A project plan for the development of a formalized adaptation course to assist Hispanic students in pursuing advanced academic degrees

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A PROJECT PLAN FOR THE DEVELOPMENT OF A
FORMALIZED ADAPTATION COURSE TO ASSIST
HISPANIC STUDENTS IN PURSUING
ADVANCED ACADEMIC DEGREES

A Project
Presented to the Department of
Mexican American Studies
San Jose State University

In Partial Fulfillment
of the Requirements for the Degree of
Masters of Arts
(Emphasis: Policy Studies)

by
Janina Irene Espinoza
August 19, 1994
APPROVED FOR THE DEPARTMENT OF MEXICAN AMERICAN STUDIES

Dr. Jose A. Carrasco (Project Advisor)
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CHAPTER I
INTRODUCTION

California reflects a growing population that has rapidly changed over the past 10 years. The 1980 census identified the racial/ethnic composition of California's population at 24 million. California's 1990 census identified the same population at over 30 million. This represents an increase of nearly 6 million people of which 3.1 million represents Latino residents. Of this 1990 population, the California State University (CSU) system has over 277,000 students from different racial/ethnic groups enrolled. These racial/ethnic groups show a decline in enrollment with the Latino below average at a rate of 50.1 percent (California Postsecondary Education Commission, Sept. 1993). Juan Flores stated that if the trend presently existing for Hispanics in higher education continues, it will "worsen" even more (p.8). It is this trend that the CSU system may wish to research further.

The CSU system is one of California's two 4-year university systems; the other is the University of California (UC) system. The CSU system consists of 19 campuses, which includes California State University, Stanislaus (CSU, Stanislaus) is situated in Turlock, California with a total enrollment of 5,790. In the 1993 academic year at CSU, Stanislaus, 400 baccalaureate degrees were granted and only 7.2 percent (29) were earned by Hispanics. Like other
universities throughout the United States, Stanislaus has been concerned with increasing the number of minority students continuing in Advanced Academic Degree programs. Because of this, the University Outreach program was created in 1990. The University Outreach program at CSU, Stanislaus is designed to recruit new and transferring community college students to enter the University. However, Jaime Alcaraz, Director of University Outreach at CSU, Stanislaus, states that the University's graduate programs, which offer Advanced Academic Degrees (AAD), want the University Outreach program to take over the task of recruiting graduate students. Over a period of three years, the recruitment of students by the University Outreach program at Stanislaus has steadily increased. The number of Hispanic students recruited to enter CSU, Stanislaus increased from 8 percent (32) in the 1990 academic year to 17 percent (67) for the 1993 academic year. Although, the number of Hispanics entering CSU, Stanislaus has increased, those earning baccalaureate degrees remain the same with less than 2 percent of the 29 Hispanic graduates entering AAD programs at CSU, Stanislaus (Alcaraz, 1994).

Information on entry level requirements needed for AAD programs is provided by the CSU system to students through various programs. Some of these programs include Career Fairs, Orientations, Academic Advising and Career Development. Each of the programs is responsible for providing students with information on graduate and postbaccalaureate admission
requirements. Although these programs are in place, the review of literature in Chapter II indicates that information regarding AAD programs within the CSU system is not reaching Hispanic students. There is an increasing need to ensure that all students receive information in a timely and accurate manner facilitating entry into AAD programs. At CSU, Stanislaus, an Adaptation course entitled "Multidisciplinary Studies 1000" (MDIS 1000) includes some information on AAD programs for Equal Opportunity Program (EOP) students. According to the literature, a more effective approach is needed to provide timely and accurate information on pursuing AAD programs. The intent of this project is to develop a curricular unit on "Pursuing Advanced Degrees" (PAD). The PAD unit will be incorporated within a formalized course which will maximize timely and accurate information to insure that students have the opportunity to meet the entry level requirements for AAD programs. The course would be taught by CSU/CSU, Stanislaus faculty to provide a viable "reach out" and "engage" (De La Rosa, 1990) approach to increase the total number of students recruited and receiving AAD program information at CSU, Stanislaus (Alcaraz, 1994).

In order to formulate the proposed plan, the interrelationship between variables was examined and generated by applying a detriment-benefit conflict model formulated by Espinoza (1980). This model is an extension of the model devised by the Mexican American Graduate Studies Department (MAGSD) for graduates enrolled in the department's past Public Affairs Program. This
program was also known as the ISSPA program, which stood for the "Institute for Spanish Speaking in Public Affairs."

The Espinoza detriment-benefit conflict model focuses the project plan by raising three questions regarding a specific environment. While the first two questions focus on the perceived benefit-detriment, it is followed by a third question which generates the conflict. For this project plan, the questions are:

**Detriment:** Why are Hispanic students enrolled in Adaptation courses at CSU, Stanislaus receiving minimized timely and accurate information about entry level requirements for AAD programs?

**Benefit:** Why are there formal Adaptation courses at CSU, Stanislaus to ensure Hispanic students receive maximized timely and accurate information about entry level requirements for AAD programs?

**Conflict:** Why are Hispanic students enrolled in Adaptation courses at CSU, Stanislaus receiving minimized timely and accurate information about entry level requirements for AAD programs when there are formal Adaptation courses at CSU, Stanislaus to ensure Hispanic students receive maximized timely and accurate information about entry level requirements for AAD programs?

The interrelationship between variables found in the conflict were examined to focus the constraint which allowed for the detrimental and beneficial attributes to be formulated. The Constraint, a pivotal link formulating divergent solutions, identifies the Adaptation course for Hispanic students as the organizing principal. The Value, a beneficial divergent solution designated by
the constraint, identifies maximized timely and accurate information for AAD programs as the focus of the model for the project (Espinoza, 1980).

**Detriment-Benefit Conflict Model**

<table>
<thead>
<tr>
<th>Value</th>
<th>Benefit</th>
<th>Constraint</th>
<th>Detriment</th>
<th>Disvalue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximized Timely &amp; accurate</td>
<td>Formal Adaptation course</td>
<td>Adaptation course for Hispanic Students</td>
<td>Informal Adaptation course</td>
<td>Minimized Timely &amp; accurate Information for AAD</td>
</tr>
<tr>
<td>Information for AAD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In summary, to maximize timely and accurate information on entry level requirements, Hispanic students are expected to take advantage of opportunities to pursue AAD programs. The essential organizing principle generated to guide the development of this proposed project plan is:

Formalized Adaptation courses serve as a means for providing maximized timely and accurate information on entry level requirements for AAD programs.
Project Plan Variables

As the constraint allowed for focus on the Adaptation course, the variables allowed for focus on the environment in which the Adaptation course would be situated. The project plan consists of variables which are used to increase the benefits and reduce the detriments found in the constraint. Each of these variables consists of two mutually exclusive attributes allowing for the beneficial and detrimental patterns found in the environment. Variables and attributes used in this project are:

