

STRATEGIES FOR IMPROVING THE RETENTION  
AND SUCCESS OF MINORITY STUDENTS  
IN COMMUNITY COLLEGES

By

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THIS STUDY IS DEDICATED TO  
THE MEMORY OF MY FATHER, JOSEPH J. MCKEON,  
WHO ENCOURAGED ME TO ENTER THE FIELD OF EDUCATION.

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## TABLE OF CONTENTS

| Chapter                                                                    | Page |
|----------------------------------------------------------------------------|------|
| I. INTRODUCTION . . . . .                                                  | 1    |
| Statement of the Problem. . . . .                                          | 4    |
| Scope and Limitations . . . . .                                            | 5    |
| Assumptions . . . . .                                                      | 5    |
| Definitions . . . . .                                                      | 6    |
| Organization of the Study . . . . .                                        | 7    |
| II. REVIEW OF THE LITERATURE . . . . .                                     | 9    |
| Introduction. . . . .                                                      | 9    |
| Community Colleges. . . . .                                                | 9    |
| Demographics. . . . .                                                      | 13   |
| Minorities in Higher Education. . . . .                                    | 16   |
| Recruitment and Retention in Higher Education . . . . .                    | 23   |
| Delphi Technique. . . . .                                                  | 32   |
| Summary . . . . .                                                          | 35   |
| III. METHODOLOGY. . . . .                                                  | 40   |
| Introduction. . . . .                                                      | 40   |
| Selection of the Panel. . . . .                                            | 41   |
| Collection of Data. . . . .                                                | 44   |
| Analysis of Data. . . . .                                                  | 49   |
| IV. RESULTS OF THE STUDY . . . . .                                         | 52   |
| Introduction. . . . .                                                      | 52   |
| Panel of Experts. . . . .                                                  | 52   |
| Rate of Response. . . . .                                                  | 53   |
| Round One . . . . .                                                        | 55   |
| Round Two . . . . .                                                        | 56   |
| Round Three . . . . .                                                      | 62   |
| V. FINDINGS, CONCLUSIONS AND IMPLICATIONS, AND<br>RECOMMENDATIONS. . . . . | 63   |
| Summary . . . . .                                                          | 63   |
| Findings. . . . .                                                          | 65   |
| Conclusions and Implications. . . . .                                      | 66   |
| Recommendations for Policy and Future Research . . . . .                   | 69   |

| Chapter                                                | Page |
|--------------------------------------------------------|------|
| A SELECTED BIBLIOGRAPHY . . . . .                      | 73   |
| APPENDICES. . . . .                                    | 77   |
| APPENDIX A - TIME SCHEDULE FOR DELPHI STUDY. . . . .   | 78   |
| APPENDIX B - LETTERS TO NATIONAL LEADERS . . . . .     | 80   |
| APPENDIX C - DELPHI PANEL MEMBERS. . . . .             | 87   |
| APPENDIX D - LETTER TO REVIEW PANEL. . . . .           | 89   |
| APPENDIX E - ROUND ONE MATERIALS . . . . .             | 91   |
| APPENDIX F - ROUND ONE RESPONSES BY CATEGORY . . . . . | 96   |
| APPENDIX G - ROUND TWO MATERIALS . . . . .             | 106  |
| APPENDIX H - ROUND THREE MATERIALS . . . . .           | 120  |
| APPENDIX I - ROUND TWO COMMENTS. . . . .               | 134  |
| APPENDIX J - MEASURES OF CENTRAL TENDENCY. . . . .     | 136  |
| APPENDIX K - ROUND THREE COMMENTS. . . . .             | 145  |

LIST OF TABLES

| Table                                                                                                 | Page |
|-------------------------------------------------------------------------------------------------------|------|
| I. List of National Leaders. . . . .                                                                  | 42   |
| II. Cochran Model for Calculating Levels of Agreement and<br>Likelihood of Occurrence. . . . .        | 51   |
| III. Delphi Study Response Rate. . . . .                                                              | 55   |
| IV. Statements On Round Two with a Lack of Agreement and<br>Lack of Likelihood of Occurrence. . . . . | 57   |
| V. Statements in Round Two with a Lack of Likelihood<br>of Occurrence. . . . .                        | 60   |
| VI. Statements in Round Two with a Lack of Agreement . . . . .                                        | 61   |



## CHAPTER I

### INTRODUCTION

The racial and ethnic make-up of the college-age population in the United States is undergoing changes that will have a dramatic impact on higher education during the next twenty years (Samuels, 1985). By the year 2000, one third of this country's population will be non-white. In 1985, there were 238 million people living in the United States. The nation's population is projected to increase to 265 million people by the year 2020, with most of the increase coming from minority groups (Hodgkinson, 1985). These demographic changes are occurring at an extremely rapid rate and suggest major implications for the political, social, and economic future of the nation (Samuels, 1985).

At the same time that minority students represent an increasing proportion of the college-age population, their rate of graduation from high school and their overall representation in higher education is decreasing (Richardson and Bender, 1987). According to the American Council on Education (1985):

Allowing declines in minority participation to continue unchecked will return society to an elitist system of a highly educated upper and middle class, mostly white, and a seriously under-educated working and poor class, mostly non-white—in other words, educational and, consequently, economic apartheid (p. 23).

Santos (1986) placed the problem into the context of generational interdependence. Generally, the young in our society are educated and cared for by the adults. Society also provides for the older and

retired citizens through social programs such as Medicare and Social Security. The quality and quantity of services provided to both the younger and older generations directly depends on the working class and the resources these individuals contribute in the form of taxes. The demographic changes and data on minority representation indicate severe social and economic repercussions unless this rapidly growing segment of the United States' population advances educationally.

Several social forces have been responsible for the growth and popularity of community colleges in this country. Cohen and Brawer (1982, p. 1) identified, "the drive for social equality, which was enhanced by opening more schools and encouraging everyone to attend" and "the need for workers trained to operate the nation's expanding industries" as two of the most prominent forces. Today, community colleges are geographically and financially within the reach of most Americans.

Several other factors seem to indicate a commitment by community colleges to serve the needs of minority students. Most community colleges offer basic skills development programs which respond to the needs of a diverse student population admitted through open door policies. Two-year colleges also "have been able to demystify higher education, thus helping break elitist notions, reducing anxiety, and offering many students their first opportunity for educational success" (Kempner and Stapleton, 1986, p. 269). Because of their accessibility, community colleges provide the only higher education opportunity available for many minorities (Santos, 1986).

The student population at community colleges tends to reflect the local racial composition more than at four year institutions. By

1980, community colleges were enrolling approximately forty percent of all minorities in higher education within the United States. Currently, community colleges enroll over forty percent of black college students and over fifty percent of Hispanic college students. Minority representation is even greater in large, urban two year college districts and in states with well developed community college systems. As early as 1977, over sixty percent of the students in the Los Angeles Community College District were from minority groups. The states with the highest proportion of minority students attending community colleges include: Alaska, California, Hawaii, Louisiana, Maryland, Mississippi, South Carolina, and Texas (American Council on Education, 1985; Cohen, 1980; Cohen and Brawer, 1982; Noel and others, 1986). The over representation of minority students at community colleges is likely to increase in the future. This will be influenced by their increase in the general population as well as higher tuition and more stringent entrance requirements at four-year colleges and universities.

Many educators believe community colleges are committed to serving the needs of minorities. Critics claim that minority students are tracked into the two year college system, enroll in less than collegiate level studies, and are concentrated in non-professional, occupational programs (Cohen, 1980; Kempner and Stapleton, 1986). Others have taken the position that minorities are actually harmed by two-year institutions since students who begin their studies at community colleges are less likely to complete a baccalaureate degree (Astin, 1982; Cohen and Brawer, 1982).

It still may be debatable whether community colleges are committed

to meeting the educational needs of minorities, but the available data indicate that two year institutions have now and will continue to have an increasing major impact on the education of minorities. In most instances, retention studies indicate community colleges are not providing the supportive services needed by minority students to complete their educational goals successfully.

Practical guidelines for the establishment of comprehensive programs and support services to increase minority student success and retention at community colleges have not been available. If community colleges in the United States respond to the educational needs of minorities and are committed to increasing the success and retention of these students, they must begin to consider the development of appropriate programs of assistance.

#### Statement of the Problem

The purpose of this study was to obtain practical guidelines which community colleges could use in developing policies, comprehensive support services and programs to increase minority student retention and success.

To achieve the purpose of this study, it was necessary to answer the following research question:

How can community colleges increase the retention and success of minority students?

It was anticipated that the following question would also be answered in the course of the research:

How can community colleges increase the participation of minority students in transfer programs?

### Scope and Limitations

The following were limitations related to this study:

1. The participants in this study were limited to those with a broad knowledge of community college education and/or a knowledge of the educational needs of minorities.
2. Participants were limited to: a) practitioners from community colleges, b) educational policy makers or planners, c) higher education researchers, and d) minorities with community college experience.
3. The scope of this study was limited to community colleges. Generalization of this study to other types of institutions in higher education is unwarranted.

### Assumptions

The following were assumptions related to this study:

1. The minority population in the United States will continue to grow at a rapid pace.
2. Minority students have unique educational needs which are currently not being met by community colleges.
3. The need for a well educated and trained minority population is critical to the political, social, and economic health of the United States.
4. The perceptions of the participants were assumed to be accurate.

## Definitions

The following definitions were used in this study to clarify terms:

Community college: A term synonymous with two-year college and junior college. The term means an institution of higher education accredited by a state agency to offer the Associate in Arts degree, the Associate in Science degree, or the Associate in Applied Science degree (Cohen and Brawer, 1982). The mission of community colleges encompasses the following areas: college transfer programs, technical and occupational programs, community or continuing education, student services, and compensatory or remedial education.

Delphi Technique: A research methodology utilizing a panel of experts to furnish opinions through brainstorming techniques. Opinions are tabulated through the use of questionnaires, with the goal being group consensus.

Minority: An individual residing in the United States with origins other than the original peoples of Europe, North Africa or the Middle East. This term refers to the following groups of people: Black-(non-Hispanic) having origins in any of the black racial groups of Africa; Hispanic—a person of Mexican, Puerto Rican, Cuban, Central and South America or other Spanish culture or culture or origin regardless of race; Asian or Pacific Islander—a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent or the Pacific Islands; Filipino—a person having origins in any of the original peoples of the Philippine Islands; and American Indian—or Alaskan Native—a person having origins in any of the original peoples of North America, and who maintain cultural

identification through tribal affiliation or community recognition. Although this study is concerned with minorities in general, the predominant focus is on Blacks and Hispanics.

Open door: a term which relates to the policy of community colleges whereby high school graduates, adults with general equivalency diplomas (GED) and those who are eighteen years of age or older are admitted.

Success of minorities: the proportion of minority students who progressively master units of subject matter until they attain their educational goals. Success rate is gauged by the students' goals, not the institution's exceptions or by the completion of credits, courses or degree.

Retention: the proportion of students who enter an institution at the same time and who continue to enroll in that institution until they attained their educational goal.

### Organization of Study

Chapter I provided background information related to the study and presented the statement of the problem, the purpose of the study, the research questions, limitations, assumptions, and definition of terms. Chapter II presented a review of the literature related to the study. This chapter included sections on the history and mission of community colleges, demographic data related to the changing student population in the United States, minorities in higher education with specific emphasis on community colleges, and recruitment and retention in post-secondary education. Chapter II also reviewed the Delphi technique. The procedures used to conduct the study were presented in

chapter III. This chapter included the selection of the panel, the collection of data, and the analysis of data. Results of the study were included in chapter IV. This chapter was organized into five major sections which included: round one results, round two results, and round three results. Chapter V included a summary of the research, findings, conclusions, recommendations for future policy and reasearch, and closing thoughts.



## CHAPTER II

### REVIEW OF LITERATURE

#### Introduction

The purpose of this chapter was to present a review of literature related to minority students in American Higher Education. This chapter was organizationally divided into the following sections to give an overview of the topic:

1. History and mission of community colleges.
2. Demographic data related to the changing student population in the United States.
3. Minorities in higher education.
4. Recruitment and retention in higher education.
5. Delphi Technique.
6. Summary

#### Community Colleges

Community colleges in America are relatively young institutions within higher education. The first junior college was established by William Rainey Harper in 1892 within the organizational structure of the University of Chicago. In 1901, Joliet Junior College was established as an extension of the local high school in Joliet, Illinois (Vaughan, 1983). Community colleges have evolved significantly from these early institutions.

The contemporary community college movement began to take shape in the early 1920's. The state of California passed legislation in 1921 which created the provision for the development of independent community college districts with their own governing boards, budgets, and policies and procedures. According to Vaughan (1983, p. 14), this development in California was important in the history of community colleges because, "it provided for local control, equated the first two years of junior college work with the first two years of university work, and endorsed the concept of having public institutions of higher education available locally." Another important event in 1920, was the development of the American Association of Junior Colleges. This organization is known today as the American Association of Community and Junior Colleges and since its inception has represented two-year institutions at the national level. By 1922, there were 207 junior colleges located in thirty-seven of the forty-eight states (Cohen and Brawer, 1982).

Two major developments during the 1940's were instrumental in the growth and popularity of community colleges. The Servicemen's Readjustment Act, also known as the GI Bill, was passed by the United States Congress in 1944. The GI Bill represented the first major involvement by the federal government in the financing of post-secondary education for citizens. This bill provided scholarship funds for millions of World War II veterans and was responsible for breaking down many traditional barriers of access to higher education (Vaughan, 1982). In 1947, President Truman's Commission on Higher Education for American Democracy was concerned with expanding educational opportunities at the post-secondary level. According to Vaughan

(1982), the Commission recommended:

to establish a network of community colleges throughout the nation, thus placing higher education opportunities within reach of a greater number of citizens. These community colleges would have no tuition, would serve as cultural centers for the community, offer continuing education for adults, emphasize civic responsibilities, be comprehensive, offer technical and general education, be locally controlled, and blend into statewide systems of higher education, while at the same time coordinating their efforts with the high schools (p. 19).

The Truman Commission's Report had a major influence in the establishment of the community colleges as viable providers of higher education in the United States. By 1947, the number of public and private two-year colleges had increased to 650 (Cohen and Brawer, 1982).

Social forces were responsible for the rapid rise of community colleges. Cohen and Brawer (1982) identified several of these, which included:

the need for workers trained to operate the nation's expanding industries; the lengthened period of adolescence, which mandated custodial care of the young for a longer time; and the drive for social equality, which was enhanced by opening more schools and encouraging everyone to attend (p. 1).

These forces gave the community colleges new responsibilities, and during the 1960's these institutions thrived. No single concept influenced the development and growth of two-year colleges more than the belief that all citizens should have equal access to higher education (Vaughan, 1982). This social policy, coupled with a dramatic increase in birthrates following World War II, necessitated the rapid expansion of community colleges to serve the nation's growing college-age population. In 1965, there were 719 public and private two-year colleges in the United States. By the year 1969, this number had

increased to 993. This increase represented an average of more than one community college opening each week during that four year period. Enrollments at two-year colleges rose from one half million students in 1960 to over two million students by 1970 (Cohen and Brawer, 1982).

The increase in enrollments at community colleges during the 1960's and 1970's brought a new student clientele. Established in almost every metropolitan area in the United States, the two-year institutions were attracting an increasing number of minorities, women, low income students, and students with poor academic preparation (Cohen and Brawer, 1982). For many of these students, the community college was their only hope for a post-secondary education (Santos, 1986). According to Warren (1985), the community colleges contribution to higher education in the 1970's was their accommodation of a more diverse student population.

In 1980, community college enrollments had increased to four and one-half million students. This represented thirty-seven percent of all college enrollments and forty-nine percent of all undergraduate enrollments in the United States (Warren, 1985). The goal of President Truman's Commission on Higher Education was to make post-secondary education accessible to everyone. According to Cohen and Brawer, (1982 p. 23) this had been accomplished, "Two years of post-secondary education is within reach-financially, geographically, practically-of virtually every American."

The mission of the two-year college has changed and has been refined throughout their history. Individual colleges have also changed their priorities and practices over a period of time. According to Warren, (1985), the following six objectives have become

the doctrine of public community colleges: 1) terminal education, 2) general education, 3) transfer and career orientation and guidance, 4) lower division preparation for university transfer, 5) adult education, and 6) removal of matriculation deficiencies.

### Demographics

During the 1970's, discussion of the impact of demographic change occurring in this country focused on the decline in birthrates and the aging of America. In an enrollment driven system of higher education, there was great concern over the decrease in the eighteen to twenty-one age cohort and the impact this would have on college enrollments. Today, there are other dramatic demographic changes occurring in the United States. One change is the significant increase in the proportion of the minority population as compared to whites. This change suggests major implication for the political, social, and economic future of the nation (Samuels, 1985).

One third of the nation's population will be non-white by the year 2000. Currently, 14.6 million Hispanics and 26.5 million blacks live in the United States. In the year 2020, there will be 44 million blacks and 47 million Hispanics in this nation; more so, if immigration rates increase. The United States in the year 2020 will have a total population of 265 million people with more than 91 million blacks and Hispanics (Hodgkinson, 1985).

The tremendous growth rate in minority populations can be explained by examining their birthrates as compared to the birthrates of whites. To maintain a static growth rate, a population group needs about 2.1 births per female. In the future, whites with 1.7 children

per female and Cubans with 1.3 children per female will be less represented. Blacks currently have a birthrate of 2.4, while Hispanics have 2.9 children per female (Hodgkinson, 1985). According to the American Association of Community and Junior Colleges (1988, p. 7), "The 'baby bust' which impacted whites in the years between 1964-1978, did not occur in the United States' minority populace . . ." These trends in birthrates are further confirmed by the average age of each population group. According to Birenbaum (1986), the average age for blacks in the United States is currently twenty-five, for Hispanics, twenty-one, compared to thirty-one for whites.

Ian McNett (1983, as cited by Samuels, 1985), in a report for the American Council on Education, highlighted the following demographic trends:

1. The average age of the white population is growing older—that of the minority population is much younger.
2. Minorities constitute the majority of school enrollments in twenty-three of twenty-five of the nation's largest cities.
3. By the year 2000, fifty-three major cities will have a majority minority population.
4. The United States is seeking to integrate into North American culture the second largest wave of immigrants in history—a total of 13.9 million, many of them from Asia and the Pacific Islands.
5. Hispanic Population growth (103%) has been and continues to be the highest of all groups.
6. Sixty percent of all Hispanics live in three states (California, Texas and New York), 85 percent in nine states.
7. Hispanics are the most urbanized group, with 88% living in the cities, but more blacks live in inner cities (71%) than any other population group (page 4).

Working status is another important characteristic when examining minority groups. Blacks have the highest unemployment rate for all population groups, and Hispanics and Native Americans are significantly higher than whites. As of 1983, blacks had an unemployment rate 100 percent greater than whites while Hispanics had a sixty percent greater unemployment rate than whites. Black teenagers have a unemployment rate 250 percent greater than white teenagers, and Hispanic teenagers' unemployment rate is 130 percent greater than whites (American Association of Community and Junior Colleges, 1988). By the year 1986, over thirty-one percent of the country's blacks and over twenty-seven percent of the Hispanics had incomes below the poverty level. During the same year, the poverty level for whites was less than ten percent (American Council on Education and Education Commission of the States, 1988).

To understand the future impact of the minority population growth on higher education, Hodgkinson (1985) suggested that attention be focused on the individuals who are now entering the public educational system in the United States. A recent report published by the American Association of Community and Junior Colleges (1988) gave insight into public school enrollment patterns:

Many major metropolitan areas, whether predominantly minority or white in overall population, have a majority of minority students enrolled in the public schools. In addition to cities such as New York, Los Angeles, Detroit, Chicago, Atlanta and St. Louis, which also have a predominance of minority students enrolled in the public schools, there are numerous cities, such as Milwaukee, where the overall minority population is comparatively small (29 percent in Milwaukee), but where minorities constitute the majority (60 percent in Milwaukee) of the public school enrollment (p. 7).

Data presented by Hodgkinson (1985) indicated eighteen states currently have minority public school enrollment in excess of twenty-five percent while seven states are above thirty-five percent. Figures from the American Council on Education and the Education Commission of the States, (1988) indicated that by the year 2000, forty-two percent of all public school students in the United States will be from minority groups.

According to Samuels (1985), there is a growing appreciation for the importance of the current demographic changes. He also stated that there is a moving concern that the educational institutions in this country have not responded quickly or adequately enough to maximize the contributions which the growing minority population can make to the United States. The American Association of Community and Junior Colleges (1988) summarized these concerns:

Given the high correlation between college attendance, college success, and socioeconomic status, the lack of parity between whites and minorities portends a serious problem for all of higher education, as well as society at large (p. 6).

