

**PENNSYLVANIA HIGHER EDUCATION INSTITUTION ADMISSIONS OFFICERS'
PERCEPTIONS OF MINORITY STUDENTS' ACCESS TO FOUR-YEAR
BACCALAUREATE DEGREE-GRANTING INSTITUTIONS**

by

Eric D. Young

B.A., Shippensburg University, 1975

M.A., University of Northern Iowa, 1977

Ed.S., University of Iowa, 1980

**Submitted to the Graduate Faculty of
the School of Education in partial fulfillment
of the requirements for the degree of
Doctor of Education**

University of Pittsburgh

2005

UNIVERSITY OF PITTSBURGH
SCHOOL OF EDUCATION

This dissertation was presented

by

Eric D. Young

It was defended on

December 5, 2005

and approved by

Glenn M. Nelson, Associate Professor

Administrative and Policy Studies

John C. Weidman, Professor

Administrative and Policy Studies

Richard K. Seckinger, Professor Emeritus

Administrative and Policy Studies

Thomas G. Zullo, Professor Emeritus

Administrative and Policy Studies

Dissertation Director: Glenn M. Nelson, Associate Professor, Administrative and Policy Studies

©Copyright by Eric D. Young

2005

**PENNSYLVANIA HIGHER EDUCATION INSTITUTION ADMISSIONS OFFICERS'
PERCEPTIONS OF MINORITY STUDENTS' ACCESS TO FOUR-YEAR
BACCALAUREATE DEGREE-GRANTING INSTITUTIONS**

Eric D. Young, Ed.D.

University of Pittsburgh, 2005

This study reviewed the history of minority students' access to higher learning in the state of Pennsylvania. In addition, recent trends concerning minority students' access to Pennsylvania's four-year baccalaureate-degree granting institutions of higher education were examined. Emphasis was placed on examining the status of affirmative action policies in college admissions. Issues regarding equal opportunity provided the foundation for the conceptual frame of the study.

The study found that Pennsylvania's four-year institutions of higher education have historically operated within the full context of the law regarding affirmative action policy in college admissions. The study also examined; Access, Preparation, Admissibility, Affordability, and the Legal-Institutional implications of college access.

The survey methodology utilized a sample frame of 106 of the state's 108 four-year institutions of higher education. In addition, two community colleges were included in the sample to review transferability of minority students to four-year institutions. The target group consisted of 120 Admissions Officers and Enrollment Managers from 106 Pennsylvania baccalaureate degree-granting institutions of higher education and 2 community colleges.

The response rate for the survey was 98 of 120 equaling 82%.

The study found that Pennsylvania admissions officers perceived that minority students' academic preparedness for four-year baccalaureate-degree study required significant improvement. These findings showed, that in spite of perceived academic shortcomings, the majority of the state's four-year colleges and universities reported that minority students were generally admissible to their institutions.

Admissions officers reported that transferring minority students from two- to four-year schools to increase access was not a priority for their institutions. The findings also indicated that a significant number of admissions officers perceived that affordability and the cost of attendance at Pennsylvania's four-year institutions impeded minority students' access to baccalaureate-degree study.

Based on the research findings, this study outlines several policy options for implementing affirmative action admissions practices and increasing four-year rates of college entry for Pennsylvania resident minority students.

TABLE OF CONTENTS

	PAGE
LIST OF TABLES	X
LIST OF FIGURES	XII
ACKNOWLEDGEMENTS.....	XIII
1.0 CHAPTER.....	1
1.1 INTRODUCTION	1
1.2 OVERVIEW OF THE STUDY	4
1.2.1 <i>Need for the Study</i>	5
1.2.2 <i>Thesis Statement</i>	7
1.2.3 <i>Purpose of the Study</i>	7
1.2.4 <i>Background of the Problem</i>	9
1.2.5 <i>Summary</i>	14
2.0 CHAPTER.....	16
2.1 STATEMENT OF THE PROBLEM	16
2.1.1 <i>Problem Statement</i>	17
2.1.2 <i>Elements of the Problem</i>	17
2.1.3 <i>Research Questions:</i>	17
2.1.4 <i>Assumptions</i>	18
2.1.5 <i>Limitations of the Research</i>	19
2.1.6 <i>Delimitations of the Research</i>	19
2.1.7 <i>Definition of Terms</i>	19
2.1.8 <i>Summary</i>	23
3.0 CHAPTER.....	24
3.1 REVIEW OF THE LITERATURE.....	24
3.1.1 <i>Introduction</i>	24
3.2 HISTORICAL OVERVIEW OF THE RESEARCH LITERATURE	25
3.2.1 <i>Synopsis of Minority Access in Higher Education</i>	25
3.2.2 <i>National Trends and Statistics on Access</i>	34
3.2.3 <i>U. S. Census Data</i>	40
3.2.4 <i>High School Completion</i>	41
3.2.5 <i>College Participation and Educational Attainment</i>	42
3.2.6 <i>College Enrollment</i>	42