VARIABLES

<table>
<thead>
<tr>
<th>BENEFICIAL ATTRIBUTES</th>
<th>DETRIMENTAL ATTRIBUTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptation Course</td>
<td></td>
</tr>
<tr>
<td>Formal</td>
<td>Informal</td>
</tr>
<tr>
<td>Access</td>
<td></td>
</tr>
<tr>
<td>Required</td>
<td>Optional</td>
</tr>
<tr>
<td>Opportunity</td>
<td></td>
</tr>
<tr>
<td>Maximized</td>
<td>Minimized</td>
</tr>
<tr>
<td>Reach Out</td>
<td></td>
</tr>
<tr>
<td>Systematic</td>
<td>Sporadic</td>
</tr>
<tr>
<td>Engage</td>
<td></td>
</tr>
<tr>
<td>Personal</td>
<td>Impersonal</td>
</tr>
<tr>
<td>Role Model</td>
<td></td>
</tr>
<tr>
<td>Link</td>
<td>Expose</td>
</tr>
</tbody>
</table>
Observable Variable Activities

As the variables allowed focus on the environment, CSU, Stanislaus, in which the Adaptation course would be situated, the mutually exclusive attributes allowed for focus on observable activities within the environment. Each variable consists of mutually exclusive attributes, which establish specific beneficial and detrimental observational patterns containing specific activities as noted:

**VARIABLES**

<table>
<thead>
<tr>
<th>BENEFICIAL ATTRIBUTES with BENEFICIAL ACTIVITIES</th>
<th>DETRIMENTAL ATTRIBUTES with DETRIMENTAL ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formal</strong></td>
<td><strong>Informal</strong></td>
</tr>
<tr>
<td>1. Faculty role models</td>
<td>1. Staff role models</td>
</tr>
<tr>
<td>2. Eligible candidates</td>
<td>2. Ineligible candidates</td>
</tr>
<tr>
<td><strong>Access</strong></td>
<td><strong>Optional</strong></td>
</tr>
<tr>
<td>1. Recruit actively</td>
<td>1. Contact actively</td>
</tr>
<tr>
<td>2. Encourage personally</td>
<td>2. Inform personally</td>
</tr>
<tr>
<td><strong>Maximized</strong></td>
<td><strong>Minimized</strong></td>
</tr>
<tr>
<td>1. Timely information</td>
<td>1. Timely information</td>
</tr>
<tr>
<td>2. Accurate Information</td>
<td>2. Accurate Information</td>
</tr>
<tr>
<td><strong>Reach Out</strong></td>
<td><strong>Sporadic</strong></td>
</tr>
<tr>
<td>1. Individual guidance</td>
<td>1. Group guidance</td>
</tr>
<tr>
<td>2. Role model assists</td>
<td>2. Role model directs</td>
</tr>
<tr>
<td><strong>Engage</strong></td>
<td><strong>Impersonal</strong></td>
</tr>
<tr>
<td>1. Individual presentation</td>
<td>1. Group presentation</td>
</tr>
<tr>
<td>2. Research participation</td>
<td>2. No research participation</td>
</tr>
<tr>
<td><strong>Role Model</strong></td>
<td><strong>Expose</strong></td>
</tr>
<tr>
<td>1. Introduce candidates</td>
<td>1. Identify candidates</td>
</tr>
<tr>
<td>2. Shared experiences</td>
<td>2. Related experiences</td>
</tr>
</tbody>
</table>
According to Charles Treadwell, methods utilized by the CSU system to provide information on graduate and postbaccalaureate admissions have been ineffective in assuring that information is reaching eligible students. Data, from a 1980 High School and Beyond study, indicates that only 47.9 percent of Hispanic seniors applied for admission to one or more colleges, compared to 62.7 percent of Blacks and 64.6 percent of Whites. Traditionally, undergraduate White students, identified as having postgraduate educational goals, are actively recruited and encouraged to participate in courses which meet requirements for entrance to AAD programs. The students who are not identified as having postgraduate goals, Blacks and Hispanics, are not actively recruited or encouraged to participate in courses which meet requirements for entrance to AAD programs. These students, Blacks and Hispanics, graduate from the CSU system but are often unable to meet the minimal admission criteria needed for ADD programs. Many students are forced to seek out the necessary admissions information on their own; thereby, minimizing their opportunities for eligibility in AAD programs. As a result, prospective applicants do not receive timely or accurate graduate admissions information and are then informed that they have not met entry level requirements for AAD programs (Brooks, 1987).
The following data strongly supports the position taken by Brooks regarding Blacks and Hispanics:

**ANNUAL DOCTORATES IN U.S. by RACE/ETHNICITY**

<table>
<thead>
<tr>
<th>75-85 adjusted for '80 Pop. '89 for '90</th>
<th>1975</th>
<th>1980</th>
<th>1985</th>
<th>1989</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whites (non-Hispanic)</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Blacks</td>
<td>0.3</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Asian/Pacific</td>
<td>0.7</td>
<td>1.2</td>
<td>1.5</td>
<td>1.8</td>
</tr>
</tbody>
</table>

1.0 = Perfect Representation (Flores, 1992, p. 9)

The purpose of this project plan is to develop a formalized course that will incorporate the unit on PAD to address the issue of access to timely and accurate information provided to students on entry level requirements for AAD programs. Arnove suggests that the lack of timely and accurate information on AAD programs has resulted in Hispanic students not meeting academic eligibility requirements for admissions to masters and doctoral programs (Arnove, Altbach, and Kelly, 1992). It is important that students be provided timely and accurate information pertaining to entry level requirements for AAD programs in an effective manner. In recent years, a large number of faculty retirements and reduction of faculty at many CSU campuses have taken place. Therefore, it is extremely difficult to effectively link students with stable role models that provide
timely and accurate information needed to meet graduate and postgraduate admissions requirements (Austin, 1982).

To ensure that all students receive information needed to prepare for future careers, institutions should review the manner in which students are designated to receive admission related information for AAD programs. In 1990, there were 7,270 tenured faculty in the CSU system. Of this, 242 (3%) were Latinos (Rodriguez, Guillermo, 1991). An increase of Latino representation among tenured faculty in the CSU system would greatly enhance faculty role model relationships; hence, "more successful to overcome underrepresentation" (Arciniega, 1984). The aim of the PAD unit is to ensure that Hispanic students entering MDIS 1000 courses at CSU, Stanislaus are provided maximized information in order to be eligible for AAD programs upon completion of their undergraduate degree. The purpose of this project is to propose the development of a beneficial and formalized course for CSU faculty on criteria related to programs offered by both CSU, Stanislaus and other four year academic universities.

The key concept underlying this project is "reach out" and "engage." According to De la Rosa, "reach out" (actively seeking students) and "engage" (involving students in process), suggest that counselors are less likely to make contact with students and less likely to involve them in discussions relative to future careers and will merely refer them to written materials. Furthermore,
Duran reports that Latino students often fail to receive adequate counseling or support from educational institutions (p.16). This concept is introduced in a report addressing educational systems taking proactive approaches in meeting the academic needs of Hispanic students (Hispanic Education: A Statistical Portrait, 1990). This model proposes a formalized course to provide a "reach out" and "engage" approach for the dissemination of timely and accurate information for Hispanic students interested in pursuing AAD programs. This would allow Hispanic students greater opportunities to qualify and meet eligibility requirements for entrance to AAD programs.

