture of your Upward Bound program?

- Everything ran perfectly. Not trying to say it's the perfect program. Reasonable. Anyone could do it. Overall experience, different kinds of culture.
- "I would say it was really more of a family." A good amount of people knew everyone faces. Really family-oriented.
- "I think that Upward Bound is a very inviting environment. It really allows all the participants to break out of their comfort zone and explore." First year, I was there on my own. At the time quiet and shy, not proactive. Gave me that push. Environment and respect everyone has for each other. "I think it's an awesome experience."
- "Our Upward Bound program is based on NHU, but when I got in there it was pretty diverse. Pretty scared because I didn't know English. I felt comfortable." At first timid. Upward Bound let me open myself to everyone. "Environment is comfortable and friendly."
- "It was very friendly, kinda homey feel to it just because they had a lot of students that were going through the same things that I was going through." Culture wise, could relate. "It was just this bonding experience that I can't really explain when you take these courses and eat with these people and sleep in the same dormitories there's just this bonding that happens so naturally you get this encouragement between one another to keep going forward." Eye-opening experience. In high school just go from class to class and go home. Upward Bound was different and helped during tough times. Had friends going through the same to encourage one another.
- "Family. That's what I would call because you went there and it was so culturally diverse but it united us. You got there and this was your second mom and your second dad." "Everyone was very respectful of everyone and even if cultural difference may have divided the community outside the program, within the program those barriers didn't exist." That was also new because when you come from a different culture you tend to gravitate towards those that you perceive as like you. So when you get out you realize, hey we're not so different. Helped out parents too. It definitely united us. A very friendly atmosphere.

Q3b. For example, did Upward Bound foster a supportive environment; perhaps create an environment of high expectations?

- "Very comfortable and welcoming. It really does feel like you are in with a family." Feels completely different then high school. Smaller version of high school but with a more close relationship. A little friendlier too.
- "It's a really close-knit environment. Family-oriented and friendly. Still expectations of focusing on school because it is an academic program. Although we have those expectations, we also have expectations for you to kinda like break out and explore different things and also have fun, learn new
things." For a lot of students it was branching out of their normal environment. Each year different. It was really interesting.

- "My Upward Bound was pretty strict. The strictness of our Upward Bound leads to more to achieve the goals. Focused for the students to go to college."
- "They had high expectations. Why are you doing bad in school? Why aren't you seeking help when there's help here? They were very assertive and that's good because when you're trying to get the students motivated you can't be passive. You have to be in there, you have to be involved and they definitely were." Staff from same culturally backgrounds. Important to identify and role models.

Q4. Can you please describe your relationship with the Upward Bound staff?

- "Good relationship with them... Good people that I really look up to and know I can count on." Teachers are great. Try to make you experience something more personal. Pretty comfortable to be with and very friendly.
- "I knew I could come to them for anything, any problems I had personal or school wise. You know I would come to them. I'd feel free to. I felt that close to them."
- "It's like being friends." Different when you are in the program and when you are out. When you are in the program they are the staff. Everyone is friendly. First-name basis. Even though staff, you're still their friends. When there were problems, stood ground. After program, there is a difference. Not treated like a student anymore.
- I really got close to Directors and Academic Advisor so after I graduated I became a tutor for Upward Bound for math.
- "Definitely someone that I could look up to. Encouraging and the ones that motivated me to go forward. They were the ones that were always there." Tutor, person to go to if I did have problems knowing that they had gone through similar situations. Big brother/older sister to get advice.
- "You respected them. You took their advice seriously. They were like aunts and uncles. They definitely had a great influence on us and they were very well respected."

Q4b. What about your relationship with fellow Upward Bound students?