3.2.7	<i>Higher Education Policy Statements on Access</i>	43
3.2.8	<i>AASCU’s Policy Statements on Access and Inclusion</i>	44
3.2.9	<i>Affirmative Action in College Admissions</i>	45
3.2.10	<i>AASCU’s Policy Statement</i>	45
3.2.11	<i>Summary</i>	48
3.3	HIGHER EDUCATION ACCESS IN PENNSYLVANIA	49
3.3.1	<i>Introduction</i>	49
3.3.2	<i>History of Minority Higher Education in Pennsylvania</i>	50
3.3.3	<i>Politics and Higher Education</i>	51
3.3.4	<i>Equal Opportunity Access in Pennsylvania: ACT 101</i>	52
3.3.5	<i>PA Department of Education Statistical Profiles</i>	55
3.3.6	<i>Demographics</i>	56
3.3.7	<i>Summary</i>	60
3.4	PREPARATION FOR COLLEGE	60
3.4.1	<i>Early Intervention</i>	61
3.5	REVIEW OF URBAN EDUCATION	70
3.5.1	<i>Policies of The College Board</i>	74
3.5.2	<i>Pre-College Programs</i>	80
3.5.3	<i>Community Colleges and Transferability</i>	85
3.5.4	<i>Summary</i>	88
3.6	ADMISSIBILITY FOR HIGHER EDUCATION	89
3.6.1	<i>The Lumina Studies on Higher Education Access</i>	89
3.6.2	<i>Standardized Testing</i>	91
3.6.3	<i>Recruiting Minority Students</i>	95
3.6.4	<i>Race-Sensitive Admissions Policies</i>	97
3.6.5	<i>Summary</i>	101
3.7	ISSUES OF AFFORDABILITY	102
3.7.1	<i>College Pricing</i>	102
3.8	FINANCING HIGHER EDUCATION FOR MINORITY STUDENTS	106
3.8.1	<i>Summary</i>	108
3.9	LEGAL IMPLICATIONS OF ACCESS	110
	ASSOCIATE JUSTICE, SUPREME COURT OF THE UNITED STATES (1939-1975)	110
3.9.1	<i>Case Law: 25-Year Trends; 1978-2003</i>	110
3.9.2	<i>Update on the 2003 University of Michigan Legal Cases</i>	121
3.9.3	<i>Percentage Plans and Access</i>	123
3.9.4	<i>Graduate and Professional Education</i>	126
3.9.5	<i>Summary</i>	127

3.10	SUMMARY: ACCESS AND DIVERSITY IN HIGHER EDUCATION	129
3.10.1	<i>A Synopsis of Student Development Research</i>	129
3.10.2	<i>Minority Students in American Higher Education</i>	132
3.10.3	<i>Summary</i>	134
3.11	CONTRIBUTION THIS STUDY WILL MAKE TO THE LITERATURE	134
4.0	CHAPTER.....	136
4.1	RESEARCH METHODOLOGY	136
4.1.1	<i>Assumptions</i>	137
4.1.2	<i>Problem Statement</i>	137
4.1.3	<i>Elements of the Problem</i>	138
4.1.4	<i>Research Questions</i>	138
4.1.5	<i>Research Design</i>	139
4.1.6	<i>Inferences In The Research</i>	140
4.1.7	<i>Scope of the Study</i>	140
4.1.8	<i>Research Methodology</i>	140
4.1.8.1	Subjects	141
4.1.8.2	Sampling Methods	141
4.1.8.3	External Validity	143
4.1.8.4	Internal Validity	143
4.1.8.5	Instrumentation	144
4.1.9	<i>Data Collection Procedures</i>	146
4.1.10	<i>Data Analysis</i>	148
4.1.11	<i>Limitations</i>	148
4.1.12	<i>Delimitations</i>	148
4.1.13	<i>Summary</i>	149
5.0	CHAPTER.....	150
5.1	FINDINGS	150
5.1.1	<i>Descriptive Data and Collection Process</i>	150
5.1.2	<i>Demographic Description of the Survey Respondent Group</i>	152
5.1.3	<i>Analyses</i>	156
5.1.4	<i>Quantitative and Descriptive Data Findings</i>	160
5.1.4.1	Analyses.....	160
5.1.4.2	Analyses.....	165
5.1.4.3	Analyses.....	170
5.1.4.4	Analyses.....	173
5.1.4.5	Analyses.....	178
5.1.5	<i>Summary</i>	184