The Performance Evaluation Review Technique (PERT) model was utilized in Chapter III to determine the major steps in the solution of the problem derived from the detriment-conflict model. The purpose was to generate a planning subsystem in the form of a project plan consisting of the following components: Work breakdown structure, Workflow, Time estimation and Critical Path.

**DEFINITION OF TERMS**

**Access:** Access, resulting in viable credentials and career development, is a need to increase and recognize equitable admission procedures which do not exclude minority candidates from graduate programs (Williams, 1986).

**Adaptation Course:** Elective course offered to assist students with educational goals at CSU, Stanislaus. The unit on Pursuing Advanced Degrees (PAD), would be incorporated into the Adaptation course, includes such activities as faculty, AAD graduates and AAD candidates providing services. Those services would include: graduate students as presenters to reach out to students, to engage students in the application process, and monitor students applying to and accepted into AAD programs. Other activities derive from the Observable
Variable Activities model which include: Active recruitment, Personal encouragement, Individual guidance, Role model assistance, Link with role models and Participation in AAD research.

**Advanced Academic Degrees (AAD):** Advanced Academic Degrees refers to graduate degrees such as masters and doctorates attained at four year academic institutions.

**CSU:** The California State University system, was brought together as a system by the Donahoe Higher Education Act of 1960. It consists of 19 campuses from Humbolt to San Diego offering BA and MA level degrees. In 1982, the system became the California State University (CSU, Stanislaus Catalogue, 1993-94).

**CSU, Stanislaus:** The University was established to serve the Central San Joaquin Valley and neighboring Central Sierra Foothills (CSU, Stanislaus Catalogue, 1993-94).

**Opportunity:** In accordance with public law, Senate Bill 3531, the term opportunity refers to a policy which provides equality of educational opportunity to all persons regardless of race, color, religion, sex, national origin, or social class (Kent, 1972).

**Program Evaluation and Review Technique (PERT):** Is a model developed by Desmond Cook which allows for work flow, time estimations, and critical paths to be determined for purposes of implementing a proposed project (Cook, 1971).

**Reach out and Engage:** "Reach out" and "Engage" is the active contact with Hispanic students and personally involving them in discussions regarding their future careers. It is promoting more educational services offered through community based organizations with proven track records (De La Rosa, 1990). Consistent with the observable variables, "reach out" and "engage" are defined as attributes within a formalized procedure to deliver systematic and personal assistance.

**Role Model:** Quality individuals providing outreach which is more conducive to establishing rapport, communication, and trust with students. The linking of qualified individuals with students for the purpose of providing them assistance in attaining goals (Trevino, 1993).

**Timely and Accurate:** Timely is information allowing for benefits to be derived from available opportunities during specific time frames. As opportunities are available, accurate is when the criteria, guidelines and options available are
precise as to specifics needed to qualify for opportunities (Simpson & Yinger, 1972).

**HYPOTHESIS**

There will be a significant difference between the number of students eligible to enter AAD programs who are enrolled in a formalized Adaptation course which serves as a means for providing maximized timely and accurate information. The students enrolled in Adaptation courses will be more informed and apt to successfully enroll in an AAD program as compared to the number of students eligible to enter programs of higher education who are enrolled in Adaptation courses which do not serve as a means for providing maximized timely and accurate information.

**LIMITATIONS**

Implementation of the project plan at CSU, Stanislaus will maximize timely and accurate information on AAD programs for Hispanic students enrolled in a formalized Adaptation course. This project plan did not operationalize the techniques or methods for implementation. The project was developed in regards to CSU, Stanislaus and is not intended to implement curriculum. It is limited to maximizing timely and accurate information for Hispanic students enrolled in Adaptation courses at CSU, Stanislaus pursuing Advanced Academic Degrees.
SUMMARY

A significant number of major points strongly suggests that many students do not receive the necessary four year college related information required for them to successfully qualify for AAD programs of higher education. Currently, methods utilized by the CSU system do not effectively ensure that a large number of Hispanic students obtain timely and accurate information. There is a need to examine the manner in which a differentiation is made between students who are eligible to receive information on AAD programs. There is also a need for a formalized plan to ensure delivery of entry level requirements which will facilitate an increase in the number of Hispanic students meeting admission requirements to Advanced Academic Degree programs. In an attempt to provide a review of literature that would directly relate to students not meeting entry level requirements for advanced academic degrees, the literature review, in Chapter II, addresses the variables and attributes derived from the detriment-benefit conflict model.
CHAPTER II

REVIEW OF LITERATURE

The purpose of this study is to develop a course unit to increase the number of California State University Hispanic students who graduate with baccalaureate degrees and are prepared to meet the academic requirements needed for admission to Master's and Doctoral programs. This chapter documents the literature related to research in this area. In addition this investigation examines sources that address past and present decision making tendencies faced nationally by Hispanic students. This study examines literature that focuses on Hispanic students, throughout the state of California, who are faced with meeting admission requirements for programs of higher education. The literature utilized establishes the foundation to explain some of the reasons students are not presently able to meet requirements allowing them to pursue advanced degrees. Statistical data examining and exemplifying specific expectations for students in the United States and the State of California are provided.

OPPORTUNITY

In accordance with public law, Senate Bill 3531, the term opportunity refers to a policy which provides equality of educational opportunity to all
persons regardless of race, color, religion, sex, national origin, or social class (Kent, Leonard, 1972). The data collected exemplifies the lack of opportunities which exist for Hispanic students seeking to enter masters and doctoral programs. Trends, which affect Hispanic students graduating with baccalaureate degrees, seem to conclude that they are uninterested in attaining advanced degrees. In his work, *Graduate Education in the Decades Ahead*, Burke discusses the issue of higher education's failure to meet the needs of minorities. He states, "It has become apparent that our limited knowledge of the fundamental nature of the learning process is a major roadblock." He continues by stating that this problem is reflected in Senate Bill 3531 which was introduced on March 3, 1970, on the recommendation of President Richard Nixon. This bill notes that:

"The Congress hereby declares it to be the policy of the United States to provide equality of educational opportunity to all persons regardless of race, color, religion, sex, national origin, or social class. Although the American educational system has pursued this objective, it has not attained it. Inequalities of opportunity remain pronounced. To achieve equality will require far more dependable knowledge about the processes of learning and education than now exists or can be expected from present research and experimentation in this field. While the direction of the education system remains primarily the responsibility of State and local governments, the Federal Government has a clear responsibility to provide leadership in the conduct and support of scientific inquiry into the educational process" (pp. 20).
Other issues on opportunities for students to enter programs of higher education are discussed by Robert Arnove. He states that legacy, a commitment to providing all qualified Californians whatever their economic status the benefits of a college education, is already badly battered. The social contract that made it possible has eroded. Since 1991, opportunities for higher education in California have been rolled back. He adds, that in the face of population growth opportunities for college attendance in California has been reduced by almost 200,000 student slots. In the current academic year alone, enrollment in California higher education dropped dramatically (Emergent Issues of Education, 1992).

Chapter one of *In Pursuit of Equality In Higher Education*, by the California Higher Education Policy Center, states that Californians made the benefits of a college education available to every state resident motivated and capable of taking advantage of the opportunity. No other state has matched that impressive commitment to opportunity beyond high school. However, the report further states that the California Higher Education Policy Center knows the difficulty of maintaining opportunities for quality education (Pruitt, 1987).