A recent report by the American Council on Education and the Education Commission of the States (1988) urged colleges and universities to become active in the process of improving the prosperity of minorities. The report noted that some minority group members have made gains but that gaps between whites and minorities are widening in education, employment, income, health, and other basic measures of well being.

#### Minorities in Higher Education

The participation of minorities in higher education in the United States can be traced to blacks following the Civil War. However, their



presence at colleges and universities during the reconstruction period was extremely limited. Public policies of segregation and separation dominated while the civil and political rights of blacks were restricted by the passage of white supremacy legislation in the south. At that time, those black Americans who did find opportunities for post secondary education were typically enrolled in vocational programs at institutions like Tuskegee (Brubacher and Rudy, 1976).

The evolution of minority group participation in higher education can be traced to several important court cases and pieces of legislation (Preer, 1981; Brubacher and Rudy, 1976, et al.). The second Morrill Act of 1890 further enhanced the opportunities for black minorities to participate in public higher education. This legislation specifically prohibited state colleges and universities from discriminatory practices in their admissions policies. To comply with the nondiscrimination clause of this legislation, the southern states began to establish black land grant colleges under the doctrine of "separate but equal." In 1896, segregation in higher education was upheld by the supreme court in the case of Plessy v. Ferguson. This practice was ultimately responsible for the establishment of seventeen black land grant colleges before it was challenged beginning in 1938.

The National Association for the Advancement of Colored People took the lead in the challenge against the Plessy v. Ferguson decision and participated in three court cases which were important in reversing the "separate but equal" doctrine. During the 1938 case of Missouri ex Real Gaines v. Canada, the courts ruled that each state must provide educational opportunities for all residents within the states' boundaries. This decision required the states to begin to

provide professional educational opportunities for minorities. In 1950, Texas was challenged for establishing an all black law school within its state system. The decision in Sweatt v. Painter questioned whether the quality of a separate all black law school would equal the quality of professional training in law provided to whites. The third important case also occurred in 1950. In McLaurin v. Oklahoma State Regents, the Supreme Court ruled that the University of Oklahoma had denied a black student the opportunity for meaningful exchanges with other students by forcing him to use segregated facilities. Although a few states continued to resist desegregation, by the early 1950's the vast majority of states were admitting blacks to their public colleges and universities (Brubacher and Rudy, 1976).

A landmark decision by the Supreme Court in 1954 advanced minority student access to public higher education. In the case of Brown v. the Board of Education of Topeka, the high court outlawed all racial segregation in public education, including the elementary, secondary and post secondary levels. Ten years later, the Civil Rights Act of 1964 had a major impact on higher education in the United States. This legislation ordered all colleges and universities receiving grants or other federal assistance to establish affirmative action programs and to practice nondiscrimination in employment and admissions on the basis of race, color, sex or national origin. The Civil Rights Act of 1964 further required publicly supported colleges to submit plans to the United States Office of Education stating how they intended to end racial segregation immediately in their higher education systems. Later, several states were sued for noncompliance of the desegregation order or for submitting incomplete desegregation plans (Brubacher and Rudy, 1976).

According to Preer (1981), two important Supreme Court cases in the 1970's dealt with race as an admissions criterion for access by minorities to state colleges. The DeFunnis v. Odegaard and Regents of the University of California v. Bakke cases involved voluntary affirmative action programs by state-supported professional colleges to increase minority admissions. The Bakke case of 1978 involved a quota system by the University of California which reserved a specific number of places for entering minorities. The case raised several important legal questions, including reverse discrimination of whites. The court ruled in favor of the admission of Bakke and the use of race as one of many criteria in admission policies, but it rejected the use of quota systems for any racial group.

Shortly after the Bakke case, the office of Civil Rights for the Department of Health, Education and Welfare issued a document to clarify the government's affirmative action guidelines for higher education. According to Preer (1981), this document suggested numerous ways in which colleges and universities could increase minority participation. Some of these included:

- Consideration of race as one criterion in selecting students;

- Increased recruiting efforts in minority institutions and communities;

- Use of alternative admissions criteria when traditional criteria inadequately predict student success;

- Provision of pre-admission compensatory and tutorial programs;

- Establishment and pursuit of numerical goals to achieve the racial and ethnic composition of the student body the institution seeks (p. 17).

The concepts of equal opportunity and equal access have been predominantly accepted in higher education. Richardson and Bender (1987) pointed out that these terms are often defined "as the ability to enroll in some post-secondary institution" (p. 1). This accepted definition has caused problems for many minority students since all institutions are not equivalent. By the 1980's, the question of where a student goes to college had become as important as the access questions of past years (Astin, 1982). As a response to the affirmative action mandate in the 1960's, many states instituted open door admission policies to increase minority student participation. This practice was used particularly at community and junior colleges and has become common place at these institutions (Brubacher and Rudy, 1976). Although minority student participation in post-secondary education showed significant gains during the 1960's and 1970's, partially because of the open door policy at two year colleges, there has been little change in their economic and social class mobility (Richardson and Bender, 1987).

In response to the landmark court cases and legislation passed in the 1960's and 1970's, many four year colleges and universities implemented ambitious recruitment programs for minority students and minority faculty. These efforts also played an important part in the increase of minority student participation in higher education. However, recent data indicated that these efforts by colleges and universities may have declined. Jaschik (1988) offered the following statistics:

Between 1976 and 1985, the high-school graduation rate of black students rose from 67 to 75 percent, while the college-going rate of those graduates fell from 34 to 26

percent. For Hispanics, high-school graduation rates increased from 56 to 62 percent, while the college-going rate fell from 36 to 26 percent.

In 1976, black students made up 9.4 percent of the enrollment in all institutions of higher education; by 1984, the proportion had fallen to 8.8 percent.

With the exception of Asian students, minority-student participation in higher education declines at the graduate and professional school level. In 1984, 9.5 percent of undergraduate students were black, but only 4.8 percent of graduate students and 4.8 percent of professional students were black. For Hispanics, the figures are 4.6 undergraduate, 2.2 graduate, and 2.9 professional (p. 88A).

Recent declines in minority student participation in post-secondary education can also be traced to the current financial difficulties in funding a college education. Rising college costs and reduced financial aid have increased the debt burden for minorities, particularly at four year institutions. Federal budget changes since 1981 have altered student financial aid packages. Loans, which must be repaid, account for approximately fifty percent of current financial aid packages. In the 1970's, these loans accounted for only seventeen percent of the total financial aid package. Budget reductions have also reduced the funding for tutorial and counseling programs aimed at disadvantaged students (Watkins, 1985). According to Parnell (1982), the Reagan administration had abruptly and drastically reneged on its commitment to expand higher education opportunities. This came at a time when education and training needed to be increased to meet the heightened demands of technology, global competition, and economic productivity.

At the same time that their representation in higher education has decreased, minority students have represented an increasing proportion of the college age population (Richardson and

Bender, 1987). According to the American Council on Education (1985):

Allowing declines in minority participation to continue unchecked will return society to an elitist system of a highly educated upper and middle class, mostly white, and a seriously under-educated working and poor class, mostly nonwhite—in other words, educational and, consequently, economic apartheid (p. 23).

Santos (1986) had placed the problem in the context of generational interdependence. Generally, the young in our society are educated and cared for by the adults. Society also has provided for the older and retired citizens through social programs such as Medicare and Social Security. The quality and quantity of services provided to both the younger and older generations directly depends on the working class and the resources these individuals have contributed in the form of taxes. The demographic changes and data on minority representation in higher education indicated severe social and economic repercussions unless this rapidly growing segment of the United States population advances educationally.

Preer (1981) outlined other current concerns for minorities in higher education. She stated:

Minority groups, especially blacks and Hispanics, suffer from inadequate secondary school preparation and counseling and from economic and psychometric barriers. They are disproportionately overrepresented in two-year institutions and underrepresented in four-year colleges and graduate and professional schools. They are more likely to drop out before graduation. Although the patterns are somewhat different, black and Hispanic students are both underrepresented in scientific and technical fields and in courses that lead to the most remunerative positions. Because affirmative actions programs for faculty hiring have failed to put large numbers of black and Hispanic faculty members on campus, minority students share problems of adjusting to unfamiliar and unsympathetic academic environments. Lastly, although the rates of short-run progress may vary, all minority groups are subject to the vagaries of political and economic change (p. 37).

The resurgence of subtle and overt racism during the mid 1980's has also been included as a major concern for minorities at American colleges and universities. These incidents have hampered retention and recruitment efforts at many colleges and universities (Clark, 1988).

#### Recruitment and Retention in Higher Education

Recruitment and retention of students became a major issue in the literature of higher education during the 1970's and early 1980's. The attention focused on these two topics was primarily driven by a predicted decline in enrollment during the same period. Colleges and universities which had rapidly expanded staff, services, and facilities to meet the demands of significant enrollment increases during the 1960's were ill equipped to master retrenchment and decline (Finn, 1978). As Astin (1975) pointed out, a ten percent decrease in enrollments was followed approximately by a ten percent decline in revenues, while college operational costs remained fairly constant.

The number of eighteen-year olds in the United States doubled between 1950 and 1980 with 1979 being the peak year. The traditional college-age population has been projected to decline by approximately twenty-five percent between 1980 and the mid 1990's. These declines were predicted despite increases in nontraditional students and programs (Breneman, 1982). When the pool of potential, traditional college age students was considerable, colleges and universities focused their attention on recruitment efforts. As more colleges established extensive marketing campaigns to recruit students, the gains diminished due to increased competition (Tinto, 1987). With

declining enrollments imminent, institutions were warned to increase their efforts to retain currently enrolled students rather than to develop strategies to enroll more students (Breneman, 1982). In the 1980's, retention had emerged as a major area of concern for colleges and universities in the United States (Gardiner and Nazari-Robati, 1983).

Four progressive stages of student retention research have been identified in higher education (Noel, Levitz, Saluri and others, 1986). The initial work was based on attrition. Researchers were interested in who was dropping out of college and why. This original research consisted of conceptual and empirical models related to dropouts. These studies tended to focus on the personal, social, and environmental factors contributing to attrition. Spady, Tinto and Astin were among those actively involved in these early studies (Lewis, Leach, and Lutz, 1983).

This research was followed by work in the late 1970's and early 1980's aimed at the identification of successful programs and strategies designed to combat attrition in higher education. During this stage, a change in emphasis was suggested away from attrition and the dropout toward retention and the persister (Gardiner and Nazari-Robati, 1983). Studies linked to action-oriented programs developed in higher education were numerous, and the literature was replete with examples. In their research, Beal and Noel (1980) identified a comprehensive list of action programs. These included the following:

- Advising Effort
- Learning Center
- Learning Assistance
- Orientation
- Career Emphasis



Counseling  
 Early Warning  
 Financial Aid  
 Peer Counseling  
 Student Advocacy  
 Faculty-Staff Development  
 New Policies  
 Follow-up Studies  
 Cocurricular Programs  
 Curricular Developments and Changes, Including Honors  
 Special Classes  
 Brochures for Majors  
 Meetings with School Counselors  
 Letters to majors  
 Employment and Study Skills  
 Exit Interview  
 Retention Officer  
 "Returning Student News"-3 Issues  
 Lunch Hour for Returning Students  
 Job Development  
 Internships (p. 119)

Astin (1975); and Lenning, Sauer and Beal (1980) also offered similar examples of action-oriented programs which were designed to improve college and university retention rates.

The third thrust of retention research concentrated on "principles of organizational development 'whereby' campuses began to organize and mobilize campus wide retention efforts" (Noel, Levitz, Saluri, and others, 1986, p. 16). In this type of approach, colleges have taken several of the action-oriented strategies and have organized them into a comprehensive and systematic approach with a central focus (Rouche and Baker, 1986). Noel (1978) identified the following fourteen components of a campus wide systems approach to retention:

1. Establish an institutionwide retention steering committee.
2. Determine dropout rate.
3. Conduct a dropout study to determine why students are leaving.

4. Conduct an institutional self-study to determine where the institution is successful and where it needs improvement.
5. Establish retention task committees within each of the units or departments to determine appropriate student-oriented action programs.
6. Make concerted efforts to increase faculty and staff awareness of factors related to retaining students; encourage a campuswide attitude of serving students.
7. Build a sound marketing approach into the recruiting program; recruit for retention.
8. Develop a good orientation program for entering freshman.
9. Build a student counseling and advising program from admissions through job placement.
10. Provide a special career-planning program for students who are undecided about educational major or vocational choice.
11. Provide a range of academic-support services for students with marginal academic credentials.
12. Build a so-called early warning system to identify students who are likely to drop out.
13. Set up a simple but sensitive exit-interview process.
14. Institute a tangible reward system for good teaching and faculty advising (pp. 97-98).

A recent research study conducted by Rouche and Baker (1986) supported the systems approach for improving student retention. Their case study analysis of Miami-Dade Community College used the Community College Excellence Model and was centered on eight basic reforms. The reforms were implemented by Miami-Dade in a systems approach designed to ensure access and excellence. They included the following areas:

1. Curriculum
2. Assessment
3. Basic Skills

4. Honor Programs
5. Standards of Academic Progress
6. Academic Alert
7. The Advisement and Graduation Information System
8. Faculty and Staff Development (p. 54)

In applying the model at Miami-Dade, three essential variables for improving student success were identified. The college had:

1) designed a system which had encompassed the major policy decisions and philosophies of those individuals who worked together to increase student success; 2) developed a culture for excellence; and 3) created a positive climate. Rouche and Baker (1986) found that the typical student at Miami-Dade "was influenced to engage the behaviors that will lead to success" (p. 56). They concluded that Miami-Dade was one of the best examples of an American Community college which had systematically reformed the way it dealt with students.

Staffing has been identified as the emerging central theme in the fourth generation of student retention efforts.

The best, most thoughtfully designed curriculum, the most perfectly designed program or delivery strategy will be just another curriculum or program if one has not paid attention to those people who will be executing it. (Noel, Levitz, Saluri and others, 1986, p. 16).

The people dimension in retention work was also identified by Rouche and Baker (1986) in their work at Miami-Dade. They concluded that:

When an institution is careful to select, evaluate, reward, and develop exceptional teaching talent, the college increases the probability of being successful with larger numbers of typical community college students (p. 56)

Staffing in leadership roles was also identified as critical to the success of retention programs. Rouche and Baker (1986) utilized

questionnaires and structured interviews at Miami-Dade Community College to evaluate leadership behaviors. They discovered that leaders who have a "sense of direction, sense of structure for implementation, and a sense of enthusiasm (p. 51)" do make a difference. They concluded that certain leadership behaviors are associated "with positive organizational outcomes regarding student achievement and success (p. 52)."

With a significant portion of the college budget dedicated to faculty, administrative, and staff salaries, colleges and universities were urged to get serious about matching the right individual with the responsibilities of the position. Two principles of management related to staffing were identified as being the most violated on college campuses (Noel, Levitz, Saluri, and others, 1986):

First, we continue to expect people to do everything to the same level of competence—teach, advise, and simultaneously research. Second, as managers, we generally spend more time with those who perform poorly than in reinforcing those who excel (pp. 18-19).

Timing was also identified as a critical staffing factor if institutions were going to be successful at reducing attrition and increasing student achievement. "We must make sure that these right people come into contact with students at the right time (Noel, Levitz, Saluri and others, 1986, p. 20)." The first few weeks, or even the first few sessions, of the freshman's introductory course were identified as the "critical time in establishing the kind of relationships and one-to-one contacts between student and their teachers and advisers that contribute to student success and satisfaction (Noel, Levitz, Saluri and others, 1986, p. 20)."

In recent works, Tinto (in Noel, Levitz, Saluri and other, 1986, and Tinto, 1987) has explored retention from the institutions' standpoint and has taken a student-centered approach. Colleges and universities were advised to stop asking who had stayed or who had left and focus on what students had learned. Institutions that were genuinely concerned about the education of all students and had implemented policies to achieve that goal were identified as having the greatest potential for student success. Tinto (in Noel, Levitz, Saluri and other, 1986) suggested that institutions begin their retention efforts by asking two questions:

1. What are the educational goals of the institution?
2. What educational needs can the institution address?

Tinto (1987) concluded that increasing retention, although an important outcome, should not be the goal of a college or university. It was advised that students could be better served if their social and intellectual growth were the ultimate goal of the institution.

Defining retention has been a major problem for both researchers and practitioners (Astin; 1975, Lenning, Sauer and Beal, 1980; and Tinto, 1987). In early research studies, degree completion was used as the yardstick to measure retention (Astin, 1975). Unfortunately, this definition did not consider several important variables as suggested by Lenning, Sauer, and Beal (1980):

1. Students are frequently 'stopping' out in either a planned or unplanned interruption of schooling.
2. Did the students graduate from the institution of original entry?
3. Did the students graduate in the program they originally entered? (p. 41).

It has been suggested that there are numerous other definitions for retention and that retention rates can show considerable variation among colleges and universities unless institutional characteristics are incorporated into the formula (Lenning, Sauer and Beal, 1980). Course or term completion was also utilized as a retention definition in earlier studies. It was found that students withdrawing during a term were significantly less likely to return to college than those who had completed a course or term. It was also discovered that the greatest percentage of students leaving college occurred between the freshman and sophomore year (Lenning, Sauer and Beal, 1980).

Personal goal attainment was identified as a third possible definition for retention. It was emphasized that this definition is important and beneficial because it has linked "retention and withdrawal to student goals and objectives (Lenning, Sauer and Beal, 1980, p. 10)."

Tinto (1987, p. 3) has identified "the inability to make sense of the variable characteristics of students" as an impediment in implementing successful retention efforts. Institutions that have utilized the personal goal attainment definition of retention have been successful because they have effectively included student diversity (variable characteristics of students) as a factor in determining student success.

Community colleges are identified by Lenning, Sauer and Beal (1980) as institutions which have historically served a diverse student body. They state:

Community college students are enrolled for many reasons other than obtaining a degree or certificate—to obtain a personally desired skill or area of knowledge, to

enrich personal life, to take advantage of an employer-paid educational program, etc. (p. 9)

The above example of student diversity within the community college has emphasized "the important fact that withdrawal or transfer prior to graduation is not necessarily bad, but can be a positive and desirable step for the student and should be supported and facilitated by the institution (Lenning, Sauer, and Beal, p. 10)."

These views have also been shared by Tinto (in Noel, Levitz, Saluri, and others, 1986) through his redefinition of dropout. When a student withdrew from a college, it was typically viewed as failure or as negative on the part of the student or the institution. Viewpoints of this type have been considered to be false unless they have considered the multitude of variables responsible for influencing the student's action and were considered unwise because "it assumes, in effect, that all forms of departure are treatable or of equal importance to the educational mission of the institution (Tinto, in Noel, Levitz, Saluri, and others, 1986, p. 39)."

The literature suggested usage of the term dropout only in those situations where students were unable to reasonably attain their personal goals. This definition was regarded to be legitimate because it accounted for the variability of student influences and was judged on the student's personal goals, not the institution's expectations. A dropout defined without regard to these key points suggested that learning mainly occurs within the walls of a college or university and those learning experiences found outside of higher education were somewhat inferior. According to Tinto (in Noel, Levitz, Saluri and others, 1986), institutions which have embraced this self-serving

viewpoint could have difficulty in defending the educational doctrine of lifelong learning.

As stated earlier, personal goal attainment has been viewed as a legitimate definition of retention. The literature also suggested that this definition was not only applicable to community college but was also important to four-year colleges and universities. Lenning, Beal and Noel (1980) suggested that more information be gathered on this topic. It appeared that further work was needed to identify a standard measurement to distinguish between varying personal goal levels. According to Cross (1979), colleges have traditionally utilized classes, semesters and grades as administrative conveniences to monitor student progress. Cross has proposed mastery learning as a viable and accurate alternative unit of measurement. "Accompanied by variable credit, mastery learning is a simple concept in which the number of credits accumulated is a direct reflection of the amount learned (Cross 1979, p. 6)." If the personal goal attainment definition of retention, as proposed by Lenning, Sauer and Beal (1980) and supported by Tinto, (1987) could be combined with the master learning concepts suggested by Cross (1980), colleges and universities might experience significant improvement in student success and retention.

#### Delphi Technique

The Delphi Technique is a research methodology which was developed to gather and refine individual opinions, with the ultimate goal of reaching group consensus. In utilizing the Delphi process, researchers have typically designed a sequence of carefully constructed questionnaires which also provided the participants with information



and opinion feedback. The Rand Corporation originally developed the Delphi Technique to improve long range decisionmaking in the United States military. The process has also been used in corporate planning and technological forecasting in industry. During recent years, governmental agencies have adapted the Delphi procedures for planning in areas related to health, education and urban development (Dalkey, 1969; and Cyphert and Gant, 1971).