- "Well like I said at the beginning like a big family. You can really trust each other and count on each for just about anything." Students you do not want to be with, but a lot of them had similar aspects of life like I do.
- They became really close friends. Got to them very personally over the 6 weeks. Chances to get to know them really personally. Follow-up Question: More impact summer or academic year? I felt like I changed when I come back. During the school year was really helpful. They held workshops that were really beneficial.
- "I would say I wasn't one of those students who was proactive in meeting other students." Don't think there was enough time to bond with every single
person. Met certain people and that's who you hung out with, but also met new people. Various relationships with different people.

- We got really close to each other after six weeks of summer residential. Environment is homey. We became like a familia.
- Provided a gap that was in life because grew up as an only child. An overall good experience that helped me experience something new, something different. It really encouraged me to learn.
- Still talk to all of them, especially in grade. Classes were mixed but mostly around them. Class about Teen Psychology - Taught us about problems adolescents went through, talked about problems going through and were really close. Went through so many things together, learned a lot, and built up trust.

Q5. Please describe experiences that allowed you to become more engaged with the Upward Bound program. Were you given the opportunity to take on leadership roles?

- A lot of new students at tutoring session. Felt like I had to step-up. That's what really got me engaged in the program. In the actual summer program I had a lot of students that used to come up to me so I felt the responsibility having to be there for them.
- Had leadership board. President, VP, etc... Treasurer last year. Elected 2 students from core group - liaison. Relaying information, activities. How do you think that helped you in developing you in terms of leadership?

  Leadership - I had to step up. I was the link between the students and student government. Gives you that ability to ... “Makes you an overall stronger leader.”

- "I think it was recruiting students to come to the tutoring sessions." [Summer Program] I think it was just trying to make other students comfortable. During sessions, newer students would expect to see me there.
- Because I know Upward Bound has given a lot I wanted to give back. I offered to be a tutor. I became the President of Upward Bound Student Council. I was in charge of fundraising.
- Really enjoyed the program and I talked to the person in charge. Told him program was amazing and wanted to give a helping hand. Thankfully there was a position open as a tutor. Was involved, knew expectations. Helped other people as a source of encouragement to move forward.
- Tours were very important. Not just out-of-state, but in-state. Extremely important that we know about the colleges and options that we have in state. Gave information about Southern California. “Yeah you can come visit the ones in Northern California, maybe if your parents have time to take you, in most cases they don't, but Southern California especially is much more difficult to get to. Took us to a lot of places that otherwise may not have even heard of or that we would never have gotten an opportunity to visit even if we
had heard of. Plus it gave our parents open up more to the idea of letting us go. Opened up parents eyes if they have the opportunity to go should go. Upward Bound really opened up that mentality." Junior year was Vice-President of Student Government Association. "It was especially important that the students had an input about what could happen in the program." Want to help them help us. Did fundraisers also - sashes for graduation (symbolic of unity).

Transition to College

Q6. As you began your first year of college, what specific activities helped you transition from high school to college?

- Summer classes. I think I learned a lot more in the 6 weeks in UB then high school classes. "I remember my Calculus class my first year...I could relate back to Martin's class." Being on campus gave me a big overall feeling of what the school is. Bridge program, was biggest help for transition. Familiarize with campus and different programs that could help me. "The Bridge program was really I think was the biggest help to transition into my first year."
- College tours were helpful. "If I would not have done that through Upward Bound, I would not have come to see the colleges because my high school did not provide those types of college tours. Dorm experience for 6 weeks, talking to RA's about what I should expect."
- "I would say living in the dorms. The fact that I came to Davis, just knowing where to go. Time management- something I still continue during my academic year. The only way I could have survived." Was really pounded into our heads.
- Helped with financial aid a lot and entrance exams and preparation for tests. Had programs for time management and test taking skills.
- I knew that the friends that I made in Upward Bound carried forward. "I knew that if I had questions I could always just contact them and I wouldn't feel awkward." It was more like a friend, if I was going through something hard or had questions about resources, could call. Students from program came to Davis so gave resources here, show me around, give me advice and tips. "Overall smooth transition into college."
- "First of all, I did not know anything about college life when I got here. I think the workshops really helped. Those weren't necessarily the academic part. Gave us an insight. Prepared mentally. Idea that we need to save. College is expensive. Helped with scholarships and learning more about grants. "I think the classes in general were very important for the transition." Street law - learned about history, influences on groups, learned about rights. Can't make yourself a victim, be assertive. All classes were very important especially in high school. They held workshops for parents, colleges. Workshops on being
sexually active, alcohol problems, depressions, what happens if you're feeling lonely, homesick.