According to Mirande, one of the factors contributing to the lack of opportunities for pursuing higher education is that minorities generally attend colleges at a much lower rate than Whites. He also reports that attendance is perceived as a particular problem negatively impacting Hispanics who are attempting to meet graduation requirements. Mirande attributes this problem in
part to the fact that education in the United States is not properly addressed as he states:

Children may be born into families of varying economic backgrounds, but such differences are largely inconsequential to their performance, for the school is the great equalizer that works to obviate these differences. (p. 94)

In her article, *Hispanic Education: A Statistical Portrait*, De La Rosa reports that the educational attainment level of Hispanic adults continues to be much lower than those of non-Hispanics. The illiteracy rates among Hispanics are substantially higher than for any other major racial/ethnic population in the United States. The article continues by saying that while Hispanics have made progress in educational attainment since 1970, the gap between Hispanics and non-Hispanics educational attainment seems to be widening. This is demonstrated by the college completion rates reported in March of 1989 (McMillan, 1989). This research states that 9.9% of Hispanics, 25 years of age and over have completed four or more years of college, compared to 21.9% for non-Hispanics. In 1970, about 5.5% of Hispanics, Blacks, and Asians 25 years and over, graduated from college, compared to 11.3% of Whites. In 1980, the White college completion rate was 17.1% compared to 8.4% for Blacks and 7.6% for Hispanics and 5.9% for Asians.
ACCESS

Some researchers believe that issues of access relevant to the academic entry level requirements needed for advanced degrees are among the most controversial in debates concerning higher education. Arnove suggests that this topic may be especially volatile since there is widespread assumption that all segments of the population should be able to obtain a university education. Yet, the realities of higher education do not permit this level of enrollment (Arnove, Altback, and Kelly, 1992).

Stephen Williams discusses how minorities have faced professional discrimination and experienced difficulties gaining admission to training programs. He states that minorities have faced numerous barriers in education, specifically in the field of medicine and law. There is a lack of access to educational and cultural opportunities that result in viable credentials and career development which excludes many capable minority candidates from admission to graduate and professional programs. He suggests that one of the contributing factors for this phenomena is the lack of accessibility to financial resources as well as access to traditionally White dominant fields such as: law, medicine, business, engineering and education, which tend to exclude minorities. However, he further explains that today there is an increased recognition of the inequitable tradition of discrimination that has been dominant in graduate admissions. Williams concludes that this is the result of increased active social
pressure to alleviate the underrepresentation of these groups in all professional fields (How to Get Into & Finance Graduate & Professional Schools. 1989 pp. 139-40).

According to Olivas, access is also a matter of financial aide information having a particularly negative effect on minority and bilingual communities which are developed on different and less formal information systems than majority populations (The Retreat from Access. 1986, p.16). This view is supported by Jackson who states that Hispanic students depend, more than other students, on complex family and social networks for information (Financial Aide, college entry and Affirmative Action. 1990. p.543).

In June of 1976, the National Board of Graduate Education looked at minority students in Graduate programs. They found that minority men and women (Blacks, Chicanos, Puerto Ricans, American Indians and Asians) make up more than 26 percent of the total population of the United States. However, they usually represent less than 6 percent of the total population enrolled in master’s and doctoral programs in the United States colleges and universities. In 1973-74, minorities earned fewer than 5 percent of the doctorates awarded. These statistics serve to validate the lack of access to doctoral programs and the failure of educational institutions to recruit and maintain students from underrepresented groups (National Board of Graduate Education. 1976).
In general, parents are interested in the academic preparation of their children since it is a prerequisite for them to succeed in life. Although many parents often fail to attend or complete their high school education, graduation from high school is perceived as a necessary and major accomplishment for their children to qualify for higher educational programs (Simpson & Yinger, 1972).

The one school environment factor where the minority student is consistently at a disadvantage is in the economic, social and psychological characteristics of his fellow students (p.556).

A significant number of students, particularly Hispanics and other minorities who are eligible to continue on to college, and beyond end their education by merely getting a high school diploma or baccalaureate. Unfortunately, the failure of many of these students to pursue advanced degrees may simply be the result of their lacking the necessary information to know that college is a possible option for them. Many of these students rely on the school system to provide the instruction and information necessary for them to make appropriate decisions regarding higher education. If schools are minimizing the manner in which they provide accurate and timely information, Hispanic students who cannot afford to contract with a private counselor will fail to benefit from opportunities attainable only through higher educational institutions. Normally, counselors are responsible for providing all students with academic guidance and information relevant to attain higher educational goals. They are
often perceived as responsible for students failing to continue on with their education (Simpson & Yinger, 1972).

In his article, Policy and Closed Access to Higher Education, Ochoa discusses the need for school districts to move from a policy of equal access of resources, to a policy of equal expectation and equal treatment that will yield a Latino/Chicano labor force reflective of its community composition. He suggests that schools need to view the background of Hispanic students not as deficient but as experiences to be used to develop concepts, literacy skills, decision making, and critical thinking. In brief, institutions need to recognize that students learn at different rates, through different approaches.

California Postsecondary Education Commission voices that in addition to traditional socio-economic status indicators (family income, parents education), two additional reasons are presented as important factors influencing both the probability that students will attend college and decisions they make. The first factor, "which track to take, has major implications for students' later education and career options." The second factor is, "that certain groups of students, i.e. low income, ethnic minorities and their families," need to be provided college-related information while in elementary and junior high school as a means of motivating their interests in college (CPEC News, 1986). Hopke states that the public educational system is becoming a major social concern to parents and the community in the eighties. He further explains that one aspect of this concern is
the significant number of graduating students failing to continue on to higher education. He suggests that the way to offset the problem would be to consider teachers as being instrumental in offering personal encouragement to students to follow a postsecondary education (CPEC NEWS, 1986).

Kauffman, on the other hand has serious concerns regarding programs intended to prepare students for their future educational environment. He suggests the following points when planning student programs.

- Strengthen student ability to future success.
- Expand student's potential for future choices.
- Relate curriculum to student's future plans.
- Integrate career education/job preparation roles.
- Demand good judgment and creative problem solving
- Encourage alternative future possibilities and speculate as to consequences (CPEC NEWS).

According to the California Postsecondary Education Commission, the popular perception of increased Hispanic participation in institutions of higher education seems to be a myth. Despite the appearance of increased access to higher education through affirmative action programs, proportionately speaking, fewer Hispanics attended college in 1980 than in 1975. While the number of Hispanic students attending college between 1975 and 1980 remained steady, the percentage of Hispanic high school graduates dropped. This fact, coupled with the soaring high school dropout rate, further complicates the problem of underrepresentation of Hispanics in post-secondary education (1986).
Ochoa attacks the public school system when he states, “Presently, public institutions continue to treat our Chicano students as second class citizens and fail to nurture their educational development. Public schools have a dismal track record in providing Chicano and low income students with the necessary skills and requirements needed to enter institutions of higher learning” (Ochoa, Espinosa & Nieto, 1992). The data from his report indicates that many factors influenced high school students’ decisions to decline or pursue a postsecondary education. For example:

1. Only 47.9 percent of Hispanic seniors applied for admission to one or more colleges, compared to 62.7 percent of Blacks and 64.6 percent of White youth who reported applying to several schools to increase their chances of acceptance, most Hispanic seniors indicated that they had applied to only one school.