Dalkey (1969) identified the following unique features of the Delphi Technique:

1. Anonymous response - opinions of members of the group are obtained by formal questionnaires.
2. Iteration and controlled feedback - interaction effected by a systematic exercise conducted in several iterations, with carefully controlled feedback between rounds.
3. Statistical group response - the group opinion is defined as an appropriate aggregate of individual opinions of the final rounds (p. v).

Group anonymity has been identified most often by researchers as one of the strengths of the Delphi Process. The Delphi, through independent responses, has eliminated the possibility of group pressure or a dominant panelist often found in face-to-face brainstorming sessions. In using the Delphi Technique, panelists have also had the opportunity to change their opinions freely through group feedback (Dalkey, 1969; and Cyphert and Gant, 1971).

Several variations of the Delphi process have been adapted to different research situations. The procedures have utilized sophisticated techniques for arranging and presenting information. Pheiffer (1968) has described the process as successive rounds of questionnaires designed to gather carefully considered group opinions.

He has indicated that the general process includes the following:

1. The first questionnaire may call for a list of opinions involving experienced judgment, perhaps a list of predictions or recommended activities.
2. On the second round, each expert receives a copy of the list and is asked to rate each item by some criterion as to importance, probability of success and so forth.
3. The third questionnaire includes the list and the rating; indicates the consensus if any, and in effect asked the experts to either revise their opinions or to specify their reasons for remaining outside the consensus (p. 152).

Delphi techniques used in education have been classified into the following three areas: "educational goals and objectives, curriculum and campus planning and development of evaluation criteria (Judd, 1972, p. 174)." Judd (1972) has suggested that the use of Delphi in higher education has introduced new demands on the process and has evoked modifications in the procedures. Judd (1972) has identified "selection of the panel, character of round one, and consequences of feedback (p. 180)" as three of the methodological issues in the use of Delphi in higher education. Judd (1972) believed that it was difficult to determine who was an expert in higher education. With regard to round one, he indicated that there was disagreement as to whether panelists should be given prepared statements or an open ended statement for their response. It has been concluded by the Rand Corporation, in their particular studies, that the Delphi Technique proved to be very reliable (Dalkey, 1969).

According to Cyphert and Gant (1971), the Delphi technique is normally used with small groups totalling under fifty panel members. Delphi reliability studies reported by Martino (1972) indicated "that

a panel of fifteen members is sufficiently large to obtain a high degree of reliability (p. 52)." The overriding importance of the success of the Delphi study is the selection of individuals to form the panel of experts (Dalkey, 1969; and Martino, 1972).

### Summary

Several social forces were responsible for the rapid rise of community colleges. Cohen and Brawer (1982) identified some of these which include:

the need for workers trained to operate the nation's expanding industries; the lengthened period of adolescence, which mandated custodial care of the young for a longer time; and the drive for social equality, which was enhanced by opening more schools and encouraging everyone to attend (p. 1).

No single concept influenced the development and growth of two-year colleges more than the belief that all citizens should have equal access to higher education (Vaughan, 1982). This social policy, coupled with a dramatic increase in birthrates following World War II, necessitated the rapid expansion of community colleges to serve the nation's growing college-age population.

During the 1970's, discussion of the impact of demographic change occurring in this country focused on the decline in birthrates and the aging of America. In an enrollment driven system of higher education, there was great concern over the decrease in the 18-21 age cohort and the impact this would have on college enrollments. Today, there are other dramatic demographic changes occurring in the United States. One change is the significant increase in the proportion of the minority population as compared to whites. This change suggests major

implication for the political, social and economic future of the nation (Samuels, 1985).

One third of the nation's population will be non-white by the year 2000 (Hodgkinson, 1985). To understand the future impact of the minority population growth on higher education, Hodgkinson (1985) suggested that attention be focused on the individuals who are now entering the public educational system in the United States. Figures from the American Council on Education and the Education Commission of the States, (1988) indicated that by the year 2000, forty-two percent of all public school students in the United States would be from minority groups.

The evolution of minority group participation in higher education can be traced to several important court cases and pieces of legislation (Preer, 1981; Brubacher and Rudy 1976, et. al.). The passage of the following legislation and the decisions of the following court cases have been primarily responsible for the acceptance of equal opportunity and equal access in higher education: the second Morrill Act of 1890, Plessy v. Ferguson, Missouri ex Real Gaines v. Canada, Sweatt v. Painter, McLaurin v. Oklahoma State Regents, Brown v. the Board of Education of Topeka, the Civil Rights Act of 1964, and Regents of the University of California v. Bakke.

At the same time that their representation in higher education has decreased, minority students have represented an increasing proportion of the college age population (Richardson and Bender, 1987). According to the American Council on Education (1985):

Allowing declines in minority participation to continue unchecked will return society to an elitist system of a highly educated upper and middle class, mostly white,

and a seriously under-educated working and poor class, mostly nonwhite—in other words, educational and, consequently, economic apartheid (p. 23).

The demographic changes and data on minority representation in higher education indicated severe social and economic repercussions unless this rapidly growing segment of the United States population advances educationally.

Recruitment and retention of students became a major issue in the higher education literature during the 1970's and early 1980's. The attention focused on these two topics was primarily driven by a predicted decline in enrollment during the same period. With declining enrollments imminent, institutions were warned to increase their efforts to retain currently enrolled students rather than develop strategies to enroll more students (Breneman, 1982). Retention had emerged as a major area of concern for colleges and universities in the United States (Gardiner and Nazari-Robati, 1983).

In recent works, Tinto (in Noel, Levitz, Saluri and other, 1986, and Tinto, 1987) has looked at retention from the institutions' standpoint and has taken a student-centered approach. Colleges and universities were advised to stop asking who had stayed or who had left and focus on what students had learned. Institutions that were genuinely concerned about the education of all students and had implemented policies to achieve that goal were identified as having the greatest potential for student success.

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completion was also utilized as a retention definition in earlier studies. Personal goal attainment was identified as a third possible definition for retention. The literature suggested that this definition was important and beneficial because it has linked "retention and withdrawal to student goals and objectives (Lenning, Sauer and Beal, 1980, p. 10)." This definition was also regarded to be legitimate because it accounted for the variability of student influences and was based on the student's personal goals, not the institution's expectations. These views have also been shared by Tinto (in Noel, Levitz, Saluri, and others, 1986) through his redefinition of dropout.

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The above example of student diversity within the community college has emphasized "the important fact that withdrawal or transfer prior to graduation is not necessarily bad, but can be a positive and desirable step for the student and should be supported and facilitated by the institution (Lenning, Sauer, and Beal, p. 10)."

According to Cross (1979), colleges have traditionally utilized classes, semesters and grades as administrative conveniences to monitor student progress. Cross has proposed mastery learning as a viable and accurate alternative. "Accompanied by variable credit, mastery learning is a simple concept in which the number of credits accumulated

is a direct reflection of the amount learned (Cross 1979, p. 6)." If the personal goal attainment definition of retention as proposed by Lenning, Sauer and Beal (1980) and supported by Tinto (1987) could be combined with the master learning concepts suggested by Cross (1980), colleges and universities might experience significant improvement in student success and retention.

## CHAPTER III

### METHODOLOGY

#### Introduction

The purpose of this study was to develop practical guidelines which community colleges could use in developing policies, comprehensive support services, and programs to increase minority student retention and success. To achieve this purpose, it was necessary to identify national leaders who could recommend a panel of experts. Eight individuals with expertise related to the study were chosen and asked to recommend participants for the study. These eight national leaders represented community college practitioners, public policy makers or planners, and higher education researchers. The Delphi technique was chosen as the method to collect data and determine group consensus among the panel of experts. This technique has been demonstrated to be useful and reliable in educational planning and has been effective in obtaining group consensus from knowledgeable participants (Dalkey, 1969; Cyphert and Gant, 1971; and Judd, 1972).

The study was designed to include three survey instruments which were mailed to the participants between November 1988, and February 1989. See Appendix A for the Delphi study time schedule. Chapter III is divided into the following sections: 1) selection of the panel, 2) collection of data, and 3) analysis of data.



### Selection of the Panel

Participants in a Delphi study consist of individuals who are knowledgeable about or have an expertise related to the topic being studied. These individuals are typically referred to as a panel of experts. According to Cyphert and Gant (1971), the Delphi technique is normally used with small groups totalling under fifty panel members. Delphi reliability studies reported by Martino (1972) indicated "that a panel of fifteen members is sufficiently large to obtain a high degree of reliability (p. 52)." The overriding importance of the success of the Delphi study is the selection of individuals to form the panel of experts (Dalkey, 1969 and Martino, 1972).

To develop the panel for this study, eight prominent, national leaders were relied upon to recommend participants with knowledge or expertise related to minority student success and retention in community colleges. Because of their positions at the national level, these leaders were viewed as having the greatest potential for identifying the most qualified participants. These individuals were also utilized as a means of eliminating researcher bias in the development of the panel of experts. Three of these leaders were community college practitioners, three were public policy makers or planners, and two were involved in higher education research. A list of the national leaders is contained in Table I on page 42. The eight leaders were each mailed a cover letter and form on June 14, 1988, and were asked to identify and recommend from five to ten participants from the following groups: community college practitioners, public policy makers or planners, higher education researchers, and minorities with

community college experience. A follow-up request was mailed on July 21, 1988 (see Appendix B).

Community college practitioners were selected for their awareness of the problems minority students encounter in attaining their educational goals. It was expected that these participants would provide insight into the specialized educational needs of minority students and would identify model programs aimed at increasing the retention and success of minorities. Their expertise came from their applied knowledge.

TABLE I  
LIST OF NATIONAL LEADERS

| Name                     | Position                                | Organization                                          |
|--------------------------|-----------------------------------------|-------------------------------------------------------|
| Edmund J. Gleazer Jr.    | Past President                          | American Association of Community and Junior Colleges |
| Harold L. Hodgkinson     | Senior Fellow                           | Institute for Educational Leadership                  |
| Robert H. McCabe         | President                               | Miami-Dade Community College                          |
| Lee Noel                 | President                               | Noel/Levitz National                                  |
| Dale Parnell             | President                               | American Association of Community and Junior Colleges |
| Frank H.T. Rhodes        | President                               | Cornell University                                    |
| Alfredo G. de los Santos | Vice Chancellor Educational Development | Maricopa County Community College                     |
| Reginald Wilson          | Director of the Office of Minority      | American Council on Education Concerns                |

Public policy makers or planners were cognizant of the changing population demographics in this country. They were selected for their awareness of the importance of an educated workforce and the social, economic and political problems related to the lack of educational parity between whites and minorities. It was expected that these individuals would have a broad view of the educational system in this country and be knowledgeable of the importance of the community college's role in the educational advancement of minorities.

Higher education researchers were selected for their knowledge in the area of retention, transfer, community colleges, and minority education. The expertise of these participants came from the theoretical knowledge related to these subject areas.

Minorities with an educational experience at a community college were chosen for their firsthand experience. These individuals provided important input from the user's standpoint. According to the American Association of Community Colleges (1988, p. 4), "policy makers frequently neglect to obtain input and perspective from representatives of the 'majority minority' whom their proposals will ultimately impact."

It was expected that between twenty and forty participants would be recommended as the panel of experts. Four of the eight national leaders made a total of twenty-nine panel member recommendations. One individual declined to make recommendations due to insufficient knowledge of community colleges, and three individuals did not respond. After checking the participant recommendations for duplication, twenty-four individuals were included to participate in this study. See Appendix C for a list of the Delphi panel members.

As originally planned, the panel of experts represented individuals from the following groups: 1) community college practitioners, 2) public policy makers or planners, 3) higher education researchers, and 4) minorities with educational experience at a community college. The geographical distribution of the participants was fairly even. Representation from the following geographical regions was present: east, southeast, Great Lakes, southwest, west and pacific northeast. The researcher determined to study the entire population of twenty-four participants.

From the original group of twenty-four participants, three designated substitutes were recommended. These substitutes included: a vice president from a national educational association, the vice president for student service at an urban community college, and the assistant dean of faculty at an urban community. During the Delphi process, three individuals declined to participate in the study. A policy maker/planner at a national educational association and a higher education researcher both cited a lack of time for not participating, while another higher education researcher declined to participate for unspecified reasons.

#### Collection of Data

The Delphi technique was used to collect data from the participants in this study. This process was a research methodology which utilized a panel of experts to furnish opinions through individual brainstorming techniques. Opinions of the participants were tabulated through the use of a series of three questionnaires. The use of the Delphi technique allowed for independent

response and eliminated the possibility of group pressure which is often found in face-to-face panels. This technique also facilitated the gathering of opinions from experts in all geographic regions of the country without bringing the participants together. The Delphi process provided the panel members with opportunities for interaction through controlled feedback following rounds one and two. The group's opinion was defined after round two using an aggregate of the members' individual opinions.

During September, 1988, round one materials were prepared. These items consisted of: 1) a cover letter to each panel member which explained how they were selected for the study, invited them to participate, outlined background information concerning the study, and described each panel member's involvement; 2) a one-page description of the Delphi technique provided the panel members with information related to the research methodology; and 3) the round one instrument, which included instructions asking the participants to list strategies for increasing the retention and success of minority students at community colleges.

After the round one materials were prepared, three individuals were selected to review the documents for validity and clarity (See Appendix D). The review panel consisted of a community college administrator, a statewide educational planner, and a higher education researcher. These individuals were chosen to review the round one materials because they had knowledge or experience related to the research topic and approximated the composition of the panel of experts in terms of their positions. The suggestions and recommendations of the review panel were utilized to revise the round one materials before

they were mailed to the participants.

On November 22, 1988, the round one materials were mailed to the twenty-four individuals who comprised the panel of experts. A cover letter to each participant explained how they were selected for the study and invited them to participate. A one-page description of the Delphi technique provided the panel members with information related to the research methodology. The round one instrument was developed from information gathered during a review of literature related to the research topic. The instrument included instructions to the participants asking them, based on their knowledge or experience, to list strategies to increase the retention and success of minority students at community colleges. The instructions stated that their responses could include educational philosophies, policies, goals/objectives, support/assistance or specialized programs. The participants were encouraged to relate their responses to the functions of a community college which included transfer programs, technical/occupational programs, continuing education, student services and remedial programs. However, the panel members were also instructed that their responses did not need to be limited to those areas. The participants were encouraged to be concise but also to express their thoughts adequately.

The participants were asked to complete the round one instrument by December 12, 1988, and to return it in the self-addressed, stamped envelope which was provided. On December 8, 1988, a follow-up letter was mailed to the non-respondents encouraging them to participate in the study. See Appendix E for examples of the round one materials.

Fifteen panel members responded during the first round process and generated 117 separate items of information for an average response of approximately eight items per participant. Each response was entered into a microcomputer data base to facilitate sorting and consolidation. In sorting the round one responses, the researcher established thirteen categories to group information. These categories included: 1) outreach/intervention; 2) financial aid; 3) basic skills assessment/placement/developmental studies; 4) counseling/advisement; 5) other student services and special support services; 6) careers/job placement; 7) peer groups/mentors; 8) academics/instruction; 9) classroom management; 10) philosophy; 11) policies and procedures; 12) staffing; and 13) miscellaneous. The entire list of responses (See Appendix F) was reviewed and similar items were synthesized to form a single set of responses. In some cases, the responses had to be broken down into discrete items or were restated in as clear terms as possible. During this process, great care was taken to retain the ideas originally expressed by the panel members (Martino, 1972).

The original list of 117 responses to the round one instrument were consolidated into a total of seventy-one items which comprised the round two instrument. It was determined that the seventy-one items could be divided into two broad areas. The first area was related to community college philosophy, policies and procedures, and outreach. This group contained items which had a institutional focus. A total of twenty-eight items were selected for inclusion in this cluster which was identified as Section I on the round two instrument. The second broad area related to student, academic, and other college support services. Forty-three items were selected for inclusion into this group which was identified as Section II.

The items included in this cluster focused on individuals. The twenty-eight items in Section I and the forty-three items in Section II comprised the seventy-one item round two instrument.

The entire Delphi panel was asked to participate in the round two process with the exception of a higher education researcher who had declined to participate. The panel members were asked to react to the importance of each statement included in the instrument. The directions indicated that space had been provided to add statements. On January 12, 1989, a cover letter and the round two instrument were mailed to twenty-three participants. The cover letter explained how the round two instrument was developed and encouraged those individuals who had not responded to the round one instrument to participate during the second round. A self-addressed, stamped envelope was included, and a return date of January 22, 1989, was requested. A follow-up letter to non-respondents was mailed on January 20, 1989. See Appendix G for an example of the round two materials.

The instructions on the round two instrument directed the panel members to use a seven-point scale to rate the importance of each statement related to the development of strategies to increase the retention and success of minority students at community colleges. The ratings for the seven point scale were indicated as: (7) strongly agree; (6) agree; (5) slightly agree; (4) neutral; (3) slightly disagree; (2) disagree; and (1) strongly disagree.

The results obtained from round two were used to develop the round three instrument. The mean, median, mode, and interquartile ranges were calculated for each round two item. The median score and interquartile rankings were then indicated for each item on the



round three instrument (See Appendix H). The directions and cover letter for round three explained to the participants that the interquartile range contained the middle fifty percent of the responses tabulated for each round two statement. It was further indicated that the interquartile range contained twenty-five percent of the responses below the median and twenty-five percent of the responses above the median (Martino, 1972).

The participants in round three were asked to read each statement and mark only those statements where their ratings fell outside the interquartile range. If their ratings were outside the indicated range, the participants were encouraged to state the reason(s) why they disagreed with the group. To facilitate the tracking of the round three returns, the panel members were encouraged to return their instrument even if they agreed with the interquartile range for each item.

The entire Delphi panel was included in the round three process with the exception of two individuals who had declined to participate. On February 13, 1989, a cover letter explaining how the round three instrument was developed and the questionnaire form were mailed to the twenty-two participants. A self-addressed, stamped envelope was included, and a return date of February 24, 1989, was requested. On February 23, 1989, a round three follow-up letter was mailed to the non-respondents. See appendix H for examples of the round three cover letter, instrument and follow-up letter.

#### Analysis of Data

The responses from round one were not analyzed statistically. The information was collected, separated into discrete statements, checked

for duplication, and consolidated into a questionnaire for use in the subsequent rounds.

The round two data were tabulated, and the mean, median, mode and interquartile ranges were calculated for each statement. The interquartile range was determined by calculating the twenty-fifth and seventy-fifth percentiles. The median and interquartile ranges were used to determine group consensus and level of agreement for each statement in round two. See appendix J for the measures of central tendency for each round two statement.

The Cochran model (see Table II on page 51) was specifically developed for Delphi research studies. The model was designed to predict group consensus and level of agreement (as cited by Jones, 1982, in Wischroop, 1985). This model was applied to the data collected after round two. Panel consensus required a median of 5.50 or greater and an interquartile range of 2.00 or less on a seven-point Likert scale on which seven represented agreement and one represented disagreement. Likelihood of occurrence required a median of 5.50 or greater.

The data collected during round three were reviewed, and the ratings which fell outside the indicated interquartile ranges were recorded in Appendix K along with the participant's comments.

According to Blohmand Steinbuch (1973),

. . information is generally a much better aid to decision-making than the pure forecasting result. Experience shows that a 'convergence' of opinions by the group of experts is therefore not too important. Further, statistical evaluation of the answers in the sense of calculation of medians and quartiles is in practice of subordinate significance (p. 16).

Since the goal of this study was more concerned with gathering information from experts than with the convergence of group opinion, the mean, median, mode, and interquartile ranges were not recalculated after round three.

TABLE II  
COCHRAN MODEL FOR CALCULATING LEVELS OF AGREEMENT  
AND LIKELIHOOD OF OCCURRENCE

| Median      | Interquartile Range | Indication of Agreement |
|-------------|---------------------|-------------------------|
| 7.00 - 6.50 | 0.50 - 1.50         | very high               |
| 6.49 - 6.0  | 1.51 - 2.00         | high                    |
| 5.99 - 5.50 | 2.01 - 2.50         | fairly high             |
| 5.49 - 4.50 | 2.51 - 3.00         | some agreement          |
| 4.49 - 1.00 | 3.01 - 7.00         | very little agreement   |

## CHAPTER IV

### RESULTS OF THE STUDY

#### Introduction

The purpose of this study was to develop practical guidelines which community colleges could use in developing policies, comprehensive support services, and programs to increase minority student retention and success. To achieve this purpose, it was necessary to identify national leaders who could recommend a panel of experts. Eight individuals with expertise related to the study were chosen and asked to recommend participants for the study. These eight national leaders represented community college practitioners, public policy makers or planners, and higher education researchers. The Delphi technique was chosen as the method to collect data and determine group consensus among the panel of experts. This technique has been demonstrated to be useful and reliable in educational planning and has been effective in obtaining group consensus from knowledgeable participants (Dalkey, 1969; Cyphert and Gant, 1971; and Judd, 1972).