6.0	CHAPTER.....	186
6.1	SUMMARY, IMPLICATIONS, CONCLUSIONS.....	186
6.1.1	<i>Discussion</i>	188
6.1.2	<i>Research Questions</i>	193
6.1.3	<i>Discussion</i>	195
6.1.4	<i>Discussion</i>	200
6.1.5	<i>Discussion</i>	207
6.1.6	<i>Discussion</i>	210
6.1.7	<i>Discussion</i>	218
6.1.8	<i>Summary and Concluding Statements</i>	222
6.1.9	<i>Key Findings</i>	226
6.1.10	<i>Policy Options</i>	229
6.1.11	<i>Implications for Research and Further Study</i>	230
6.1.12	<i>Summary</i>	232
6.1.13	<i>Epilogue</i>	233
6.1.14	<i>Conclusion</i>	234
APPENDIX A	236
APPENDIX B	240
APPENDIX C	251
APPENDIX D	263
APPENDIX E	264
APPENDIX F	268
APPENDIX G	269
APPENDIX H	271
APPENDIX I	277
APPENDIX J	279
BIBLIOGRAPHY	280

LIST OF TABLES

	PAGE
TABLE 3.1 DEMOGRAPHIC PROFILE OF THE STATE OF PA FROM THE 2001 DECENNIAL CENSUS TRACT	56
TABLE 3.2 COLLEGE ENROLLMENT STATISTICS STATE OF PA INSTITUTIONS OF HIGHER EDUCATION	58
TABLE 4.1 SURVEY QUESTION MATRIX.....	145
TABLE 5.1 SELF IDENTIFIED ADMINISTRATIVE CHARACTERISTICS OF THE HIGHER EDUCATION	153
TABLE 5.2 TARGET GROUP SELF-REPORTED NUMBER OF YEARS OF ADMINISTRATIVE EXPERIENCE IN.....	154
TABLE 5.3 INSTITUTIONAL RESPONSE RATES BY SELF-REPORTED REGIONS IN THE STATE OF PA	155
TABLE 5.4 SELF-REPORTED DATA BY RESPONDENTS IN THE STUDY ON PUBLIC AND PRIVATE INSTITUTIONS OF HIGHER EDUCATION BY TYPE.....	155
TABLE 5.5 UNDERGRADUATE FULL-TIME EQUIVALENT (FTE) ENROLLMENT OF RESPONDENTS'	156
TABLE 5.6 ESTIMATED NUMBER OF MINORITY STUDENTS FULL-TIME ENROLLMENTS AT FOUR- YEAR INSTITUTIONS OVER A THREE-YEAR PERIOD.....	157
TABLE 5.7 SURVEY QUESTIONS 1 – 12	161
TABLE 5.8 PERCENTAGES, COUNTS AND MEAN SCORES FOR THE RESULTS OF THE ACCESS SECTOR OF THE QUESTIONNAIRE	162
TABLE 5.9 SURVEY QUESTIONS 13 – 24	165
TABLE 5.10 PERCENTAGE, MEAN SCORES, AND COUNTS FOR THE RESULTS OF THE PREPARATION SECTOR OF THE QUESTIONNAIRE	166
TABLE 5.11 SURVEY QUESTIONS 25 - 34	170
TABLE 5.12 PERCENTAGES, MEAN SCORES, AND # FOR THE RESULTS OF THE ADMISSIBILITY* SECTOR OF THE QUESTIONNAIRE	171
TABLE 5.13 SURVEY QUESTIONS 35 - 45	174