2. Fully 52.7 percent of Hispanic students expecting to go to college planned to attend a two year college, compared to 39.5 percent of Blacks and 47.0 percent of Whites.

3. More Hispanics than Black or White students who planned to attend college planned to attend on a part-time basis. 44.2 percent of Hispanics intend to go to college part-time compared to 32.6 percent of Blacks and 34.1 percent of Whites. (Baca, 1992).

To further complicate the problem of Hispanic representation, the high proportion of Hispanics who leave secondary school without a diploma drastically affects the number of Hispanics eligible to pursue a postsecondary education. Low grade point averages, low standardized entrance examination
scores, and limited financial resources act as further barriers to higher educational achievement among Hispanics. For example:

Over 40% of Chicano youth drop out of school, while the 30% who receive a high school diploma are underskilled and underemployed. Of the remaining 30%, 15% enter college and approximately 5% eventually receive a B.A. Degree (Haycock & Navarro, 1988).

Baca suggests that this data is shameful and clearly illustrates the chasm that is growing between those who live in poverty, of which Hispanics and other minorities constitute disproportionate numbers, and those in the middle and upper classes. His concerns seem to be supported by a 1984 educational Survey:

The survey shows that 18 to 19 year old Hispanics comprised 4.7 percent of post-secondary enrollments compared to 88.6 percent for Whites, 9.2 percent for Blacks and 10.1 percent for Asians (Baca, 1992).

ROLE MODELS

A 1982 CPEC report suggests that role models be utilized in order to increase the dismal numbers of Latino's pursuing advanced degrees:

"Hispanic role models in graduate and professional schools need to provide outreach to minority communities. The article suggests that outreach to Hispanics and Hispanic communities is best accomplished by persons knowledgeable of the group and skillful in behavioral norms conducive to establishing rapport, communication, and trust. Hispanics themselves are the most effective and efficient persons to accomplish these tasks in order to overcome the underrepresentation of Latinos in Higher Education" (pp.13-14).
He concludes that the dismal pattern of Latinos pursuing advanced degrees can be attributed to the low presence of Hispanic faculty and staff who play a critical role in the success of Hispanic students pursuing Baccalaureate, Masters and Doctoral degrees. In his 1984 report, *Hispanics and Higher Education*, Arciniega states that the relationship of faculty with students would be, "more successful to overcome underrepresentation, if there were greater numbers of faculty and professional staff from these same groups." He concludes, "For Hispanics in particular, the shortage is so serious as to constitute an emergency requiring extraordinary action" (p.14).

Trevino's belief is that in order to provide the quality role models for Hispanic students in higher educational systems, it is imperative that Hispanic students pursue advanced degrees upon completion of their baccalaureate degree. He feels that the need to train Latino scholars to fill a variety of positions at all levels of industry, research and education, from community colleges to research universities, is of utmost importance. He further points out that institutions, such as the California State University system, have done little to encourage undergraduates to pursue advanced educational training by failing to ensure that they are qualified to enroll in post-baccalaureate or Master's degree programs.

In *Minorities in American Higher Education*, Astin discusses the status of the educational pipeline for Latinas and Latinos, encompassing the
baccalaureate degree system through the doctoral level, as continuing experience serious "leaks" that negatively affect the Latino community (Astin, 1982). He adds that thousands of students are eliminated from the institutions while passing through the baccalaureate and the doctoral program pipeline. He reinforces that each point along the system is critical in that the students' failure to complete one stage disqualifies the student from continuing to the next stage. The result is that Latina and Latino students do not graduate with Baccalaureate, Masters or Doctoral degrees.

Trevino's report, Mentoring Chicana and Chicano Students to Participate in Graduate Education, points out that one of the most serious problems in the system occurs between the undergraduate college and graduate school (Trevino, 1993).

In 1989, 23,398 doctoral degrees were conferred. Hispanics earned 582 (2.5%) of the total number of doctorates conferred, Whites received 20,892 (90.8%) and 821 (3.6%) were received by Blacks. In 1990, 24,190 doctoral degrees were conferred. Hispanics earned 2.9% of the doctorates conferred as compared to 3.5% by Blacks, 2.6% by Asian and 90.6% by Whites. Of the 2.9%, (698) earned doctorates by Hispanics, Mexican Americans accounted for only 0.7% (187) earned doctorates (Thurgood & Weinman, 1991).

Trevino's point is supported by other research. For example, in his work titled, The Latino Report Card, Guillermo R. Rodriguez found that in 1989 the total graduate student enrollment for the California State University system was
33,179. Of this total, CSU graduating enrollment, Latinos account for only 2,430 (7.3%) (Rodriguez, 1991).

REACH OUT AND ENGAGE

"Reach out" and "engage" is the active contact with Hispanic students and personally involving them in discussions regarding their future careers. It is promoting more educational services offered through community based organizations with proven track records (De La Rosa, 1990). In her report for the Hispanic Education: A Statistical Portrait, De La Rosa analyzes the Educational Testing Services, which studies career education and counseling. She suggests that Hispanic students are less likely than other groups of students to view counselors as a resource. Counselors at institutions with a high Hispanic enrollment are also less likely to reach out to Hispanic students or engage them in discussions and counseling relative to future careers. Instead, it was reported that counselors most commonly waited for the students to come to them merely to be referred to written materials. The 1980 report of the California Postsecondary Education Commission, indicated the need for minority role models by referring to the ratios of minority students to minority faculty and other credential staff. According to Juan Hernandez, low production levels among Hispanic students in higher education are directly related to the low presence of Hispanic employees responsible for policy and program, culturally-relevant curriculum, and ethnic-sensitive student support. This is evident by the
excessive low employee and student rates and the high employee turnover and student push-out rates (The State of Hispanic America, p.3).

The central issue mentioned in this CPEC report has to do with institutional hostility toward Hispanics resulting in an internal environment which discourages effective approaches to working with Mexicans. In 1979, evidence of entrenched antipathy was so strong that it became obvious to a former trustee of one of the three segments of public higher education in California, who later released a memorandum calling attention to this issue (The State of Hispanic America, p.15).

ADAPTATION COURSE

Elective courses, offered to assist students with educational goals, are often used to provide students with the basic principles needed for success. A 1993 report, Latino Student Eligibility and Participation in the University of California UC, Santa Cruz, indicates that there is an “urgent need to build substantive and effective bridges for Latino Students between the university and other educational institutions.” It further states that most people believe that the path to personal success includes a college education. The report provides very specific barriers in academic institutions confronting Hispanic students:

- Latino students often do not receive adequate counseling, advice, or support from educational institutions
- Institutional environments have not encouraged Latino student to take themselves seriously as learners
• Latino students and their parents do not feel they are equal partners in the educational environment of their schools

• Outreach efforts are shared broadly across the university with no one person in charge of the overall responsibility

• Transfer from one educational system to another is at best characterized as a series of loosely coordinated steps, as opposed to a cohesive academic plan understandable to all (Duran, p.16).