#### Panel of Experts

To develop the panel for this study, eight prominent, national leaders were relied upon to recommend participants with knowledge or expertise related to minority success and retention in community colleges. Three of these leaders were community college practitioners,

three were public policy makers or planners, and two were involved in higher education research. A list of the national leaders is contained in Table I on page 42. The eight leaders were asked to identify and recommend from five to ten participants from the following groups: community college practitioners; public policy makers or planners; higher education researchers; and minorities with community college experience.

It was expected that between twenty and forty participants would be recommended as the panel of experts. Four of the eight national leaders made a total of twenty-nine panel member recommendations. One individual declined to make recommendations due to insufficient knowledge of community colleges, and three individuals did not respond. After checking the participant recommendations for duplication, twenty-four individuals were included to participate in this study. See Appendix C for a list of the Delphi panel members.

As originally planned, the panel of experts represented individuals from the following groups: 1) community college practitioners; 2) public policy makers or planners; 3) higher education researchers; and 4) minorities with educational experience at a community college. The geographical distribution of the participants was fairly even. Representation from the following geographical regions was present: east, southeast, Great Lakes, southwest, west and pacific northeast.

#### Rate of Response

From the original group of twenty-four participants, three members designated substitutes from their institution or organization. These substitutes included: a vice president from a national education

association; the vice president for student service at an urban community college; and the assistant dean of faculty at an urban community. During the Delphi process, three individuals declined to participate in the study. A policy maker/planner at a national educational association, and a higher education researcher both cited lack of time for not participating, while another higher education researcher declined to participate for unspecified reasons.

The round one instrument was mailed to the panel of twenty-four experts. A total of fifteen responses were received for a return rate of 62.5 percent. See Table III (page 55) for the Delphi study response rates. One participant during the first round returned the completed instrument late, and the comments were not incorporated into the round two instrument. One individual declined to participate after receiving the round one materials.

The round two questionnaire was mailed to twenty-three participants. Those individuals who had not responded to round one were included in round two. Fourteen individuals returned the completed form for a return rate of 58.3 percent. One of the round two instruments was received too late to be included in the data for the round three questionnaire. One individual who had not completed the round one instrument declined to participate after receiving the round two materials.

The round three instrument was mailed to twenty-two individuals, and sixteen participants responded for a return rate of 66.7 percent. One panel member who had not participated up to that point declined to participate during the round three process.

TABLE III  
DELPHI STUDY RESPONSE RATE

| Participation           | Number of Participants<br>(N = 24) | Percent |
|-------------------------|------------------------------------|---------|
| Round One               | 15                                 | 62.5%   |
| Round Two               | 14                                 | 58.3%   |
| Round Three             | 16                                 | 66.7%   |
| One or More Rounds      | 18                                 | 75.0%   |
| All Three Rounds        | 11                                 | 45.8%   |
| Declined to Participate | 3                                  | 12.5%   |
| Never Responded         | 3                                  | 12.5%   |

During the course of the Delphi research study, a total of eighteen individuals from the original panel of twenty-four participated in one or more rounds. This equated to an overall response rate of seventy-five percent. Eleven participants or 45.8 percent of the panel participated in all three rounds. Three individuals (12.5 percent) declined to participate in the study, and three panel members (12.5 percent) never responded.

#### Round One

The responses from round one were not analyzed statistically. The information was collected, separated into discrete statements, checked for duplication, and consolidated into a questionnaire for use in subsequent rounds.

Fifteen panel members participated in round one. One instrument was received late and was not used in developing the round two

questionnaire. The response to round one produced a total of 117 separate items. After checking the items for duplication, seventy-one statements were incorporated into a questionnaire used in the subsequent rounds. The seventy-one statements were divided into two sections. Section I of the questionnaire contained twenty-eight items, and Section II contained forty-three items.

#### Round Two

During round two a seven-point scale was used by the participants to rate seventy-one statements related to the development of strategies to increase the recruitment and retention of minorities at community colleges. The ratings for the seven point scale were indicated as: (7) strongly agree; (6) agree; (5) slightly agree; (4) neutral; (3) slightly disagree; (2) disagree; and (1) strongly disagree.

The mean, median, mode and interquartile ranges were calculated for each round two statement. The interquartile range contained the middle fifty percent of the responses tabulated for each round two statement. See Appendi J for the Measures of Central Tendency for each round two statement.

The Cochran model was applied to the data collected during round two. The model was designed to predict group consensus and level of agreement. Panel consensus required a median of 5.50 or greater and an interquartile range of 2.00 or less on a seven-point Likert scale where seven represented agreement and where one represented disagreement.

Seven items in Section I and seven items in Section II of the round two instrument had an interquartile range greater than 2.00 and a median less than 5.50. These measures indicated both a lack of



agreement and a lack of likelihood of occurrence for the fourteen items which were presented in Table IV.

TABLE IV  
STATEMENTS IN ROUND TWO WITH A LACK OF AGREEMENT  
AND A LACK OF LIKELIHOOD OF OCCURRENCE

| Item      | Statement                                                                                                                                                                                                                                                                                             | Median | Interquartile Range |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------------|
| Section I |                                                                                                                                                                                                                                                                                                       |        |                     |
| 4.        | The issues of retention at predominantly minority community colleges should be addressed in terms of the available resources needed to provide necessary programs.                                                                                                                                    | 4.80   | 3.30                |
| 5.        | Retention strategies for predominantly minority community colleges should be different than those of community colleges who serve a small number of minority students, since a very small number of urban community colleges serve the majority of minority students attending two year institutions. | 5.00   | 4.10                |
| 7.        | Programs should not be keyed to minorities, when we do we are separating minorities and treating them differently.                                                                                                                                                                                    | 3.80   | 2.10                |
| 13.       | Select minority faculty and administrators to lead the retention/success process.                                                                                                                                                                                                                     | 4.80   | 2.20                |
| 17.       | Develop a school calendar which accommodates an appropriate time frame based on the educational needs of students.                                                                                                                                                                                    | 4.50   | 2.50                |

TABLE IV (Continued)

| Item       | Statement                                                                                                                                                                                                                           | Median | Interquartile Range |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------------|
| 20.        | Differentiate students by program and educational objective (transfer, terminal occupational and non-degree credit students). Programs and interventions should be specifically designed for each different student subpopulation). | 4.60   | 3.80                |
| 22.        | Eliminate "Withdrawal Failing" (WF) grades and award a non-punitive "Withdrawal" grade which does not impact GPA.                                                                                                                   | 4.30   | 4.40                |
| Section II |                                                                                                                                                                                                                                     |        |                     |
| 3.         | Discourage part-time attendance, especially among students coming directly from high school.                                                                                                                                        | 3.30   | 2.10                |
| 5.         | Discourage full-time employment while enrolled in classes.                                                                                                                                                                          | 3.40   | 2.60                |
| 11.        | Develop an assessment and counseling program but do not require mandatory course placement.                                                                                                                                         | 3.00   | 5.20                |
| 23.        | Provide continuing education opportunities.                                                                                                                                                                                         | 4.70   | 2.90                |
| 24.        | Offer Adult Basic Education and GED testing.                                                                                                                                                                                        | 5.00   | 2.50                |
| 34.        | Establish a transfer college within the college which has a clear identity and mission.                                                                                                                                             | 5.30   | 2.10                |
| 36.        | Take roll in class and call the absentees.                                                                                                                                                                                          | 5.10   | 2.30                |

In Section I, Item 4 related to available resources for minority student retention programs and had a median of 4.80 and an interquartile range of 3.30. Item 5, which referred to different retention strategies for community colleges with large minority student

populations, had a median of 5.00 and an interquartile range of 4.10. Item 7, which suggested not keying specialized programs to minorities, had a median of 3.80 and an interquartile range of 2.10. Item 13, which suggested selecting minority faculty and administrators to lead the retention/success process, had a median of 4.80 and an interquartile range of 2.20. Item 17, which related to the development of a school calendar which accommodates an appropriate time frame based on the educational needs of students, had a median of 4.50 and an interquartile range of 2.50. Item 20, which suggested that colleges differentiate students by program and educational objective for intervention programs, had a median of 4.60 and an interquartile range of 3.80. Item 22, which related to the elimination of "withdrawal failing" grades and the awarding of non-punitive "withdrawal" grades, had a median of 4.30 and an interquartile range of 4.40.

In Section II, Item 3 recommended discouraging part-time attendance and had a median of 3.40 and an interquartile range of 2.60. Item 5, which discouraged full-time employment while students were enrolled in classes, had a median of 3.40 and an interquartile range of 2.60. Item 11, which promoted the development of an assessment and counseling program without mandatory course placement, had a median of 3.00 and an interquartile range of 5.20. Item 23, which suggested providing continuing education opportunities, had a median of 4.70 and an interquartile range of 2.90. Item 24, which promoted the offering of Adult Basic Education and GED testing, had a median of 5.00 and an interquartile range of 2.50. Item 34, which related to the establishment of a transfer college within the college, had a median of 5.30 and an interquartile range of 2.30. Item 35, which

recommended taking roll in class and calling the absentees, had a median of 5.10 and an interquartile range of 2.30.

Two items had a interquartile range of less than 2.00 and a median of less than 5.50. According to the Cochran model, this indicated a lack of likelihood of occurrence. Item 2 in Section I suggested that colleges determine if there is a retention/success problem at the institution by identifying institutional success variables and assessing student sub-populations. This item had a median measure of 5.40. Item 2 in Section II recommended providing services to assist students in declaring a major as soon as possible and had a median of 5.30. Information concerning the two statements which had a lack of likelihood of occurrence is contained in Table V.

TABLE V  
STATEMENTS IN ROUND TWO WITH A LACK  
OF LIKELIHOOD OF OCCURRENCE

| Item       | Statement                                                                                                                                                                                    | Median |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Section I  |                                                                                                                                                                                              |        |
| 2.         | Determine if there is a retention/success problem at the institution by; 1) identifying institution success variables and, 2) assessing student sub-populations in light of these variables. | 5.40   |
| Section II |                                                                                                                                                                                              |        |
| 2.         | Provide services that assist students in declaring a major as soon as possible, since retention is lower for undeclared majors.                                                              | 5.30   |

One item in round two had an acceptable median but had an interquartile range of greater than 2.00, which indicated a lack of agreement. Item 19 in Section II related to the involvement of all new students in an orientation seminar which would be given for credit in general education. This item had an interquartile range of 2.20, and information related to it is contained in Table VI.

TABLE VI  
STATEMENT IN ROUND TWO WITH  
A LACK OF AGREEMENT

| Item       | Statement                                                                                                                                                  | Interquartile Range |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Section II |                                                                                                                                                            |                     |
| 19.        | Involve all new students in an orientation seminar. This course should be at least one term in length and should be given for credit in general education. | 2.20                |

According to the Cochran model, the remaining fifty-four items on the round two instrument had acceptable medians of greater than 5.50 and interquartile ranges of less than 2.00. This indicated that there was panel-member agreement and a likelihood of occurrence for these items. Fifty-one items or 71.8 percent had a interquartile range of 1.50 or less, which indicated strong agreement according to the Cochran model.

### Round Three

The round three instrument contained all of the seventy-one statements which were included in the round two questionnaire. This instrument was mailed to twenty-two panel members who were asked to participate. Sixteen individuals returned the round three instrument. Three of those participants made no changes on the questionnaire. The other thirteen participants marked a total of seventy-five items where their reaction fell outside the indicated interquartile ranges. This averaged approximately 4.7 items per participant where reactions differed from the group consensus.

Fourteen responses on the round three questionnaire had only one rating indicated outside the interquartile range. Nine items had two ratings, six items had three ratings, and five items had four ratings indicated outside the interquartile range. The most disagreement occurred on Item 22 in Section I, which had five reactions outside the interquartile range. The response for this item on round three included two 7's, two 2's and a 1. Item 22, which was related to the elimination of "withdrawal failing" grades and replacing them with non-punitive "withdraw" grades, had a interquartile range of 4.40. Thirty-seven or 52.1% of the original seventy-one items had no changes from round two to round three.

After reviewing the responses to round three, it was determined that little change occurred between the last two rounds. This indicated that, overall, the participants were not persuaded to change their responses after having the opportunity to see the group consensus which was indicated by the interquartile range.

## CHAPTER V

### FINDINGS, CONCLUSIONS AND IMPLICATIONS, AND RECOMMENDATIONS

#### Summary

The purpose of this study was to obtain practical guidelines which community colleges could use in developing policies, comprehensive support services, and programs to increase minority student retention and success. The Delphi technique was used to collect data from a nationwide panel of experts who had knowledge or expertise related to minority student retention and success at community colleges.

Eight national leaders were relied upon to recommend the panel members for this study. Four national leaders recommended twenty-four individuals who constituted the panel of experts. These participants were community college practitioners, public policy makers or planners, higher education researchers, and minorities with a community college experience.

The round one instrument was mailed to the twenty-four participants, and they were asked to participate in the research study. The round one materials explained the Delphi process, and the panel members were asked, based on their knowledge or experience, to list strategies aimed at increasing the retention and success of minority students at community colleges. The round one process generated 117 statements from the fifteen individuals who participated during this

phase. The 117 items were reviewed and consolidated into seventy-one statements which comprised the instrument for the subsequent rounds. The instrument had two parts; Section I contained items related to community college philosophy, policies and procedures, and outreach, while Section II contained items related to academic and student support services.

The round two instrument was mailed to twenty-three panel members since one individual had declined to participate. The panel members were asked to react to the importance of each item in the development of strategies to increase the retention and success of minority students at community colleges. In rating the importance of each statement, the participants used a seven-point Lickert scale where seven represented strong agreement and where one represented strong disagreement. Fourteen participants returned a completed round two instrument. The round two data were tabulated and analyzed. The mean, median, mode, and interquartile ranges for each item were reviewed and compared. The Cochran model was applied to the round two data to determine the level of panel-member agreement and the likelihood of occurrence.

The round three materials were mailed to twenty-two panel members since a second individual had declined to participate. The median and interquartile ranges tabulated from the round two responses were indicated on the round three instrument. The participants were asked to read each statement and mark only those statements where their rating fell outside the indicated interquartile range. They were also encouraged to state the reason(s) why they disagreed with the group.

The sixteen completed instruments were reviewed after the round three process, and it was determined that little change occurred



between the last two rounds. This indicated that, overall, the participants were not persuaded to change their responses after having the opportunity to see the group consensus which was indicated by the interquartile range.

Seventeen items from the original seventy-one statements had unacceptable medians and/or interquartile ranges and demonstrated little agreement and/or low levels of likelihood of occurrence. The remaining fifty-four items had acceptable medians and interquartile ranges, which indicated agreement and a likelihood of occurrence. Fifty-one items had ranges which indicated strong agreement.

#### Findings

This study identified practical guidelines which community colleges could use in developing philosophies, policies and procedures, comprehensive support services, and programs to increase minority student retention and success. The nationwide panel of experts who participated in this study was able to generate numerous detailed guidelines perceived as being important and related to the research topic.

1. On fifty-four of the seventy-one statements, a high or very high degree of agreement and consensus was reached by the panel of experts. Those statements with the highest degree of agreement and consensus related to: (A) the college's philosophy and mission; (B) affirmative action programs; (C) a supportive campus environment; (D) intervention/outreach programs; (E) financial aid; (F) personal needs of students; (G) assessment programs; (H) support services; (I) mentors; (J) orientation programs; (K) early alert systems; (L) course

objectives; (M) university transfer programs; (N) career guidance/job placement; and (O) institutional research. Seventeen statements generated from the round one Delphi technique were considered as being not very significant in the development of guidelines to increase the retention and success of minority students at community colleges.

### Conclusions and Implications

1. The participants were highly qualified and many were recognized as nationally known leaders in their fields. The high degree of participation by the panel of experts indicated that the retention and success of minority students were major issues in higher education.

2. The perceptions of the participants recommended for this research study closely matched the concerns reviewed in the literature related to the retention and success of minority students. The literature discussed the social, political, and economic implications if minorities do not advance educationally. The panel, through their high rate of participation and detailed responses demonstrated members' understanding of these implications and their eagerness to offer solutions.

3. The panel members recommended that community colleges provide remedy and help to underprepared students, enabling them to succeed with their educational goals. This was supported by their strong recommendations to provide a comprehensive assessment and basic skills program and was consistent with current community college philosophy and the literature related to student assessment. However, there was panel-member disagreement as to whether the placement of students should be mandatory. Several comments during the last round

recommended mandatory student placement. These statements indicated that "the right to fail" had been discredited, and without mandatory placement, assessment efforts were rendered useless and wasted human and financial resources.

4. The panel of experts proved to be aware of the impact that community college philosophy, policies and procedures, and comprehensive academic and student support services have on the social and educational development of not only minority students but of all students. This awareness was expressed through the detailed statements made during round one and was very consistent with the literature related to the retention of community college students and with the more recent literature specifically aimed at the success of minority students.

5. The panel overwhelmingly supported a commitment by presidents and governing boards to serve minority students as a prerequisite to the establishment of comprehensive programs of support and assistance. This strong commitment by the college leadership has been reflected in the literature in terms of the leaders' enthusiasm, sense of direction and sense of structure for implementing comprehensive retention programs.

6. The panel of experts recommended the implementation of institutional research with up-to-date data bases to track minority students from the time of entrance to the time of exit. It was further recommended that follow-up studies be conducted to determine the student's success on the job or at a senior college. On-going assessment and follow-up studies were documented in the literature as being an important component of a comprehensive retention program.

7. The community college campus environment is an important ingredient in the future success of programs or strategies which may be implemented to increase the retention or success of minority students. With the recent increase of racist activities on college campuses, it is imperative that the college chief executive officer communicates the institution's commitment to all students and makes the implementation of specific programs aimed at the retention and success of minorities a top priority. This commitment should begin with an aggressive affirmative action program and include an on-going staff development program for majority employees, since it is the human element which creates the college campus environment.

8. Individual programs cannot be independently implemented and operated. Currently, community colleges have many of the support services in place to foster student retention and success; what often is lacking is a comprehensive, systematic approach with a central focus. This comprehensive approach requires a strong, collaborative, working relationship between the student services and academic areas and should include on-going input from all campus constituencies.

9. Community colleges can no longer rely on the same definition of student retention as used by senior institutions. With the diversity of students and functions at two-year colleges, a more realistic indicator of retention is required. Community colleges should develop a definition of retention which is tied to the student's educational goals upon entry and is measured based upon the successful completion of those goals. This will enable two-year colleges to track students more accurately and assess the success of their comprehensive retention program.

10. Community colleges have been criticized for allowing the "open door" to become a "revolving door." Two-year colleges can no longer admit students without assessing their basic skills. Community colleges should implement a comprehensive assessment program and require the mandatory placement of students. Financial and human resources are too scarce to continue to allow students the "right to fail." Mandatory assessment and placement often raises a concern that colleges are screening disadvantaged students out of their institution, but the continued practice of allowing students to enroll in courses they are unprepared for is a disservice to the student. A more recent viewpoint has been expressed that, with mandatory assessment and placement, students are screened into the college for success. This issue continues to be volatile as was apparent in this study, but community colleges should review their assessment, advisement, and placement policies. Open access can be maintained, and accountability can be improved.

#### Recommendations for Policy and Future Research

##### Policy

The following recommendations for policy are made to community colleges based upon the findings, conclusions, and implications of this study:

1. A community college's philosophy and mission should include a strong statement related to its commitment to serve all students.
2. An aggressive affirmative action program is recommended to employ minority personnel at all levels to serve as resource persons and role models for minority students as well as majority colleagues.

3. Staff development activities and the implementation of practices which are useful in developing an environment supportive of learning for all students is recommended.

4. Cooperative intervention/outreach programs aimed at the public schools are recommended to improve student preparation and motivation and to communicate the institution's expectations to future students.

5. Adequate financial aid and scholarships to ease the financial burden of students attending college should be provided.

6. It is recommended that the college address the child care, housing, and medical needs of its students and that linkages with local social service agencies be developed.

7. Colleges should consider the implementation of a comprehensive assessment program with mandatory placement to provide students an educational opportunity based upon their social and educational needs.

8. It is recommended that a tutorial center with instructional support services be readily accessible to all students.

9. It is recommended that colleges establish peer tutors and faculty and staff mentors, as well as encourage parents and community leaders to form networking and support groups for the minority student.

10. Institutions should provide a comprehensive orientation program with follow-up sessions during the first term. This should include close student contact and support during the first few weeks of the semester.