Q7. Academically, what specific Upward Bound services helped you successfully complete your first year of college and enroll in your second year?

- Besides the classes the workshops that dealt with college life. Time management, made me think about everything twice. Could relate to those workshops that helped us prepare for time management and learn how to be more responsible.
- "Mandatory study time. You just had to sit at your desk and study for a straight hour. It kept you disciplined. I know I can go and do that for 3-4 hours now." Getting started with that. Now I have no problem. "The most key thing to help me academically."
- "My leadership roles in Upward Bound. Those experiences in the dorms and those experiences taking college courses while in the summer. I became more prepared to go to college and experience college life."
- "First thing that comes to mind is that during the summer we would meet Saturdays in the library and for like 4 to 5 hours on Saturday study and back in high school you never studied on a Saturday. So that just really helped me get into the study mood of college. Now I study 5 days a week, Saturday and Sunday. So that really just helped me get into that mentality of trying hard to accomplish and succeed and do well in these classes."
- "Definitely just going to class was very important because it got you into that mode of I have to try. I may not like being up at 8:00am already on a Saturday, but you have to keep working." Helped with motivation.

"Academically if you need help then they were there." Groups a lot smaller then school. This was very important for situations when you didn't want to ask questions at school. Maybe more peer pressure, can't show that you were intelligent. Not cool to be super book smart so it was very important to have this private help, more one-on-one and the classes were a lot smaller. Follow-up Q: What did you carry over to be successful at Davis? Office hours. The class lectures, especially in science classes are enormous. Really difficult in a class with 500 students to ask questions. "Upward Bound got me in the mentality that you can't necessarily ask in class, ask in a smaller setting and that's where office hours come into play. They always drilled that into our heads...go to office hours, go to office hours, go to the tutoring. I did use that my first year." Tutoring for Calculus.

College Success

Q8. If you had to select just one aspect of Upward Bound that helped you get to where you are today, what would it be?
• "I think it would have to be the classes because, I mean they really pushed you to get your work done. When I was here I felt more was expected of me so I tried harder then I did in high school. Now I think about the same thing. I try to remember back to when I was in UB. I think about it so I get my homework done. The classes got me going for my 1st two years here. They gave you a small experience of what college could be like.

• "I can't think of anything else, but just the staff, and how willing they were to help you. Their love of it. You can see that they love the program and how they like to see the students succeed. I know they believe me so I'm going to believe in myself too. If see some potential in me then why not believe."

• "That's hard. One aspect... I think it's just the support cause I know you guys are here. Also, the fact that you are located on the Davis campus, it's easier for me to come back. One of the reasons I choose Davis is because I had that support system going on."

• "That's a tough question. Since we have a lot of Saturday sessions, summer residential would be the best one - get to know a lot of people, college life."

• "I just like the fact that the staff there is really encouraging. Or like you see that they're there to help people advance in their situation or their life, to break out of those norms. So I feel like that's carried over with me and I kinda have that mentality now that I have been lucky and fortunate to be born and raised here and there's other people that want to advance as well but they unfortunately don't have the same resources that I have and I kinda feel like an obligation right now to provide the knowledge that I've been fortunate to have." Encouraged to get involved in community, especially in my community. Obligation to help people out as much as I can.

• "The motivation, the drive that they instilled in us. It's not a matter of wanting to succeed; it's a matter of making yourself succeed." You can want something, but if you don't take action then you aren't going to get it. Also, they always had us do community service. They taught us the importance of giving back to our community and I think that's essential. Community service helped me grow as a person. Upward Bound students began to get involved in other community service activities in high school.