Duran further states that there must also be agreed upon ways to widen the bridges that exist in the academic institutions which can take students toward higher educational achievements.

• Access to and utilization of a strong college-preparatory curriculum and institutional practices that facilitate learning standards

• Monitoring systems that all advisors to know where students are in their educational process and that create early-warning systems for students who are in difficulty

• Persistent contact between Early Academic Outreach Program staff and students

• The presence of identified and committed role model mentors (Duran, p.18).

Arciniega, in Hispanic Underrepresentation: A Call for Reinvestment and Innovation, is confident that the CSU system can and will respond to challenges in a positive and proactive manner (p.26). In his report, he lists a series of recommendations that were presented to the CSU system. Of the 46
recommendations, the first and second listed in the document strongly support his expectations (Appendix A, 1988).

1. In order to meet its dual commitments to quality and access, changes in admission policies should be implemented in phases over a number of years in such a manner as to assure that Hispanic students have due opportunity for adequate college preparation.

2. A staffing augmentation should be sought which will permit CSU to initiate an effective collaborative outreach program for Hispanic students in intermediate and junior high schools on a regular basis. The CSU should take the initiative to collaborate and coordinate its activities with those of other postsecondary segments to ensure maximum coverage and mutual assistance.

In *Chicanos in Higher Education*, Juan Flores discusses the issues related to recruitment and retention of Hispanic students in institutions of higher education. Many Hispanic students are beset by obstacles such as: admissions qualifications, economic difficulties and responsibilities of being an older child (p.4). Hispanics, he states, that are fortunate enough to enter graduate school and choose the route to academia often end up with another set of problems. Among these problems is that Hispanics are initially isolated by academic peers because they are the only minority, and they are isolated by disciplines "whose validity is often questioned by traditional academics" (p.5). He further states that it is time to devote energy to the study of higher education as it relates to the communities. He explains that Hispanic students in California comprise 53% of the school population but only 10% of the teachers in California are Hispanic.
He provides data that indicates that if the trend that exists for Hispanics in higher education continues, it will “worsen” even more. His concern is that, if data were available, the “Chicano or Mexican origin subgroup figure might be even lower” (p.8).

**ANNUAL DOCTORATES IN U.S. by RACE/ETHNICITY**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Whites (non-Hispanic)</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Blacks</td>
<td>0.3</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Asian/Pacific</td>
<td>0.7</td>
<td>1.2</td>
<td>1.5</td>
<td>1.8</td>
</tr>
</tbody>
</table>

1.0 = Perfect Representation (Flores, 1992, p. 9)

**SUMMARY**

The review of literature focused on the various concerns pertaining to the underrepresentation of minority students, specifically on Hispanics, in higher education and the obstacles that hinder them (Williams, 1989). The literature also focuses on information necessary for Hispanic students to effectively utilize in order to qualify for admission to AAD programs. Moreover, the literature references that there are concerns regarding the lack of assistance Hispanic students receive when pursuing Baccalaureate, Masters, and Doctoral degrees from institutions of higher learning (Arnoye, 1992; De La Rosa, 1990; Simpson & Yinger, 1972). The literature explicitly proposes the need for increasing the
number of Hispanics who enter and successfully graduate from four year colleges and universities and qualify to meet admission requirements to AAD programs. The literature suggests that the procedures used to provide information to Hispanic students need to be more accessible to help them meet the qualifications for AAD programs. It is imperative that the number of Hispanic role models be increased and a greater understanding of the learning process be develop to reinforce the schools' role as the "great equalizer that works to obviate these differences" (Mirande, 1985; Astin, 1982). The development of a formalized process to increase the number of Hispanic students qualified for AAD programs is needed to overcome the underrepresentation of Hispanics that presently exists in institutions of higher learning.

In Chapter III, the proposed project will be developed using Desmond Cook's project management model. The development of a planning subsystem for conducting the project will be established. The explanation of the subsystem will include charts highlighting the beneficial attributes and activities. The chapter consists of the Project Model, Project Definition, Work Breakdown Structure, Workflow, Time estimation and Critical path.
CHAPTER III

PLANNING THE PROJECT

INTRODUCTION

Chapter I and Chapter II delineated the problem being presented. The hypothesis is formulated to illustrate a potential solution, and the review of literature establishes the basis for a need to formulate a viable solution. The focus of this chapter is to formalize the proposition made in National Council of La Raza (De La Rosa 1990), which states that there is a need to "reach out" and "engage" students in discussions on pursuing advanced academic degrees. Utilizing this "reach out" and "engage" approach, the hypothetical format developed in Chapter I provides the impetus to examine alternative approaches for students to Pursue Advanced Degrees (PAD). Chapter II provides the basis for the need to develop a formalized proposed project to address underrepresentation of Hispanic students in higher educational institutions.

Chapter II shows that there are numerous components which account for Hispanic students failing to qualify and receive necessary information on entry level requirements needed for AAD programs. The literature also exemplifies a strong need for a feasible solution which will increase the number of students successfully applying for and being admitted to AAD programs. A formalized course is needed to provide information on entry level requirements in order to increase the number of students eligible to enter higher educational institutions.
A plan for a unit on PAD will be developed to utilize and incorporate within the Adaptation course. The Adaptation course establishes the basis for an on-going formalized approach to provide students with AAD program information. Decision making, based upon maximized accurate and timely information provided to students, will increase their knowledge base and enable them greater opportunity to meet entry level requirements needed for AAD programs in higher education.

The function of the project, and its component parts, is to establish parameters of the project and the criteria for development of a unit entitled "Pursuing Advanced Degrees" which will ensure that the goals of the project are accomplished. The overall goal is to develop a formalized approach utilizing the variables with beneficial attributes and activities. The justification for this potential solution is to reverse the perception that institutions are "hostile" and that the internal environment is "disapproval" of students and thereby responsible for students failing to continue on to institutions of higher education (Astin, 1982, p.40).

PROJECT MODEL

Development of a unit on "Pursuing Advanced Degrees" to incorporate and be implemented within the MDIS 1000 course is necessary to commence the project. The goals and objectives converge on a "reach out" and "engage" (De La Rosa, 1990) approach to integrate a comprehensive procedure. This procedure will stimulate interest and provide specific information to students on entry level requirements needed for AAD programs in higher education. The project reflects the approach that will be instrumental to increase the number of students qualifying to enter institutions of higher education offering Advanced
Academic Degrees. The major steps utilized in developing the project plan include:

1. Group research projects on special programs in Higher Education which will engage each individual.

2. Group presentations on research projects and exchange of timely and accurate information.

3. Individual completion of "mock" applications to be utilized on appropriate date(s).

4. Presentation to class by faculty/AAD Graduates and AAD Candidates representing AAD programs to "reach out" to individual students.

The first major objective of the project is to develop a formalized plan to incorporate a unit into the Adaptation course. The unit will provide pertinent practical approaches for the delivery of entry level requirements needed for AAD programs. A primary concern is the perception that institutions are hostile and faculty members may be reluctant to accept responsibility as role models and for delivery of the proposed unit (Astin, 1982). Formalizing the Adaptation course and incorporating the PAD unit, together with the institution's desire to reverse the negative perception, will ensure students receive information on entry level requirements for AAD programs at CSU, Stanislaus.