11. An early alert system is recommended whereby faculty and staff can inform the counseling center when a student is having either academic or personal difficulties.

12. It is recommended that faculty define and communicate specific instructional objectives in all their courses and encourage writing exercises throughout these courses.

13. It is recommended that collaborative arrangements with upper-division institutions be developed to provide accessibility and ease of transfer for successful community college students.

14. Career guidance and job placement services should be provided.

15. An up-to-date data base which tracks minority students from the time of entrance to the time of exit, along with follow-up studies, should be developed to determine the student's success on the job or at a senior college.

16. It is recommended that community colleges consider a competency-based approach to learning, if not throughout the curriculum, at least in the developmental areas.

### Research

The following recommendations for future research are made based upon the findings, conclusions, and implications of this study:

1. A study based upon the findings, conclusions, and implications of this research is recommended to determine which strategies are the most successful and the most cost effective.

2. A study involving several community colleges which tracks minority student and determines retention rates based upon personal goal achievement is recommended.

3. A similar Delphi study is recommended using a nationwide panel of community college practitioners.

4. A study to identify and evaluate any existing community

college model programs related to minority student retention and success is recommended.

5. A longitudinal study which tracks public school students to determine the effectiveness of community college outreach and intervention programs is recommended.



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**APPENDIXES**

APPENDIX A

TIME SCHEDULE FOR DELPHI SURVEY

APPENDIX A  
TIME SCHEDULE FOR DELPHI SURVEY

| Date               | Activity                                                                                             |
|--------------------|------------------------------------------------------------------------------------------------------|
| June, 1988         | Identify eight national leaders to recommend study participants                                      |
| June 14, 1988      | Mail letter to eight national leaders requesting their assistance in recommending study participants |
| August, 1988       | Prepare master list of study participants                                                            |
| September 20, 1988 | Prepare and pilot test instrument                                                                    |
| November 22, 1988  | Mail round one                                                                                       |
| December 8, 1988   | Follow-up letter to non-respondents                                                                  |
| December 18, 1988  | Process round one returns and prepare round two                                                      |
| January 12, 1989   | Mail round two                                                                                       |
| January 20, 1989   | Follow-up letter to non-respondents                                                                  |
| January 30, 1989   | Process round two returns and prepare round three                                                    |
| February 13, 1989  | Mail round three                                                                                     |
| February 23, 1989  | Follow-up letter to non-respondents                                                                  |
| March 5, 1989      | Process round three                                                                                  |
| March 1989         | Analyze findings                                                                                     |

APPENDIX B

LETTERS TO NATIONAL LEADERS



June 14, 1988

Name  
Title  
Organization  
Address  
City, State, Zip

Dear \_\_\_\_\_,

I am conducting a nationwide Delphi Study on strategies for improving the retention and success of minorities at community colleges. This study is part of my thesis for the doctoral degree in Higher Education Administration at Oklahoma State University.

Besides focusing attention on the specific educational needs of the two-year college minority student, I expect this research to provide practical information which can be used to develop success models for implementation at community colleges.

As you are aware, the minority population in this country is growing at a tremendous rate and higher education needs to increase its involvement in developing programs and policies to assist minority groups in advancing educationally. I believe the community college must play a major role in this development.

I am writing you to ask for a few minutes of your time to assist me by recommending from five to ten individuals to participate as part of a panel of experts for this Delphi Study. Besides yourself, I am asking five other national leaders to also recommend participants. I hope to have from thirty to sixty individuals participating who are knowledgeable or have an expertise in areas related to this research.

I have enclosed a form with instructions for making panel member recommendations. Also, enclosed is a self-addressed, stamped envelope for your use. If I have your permission to use your name when I contact those participants you recommend, please sign the line on the front of the form. I will send you the results of my study when it is completed. I appreciate your time and valuable assistance with this study. Thank you.

Sincerely,

Thomas K. McKeon

Attachments: 2

cc: John J. Gardiner  
309 Gundersen Hall  
Oklahoma State University  
Stillwater, OK 74078

Please recommend a total of five to ten individuals to participate in this Delphi Study. Participants should have knowledge or expertise related to the research topic - Strategies for Improving the Retention and Success of Minorities at Community Colleges. Select individuals from these areas: 1) Community college practitioners, 2) Public policy makers or planners, 3) Higher education researchers, 4) Minorities with a community college educational experience. Please try and distribute your recommendations as evenly as possible among these four classifications. Participants can come from any geographical region in the United States.

You have my permission to use my name when contacting the individuals I have recommended on this form.

\_\_\_\_\_  
Signature

Panel Recommendations

Name \_\_\_\_\_

Title \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Please check: Community College Practitioner \_\_\_\_\_ Public Policy Maker/Planner \_\_\_\_\_

Higher Education Researcher \_\_\_\_\_ Minority w/ a Community College Educational Experience \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Please check: Community College Practitioner \_\_\_\_\_ Public Policy Maker/Planner \_\_\_\_\_

Higher Education Researcher \_\_\_\_\_ Minority w/ a Community College Educational Experience \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Please check: Community College Practitioner \_\_\_\_\_ Public Policy Maker/Planner \_\_\_\_\_

Higher Education Researcher \_\_\_\_\_ Minority w/ a Community College Educational Experience \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Please check: Community College Practitioner \_\_\_\_\_ Public Policy Maker/Planner \_\_\_\_\_

Higher Education Researcher \_\_\_\_\_ Minority w/ a Community College Educational Experience \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Please check: Community College Practitioner \_\_\_\_\_ Public Policy Maker/Planner \_\_\_\_\_

Higher Education Researcher \_\_\_\_\_ Minority w/ a Community College Educational Experience \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Please check: Community College Practitioner \_\_\_\_\_ Public Policy Maker/Planner \_\_\_\_\_

Higher Education Researcher \_\_\_\_\_ Minority w/ a Community College Educational Experience \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Please check: Community College Practitioner \_\_\_\_\_ Public Policy Maker/Planner \_\_\_\_\_

Higher Education Researcher \_\_\_\_\_ Minority w/ a Community College Educational Experience \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Please check: Community College Practitioner \_\_\_\_\_ Public Policy Maker/Planner \_\_\_\_\_

Higher Education Researcher \_\_\_\_\_ Minority w/ a Community College Educational Experience \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Please check: Community College Practitioner \_\_\_\_\_ Public Policy Maker/Planner \_\_\_\_\_

Higher Education Researcher \_\_\_\_\_ Minority w/ a Community College Educational Experience \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Please check: Community College Practitioner \_\_\_\_\_ Public Policy Maker/Planner \_\_\_\_\_

Higher Education Researcher \_\_\_\_\_ Minority w/ a Community College Educational Experience \_\_\_\_\_

July 21, 1988

Name  
Title  
Organization  
Address  
City, State, Zip

Dear \_\_\_\_\_,

Recently I wrote to you asking for recommendations of five to ten individuals to participate in a nationwide Delphi Study on strategies for improving the retention and success of minorities at community colleges. As this study is part of my thesis for the Doctoral Degree in Higher Education Administration at Oklahoma State University, your assistance in making these panel recommendations, along with five other national leaders, is important to the success of this research.

For your convenience, I have enclosed a form with instructions for making the panel member recommendations. Also enclosed is a self-addressed stamped envelope for your use. If I have permission to use your name when I contact those participants you recommend, please sign the line on the front of the form.

I realize that the summer, with vacations and irregular work schedules, is not the best time of the year to make this type of request. I want to thank you in advance for your time and assistance. If you have already responded to my first request, please disregard this letter.

Sincerely,

Thomas K. McKeon

cc: John J. Gardiner  
309 Gundersen Hall  
Oklahoma State University  
Stillwater, OK 74078

**APPENDIX C**

**DELPHI PANEL MEMBERS**

APPENDIX C  
DELPHI PANEL MEMBERS

| <u>Name</u>             | <u>Title</u>                                   | <u>Organization</u>                                 |
|-------------------------|------------------------------------------------|-----------------------------------------------------|
| Alexander Astin         | Director/Higher Education Research Institute   | University of California-Los Angeles                |
| Arthur Cohen            | Director                                       | ERIC Clearinghouse for Jr. Colleges                 |
| Charles Green           | President                                      | Rio Salado Community College                        |
| Connie Odons            | Vice President for Professional Services       | American Assn. of Community & Junior Colleges       |
| Earl Wright             | Vice President for Student Services            | San Antonio College                                 |
| James Palmer            | Vice President for Communications              | American Assn. of Community & Junior Colleges       |
| Johnas Hockaday         | Chancellor                                     | Virginia Community College System                   |
| Joshua Smith            | President                                      | Brookdale Community College                         |
| Judith Eaton            | President                                      | Community College of Philadelphia                   |
| K. Patricia Cross       | Professor/Graduate School of Education         | University of California-Berkeley                   |
| Max Rodriguez           |                                                | La Guardia Community College                        |
| Narcisa Polonio-Jones   | Director-Office of Community Colleges          | New Jersey Department of Higher Education           |
| Ramon Dovalina          | Vice President/Comm. Resource & Services       | Austin Community College                            |
| Raul Cardenas           | President                                      | South Mountain Community College                    |
| Reginald Wilson         | Director, Office of Minority Affairs           | American Council on Education                       |
| Richard Ernst           | President                                      | Northern Virginia Community College                 |
| Richard Richardson, Jr. | Associate Director                             | Nat'l Center for Postsecondary Government & Finance |
| Robert McCabe           | President                                      | Miami-Dade Junior College                           |
| Sarah Melendez          | Office of Minority Affairs                     | American Council on Education                       |
| Thomas Gonzales         | President                                      | Linn-Benton Community College                       |
| Walter Bumphus          | Vice President of Student Affairs              | Howard Community College                            |
| Carolyn Williams        | Dean of Student Services                       | Highland Park Community College                     |
| Lydia Linares           | Instructor                                     | Laredo Junior College                               |
| John Roueche            | Professor/Community College Leadership Program | University of Texas                                 |



APPENDIX D

LETTER TO REVIEW PANEL

September 20, 1988

Name  
Title  
Organization  
Address  
City, State, Zip

Dear \_\_\_\_\_,

As we discussed a few days ago, I am enclosing several items related to my doctoral thesis. These items will be mailed to the panelists to gather information on strategies to increase the retention and success of minorities in community colleges. The panel will be composed of individuals from the following groups: community college practitioners, public policy makers or planners, higher education researchers, and minorities with a community college experience.

Please review the attached cover letter, the sheet explaining the Delphi Technique and the round one questionnaire. I am interested in your comments or suggestions concerning these documents. If you were participating in this study, did you find the directions and explanations clearly stated?

I have enclosed a self-addressed, stamped envelope for your convenience. I appreciate your time and valuable input related to the development of my research instruments.

Thank you.

Sincerely,

Thomas K. McKeon

Attachments: 3

APPENDIX E

ROUND ONE MATERIALS

November 22, 1988

Name  
 Title  
 Organization  
 Address  
 City, State, Zip

Dear \_\_\_\_\_,

\_\_\_\_\_ from \_\_\_\_\_  
 recently recommended you to me as an individual who could make a valuable contribution in a research study aimed at developing strategies to increase the retention and success of minorities at community colleges. I am requesting your assistance along with approximately twenty-five individuals to form a panel of experts. Data gathered from this study will be used as part of my doctoral thesis in Higher Education Administration at Oklahoma State University. Besides focusing attention on the specific educational needs of two-year college minority students, I expect this research to provide practical information which can be used to develop models which can be implemented at community colleges to increase minority retention and success.

This study utilizes the Delphi Technique (explanation attached) for collecting information through a series of questionnaires. Your involvement will take approximately twenty minutes, three times during the next few months. Your responses will be kept confidential.

Please read the explanation of the Delphi Technique; then follow the instructions on the top of the round-one instrument. In order to facilitate the processing of round-one data, please return your instrument no later than December 12, 1988. I have enclosed a self-addressed, stamped envelope for your convenience.

I want to let you know in advance that I appreciate your time and valuable input as a participant in this important study. At the conclusion of this research, I will provide each panel member with a copy of the results. Thank you.

Sincerely,

Thomas K. McKeon

Attachments: 2

cc: John J. Gardiner  
 309 Gundersen Hall  
 Oklahoma State University  
 Stillwater, OK 74078

## THE DELPHI TECHNIQUE

The Delphi is a research methodology utilizing a panel of experts to generate consensus on a topic of interest. Opinions are gathered by initiating a series of brainstorming opportunities. Opinions of participants are calculated through the use of questionnaires with the goal of reaching group consensus. This technique was originally developed by the Rand Corporation and has been demonstrated to be useful and reliable in educational forecasting and planning.

The Delphi Technique utilizes a series of paper and pencil questionnaires. The first round instrument is open-ended in design and is utilized to solicit ideas and opinions related to the research topic from the panel of experts. The subsequent questionnaires are prepared from the participants responses to the round one instrument. The panel members' comments are collected, checked for duplication and used to develop a Likert's Scale questionnaire.

During round two the panel members rate each item on the scale from strongly disagree to strongly agree. During round three the participants are given the median and interquartile range for the groups response to the round two items. If opinions fall outside the interquartile range for the group, participants are asked to rate their opinion and comment as to why they disagree with the group.

The use of the Delphi Technique allows for anonymous response and eliminates the possibility of group pressure often found in face to face panels. This technique also facilitates the gathering of opinions from experts in many geographical regions without bringing the participants together. The Delphi process provides panel members with opportunities for interaction through controlled feedback following rounds one and two. The groups opinion is defined after the final round by using an aggregate of the members individual opinions.

## ROUND ONE INSTRUMENT

Instructions: Based upon your knowledge or experience, **how can community colleges increase the retention and success of minorities at their institutions?** Your responses could include philosophy, policies, goals/objectives, definitions, support/assistance or specialized programs. You may want to relate your ideas to the specific functions of community colleges: college transfer programs, technical/occupational programs, student services, continuing education or remedial education. However, do not feel you have to limit your response to these items. Be as concise as possible, while adequately expressing your thoughts. Please return this instrument to: Thomas K. McKeon, 6623 E. 86th Place, Tulsa, Oklahoma 74133 by December 12, 1988.

---

Signature

Organization

December 8, 1988

Name  
Title  
Organization  
Address  
City, State, Zip

Dear \_\_\_\_\_,

About ten days ago I wrote asking you to participate in a Delphi Study concerned with the development of strategies to increase the retention and success of minorities at community colleges. I hope you have decided to take part in this research. Your valuable input is important to the success of this study.

For your convenience, I have enclosed a copy of the round-one instrument. It will take just a few minutes to briefly express your thoughts related to the research topic. If you have already mailed back your response—thanks! Your help is appreciated.

Sincerely,

Thomas K. McKeon

Attachment: 1

cc: John J. Gardiner  
Professor of Higher Education  
309 Gundersen Hall  
Oklahoma State University  
Stillwater, OK 74078

APPENDIX F

ROUND ONE RESPONSES  
BY CATEGORY



## APPENDIX F

## ROUND ONE RESPONSES BY CATEGORY

## Intervention/Outreach

1. Colleges should explore the possibilities of establishing outreach programs in the high school. The earlier we can work with our students, the better their chances for success in college.
2. High school/college cooperative effort designed to increase the basic skills of students prior to high school graduation.
3. Let high school students know what skills are expected of them at college.
4. Early intervention - working with K-12 schools to improve student motivation and preparation.
5. Summer bridge programs between senior year of high school and freshman matriculation to strengthen preparation, study skills and ease the transition.
6. Expand marketing effort - target groups with outreach centers in the community.

## Financial Aid

1. Provide funds through scholarships.
2. Provide work study opportunities.
3. Make on campus jobs available.
4. Providing adequate financial aid.
5. Financial assistance.
6. Expand scholarship with tuition assistance for students in classes.
7. Assure a fair distribution of financial aid with respect to proportion of grants versus loans to minority students, since some institutions award minorities a disproportionate number of loans.
8. The school calendar and financial aid must accommodate an appropriate time frame based on the educational needs of students.

## APPENDIX F (Continued)

9. Financial aid and scholarships to ease financial burden.
10. Expand part-time employment opportunities on the campus.

Basic Skills Assessment  
Placement/Developmental Studies

1. Mandate supplemental instruction in basic courses.
2. Sound assessment program to assist students in identifying academic weaknesses, as well as, coursework that will assist in overcoming them. Not only should we test, but we should also provide a means to address the results.
3. Offering developmental (pre-college) programs in English reading and mathematics.
4. Assessment of basic skills at entrance, so that students needing extra help can be identified.
5. Providing developmental (remedial) courses and insisting that they be taken by students with academic deficiencies.
6. Assessment and advancement to identify preparation gaps and correct them.
7. The application process should also include assessment and counseling, but not mandatory placement.
8. Developmental studies.
9. Do not assume minorities will need remedial assistance.
10. Basic skills assessment and instruction must be given priority and flexibility within the curriculum so that innovative, exciting and realistic approaches to teaching disadvantaged students can be emphasized.
11. Developmental education to strengthen basic academic skills.

Counseling/Advisement

1. Involving faculty and staff is a must in student assessment. This is not the sole responsibility of the student services staff.
2. Providing adequate counseling services.

## APPENDIX F (Continued)

3. Intrusive advisement.
4. A strong recruitment, orientation, assessment and counseling program.
5. Provide services that assist students in declaring a major as soon as possible, since retention is lower for undeclared majors.
6. Many economically disadvantaged students need remediation and assistance in establishing appropriate educational and career goals.
7. Orientation to acquaint the student with the college's services.
8. Counseling/advising to encourage students who may have personal problems and to provide information and options on career and work opportunities.
9. Discourage part-time attendance, especially among students coming directly from high school.
10. Counsel all new students on the importance of involvement. Students should also be given clear-cut ideas as to how they can increase their own involvement (extracurricular participation, reduction in outside commitments, etc.).
11. Discourage full-time employment while enrolled in classes.

## Careers/Job Placement

1. Career and transfer advising.

## Staffing

1. A competent, caring, student services staff which reflects the student population.
2. Campus should provide for the hiring of minority staff, faculty, administrators and support personnel.  
  
They serve as role models and also understand many of the problems students face.
3. Having adequate minority representation on the faculty and staff.
4. Develop student success model programs with input by the faculty, staff and administration.

## APPENDIX F (Continued)

5. Select minority faculty and administrators to lead the process.
6. Faculty and staff must be representative of that minority.
7. It is important to employ minority personnel at all levels to serve as resources and role models for both minority students and majority colleagues.

## Peer Groups/Mentors

1. Providing peer tutors - big brothers/sisters - to help student survive treacherous first year.
2. Facilitating the establishment of a mentor on the faculty or staff - someone the student can freely call upon for support and assistance.
3. Recruit minority parents and community members to form networking/support groups.
4. Hire minority professors and staff to serve as role models and mentors.

## Academics/Instruction

1. Define and communicate specific instructional objectives in all classes.
2. Test frequently.
3. Encourage writing exercises repeatedly.
4. Maintaining program comprehensiveness.
5. Monitoring student progress.
6. Involve students in cooperative learning and other kinds of group projects.
7. Establish a transfer college within the college which has a clear identity and mission.
8. Work out collaborative arrangements with upper division institutions to provide transfer opportunities for successful community college students.

## APPENDIX F (Continued)

Other Student Services &  
Special Support Services

1. Maintain a readily accessible tutorial center.
2. Strong Student Services including; counseling, educational planning, financial aid, and student activities program are a must.
3. Implementing an "early alert" system whereby faculty and staff can inform the counseling center when a minority student is having difficulty - either academic or personnel.
4. Financial aid, child care and other student services that will allow students to devote more "time on task" at the college.
5. Providing special transition or orientation programs before the beginning of the Freshman Year (or at the very beginning of that year) to improve study skills, a sense of belonging, and strengthening weak academic areas.
6. Students who do not test well or who do not have the academic preparation can succeed in the classroom with an on going tutorial program.
7. Continuing Education.
8. Adult Basic Education and GED testing.
9. Tutoring.
10. Test taking classes.
11. Organized study groups.
12. Sponsor activities and clubs which allow the students to build a sense of ownership for the institution.
13. Develop a strong freshman orientation program (which awards college credit) and require enrollment during the first semester.
14. Use a "front loading approach" to student services, because the largest drop in retention occurs after the first semester. No other time offers as great an opportunity to make a positive impact.
15. Develop and utilize an effective early warning system. this requires commitment and support of faculty.