Improving Upward Bound

Q9. How could Upward Bound be improved to better prepare students for the academic rigor and expectations of the university?

• More rigorous writing program that might help students that could be in my situation. Had to take two quarters of workload. In summer could be more advanced classes. Also more workshops towards writing during the school year to improve student's writing.

• "The hardest thing to do is to get student's to embrace it." Find a way to captivate the students. Give them a briefing of the whole summer, what they should expect to get out of it.
"Getting in is the first step. After your first quarter you understand that it's not that easy to stay." Preparing- Apply for scholarships because once in college harder to have a higher GPA. "Having a more intense writing class." Different type of thinking. "Wish I would have that conscious awakening when I was in high school."

I guess more college courses like GE's, Chemistry, Math. They should be counted as college units, instead of electives. Higher standards for accepting students from 2.0 to 3.0

"An overall good experience."

"That's hard because it was a really good program." Sometimes not enough funding. Selecting students so many more people could benefit, but they weren't given the opportunity because there wasn't enough funding. Program did a really good job of stretching their dollars. Fundraising, students expected to buy tickets for dances. This was a way parents could contribute.

Q9b. Was there anything missing, anything you struggled with during your first year?

"Everything that I have done so far in my two years here I always do relate to my Upward Bound experience." Can't really think of anything that I've really had to struggle with that Upward Bound wasn't there when I was in high school

Time Management might have been a big one. Balancing job, school, clubs. "I know they do them already...the way they set the program up it's time management already, but they could be a little more consistent...I have no complaints."

Can't think of anything. Mistakes made were own. One would be for the staff to keep more in contact with the students. "Most of the time I knew they were there if I needed help, but they didn't actively pursue me. They did leave me with other people that were from the program that were here at Davis, but from staff directly did not get much."

"The only things that I was not prepared to see was I expected college students to be really mature, but maybe that's a common misconception." Really like Davis, but the dorms, their like little kids. "Academically, I think they did the best that they could. If I am here it's thanks to them."

Additional Comments

Q10. Is there anything else you would like to add about your Upward Bound experience?

"If it weren't for the program I don't think I'd be here... If it weren't for the program I could probably see myself just graduating from high school and that was it." There to push you to go to a university. A lot went to community college, but it's the first step into higher education. That overall support got me to the point of finishing my second year here at UC Davis.
• "I'd say the program was extremely beneficial. I know I learned a lot of things. It's so funny how it's just six weeks but you just learn so many things about yourself and so many other people. This program, there's no comparison. You can't compare it to any other program."

• "I had a lot of fun. I think...it really helped. It gave a lot of breathing space for me. The high schools you reach out to there aren't that many expectations...It gave that extra push for a lot of the students."

• "I like the field trips to colleges. It really helped in being to know, have options of different universities, and different state universities like four year universities. For me it affected a lot for myself because it really changed me so like personally it changed me from being shy to getting involved in a lot of activities. It played as a small change to a big one. That's where the process of changing me to get involved."

• "Other then it really helped me get to were I am right now. I honestly don't think I'd be here if it weren't for the program. It just really provided services during the summer whether it be encouragement to move forward or during the school year with application help. It just was really good resources to get me where I am right now and no doubt the reason why I will achieve and succeed."

• "Upward Bound is definitely a program that I think really works. They definitely helped. I would like to see more students of color doing better in school and in our community making a difference in a positive way. And getting a better education because how are you going to get out of this rut if you don't get an education. Upward Bound I think opens your eyes and makes you a well-rounded student overall not just academically." Taught us about etiquette, saw musicals. "I have a lot of very good experiences in high school and most of them, if not all of them were in Upward Bound. What you have is your memory and the past is always with you. Your memory is like a book and you're always going back to it. I'll always appreciate that and always be grateful."
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