A major goal of the course unit is to formally structure the manner in which students efficiently and accurately receive viable information for AAD programs. Objectives to reinforce the major goal include:

1. Development of a unit on "Pursuing Advanced Degrees" (PAD)

2. Formalized Adaptation course and incorporation of PAD unit
3. Structure delivery of information based on variables, attributes and activities.

A secondary goal of the project is to implement activities which will be utilized to alleviate the problem regarding the disproportionate number of Hispanic students entering AAD programs. Objectives to reinforce the secondary goal include:

1. Faculty/AAD Graduates/AAD Candidates as presenters to "reach-out" to students
2. Link Faculty/AAD Graduates/AAD Candidates with students to "engage" in application process
3. Monitor students who apply and are accepted to AAD programs.

PROJECT DEFINITION

The succeeding section employed Desmond Cook's project management model to develop a planning subsystem for conducting the project. The hypothetical format of Chapter I was utilized to move the visual format plan for application of a potential solution. The function of this planning subsystem and its component parts is to establish the boundaries of the proposed project by developing an orderly structure composed of major objectives supported by minor objectives that reflect the work to be accomplished.

WORK FLOW

In Cook's project model, work flow denoted a work plan which portrayed in graphical manner the interrelationship and inter-dependency of tasks done to
accomplish the objectives in the project definition. In this subsystem, the most common terms used were:

1. **Flow graph** denoted a diagrammatic representation in which flow through this system was portrayed by a sequence of unidirected arrows.

2. **Network** denoted a graphical representation of all the tasks or jobs that must be accomplished to reach the intermediate and final objectives of the project.

3. **Activities** denoted those individual tasks or jobs which must be accomplished to reach the project objectives.

4. **Milestone events** denoted the accomplishment of a major piece of work in the form of a work package.

**EVENT CODING SYSTEM**

In order to construct the network for the work plan, some basic symbols were used to represent the milestone events, regular events, interface events and activities. For example:

1. Milestone events were distinguished from regular events by a geometric figure such as a square □

2. Regular events were represented on the network by a geometric figure such as a circle ○

3. An activity, on the other hand, was represented by a solid arrow →

In this project, there was no connection established between the length of the activity arrow and the amount of time needed to reach an event (see p.39). The activity numbers in the network were designated by giving the preceding and succeeding event numbers for each activity letter.
SUMMARY WORK FLOW NETWORK

<table>
<thead>
<tr>
<th>LETTER</th>
<th>EVENT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1-2</td>
<td>Meet w/community</td>
</tr>
<tr>
<td>B</td>
<td>1-3</td>
<td>Meet w/students/incoming</td>
</tr>
<tr>
<td>C</td>
<td>1-4</td>
<td>Meet w/CSU support services</td>
</tr>
<tr>
<td>D</td>
<td>2-5</td>
<td>Meet w/CSU system</td>
</tr>
<tr>
<td>E</td>
<td>3-5</td>
<td>Meet w/Undergraduate department</td>
</tr>
<tr>
<td>F</td>
<td>4-5</td>
<td>Meet w/Ed. policies committee</td>
</tr>
<tr>
<td>G</td>
<td>5-6</td>
<td>Meet w/CSU faculty</td>
</tr>
<tr>
<td>H</td>
<td>5-7</td>
<td>Joint mtg of all affected parties</td>
</tr>
<tr>
<td>I</td>
<td>6-8</td>
<td>Establish goals and objectives</td>
</tr>
<tr>
<td>J</td>
<td>7-9</td>
<td>Establish communication network</td>
</tr>
<tr>
<td>K</td>
<td>8-9</td>
<td>Selection of faculty/implementation</td>
</tr>
</tbody>
</table>
TIME ESTIMATION

In Cook’s project model, time estimation denoted the time frame for the total project and the individual activities and events within the project. In this subsystem, the most common terms are:

1. **Probabilistic estimates** denotes time estimate procedures based on the idea that uncertainty existed about a particular activity.

2. **Expected elapse time** denotes the activity time estimation for the project and is designated by the symbol \( (T_e) \) in mathematical calculation.

3. **Optimistic time estimates** denotes the time estimation based on the assumption that "everything will go well" in completing an activity and is designated by the symbol \( (O_t) \) in mathematical calculations.

4. **Most likely time estimates** denotes the most realistic estimate of time the activity may take and is designated by the symbol \( (R_t) \) in mathematical calculations.

5. **Pessimistic time estimate** denoted the longest time the activity would take under the most adverse conditions and is designated by the symbol \( (P_t) \) in mathematical calculations.

6. **Critical path** denotes the most time consuming pathway in the network and is obtained by moving forward while adding the longest activity time estimates along the various pathways in the network. Critical path is designated by the symbol \( (C_p) \) in mathematical calculations.

PROCEDURES PROBABILISTIC

In this project, the PERT (Program Evaluation and Review Technique) method is used to determine the activity time estimates. The primary concern is the occurrence of events. In the PERT method, three estimates of time are given for each individual activity. These time estimates were identified as
optimistic, most likely, and pessimistic. The optimistic time estimate is designated by the symbol (Ot) and is based on the assumption that an activity can be accomplished or completed if everything goes extremely well (Cook, 1971, pp. 110-111). The most likely time estimate is designated by the symbol (Rt) and is the most realistic estimate of time an activity will take. The pessimistic time estimate, designated by the symbol (Pt), is the longest time an activity will require under the most adverse conditions. When these three individual time estimates are obtained an expected elapse time estimation (Te) is established for each activity in the work flow. The following formula is used to calculate the time estimates for each activity in the project:

\[ TE = \frac{Ot + 4Rt + Pt}{6} \]

The expected elapse time is further illustrated by describing the activities in the network and their predecessor and successor events. These activities, events and expected elapse time are listed on p. 42 and illustrated on p. 43.

CRITICAL PATH

The critical pathway is the most time consuming pathway in the network. The critical path is identified in the flow graph by a darkened solid arrow (→→) (See p.43).
### TABULAR DESCRIPTION OF ACTIVITIES, ACTIVITY TIME ESTIMATION, MANPOWER and MANPOWER HOURS