## APPENDIX F (Continued)

16. Promote a strong minority student union program and other extracurricular activities, since programs such as these enhance "institutional fit".
17. Mechanisms to identify high-risk students and provide them with support and special attention needs to be implemented at community colleges.
18. Tutoring to overcome difficulties with courses and test taking.
19. Monitor student progress closely, especially in the first few terms of attendance. The monitoring system should be connected to a feedback and response system that allows rapid intervention in the event that the student encounters significant difficulties.
20. Involve all new students in an orientation seminar. This course should be at least one term in length and should be given for credit in general education. The basic purpose of the course should be to familiarize students with the curriculum and other program offerings and to give the student an opportunity to consider in depth the possible connections between his/her interest and aspirations and the offerings of the institution. Much discussion and debate among students during the course is recommended.

## Philosophy

1. Retention and success of minorities can be enhanced by the practices that are useful in providing an environment supportive of learning for all students.
2. If an individual has the mental capacity to succeed in college but is not educationally prepared, then the community college has an obligation to provide the remedy and help the student continue with his/her goals.
3. Minorities do not have a monopoly on retention and success problems.
4. Programs should not be keyed to minorities, when we do we are separating minorities and treating them differently.
5. Whatever strategies you employ (instructional change, support services, new programs etc.) require institutional valuing of the effort.
6. Make this a college priority.

## APPENDIX F (Continued)

7. Institution must make a conscious decision to recruit and retain the minority group.
8. Retention strategies for predominantly minority community colleges should be different than those of community colleges who serve a small number of minority students, since a very small number of urban community colleges serve the majority of minority students attending two year institutions.
9. The issues of retention at predominantly minority community colleges should be addressed in terms of the available resources needed to provide necessary programs.
10. The colleges philosophy and mission should contain a strong statement about its commitment to serve all students. This should be widely disseminated both inside and outside the college to indicate the governing board and administrations commitment to its minority population.

## Policies &amp; Procedures

1. Institutional policies and procedures should be reviewed to insure these aren't in conflict with promoting student retention - admission/advisory policies, financial aid regulations, course offerings, etc.
2. Colleges should provide recruitment programs that go beyond the "pass out application and catalog stage" and into an orientation and information dissemination process.
3. A re-testing policy.
4. Determine if there is a retention/success problem at the institution by; 1) identifying institution success variables and, 2) assessing student sub- populations in light of these variables.
5. Identify the nature of the problem - what strategies you use should be determined by the specific problems you are trying to solve.
6. Delay enrollment in "high risk courses" with traditionally low productive (A, B or C) grade rates until after the first semester. The difficult combination of high-risk courses and lack of adjustment to college may be avoided for some incoming freshman.
7. Prevent underprepared students who enroll in developmental courses from enrolling in too many hours or from enrolling in courses which are inappropriate for their present ability level.

## APPENDIX F (Continued)

8. Eliminate "Withdrawal Failing" (WF) grades and award a non-punitive "Withdrawal" grade which does not impact GPA.
9. Conduct a complete survey of current policies and practices that affect students with an eye to identifying those that either would enhance or impede student retention.

## Classroom Management

1. Take roll in class and call the absentees.
2. Enforce course prerequisites.
3. Offer classes at all times of the day.

## Miscellaneous

1. Community colleges have a variety of ways to increase the retention and success of minority students.
2. Several actions can be undertaken to increase the retention of minority students (indeed of all students).
3. Being very honest in recruiting literature about what to expect at the college - avoid unrealistic expectations.
4. Really caring about individual student success.
5. Communicate high expectations to all students.
6. The real problem is that many students are underprepared and that minorities are overrepresented in the underprepared category.
7. Allocate funds to the special programs to get the proper start.
8. Plan programs for leaders/scholars from minority group.
9. Develop workshops and other training and professional development activities for professors whose classes demonstrate consistently low productive grader rates.
10. The college must have the appropriate linkages with social service agencies so that issues such as housing, child care and medical needs can also be addressed, since students from disadvantaged backgrounds often drop out of school because of family or economic situations as opposed to lack of motivation or failing grades.



## APPENDIX F (Continued)

11. The environment at our colleges needs to be conducive to learning for minority students. Therefore, the total college community has to see the value of retaining minority students, including faculty, clerical and cafeteria support staff.
12. Policies, programs, and services to support the retention and success of minorities should be reviewed periodically by administrators and faculty to ensure that there is no conflict or barrier for minority students.
13. The college should have an up-to-date data base which tracks minority students from the time of entrance to the time of exit. Follow-up studies should be conducted to determine the students success on the job or at a senior college.
14. The college should provide staff and professional development for all employees to sensitize them to the needs of minorities and to help employees develop programs and services to benefit minority students.
15. Establish a comprehensive longitudinal data base in which entering and follow-up information is collected on each student.
16. Differentiate students by program and educational objective (transfer, terminal occupational and non-degree credit students). Programs and interventions should be specifically designed for each different student subpopulation.

APPENDIX G

ROUND TWO MATERIALS

January 12, 1989

Name  
Title  
Organization  
Address  
City, State Zip

Dear \_\_\_\_\_ ,

I have enclosed the second round questionnaire for my research study concerning minority students at community colleges which we began last month. If you did not participate in the first round, I hope you will consider participating in this segment of the Delphi process. The participation and valuable input from all panel members is important to the success of this research since our goal is to reach group consensus on strategies to increase the retention and success of minority students at community colleges.

The second round questionnaire was developed from responses identified by round one participants. Similar and duplicate responses on round one were summarized into single statements for this questionnaire. Instructions for completing the questionnaire are included at the top of the form. All responses will be considered strictly confidential.

I have enclosed a self-addressed, stamped envelope and would appreciate your returning the survey by January 22, 1989.

Again, my sincere thanks for your assistance.

Sincerely,

Thomas K. McKeon

cc: John J. Gardiner  
Professor of Higher Education  
309 Gundersen Hall  
Oklahoma State University  
Stillwater, OK 74078

## ROUND TWO INSTRUMENT

INSTRUCTIONS: The following statements are related to possible strategies to increase the retention and success of minority students at community colleges. These items were identified by the respondents to the Round One Questionnaire. Please circle the number which most closely represents your perception regarding the importance of each item. Space has been provided to add additional items not included in this instrument. If you add items, be sure to circle a number to indicate importance.

7 - Strongly agree  
6 - Agree  
5 - Slightly agree

4 - Neutral

3 - Slightly disagree  
2 - Disagree  
1 - Strongly disagree

Please react to the importance of each statement in the development of strategies to increase the retention and success of minority students at community colleges. The following items are not listed in any particular order.

## SECTION I

- |                                                                                                                                                                                                                                                                                                          |   |   |   |   |   |   |   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 1. If an individual has the mental capacity to succeed in college but is not educationally prepared, then the community college has an obligation to provide the remedy and help the student continue with his/her goals.                                                                                | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/>                                                                                                                                                                                                                                                                                                    |   |   |   |   |   |   |   |
| 2. Determine if there is a retention/success problem at the institution by; 1) identifying institution success variables and, 2) assessing student sub-populations in light of these variables.                                                                                                          | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/>                                                                                                                                                                                                                                                                                                    |   |   |   |   |   |   |   |
| 3. Determine strategies to be employed after the nature of the problem has been identified.                                                                                                                                                                                                              | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/>                                                                                                                                                                                                                                                                                                    |   |   |   |   |   |   |   |
| 4. The issues of retention at predominantly minority community colleges should be addressed in terms of the available resources needed to provide necessary programs.                                                                                                                                    | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/>                                                                                                                                                                                                                                                                                                    |   |   |   |   |   |   |   |
| 5. Retention strategies for predominantly minority community colleges should be different than those of community colleges who serve a small number of minority students, since a very small number of urban community colleges serve the majority of minority students attending two year institutions. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

## ROUND TWO INSTRUMENT

INSTRUCTIONS: The following statements are related to possible strategies to increase the retention and success of minority students at community colleges. These items were identified by the respondents to the Round One Questionnaire. Please circle the number which most closely represents your perception regarding the importance of each item. Space has been provided to add additional items not included in this instrument. If you add items, be sure to circle a number to indicate importance.

7 - Strongly agree  
6 - Agree  
5 - Slightly agree

4 - Neutral

3 - Slightly disagree  
2 - Disagree  
1 - Strongly disagree

Please react to the importance of each statement in the development of strategies to increase the retention and success of minority students at community colleges. The following items are not listed in any particular order.

- |       |                                                                                                                                                                                                                                                                                     |   |   |   |   |   |   |   |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 6.    | The colleges philosophy and mission should contain a strong statement about its commitment to serve all students. This should be widely disseminated both inside and outside the college to indicate the governing board and administrations commitment to its minority population. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/> |                                                                                                                                                                                                                                                                                     |   |   |   |   |   |   |   |
| 7.    | Programs should not be keyed to minorities, when we do we are separating minorities and treating them differently.                                                                                                                                                                  | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/> |                                                                                                                                                                                                                                                                                     |   |   |   |   |   |   |   |
| 8.    | Whatever strategies the college employs (instructional change, support services, new programs etc.) requires institutional valuing of the effort.                                                                                                                                   | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/> |                                                                                                                                                                                                                                                                                     |   |   |   |   |   |   |   |
| 9.    | Make a conscious decision to recruit and retain the minority group. Make this a college priority.                                                                                                                                                                                   | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/> |                                                                                                                                                                                                                                                                                     |   |   |   |   |   |   |   |
| 10.   | It is important to employ minority personnel at all levels to serve as resources and role models for both minority students and majority colleagues.                                                                                                                                | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/> |                                                                                                                                                                                                                                                                                     |   |   |   |   |   |   |   |
| 11.   | Develop student success model programs with input by the faculty, staff and administration.                                                                                                                                                                                         | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/> |                                                                                                                                                                                                                                                                                     |   |   |   |   |   |   |   |
| 12.   | Allocate funds to the special programs to get the proper start.                                                                                                                                                                                                                     | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

## ROUND TWO INSTRUMENT

INSTRUCTIONS: The following statements are related to possible strategies to increase the retention and success of minority students at community colleges. These items were identified by the respondents to the Round One Questionnaire. Please circle the number which most closely represents your perception regarding the importance of each item. Space has been provided to add additional items not included in this instrument. If you add items, be sure to circle a number to indicate importance.

7 - Strongly agree  
6 - Agree  
5 - Slightly agree

4 - Neutral

3 - Slightly disagree  
2 - Disagree  
1 - Strongly disagree

Please react to the importance of each statement in the development of strategies to increase the retention and success of minority students at community colleges. The following items are not listed in any particular order.

- |                                                                                                                                                                                                                                   |   |   |   |   |   |   |   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 13. Select minority faculty and administrators to lead the retention/success process.                                                                                                                                             | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 14. Develop recruitment programs that go beyond the "pass out application and catalog stage" and into an orientation and information dissemination process.                                                                       | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 15. Implement practices that are useful in developing an environment supportive of learning for all students.                                                                                                                     | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 16. Policies, programs, and services which support the retention and success of minorities should be periodically reviewed by administrators and faculty to ensure that there are no conflicts or barriers for minority students. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 17. Develop a school calendar which accommodates an appropriate time frame based on the educational needs of students.                                                                                                            | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 18. Prevent underprepared students who enroll in developmental courses from enrolling in too many hours or from enrolling in courses which are inappropriate for their present ability level.                                     | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

## ROUND TWO INSTRUMENT

INSTRUCTIONS: The following statements are related to possible strategies to increase the retention and success of minority students at community colleges. These items were identified by the respondents to the Round One Questionnaire. Please circle the number which most closely represents your perception regarding the importance of each item. Space has been provided to add additional items not included in this instrument. If you add items, be sure to circle a number to indicate importance.

7 - Strongly agree  
6 - Agree  
5 - Slightly agree

4 - Neutral

3 - Slightly disagree  
2 - Disagree  
1 - Strongly disagree

Please react to the importance of each statement in the development of strategies to increase the retention and success of minority students at community colleges. The following items are not listed in any particular order.

|                                                                                                                                                                                                                                         |   |   |   |   |   |   |   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 19. Delay enrollment in "high risk courses" with traditionally low productive (A, B or C) grade rates until after the first semester.                                                                                                   | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 20. Differentiate students by program and educational objective (transfer, terminal occupational and non-degree credit students). Programs and interventions should be specifically designed for each different student subpopulation). | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 21. Establish a re-testing policy.                                                                                                                                                                                                      | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 22. Eliminate "Withdrawal Failing" (WF) grades and award a non-punitive "Withdrawal" grade which does not impact GPA.                                                                                                                   | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 23. Develop an early intervention program working with K-12 schools to improve student motivation and preparation.                                                                                                                      | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 24. Communicate to high school students those skills which are expected of them at college.                                                                                                                                             | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 25. Develop outreach programs in the high school with the goal of increasing the basic skills of students prior to high school graduation.                                                                                              | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

## ROUND TWO INSTRUMENT

INSTRUCTIONS: The following statements are related to possible strategies to increase the retention and success of minority students at community colleges. These items were identified by the respondents to the Round One Questionnaire. Please circle the number which most closely represents your perception regarding the importance of each item. Space has been provided to add additional items not included in this instrument. If you add items, be sure to circle a number to indicate importance.

7 - Strongly agree  
6 - Agree  
5 - Slightly agree

4 - Neutral

3 - Slightly disagree  
2 - Disagree  
1 - Strongly disagree

Please react to the importance of each statement in the development of strategies to increase the retention and success of minority students at community colleges. The following items are not listed in any particular order.

|                                                                                                                                                                           |   |   |   |   |   |   |   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 26. Implement a summer bridge programs between the senior year of high school and freshman matriculation to strengthen preparation, study skills and ease the transition. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|

|                                                                                                                                                   |   |   |   |   |   |   |   |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 27. Develop appropriate linkages with social service agencies so that issues such as housing, child care and medical needs can also be addressed. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|

|                                                                                                  |   |   |   |   |   |   |   |
|--------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 28. Expand college marketing efforts by targeting groups with outreach centers in the community. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|--------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|

|     |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|
| 29. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|-----|---|---|---|---|---|---|---|

|     |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|
| 30. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|-----|---|---|---|---|---|---|---|

## SECTION 2

|                                                        |   |   |   |   |   |   |   |
|--------------------------------------------------------|---|---|---|---|---|---|---|
| 1. Develop a strong, comprehensive counseling program. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|--------------------------------------------------------|---|---|---|---|---|---|---|

|                                                                                                                                    |   |   |   |   |   |   |   |
|------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 2. Provide services that assist students in declaring a major as soon as possible, since retention is lower for undeclared majors. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|



## ROUND TWO INSTRUMENT

INSTRUCTIONS: The following statements are related to possible strategies to increase the retention and success of minority students at community colleges. These items were identified by the respondents to the Round One Questionnaire. Please circle the number which most closely represents your perception regarding the importance of each item. Space has been provided to add additional items not included in this instrument. If you add items, be sure to circle a number to indicate importance.

7 - Strongly agree  
6 - Agree  
5 - Slightly agree

4 - Neutral

3 - Slightly disagree  
2 - Disagree  
1 - Strongly disagree

Please react to the importance of each statement in the development of strategies to increase the retention and success of minority students at community colleges. The following items are not listed in any particular order.

- |                                                                                                                                                                                                                                        |   |   |   |   |   |   |   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 3. Discourage part-time attendance, especially among students coming directly from high school.                                                                                                                                        | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 4. Counsel all new students on the importance of involvement. Students should also be given clear-cut ideas as to how they can increase their own involvement (extracurricular participation, reduction in outside commitments, etc.). | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 5. Discourage full-time employment while enrolled in classes.                                                                                                                                                                          | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 6. Provide work study opportunities and other part-time, on campus employment.                                                                                                                                                         | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 7. Provide adequate financial aid and scholarships to ease the financial burden of attending college.                                                                                                                                  | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 8. Assure a fair distribution of financial aid with respect to proportion of grants versus loans to minority students, since some institutions award minorities a disproportionate number of loans.                                    | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 9. Implement a sound assessment program to assist students in identifying academic weaknesses.                                                                                                                                         | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

## ROUND TWO INSTRUMENT

INSTRUCTIONS: The following statements are related to possible strategies to increase the retention and success of minority students at community colleges. These items were identified by the respondents to the Round One Questionnaire. Please circle the number which most closely represents your perception regarding the importance of each item. Space has been provided to add additional items not included in this instrument. If you add items, be sure to circle a number to indicate importance.

|                    |             |                       |
|--------------------|-------------|-----------------------|
| 7 - Strongly agree |             | 3 - Slightly disagree |
| 6 - Agree          | 4 - Neutral | 2 - Disagree          |
| 5 - Slightly agree |             | 1 - Strongly disagree |

Please react to the importance of each statement in the development of strategies to increase the retention and success of minority students at community colleges. The following items are not listed in any particular order.

|                                                                                                                                                                                                                      |   |   |   |   |   |   |   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 10. Provide developmental (remedial) courses and insist that they be taken by students with academic deficiencies.                                                                                                   | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/>                                                                                                                                                                                                                |   |   |   |   |   |   |   |
| 11. Develop an assessment and counseling program but do not require mandatory course placement.                                                                                                                      | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/>                                                                                                                                                                                                                |   |   |   |   |   |   |   |
| 12. Basic skills assessment and instruction must be given priority and flexibility within the curriculum so that innovative, exciting and realistic approaches to teaching disadvantaged students can be emphasized. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/>                                                                                                                                                                                                                |   |   |   |   |   |   |   |
| 13. Involve faculty and staff in the college's student assessment program.                                                                                                                                           | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/>                                                                                                                                                                                                                |   |   |   |   |   |   |   |
| 14. Provide peer tutors - big brothers/sisters - to help student survive first year.                                                                                                                                 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/>                                                                                                                                                                                                                |   |   |   |   |   |   |   |
| 15. Facilitate the establishment of a mentor on the faculty or staff - someone the student can freely call upon for support and assistance.                                                                          | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/>                                                                                                                                                                                                                |   |   |   |   |   |   |   |
| 16. Recruit minority parents and community members to form networking/support groups.                                                                                                                                | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| <hr/>                                                                                                                                                                                                                |   |   |   |   |   |   |   |
| 17. Provide career guidance and job placement services.                                                                                                                                                              | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

## ROUND TWO INSTRUMENT

INSTRUCTIONS: The following statements are related to possible strategies to increase the retention and success of minority students at community colleges. These items were identified by the respondents to the Round One Questionnaire. Please circle the number which most closely represents your perception regarding the importance of each item. Space has been provided to add additional items not included in this instrument. If you add items, be sure to circle a number to indicate importance.

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3 - Slightly disagree  
2 - Disagree  
1 - Strongly disagree

Please react to the importance of each statement in the development of strategies to increase the retention and success of minority students at community colleges. The following items are not listed in any particular order.

|                                                                                                                                                                              |   |   |   |   |   |   |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 18. Maintain a readily accessible tutorial center.                                                                                                                           | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 19. Involve all new students in an orientation seminar.<br>This course should be at least one term in length and should be given for credit in general education.            | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 20. Implement an "early alert" system whereby faculty and staff can inform the counseling center when a minority student is having difficulty - either academic or personal. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 21. Provide child care and other student services that will allow students to devote more "time on task" at the college.                                                     | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 22. Provide special transition programs at the beginning of the Freshman Year to improve study skills, develop a sense of belonging, and strengthen weak academic areas.     | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 23. Provide continuing education opportunities.                                                                                                                              | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 24. Offer Adult Basic Education and GED testing.                                                                                                                             | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 25. Provide test taking classes.                                                                                                                                             |   |   |   |   |   |   |   |

## ROUND TWO INSTRUMENT

INSTRUCTIONS: The following statements are related to possible strategies to increase the retention and success of minority students at community colleges. These items were identified by the respondents to the Round One Questionnaire. Please circle the number which most closely represents your perception regarding the importance of each item. Space has been provided to add additional items not included in this instrument. If you add items, be sure to circle a number to indicate importance.

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3 - Slightly disagree  
2 - Disagree  
1 - Strongly disagree

Please react to the importance of each statement in the development of strategies to increase the retention and success of minority students at community colleges. The following items are not listed in any particular order.

|                                                                                                                                                                                                                                                                      |   |   |   |   |   |   |   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 26. Develop organized study groups.                                                                                                                                                                                                                                  | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 27. Use a "front loading approach" to student services, because the largest drop in retention occurs after the first semester. No other time offers as great an opportunity to make a positive impact.                                                               | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 28. Monitor student progress closely, especially in the first few terms of attendance. The monitoring system should be connected to a feedback and response system that allows rapid intervention in the event that the student encounters significant difficulties. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 29. Define and communicate specific instructional objectives in all classes.                                                                                                                                                                                         | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 30. Test frequently.                                                                                                                                                                                                                                                 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 31. Encourage writing exercises repeatedly.                                                                                                                                                                                                                          | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 32. Maintain program comprehensiveness.                                                                                                                                                                                                                              | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 33. Involve students in cooperative learning and other kinds of group projects.                                                                                                                                                                                      | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

## ROUND TWO INSTRUMENT

INSTRUCTIONS: The following statements are related to possible strategies to increase the retention and success of minority students at community colleges. These items were identified by the respondents to the Round One Questionnaire. Please circle the number which most closely represents your perception regarding the importance of each item. Space has been provided to add additional items not included in this instrument. If you add items, be sure to circle a number to indicate importance.