<table>
<thead>
<tr>
<th>CODE</th>
<th>ACTIVITY</th>
<th>PRE</th>
<th>SUC</th>
<th>Ot</th>
<th>Rt</th>
<th>Pt</th>
<th>*Te</th>
<th>Mp</th>
<th>**Mph</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Meet w/ community</td>
<td>-</td>
<td>BC</td>
<td>5</td>
<td>6</td>
<td>12</td>
<td>7.2</td>
<td>1</td>
<td>43.2</td>
</tr>
<tr>
<td>B</td>
<td>Meet w/ students/incoming</td>
<td>A</td>
<td>B</td>
<td>12</td>
<td>24</td>
<td>42</td>
<td>25</td>
<td>1</td>
<td>150</td>
</tr>
<tr>
<td>C</td>
<td>Meet w/ CSU support services</td>
<td>B</td>
<td>E</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>6</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>D</td>
<td>Meet w/ CSU system</td>
<td>AB</td>
<td>D</td>
<td>18</td>
<td>36</td>
<td>48</td>
<td>35</td>
<td>1</td>
<td>210</td>
</tr>
<tr>
<td>E</td>
<td>Meet w/ undergraduate department</td>
<td>A</td>
<td>I</td>
<td>2</td>
<td>3</td>
<td>9</td>
<td>4.2</td>
<td>1</td>
<td>25.2</td>
</tr>
<tr>
<td>F</td>
<td>Meet w/ Ed. policies committee</td>
<td>BC</td>
<td>J</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>3.3</td>
<td>4</td>
<td>79.2</td>
</tr>
<tr>
<td>G</td>
<td>Meet w/ CSU faculty</td>
<td>E</td>
<td>IJ</td>
<td>6</td>
<td>12</td>
<td>18</td>
<td>10.3</td>
<td>1</td>
<td>62.2</td>
</tr>
<tr>
<td>H</td>
<td>Joint mtg of all affected parties</td>
<td>C</td>
<td>K</td>
<td>4</td>
<td>6</td>
<td>12</td>
<td>7</td>
<td>2</td>
<td>84</td>
</tr>
<tr>
<td>I</td>
<td>Establish goals and objectives</td>
<td>AD</td>
<td>J</td>
<td>8</td>
<td>12</td>
<td>16</td>
<td>12</td>
<td>1</td>
<td>72</td>
</tr>
<tr>
<td>J</td>
<td>Establish communication network</td>
<td>FG</td>
<td>K</td>
<td>15</td>
<td>18</td>
<td>30</td>
<td>19.5</td>
<td>2</td>
<td>234</td>
</tr>
<tr>
<td>K</td>
<td>Selection faculty &amp; implementation</td>
<td>HJ</td>
<td>-</td>
<td>4</td>
<td>6</td>
<td>12</td>
<td>7</td>
<td>2</td>
<td>84</td>
</tr>
</tbody>
</table>

**TOTALS**: 79 132 214 136.5 1047.4

PRE = Preceding Activity
SUC = Succeeding Activity
Ot = Optimistic time
Rt = Realistic time
Pt = Pessimistic time
TE = Time estimation
Mp = Manpower
Mph = Manpower hours

Formulae:

*Te = Ot + 4Rt + Pt

**Mph = 6(Te x Mp)**
CRITICAL PATH and EXPECTED ELAPSE TIME

Critical Path (Cp)
Activity
Milestone
Regular events

**KEY**
*CP = 429.0 hours
Te = Time estimation
TTe = Total all Te activity paths
**TTe = 819.0 hours

* Cp = 6Cp
**TTe = TTe
SUMMARY

The purpose of this chapter is to develop a project designed to formalize the Adaptation course and incorporate the PAD unit to provide Hispanic students entry level information on AAD programs. The major steps employed are Cook's Project management model to develop a planning subsystem composed of:

- Project Definition
- Work Flow
- Project Time Estimate

These components served a function in the planning subsystem as follows:

1. The project definition developed an order structure of major subordinate objectives which provide the work to be accomplished by the project administrator.

2. The work flow developed a graphical representation of the sequences of activities and events necessary to accomplish the objectives established in the project definition.

3. The time estimation subsystem provided a time frame for the individual activities and milestone events in the project.

4. PERT procedures are employed to plan major activities, and milestone events in the project plan.

Chapter IV will provide an overview of the essential elements developed in each of the preceding chapters. The Chapter will review the hypothesis and detriment-benefit model of Chapter I, the supportive data establishing the premise for a viable solution of Chapter II, and the project plan in Chapter III.
CHAPTER IV
SUMMARY AND CONCLUSION

As presented in the preceding chapters, there are numerous reasons accounting for students failing to qualify and receive necessary information on entry level requirements needed for AAD programs. The lack of a formalized process to maximize timely and accurate information for students pursuing advanced degrees has resulted in excluding Hispanic students with potential to succeed in higher educational programs. Unfortunately, students are unable to access educational opportunities allowing them to earn credentials resulting in a disproportionate representation of Hispanics in AAD programs. This adverse situation requires the development of a project to formalize a course and incorporate a PAD unit needed to maximize information and increase the number of Hispanic students eligible to enter AAD programs.

Formulation of the project in Chapter I assisted in determining the manner which would be most beneficial when formalizing the delivery of information through faculty. A systematic approach to "reach out" and "engage" students proved to be the most viable for delivery of information to students. Utilizing this approach will efficiently and accurately develop the structure in which faculty will work with students. To provide the basis for an alternative for faculty, a formalized approach for delivering entry level requirements is necessary. The development and implementation of a unit entitled "Pursuing Advanced Degrees," (PAD) which focuses on a "reach out" and engage" process (De La Rosa, 1990), is determined to be the most appropriate manner to accomplish the project goals.
The literature in Chapter II develops and supports the need to establish an alternative method to insure students get information on AAD programs. There is a need to provide timely and accurate information to all students on entry level requirements to institutions of higher learning. The unit on PAD is considered the most probable method for establishing a systematic approach which provides both timely and accurate information to students (Simpson & Yinger 1972). A significant difference in the number of students receiving information and becoming eligible for entrance to institutions of higher learning will be the result of developing a formalized procedure for delivery of information. The literature suggests that there is a strong need to increase the knowledge base of faculty and providing them with information necessary to deliver entry level requirements for AAD programs. Considering the nature of the problem, a unit on PAD is determined to be the most basic level to relate curriculum to students' future plans in higher educational institutions. Faculty responsible for implementation of the unit on PAD will be involved in relating and integrating the curriculum for students which will focus on a research project, group presentation, and completion of a mock application.

The Performance Evaluation Review Technique (PERT) model used in Chapter III determined the major goals and objectives to be accomplished. The model established the major steps needed in the solution of the problem. A planning subsystem consisting of various components, work breakdown
structure, workflow, time estimation and critical path, provided the format for implementation of the project plan.

RECOMMENDATIONS

The problem regarding the disproportionate number of Hispanic students prepared for higher educational degrees is addressed by developing strategies to reinforce the project. Throughout the development of the project, a primary concern is the need for Hispanic students to efficiently receive timely and accurate information for AAD programs. In order to positively affect a change in the manner in which students are receiving timely and accurate information on AAD programs, the following recommendations are suggested:

1. There is a need for CSU, Stanislaus to consider ways by which to assess the degree of institutional hostility and the internal environment as disapproval of Hispanic students.

2. There is a need for CSU, Stanislaus to incorporate the PAD unit to formalize the Adaptation course.

3. There is a need for CSU, Stanislaus to formalize a course in the supportive service area and implement a course in the academic area, within departments such as the Mexican American Graduate Studies (MAGS) at CSU, San Jose, to assist in reversing the negative perception that the CSU system is hostile and disapproval of Hispanic students.

4. There is a need for further research in the area of perceived institutional hostility to accurately assess the degree to which it might interfere with successful socialization of Hispanic/minority students in the CSU system.
5. There is a need for further data, as literature suggests, in the area of consideration of compatibility/support department to formalize and have effective role models maximizing timely and accurate information.
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