7 - Strongly agree  
6 - Agree  
5 - Slightly agree

4 - Neutral

3 - Slightly disagree  
2 - Disagree  
1 - Strongly disagree

Please react to the importance of each statement in the development of strategies to increase the retention and success of minority students at community colleges. The following items are not listed in any particular order.

|                                                                                                                                                                                   |   |   |   |   |   |   |   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 34. Establish a transfer college within the college which has a clear identity and mission.                                                                                       | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 35. Work out collaborative arrangements with upper division institutions to provide transfer opportunities for successful community college students.                             | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 36. Take roll in class and call the absentees.                                                                                                                                    | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 37. Enforce course prerequisites.                                                                                                                                                 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 38. Offer classes at all times of the day.                                                                                                                                        | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 39. Plan programs for leaders/scholars from minority group.                                                                                                                       | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 40. Develop workshops and other training and professional development activities for professors whose classes demonstrate consistently low productive grade rates.                | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 41. Develop an environment at the college which is conducive to learning for minority students (the total college community has to see the value of retaining minority students). | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

## ROUND TWO INSTRUMENT

**INSTRUCTIONS:** The following statements are related to possible strategies to increase the retention and success of minority students at community colleges. These items were identified by the respondents to the Round One Questionnaire. Please circle the number which most closely represents your perception regarding the importance of each item. Space has been provided to add additional items not included in this instrument. If you add items, be sure to circle a number to indicate importance.

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6 - Agree  
5 - Slightly agree

4 - Neutral

3 - Slightly disagree  
2 - Disagree  
1 - Strongly disagree

Please react to the importance of each statement in the development of strategies to increase the retention and success of minority students at community colleges. The following items are not listed in any particular order.

|                                                                                                                                                                                                                              |   |   |   |   |   |   |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 42. Develop an up-to-date data base which tracks minority students from the time of entrance to the time of exit. Follow-up studies should be conducted to determine the students success on the job or at a senior college. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 43. Provide staff and professional development for all employees to sensitize them to the needs of minorities and to help employees develop programs and services to benefit minority students.                              | 7 | 6 | 5 | 5 | 4 | 3 | 1 |
| 44.                                                                                                                                                                                                                          | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 45.                                                                                                                                                                                                                          | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

January 20, 1989

Name  
Title  
Organization  
Address  
City, State Zip

Dear \_\_\_\_\_ ,

Ten days ago I mailed you the second round Delphi questionnaire related to my research on identifying strategies to increase the retention and success of minority students at community colleges.

So far, the response to this research has been very good. If you have completed and mailed the second round questionnaire, thank you for your rapid reply. If you have not yet had an opportunity to complete the round two form, I would appreciate you taking a few minutes to do so at your earliest convenience. As a member of this small, select Delphi panel, your participation is very important to the success of this project.

For your reply, I have enclosed a duplicate copy of the round two form and a stamped, self-addressed envelope. A response by January 28, 1989, would be appreciated.

Thank you.

Thomas K. McKeon

cc: John J. Gardiner  
Professor of Higher Education  
309 Gundersen Hall  
Oklahoma State University  
Stillwater, Oklahoma 74078

APPENDIX H

ROUND THREE MATERIALS



February 13, 1989

Name  
Title  
Organization  
Address  
City, State Zip

Dear \_\_\_\_\_ ,

Enclosed is the third and final round of my Delphi research study which is aimed at identifying strategies to increase the retention and success of minority students at community colleges. Panel members' participation in the first two rounds has been very good. Continued assistance with the enclosed final round is important to the success of this study.

Data collected from the round two survey have been analyzed. The median and interquartile rankings have been calculated for each item as indicated in the enclosed questionnaire. The interquartile rankings (Q1 - Q3) contains fifty percent of the responses received. The purpose of this final questionnaire is to determine agreement or disagreement with the groups consensus for each item.

Please read the instructions on the top of the questionnaire. If you disagree with the groups consensus, you are encouraged to state your reason(s).

Please return the completed form by February 24, 1989. For your convenience I have enclosed a self-addressed envelope.

Your assistance is appreciated. When the final results of this research are completed, I will forward you a copy.

Thank you.

Thomas K. McKeon

Enclosures: 2

cc: John J. Gardiner  
Professor of Higher Education  
309 Gundersen Hall  
Oklahoma State University  
Stillwater, Oklahoma 74078

## ROUND THREE INSTRUMENT

INSTRUCTIONS: The following statements are related to possible strategies to increase the retention and success of minority students at community colleges. The responses received for each of these statements during round two have been tabulated and are indicated below. For each statement the interquartile range is shown. This range represents responses falling between the twenty-fifth and seventy-fifth percentiles. For each statement the third quartile, the median, and the first quartile are indicated. Please read each statement and mark only those statements where your response falls outside the interquartile range. If your response falls outside the interquartile range you are encouraged to state the reason why you disagree with the group.

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## SECTION I

- |                                                                                                                                                                                                                                                                                                          |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1. If an individual has the mental capacity to succeed in college but is not educationally prepared, then the community college has an obligation to provide the remedy and help the student continue with his/her goals.                                                                                |  |
| 2. Determine if there is a retention/success problem at the institution by; 1) identifying institution success variables and, 2) assessing student sub-populations in light of these variables.                                                                                                          |  |
| 3. Determine strategies to be employed after the nature the problem has been identified.                                                                                                                                                                                                                 |  |
| 4. The issues of retention at predominantly minority community colleges should be addressed in terms of the available resources needed to provide necessary programs.                                                                                                                                    |  |
| 5. Retention strategies for predominantly minority community colleges should be different than those of community colleges who serve a small number of minority students, since a very small number of urban community colleges serve the majority of minority students attending two year institutions. |  |

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- |                                                                                                                                                                                                                                                                                        |                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 6. The colleges philosophy and mission should contain a strong statement about its commitment to serve all students. This should be widely disseminated both inside and outside the college to indicate the governing board and administrations commitment to its minority population. | 7    6    5    4    3    2    1<br> |
| 7. Programs should not be keyed to minorities, when we do we are separating minorities and treating them differently.                                                                                                                                                                  | 7    6    5    4    3    2    1<br> |
| 8. Whatever strategies the college employs (instructional change, support services, new programs etc.) requires institutional valuing of the effort.                                                                                                                                   | 7    6    5    4    3    2    1<br> |
| 9. Make a conscious decision to recruit and retain the minority group. Make this a college priority.                                                                                                                                                                                   | 7    6    5    4    3    2    1<br> |
| 10. It is important to employ minority personnel at all levels to serve as resources and role models for both minority students and majority colleagues.                                                                                                                               | 7    6    5    4    3    2    1<br> |
| 11. Develop student success model programs with input by the faculty, staff and administration.                                                                                                                                                                                        | 7    6    5    4    3    2    1<br> |
| 12. Allocate funds to the special programs to get the proper start.                                                                                                                                                                                                                    | 7    6    5    4    3    2    1<br> |

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- |                                                                                                                                                                                                                                   |         |         |         |   |   |   |   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|---------|---|---|---|---|
| 13. Select minority faculty and administrators to lead the retention/success process.                                                                                                                                             | 7       | 6       | 5       | 4 | 3 | 2 | 1 |
|                                                                                                                                                                                                                                   |         |         | ●-----● |   |   |   |   |
| <hr/>                                                                                                                                                                                                                             |         |         |         |   |   |   |   |
| 14. Develop recruitment programs that go beyond the "pass out application and catalog stage" and into an orientation and information dissemination process.                                                                       | 7       | 6       | 5       | 4 | 3 | 2 | 1 |
|                                                                                                                                                                                                                                   | ●-----● |         |         |   |   |   |   |
| <hr/>                                                                                                                                                                                                                             |         |         |         |   |   |   |   |
| 15. Implement practices that are useful in developing an environment supportive of learning for all students.                                                                                                                     | 7       | 6       | 5       | 4 | 3 | 2 | 1 |
|                                                                                                                                                                                                                                   | ●-----● |         |         |   |   |   |   |
| <hr/>                                                                                                                                                                                                                             |         |         |         |   |   |   |   |
| 16. Policies, programs, and services which support the retention and success of minorities should be periodically reviewed by administrators and faculty to ensure that there are no conflicts or barriers for minority students. | 7       | 6       | 5       | 4 | 3 | 2 | 1 |
|                                                                                                                                                                                                                                   | ●-----● |         |         |   |   |   |   |
| <hr/>                                                                                                                                                                                                                             |         |         |         |   |   |   |   |
| 17. Develop a school calendar which accommodates an appropriate time frame based on the educational needs of students.                                                                                                            | 7       | 6       | 5       | 4 | 3 | 2 | 1 |
|                                                                                                                                                                                                                                   |         | ●-----● |         |   |   |   |   |
| <hr/>                                                                                                                                                                                                                             |         |         |         |   |   |   |   |
| 18. Prevent underprepared students who enroll in developmental courses from enrolling in too many hours or from enrolling in courses which are inappropriate for their present ability level.                                     | 7       | 6       | 5       | 4 | 3 | 2 | 1 |
|                                                                                                                                                                                                                                   | ●-----● |         |         |   |   |   |   |

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- |                                                                                                                                                                                                                                         |                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 19. Delay enrollment in "high risk courses" with traditionally low productive (A, B or C) grade rates until after the first semester.                                                                                                   | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                                                                                   |                                      |
| 20. Differentiate students by program and educational objective (transfer, terminal occupational and non-degree credit students). Programs and interventions should be specifically designed for each different student subpopulation). | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                                                                                   |                                      |
| 21. Establish a re-testing policy.                                                                                                                                                                                                      | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                                                                                   |                                      |
| 22. Eliminate "Withdrawal Failing" (WF) grades and award a non-punitive "Withdrawal" grade which does not impact GPA.                                                                                                                   | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                                                                                   |                                      |
| 23. Develop an early intervention program working with K-12 schools to improve student motivation and preparation.                                                                                                                      | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                                                                                   |                                      |
| 24. Communicate to high school students those skills which are expected of them at college.                                                                                                                                             | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                                                                                   |                                      |
| 25. Develop outreach programs in the high school with the goal of increasing the basic skills of students prior to high school graduation.                                                                                              | 7   6   5   4   3   2   1<br>●-----● |

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26. Implement a summer bridge programs between the senior year of high school and freshman matriculation to strengthen preparation, study skills and ease the transition.

7    6    5    4    3    2    1  
●-----●

27. Develop appropriate linkages with social service agencies so that issues such as housing, child care and medical needs can also be addressed.

7    6    5    4    3    2    1  
●-----●

28. Expand college marketing efforts by targeting groups with outreach centers in the community.

7    6    5    4    3    2    1  
●-----●

29. \_\_\_\_\_

7    6    5    4    3    2    1

30. \_\_\_\_\_

7    6    5    4    3    2    1

## SECTION 2

1. Develop a strong, comprehensive counseling program.

7    6    5    4    3    2    1  
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2. Provide services that assist students in declaring a major as soon as possible, since retention is lower for undeclared majors.

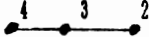

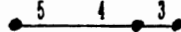


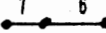

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3. Discourage part-time attendance, especially among students coming directly from high school. 7 6 5 4 3 2 1  

- 
4. Counsel all new students on the importance of involvement. Students should also be given clear-cut ideas as to how they can increase their own involvement (extracurricular participation, reduction in outside commitments, etc.). 7 6 5 4 3 2 1  

- 
5. Discourage full-time employment while enrolled in classes. 7 6 5 4 3 2 1  

- 
6. Provide work study opportunities and other part-time, on campus employment. 7 6 5 4 3 2 1  

- 
7. Provide adequate financial aid and scholarships to ease the financial burden of attending college. 7 6 5 4 3 2 1  

- 
8. Assure a fair distribution of financial aid with respect to proportion of grants versus loans to minority students, since some institutions award minorities a disproportionate number of loans. 7 6 5 4 3 2 1  

- 
9. Implement a sound assessment program to assist students in identifying academic weaknesses. 7 6 5 4 3 2 1  


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- |                                                                                                                                                                                                                      |                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 10. Provide developmental (remedial) courses and insist that they be taken by students with academic deficiencies.                                                                                                   | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                                                                |                                      |
| 11. Develop an assessment and counseling program but do not require mandatory course placement.                                                                                                                      | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                                                                |                                      |
| 12. Basic skills assessment and instruction must be given priority and flexibility within the curriculum so that innovative, exciting and realistic approaches to teaching disadvantaged students can be emphasized. | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                                                                |                                      |
| 13. Involve faculty and staff in the college's student assessment program.                                                                                                                                           | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                                                                |                                      |
| 14. Provide peer tutors - big brothers/sisters - to help student survive first year.                                                                                                                                 | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                                                                |                                      |
| 15. Facilitate the establishment of a mentor on the faculty or staff - someone the student can freely call upon for support and assistance.                                                                          | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                                                                |                                      |
| 16. Recruit minority parents and community members to form networking/support groups.                                                                                                                                | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                                                                |                                      |
| 17. Provide career guidance and job placement services.                                                                                                                                                              | 7   6   5   4   3   2   1<br>●-----● |



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- |                                                                                                                                                                              |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 18. Maintain a readily accessible tutorial center.                                                                                                                           |  |
| 19. Involve all new students in an orientation seminar. This course should be at least one term in length and should be given for credit in general education.               |  |
| 20. Implement an "early alert" system whereby faculty and staff can inform the counseling center when a minority student is having difficulty - either academic or personal. |  |
| 21. Provide child care and other student services that will allow students to devote more "time on task" at the college.                                                     |  |
| 22. Provide special transition programs at the beginning of the Freshman Year to improve study skills, develop a sense of belonging, and strengthen weak academic areas.     |  |
| 23. Provide continuing education opportunities.                                                                                                                              |  |
| 24. Offer Adult Basic Education and GED testing.                                                                                                                             |  |
| 25. Provide test taking classes.                                                                                                                                             |  |

## ROUND THREE INSTRUMENT








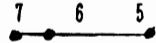
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- |                                                                                                                                                                                                                                                                      |                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| 26. Develop organized study groups.                                                                                                                                                                                                                                  | 7    6    5    4    3    2    1<br>  |
| 27. Use a "front loading approach" to student services, because the largest drop in retention occurs after the first semester. No other time offers as great an opportunity to make a positive impact.                                                               | 7    6    5    4    3    2    1<br> |
| 28. Monitor student progress closely, especially in the first few terms of attendance. The monitoring system should be connected to a feedback and response system that allows rapid intervention in the event that the student encounters significant difficulties. | 7    6    5    4    3    2    1<br> |
| 29. Define and communicate specific instructional objectives in all classes.                                                                                                                                                                                         | 7    6    5    4    3    2    1<br> |
| 30. Test frequently.                                                                                                                                                                                                                                                 | 7    6    5    4    3    2    1<br> |
| 31. Encourage writing exercises repeatedly.                                                                                                                                                                                                                          | 7    6    5    4    3    2    1<br> |
| 32. Maintain program comprehensiveness.                                                                                                                                                                                                                              | 7    6    5    4    3    2    1<br> |
| 33. Involve students in cooperative learning and other kinds of group projects.                                                                                                                                                                                      | 7    6    5    4    3    2    1<br> |

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- |                                                                                                                                                                                   |                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 34. Establish a transfer college within the college which has a clear identity and mission.                                                                                       | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                             |                                      |
| 35. Work out collaborative arrangements with upper division institutions to provide transfer opportunities for successful community college students.                             | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                             |                                      |
| 36. Take roll in class and call the absentees.                                                                                                                                    | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                             |                                      |
| 37. Enforce course prerequisites.                                                                                                                                                 | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                             |                                      |
| 38. Offer classes at all times of the day.                                                                                                                                        | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                             |                                      |
| 39. Plan programs for leaders/scholars from minority group.                                                                                                                       | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                             |                                      |
| 40. Develop workshops and other training and professional development activities for professors whose classes demonstrate consistently low productive grade rates.                | 7   6   5   4   3   2   1<br>●-----● |
| <hr/>                                                                                                                                                                             |                                      |
| 41. Develop an environment at the college which is conducive to learning for minority students (the total college community has to see the value of retaining minority students). | 7   6   5   4   3   2   1<br>●-----● |

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|--|--|--|--|--|--|--|
| 42. Develop an up-to-date data base which tracks minority students from the time of entrance to the time of exit. Follow-up studies should be conducted to determine the students success on the job or at a senior college. | <table border="0"> <tr> <td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td> </tr> <tr> <td colspan="7" style="text-align: center;"> </td> </tr> </table> | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |  |  |  |  |  |  |
| 7                                                                                                                                                                                                                            | 6                                                                                                                                                                           | 5 | 4 | 3 | 2 | 1 |   |   |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                              |                                                                                                                                                                             |   |   |   |   |   |   |   |  |  |  |  |  |  |  |

|                                                                                                                                                                                                 |                                                                                                                                                                             |   |   |   |   |   |   |   |  |  |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|--|--|--|--|--|--|--|
| 43. Provide staff and professional development for all employees to sensitize them to the needs of minorities and to help employees develop programs and services to benefit minority students. | <table border="0"> <tr> <td>7</td><td>6</td><td>5</td><td>5</td><td>4</td><td>3</td><td>1</td> </tr> <tr> <td colspan="7" style="text-align: center;"> </td> </tr> </table> | 7 | 6 | 5 | 5 | 4 | 3 | 1 |  |  |  |  |  |  |  |
| 7                                                                                                                                                                                               | 6                                                                                                                                                                           | 5 | 5 | 4 | 3 | 1 |   |   |  |  |  |  |  |  |  |
|                                                                                                                                                                                                 |                                                                                                                                                                             |   |   |   |   |   |   |   |  |  |  |  |  |  |  |

|     |                                                                                                               |   |   |   |   |   |   |   |
|-----|---------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 44. | <table border="0"> <tr> <td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td> </tr> </table> | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 7   | 6                                                                                                             | 5 | 4 | 3 | 2 | 1 |   |   |

|     |                                                                                                               |   |   |   |   |   |   |   |
|-----|---------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 45. | <table border="0"> <tr> <td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td> </tr> </table> | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 7   | 6                                                                                                             | 5 | 4 | 3 | 2 | 1 |   |   |

February 23, 1989

Name  
Title  
Organization  
Address  
City, State Zip

Dear \_\_\_\_\_ ,

About ten days ago, I sent you a copy of the third and final survey related to my Delphi Research project. I am currently beginning the process of tabulating the final results. Your participation in this round would be greatly appreciated.

For your convenience, I have enclosed a copy of the round three survey form and a self addressed stamped envelope. Please follow the instructions at the top of the survey. If you are in agreement with the group consensus for all items, please return the unmarked form.

If you have already completed and mailed the round three form, please disregard this request. Thank you.

Sincerely,

Thomas K. McKeon

cc: John J. Gardiner  
Professor of Higher Education  
309 Gundersen Hall  
Oklahoma State University  
Stillwater, Oklahoma 74078

APPENDIX I

ROUND TWO COMMENTS

## ROUND TWO COMMENTS

| <u>Item</u> | <u>Comments</u>                                                                                                                                                                                                   |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Section I   |                                                                                                                                                                                                                   |
| 4.          | I have a problem with "available."                                                                                                                                                                                |
| 4.          | Qualify this as what is meant by financial aid, loans, etc.                                                                                                                                                       |
| 7.          | Sometime should not be identified.                                                                                                                                                                                |
| 10.         | Qualified.                                                                                                                                                                                                        |
| 13.         | Qualified and caring.                                                                                                                                                                                             |
| 13.         | Not exclusively minority.                                                                                                                                                                                         |
| 22.         | Affect.                                                                                                                                                                                                           |
| 24.         | And counselors and teachers.                                                                                                                                                                                      |
| 29.         | Recruitment does not begin with high school seniors. It begins in the elementary grades. Counselors and faculty should meet with youngsters at elementary level to instill a "can do" and "how to" go to college. |
| 30.         | Provide adult basic education and GED programs to help dropouts meet entry-level requirements and as a recruitment tool for older minorities.                                                                     |
| Section II  |                                                                                                                                                                                                                   |
| 20.         | Any student.                                                                                                                                                                                                      |
| 20.         | Any student.                                                                                                                                                                                                      |
| 39.         | What kind of programs.                                                                                                                                                                                            |
| 44.         | Identify faculty who have a disproportional number of minority dropouts and minority failures. Take corrective action.                                                                                            |

APPENDIX J

MEASURES OF CENTRAL TENDENCY



APPENDIX J  
MEASURES OF CENTRAL TENDANCY

| Item                                                                                                                                                                                                                                                                                                     | Mean | Median | Mode      | Interquartile<br>Range |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|-----------|------------------------|
| <b>SECTION I</b>                                                                                                                                                                                                                                                                                         |      |        |           |                        |
| 1. If an individual has the mental capacity to succeed in college but is not educationally prepared, then the community college has an obligation to provide the remedy and help the student continue with his/her goals.                                                                                | 6.85 | 6.90   | 7.00      | .60                    |
| 2. Determine if there is a retention/success problem at the institution by; 1) identifying institution success variables and, 2) assessing student sub-populations in light of these variables.                                                                                                          | 5.23 | 5.40   | 6.00/5.00 | 1.60                   |
| 3. Determine strategies to be employed after the nature of the problem has been identified.                                                                                                                                                                                                              | 6.08 | 6.40   | 7.00      | 1.20                   |
| 4. The issues of retention at predominantly minority community colleges should be addressed in terms of the available resources needed to provide necessary programs.                                                                                                                                    | 4.54 | 4.80   | 6.00/2.00 | 3.30                   |
| 5. Retention strategies for predominantly minority community colleges should be different than those of community colleges who serve a small number of minority students, since a very small number of urban community colleges serve the majority of minority students attending two year institutions. | 4.47 | 5.00   | 7.00      | 4.10                   |
| 6. The colleges philosophy and mission should contain a strong statement about its commitment to serve all students. This should be widely disseminated both inside and outside the college to indicate the governing board and administrations commitment to its minority population.                   | 6.69 | 6.90   | 7.00      | .70                    |

## APPENDIX J (Continued)

| Item                                                                                                                                                        | Mean | Median | Mode | Interquartile Range |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|------|---------------------|
| 7. Programs should not be keyed to minorities, when we do we are separating minorities and treating them differently.                                       | 3.85 | 3.80   | 3.00 | 2.10                |
| 8. Whatever strategies the college employs (instructional change, support services, new programs etc.) requires institutional valuing of the effort.        | 6.15 | 6.30   | 7.00 | 1.70                |
| 9. Make a conscious decision to recruit and retain the minority group. Make this a college priority.                                                        | 6.69 | 6.90   | 7.00 | .70                 |
| 10. It is important to employ minority personnel at all levels to serve as resources and role models for both minority students and majority colleagues.    | 6.38 | 6.80   | 7.00 | .80                 |
| 11. Develop student success model programs with input by the faculty, staff and administration.                                                             | 6.08 | 6.60   | 7.00 | 1.20                |
| 12. Allocate funds to the special programs to get the proper start.                                                                                         | 6.08 | 6.40   | 7.00 | 1.20                |
| 13. Select minority faculty and administrators to lead the retention/success process.                                                                       | 4.46 | 4.80   | 5.00 | 2.20                |
| 14. Develop recruitment programs that go beyond the "pass out application and catalog stage" and into an orientation and information dissemination process. | 6.38 | 6.60   | 7.00 | 1.20                |
| 15. Implement practices that are useful in developing an environment supportive of learning for all students.                                               | 6.62 | 6.70   | 7.00 | .90                 |

## APPENDIX J (Continued)

| Item                                                                                                                                                                                                                                    | Mean | Median | Mode      | Interquartile<br>Range |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|-----------|------------------------|
| 16. Policies, programs, and services which support the retention and success of minorities should be periodically reviewed by administrators and faculty to ensure that there are no conflicts or barriers for minority students.       | 6.54 | 6.70   | 7.00      | 1.10                   |
| 17. Develop a school calendar which accommodates an appropriate time frame based on the educational needs of students.                                                                                                                  | 4.50 | 4.50   | 6.00      | 2.50                   |
| 18. Prevent underprepared students who enroll in developmental courses from enrolling in too many hours or from enrolling in courses which are inappropriate for their present ability level.                                           | 6.00 | 6.10   | 6.00      | 1.00                   |
| 19. Delay enrollment in "high risk courses" with traditionally low productive (A, B or C) grade rates until after the first semester.                                                                                                   | 5.23 | 5.60   | 6.00      | 1.50                   |
| 20. Differentiate students by program and educational objective (transfer, terminal occupational and non-degree credit students). Programs and interventions should be specifically designed for each different student subpopulation). | 3.85 | 4.60   | 5.00      | 3.80                   |
| 21. Establish a re-testing policy.                                                                                                                                                                                                      | 5.46 | 5.60   | 6.00/4.00 | 1.10                   |
| 22. Eliminate "Withdrawal Failing" (WF) grades and award a non-punitive "Withdrawal" grade which does not impact GPA.                                                                                                                   | 4.38 | 4.30   | 7.00      | 4.40                   |
| 23. Develop an early intervention program working with K-12 schools to improve student motivation and preparation.                                                                                                                      | 6.62 | 6.90   | 7.00      | .70                    |

## APPENDIX J (Continued)

| Item                                                                                                                                                                      | Mean | Median | Mode | Interquartile Range |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|------|---------------------|
| 24. Communicate to high school students those skills which are expected of them at college.                                                                               | 6.69 | 6.90   | 7.00 | .70                 |
| 25. Develop outreach programs in the high school with the goal of increasing the basic skills of students prior to high school graduation.                                | 6.77 | 6.90   | 7.00 | .70                 |
| 26. Implement a summer bridge programs between the senior year of high school and freshman matriculation to strengthen preparation, study skills and ease the transition. | 6.62 | 6.80   | 7.00 | .80                 |
| 27. Develop appropriate linkages with social service agencies so that issues such as housing, child care and medical needs can also be addressed.                         | 6.00 | 6.80   | 7.00 | 1.30                |
| 28. Expand college marketing efforts by targeting groups with outreach centers in the community.                                                                          | 5.46 | 6.00   | 6.00 | 1.00                |
| SECTION 2                                                                                                                                                                 |      |        |      |                     |
| 1. Develop a strong, comprehensive counseling program.                                                                                                                    | 6.31 | 6.70   | 7.00 | 1.20                |
| 2. Provide services that assist students in declaring a major as soon as possible, since retention is lower for undeclared majors.                                        | 5.31 | 5.30   | 5.00 | 1.70                |
| 3. Discourage part-time attendance, especially among students coming directly from high school.                                                                           | 3.31 | 3.30   | 4.00 | 2.10                |

## APPENDIX J (Continued)

| Item                                                                                                                                                                                                                                   | Mean | Median | Mode      | Interquartile Range |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|-----------|---------------------|
| 4. Counsel all new students on the importance of involvement. Students should also be given clear-cut ideas as to how they can increase their own involvement (extracurricular participation, reduction in outside commitments, etc.). | 5.62 | 5.90   | 6.00      | 1.40                |
| 5. Discourage full-time employment while enrolled in classes.                                                                                                                                                                          | 4.08 | 3.40   | 3.00      | 2.60                |
| 6. Provide work study opportunities and other part-time, on campus employment.                                                                                                                                                         | 6.54 | 6.80   | 7.00      | 1.00                |
| 7. Provide adequate financial aid and scholarships to ease the financial burden of attending college.                                                                                                                                  | 6.54 | 6.90   | 7.00      | .70                 |
| 8. Assure a fair distribution of financial aid with respect to proportion of grants versus loans to minority students, since some institutions award minorities a disproportionate number of loans.                                    | 6.80 | 6.70   | 7.00      | 1.50                |
| 9. Implement a sound assessment program to assist students in identifying academic weaknesses.                                                                                                                                         | 6.69 | 6.90   | 7.00      | .60                 |
| 10. Provide developmental (remedial) courses and insist that they be taken by students with academic deficiencies.                                                                                                                     | 5.85 | 6.40   | 7.00      | 1.40                |
| 11. Develop an assessment and counseling program but do not require mandatory course placement.                                                                                                                                        | 3.46 | 3.00   | 3.00/1.00 | 5.20                |
| 12. Basic skills assessment and instruction must be given priority and flexibility within the curriculum so that innovative, exciting and realistic approaches to teaching disadvantaged students can be emphasized.                   | 6.08 | 6.80   | 7.00      | 1.40                |

## APPENDIX J (Continued)

| Item                                                                                                                                                                         | Mean | Median | Mode      | Interquartile Range |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|-----------|---------------------|
| 13. Involve faculty and staff in the college's student assessment program.                                                                                                   | 6.31 | 6.40   | 7.00/6.00 | 1.10                |
| 14. Provide peer tutors - big brothers/sisters - to help student survive first year.                                                                                         | 6.62 | 6.70   | 7.00      | .90                 |
| 15. Facilitate the establishment of a mentor on the faculty or staff - someone the student can freely call upon for support and assistance.                                  | 6.54 | 6.80   | 7.00      | .80                 |
| 16. Recruit minority parents and community members to form networking/support groups.                                                                                        | 6.31 | 6.70   | 7.00      | 1.20                |
| 17. Provide career guidance and job placement services.                                                                                                                      | 6.62 | 6.90   | 7.00      | .70                 |
| 18. Maintain a readily accessible tutorial center.                                                                                                                           | 7.00 | 7.00   | 7.00      | .50                 |
| 19. Involve all new students in an orientation seminar. This course should be at least one term in length and should be given for credit in general education.               | 5.69 | 6.60   | 7.00      | 2.20                |
| 20. Implement an "early alert" system whereby faculty and staff can inform the counseling center when a minority student is having difficulty - either academic or personal. | 6.38 | 6.90   | 7.00      | .70                 |
| 21. Provide child care and other student services that will allow students to devote more "time on task" at the college.                                                     | 6.23 | 6.70   | 7.00      | 1.20                |
| 22. Provide special transition programs at the beginning of the Freshman Year to improve study skills, develop a sense of belonging, and strengthen weak academic areas.     | 6.54 | 6.80   | 7.00      | .80                 |

## APPENDIX J (Continued)

| Item                                                                                                                                                                                                                                                                 | Mean | Median | Mode           | Interquartile Range |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|----------------|---------------------|
| 23. Provide continuing education opportunities.                                                                                                                                                                                                                      | 5.00 | 4.70   | 7.00/4.00      | 2.90                |
| 24. Offer Adult Basic Education and GED testing.                                                                                                                                                                                                                     | 5.00 | 5.00   | 7.00/5.00/4.00 | 2.50                |
| 25. Provide test taking classes.                                                                                                                                                                                                                                     | 5.92 | 6.40   | 7.00           | 1.40                |
| 26. Develop organized study groups.                                                                                                                                                                                                                                  | 5.76 | 6.20   | 7.00/6.00      | 1.30                |
| 27. Use a "front loading approach" to student services, because the largest drop in retention occurs after the first semester. No other time offers as great an opportunity to make a positive impact.                                                               | 6.23 | 6.40   | 7.00           | 1.20                |
| 28. Monitor student progress closely, especially in the first few terms of attendance. The monitoring system should be connected to a feedback and response system that allows rapid intervention in the event that the student encounters significant difficulties. | 6.62 | 6.70   | 7.00           | .90                 |
| 29. Define and communicate specific instructional objectives in all classes.                                                                                                                                                                                         | 6.69 | 6.80   | 7.00           | .80                 |
| 30. Test frequently.                                                                                                                                                                                                                                                 | 6.08 | 6.20   | 7.00/6.00      | 1.30                |
| 31. Encourage writing exercises repeatedly.                                                                                                                                                                                                                          | 6.67 | 6.80   | 7.00           | .60                 |
| 32. Maintain program comprehensiveness.                                                                                                                                                                                                                              | 5.77 | 6.00   | 6.00           | .90                 |
| 33. Involve students in cooperative learning and other kinds of group projects.                                                                                                                                                                                      | 6.46 | 6.60   | 7.00           | 1.00                |

## APPENDIX J (Continued)

| Item                                                                                                                                                                                                                         | Mean | Median | Mode      | Interquartile Range |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|-----------|---------------------|
| 34. Establish a transfer college within the college which has a clear identity and mission.                                                                                                                                  | 5.00 | 5.30   | 6.00/4.00 | 2.10                |
| 35. Work out collaborative arrangements with upper division institutions to provide transfer opportunities for successful community college students.                                                                        | 6.77 | 6.90   | 7.00      | .70                 |
| 36. Take roll in class and call the absentees.                                                                                                                                                                               | 5.08 | 5.10   | 5.00      | 2.30                |
| 37. Enforce course prerequisites.                                                                                                                                                                                            | 6.31 | 6.70   | 7.00      | 1.80                |
| 38. Offer classes at all times of the day.                                                                                                                                                                                   | 6.00 | 6.10   | 6.00      | 1.20                |
| 39. Plan programs for leaders/scholars from minority group.                                                                                                                                                                  | 6.62 | 6.70   | 7.00      | 1.20                |
| 40. Develop workshops and other training and professional development activities for professors whose classes demonstrate consistently low productive grade rates.                                                           | 5.62 | 5.80   | 6.00      | 1.90                |
| 41. Develop an environment at the college which is conducive to learning for minority students (the total college community has to see the value of retaining minority students).                                            | 6.31 | 6.70   | 7.00      | 1.20                |
| 42. Develop an up-to-date data base which tracks minority students from the time of entrance to the time of exit. Follow-up studies should be conducted to determine the students success on the job or at a senior college. | 6.54 | 6.90   | 7.00      | .70                 |
| 43. Provide staff and professional development for all employees to sensitize them to the needs of minorities and to help employees develop programs and services to benefit minority students.                              | 6.15 | 6.70   | 7.00      | 1.50                |



APPENDIX K

ROUND THREE COMMENTS

## ROUND THREE COMMENTS

| <u>Item</u> | <u>Comments</u>                                                                                                                                                                                                                             | <u>Response Outside<br/>of Interquarile<br/>Range</u> |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Section I   |                                                                                                                                                                                                                                             |                                                       |
| 1.          | Practically--there may be some disabilities that would incur prohibitive costs.                                                                                                                                                             | 5                                                     |
| 2.          |                                                                                                                                                                                                                                             | 7                                                     |
| 3.          | Too vague, and most educators know what "the nature of the problem" is, if you can accept that statement as having any meaning in itself.                                                                                                   | 4                                                     |
| 4.          | States should provide more funding for community colleges with minority retention problems. Limiting problems to "available resources" is an excuse for not doing what needs to be done.                                                    | 7 7 2                                                 |
|             | The wide spread on (four and five) suggest the polarized views re: minority students. Interesting how they differ from number 9. Recruit them (along with everyone else) and let them sink or swim--just like everyone of the matriculants! |                                                       |
|             | Resources need to be found to support retention rather than using just what is available.                                                                                                                                                   |                                                       |
| 5.          | See number 4.                                                                                                                                                                                                                               | 7 2 2 2                                               |
|             | There is no known reason from research to justify different strategies at this point.                                                                                                                                                       |                                                       |
|             | Strategies for improving the retention of <u>all</u> will work for the retention of minorities.                                                                                                                                             |                                                       |
|             | Every college regardless of size of minority enrollment should use appropriate retention strategies for <u>all</u> of its students.                                                                                                         |                                                       |
| 6.          | See reason number 1.                                                                                                                                                                                                                        |                                                       |
| 7.          | Programs geared to minorities often develop a culture that is not conducive to progress beyond themselves.                                                                                                                                  | 7 6 2 1                                               |

ROUND THREE COMMENTS  
(Continued)

| <u>Item</u> | <u>Comments</u>                                                                                  | <u>Response Outside<br/>of Interquarile<br/>Range</u> |
|-------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------|
|             | This is a tricky issue, some programs should-while others should not.                            |                                                       |
|             | Special program may encourage a sense of belonging to minorities.                                |                                                       |
|             | Needs of minorities must be addressed directly-but integrated into central activities.           |                                                       |
| 10.         | But, it is more important to always hire people who are sensitive to the diverse student body.   |                                                       |
| 13.         | I don't see why this is necessary. It might be desirable, but qualifications are more important. | 7 6 6 2                                               |
|             | How reconcile number 10 with number 13 if both are accorded the same priority?                   |                                                       |
| 14.         |                                                                                                  | 5                                                     |
| 17.         | What else?                                                                                       | 7                                                     |
| 18.         |                                                                                                  | 7 7                                                   |
| 19.         | Not sure what this means.                                                                        | 7 7 4                                                 |
| 20.         | This is a basic problem with current community college practices.                                | 7 7 1                                                 |
| 21.         | Need to assess <u>learning</u> .                                                                 | 7 7                                                   |
| 22.         | No evidence that this is effective.                                                              | 7 7 2 2 1                                             |
|             | This is just bad strategy.                                                                       |                                                       |
|             | We should not penalize students.                                                                 |                                                       |
|             | Non-quantitative grading can lead to unrealistic student expectations of the real world.         |                                                       |
| 24.         |                                                                                                  | 6                                                     |

ROUND THREE COMMENTS  
(Continued)

| <u>Item</u> | <u>Comments</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <u>Response Outside<br/>of Interquarile<br/>Range</u> |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| 25.         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 6                                                     |
| 28.         | I'm not much for "marketing."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 7 4 4                                                 |
| Section II  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                       |
| 2.          | Evidence is equivocal. Depends on <u>why</u> student is undeclared.                                                                                                                                                                                                                                                                                                                                                                                                                                             | 7 4                                                   |
| 3.          | These people obviously don't understand the research literature (part-time attendance is the worst thing you can do for retention) nor the involvement principle.<br><br>We must do more to involve students in campus life. Financial aid, day care, and other services can help, freeing students of some family and job responsibilities that prevent full-time study.<br><br>Most "retention strategies" fail if students are encouraged to take one or two classes at a time. Retention loses its meaning. | 7 6 6 1                                               |
| 4.          | Ditto<br><br>The reciprocal of number 3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 7 7 7                                                 |
| 5.          | Again a very bad thing for retention.<br><br>Each student should be considered individually.                                                                                                                                                                                                                                                                                                                                                                                                                    | 7 6 1                                                 |
| 7.          | I would accord financial aid a lower priority than on-campus jobs.                                                                                                                                                                                                                                                                                                                                                                                                                                              | 5                                                     |
| 8.          | Not true.<br><br>Do not understand how <u>minorities</u> would be favored over need.                                                                                                                                                                                                                                                                                                                                                                                                                            | 1                                                     |

ROUND THREE COMMENTS  
(Continued)

| <u>Item</u> | <u>Comments</u>                                                                                                                                                                                     | <u>Response Outside<br/>of Interquarile<br/>Range</u> |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| 10.         | Mandated academic support services in the high-risk classes is a more equitable strategy.                                                                                                           | 4                                                     |
| 11.         | The "right to fail" concept is now pretty well discredited.<br><br>Meaningless without this.<br><br>There should be mandatory placement in basic skills programs to reduce failure at a later time. | 3 1 1 1                                               |
| 14.         |                                                                                                                                                                                                     | 6                                                     |
| 19.         | Not for general education credit.                                                                                                                                                                   | 2                                                     |
| 20.         | Why single out minorities here?                                                                                                                                                                     | 4                                                     |
| 23.         | Continuing education is a part of the community college mission.<br><br>Appears to be side tracking into second class status.                                                                       | 7 2                                                   |
| 24.         | GED classes for adults in a campus setting encourages continuing study.<br><br>Connection with retention?                                                                                           | 7 2                                                   |
| 34.         |                                                                                                                                                                                                     | 7 7                                                   |
| 35.         |                                                                                                                                                                                                     | 6                                                     |
| 36.         |                                                                                                                                                                                                     | 7 2                                                   |
| 38.         | Seems unrealistic in terms of resources.                                                                                                                                                            | 7 3                                                   |
| 40.         | If we could provide classes for students and not for instructors, then we place all of the responsibility (fault) on the students!                                                                  | 7 7                                                   |
| 41.         | (41 and 42) should be done for all.                                                                                                                                                                 |                                                       |
| 42.         | See above.                                                                                                                                                                                          |                                                       |

2  
VITA

Thomas K. McKeon

Candidate for the Degree of  
Doctorate of Education

Dissertation: STRATEGIES FOR IMPROVING THE RETENTION AND SUCCESS OF  
MINORITY STUDENTS IN COMMUNITY COLLEGES

Major Field: Higher Education Administration

Biographical:

Personal Data: Born in Long Beach, California, August 25, 1954.

Education: Received Bachelor of Science Degree from California  
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of Science degree in Higher Education at Oklahoma State  
University in May, 1983.

Professional Experience: Horticulture Instructor at Tulsa Junior  
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Professional Organizations: Phi Delta Kappa, American Association  
of Higher Education, National Council of Instructional  
Administrators, Oklahoma Association of Community and Junior  
Colleges' Instructional Administrators Committee.