TABLE 5.14 PERCENTAGES, MEAN SCORES, AND # FOR THE RESULTS OF THE AFFORDABILITY* SECTOR OF THE QUESTIONNAIRE	175
TABLE 5.15 SURVEY QUESTIONS 46 - 55	179
TABLE 5.16 PERCENTAGES, MEAN SCORES, AND # FOR THE RESULTS OF THE LEGAL/INSTITUTIONAL* SECTOR OF THE QUESTIONNAIRE	180
TABLE 5.17 SUMMARY SURVEY QUESTION #56: RESPONDENTS WITH PERCENTAGE RATES FOR PREPARATION AND AFFORDABILITY	185
TABLE 6.1 SUMMARY SURVEY QUESTION #56: RESPONDENTS WITH PERCENTAGE RATES FOR PREPARATION AND AFFORDABILITY	187
TABLE 6.2 RECODED DATA SET FOR THE ACCESS SURVEY QUESTIONS WITH SUMMATIONS AND DESCENDING MEAN SCORES	194
TABLE 6.3 RECODED SURVEY QUESTIONS BY DESCENDING MEAN SCORES	194
TABLE 6.4 RECODED DATA SET FOR THE PREPARATION SURVEY QUESTIONS WITH SUMMATIONS AND DESCENDING MEAN SCORES	198
TABLE 6.5 RECORDED SURVEY QUESTIONS BY DESCENDING MEAN SCORES	199
TABLE 6.6 RECODED DATA SET FOR THE ADMISSIBILITY QUESTIONS WITH SUMMATIONS AND DESCENDING MEAN SCORES	205
TABLE 6.7 RECODED SURVEY QUESTIONS BY DESCENDING MEAN SCORES: 25 – 34	206
TABLE 6.8 RECODED DATA SET FOR THE AFFORDABILITY QUESTIONS WITH SUMMATIONS AND DESCENDING MEAN SCORES	209
TABLE 6.9 RECODED DATA SET FOR AFFORDAILITY QUESTIONS 35-45.....	209
TABLE 6.10 RECODED DATA SET FOR THE LEGAL-INSTITUTIONAL QUESTIONS WITH SUMMATIONS AND DESCENDING MEAN SCORES	216
TABLE 6.11 RECODED SURVEY QUESTIONS BY DESCENDING MEAN SCORES: 46 – 55	217

LIST OF FIGURES

	PAGE
FIGURE 3-1 NUMBER OF PUBLIC HIGH SCHOOL GRADUATES, 1993-20012: MIDDLE STATES	35
FIGURE 3-2 PERCENT CHANGE IN NUMBER OF PUBLIC HIGH SCHOOL GRADUATES, 1994-2012, BY COLLEGE BOARD REGION BLACK STUDENTS.....	36
FIGURE 3-3 GROWTH IN COLLEGE ENROLLMENT BY ETHNIC GROUP 1977-1996	37
FIGURE 3-4 PERCENT CHANGE IN NUMBER OF PUBLIC HIGH SCHOOL GRADUATES, 1994-2012, BY COLLEGE BOARD REGION AMERICAN INDIAN/ALASKAN NATIVE STUDENTS	38
FIGURE 3-5 PERCENT CHANGE IN NUMBER OF PUBLIC HIGH SCHOOL GRADUATES, 1994-2012, BY COLLEGE BOARD REGION HISPANIC STUDENTS.....	39
FIGURE 3-6 COLLEGE-GOING RATES OF HIGH SCHOOL GRADUATES AGED 18 TO 24 BY ETHNIC GROUP, 1992-1996.....	41
FIGURE 3-7 DOCUMENTATION OF FEDERAL SPENDING ON EDUCATION PROGRAMS	65
FIGURE 3-8 RACIAL/ETHNIC COMPOSITION OF GRADUATE STUDENTS, 1976-1999	127
FIGURE 5-1 RESPONSE RATES BY DATES AND PERCENTAGES OF OUTCOMES FOR THE MINORITY ACCESS QUESTIONNAIRE.....	151

ACKNOWLEDGEMENTS

This study acknowledges a special dedication to my late parents:

In memoriam of, Otis Alexander Young, 1922-1983; and Betty Jane Young, 1931-1980 who taught all of their children the “true value of education” in America.

This dissertation acknowledges all of the professors, mentors, professional, colleagues, administrators, former students, and associates in higher education from the inception of my college education in 1971 to the present. They are too numerous to mention; and appreciation is extended to all of them.

To the members of the Dissertation Committee:

I would like to express my sincere appreciation to Dr. Richard K. Seckinger for his guidance during the early phases of the dissertation project. I thoroughly enjoyed writing a history of the higher education of African-Americans and minorities in the United States experience. I appreciated his encouragement, insights, knowledge, and guidance throughout this educational endeavor. As Professor Emeritus, it was important to acknowledge appreciation of the invaluable time that Dr. Seckinger extended to this dissertation.

Dr. John C. Weidman provided encouragement and guidance for this project that permitted the research to focus. Without his early suggestions, the parameters for this dissertation project might have not been as well defined. His patience with this research study was greatly appreciated.

Dr. Weidman's expectations for a well-developed dissertation kept the research focused on contemporary issues in higher education. I extend my appreciation to Dr. Weidman for his insights, and as a fellow Sociologist.

Dr. Thomas Zullo, who provided the encouragement and the motivation to complete the survey research portion of this study, has my deepest appreciation. Dr. Zullo kept the faith in this research project over the past five years. His guidance and consultations with the survey research for the dissertation had been invaluable.

I was fortunate to have Dr. Glenn Nelson as my research advisor at the University of Pittsburgh. Dr. Nelson was a very patient advisor who provided outstanding support for his doctoral students. He also encouraged me to complete this work for myself, and to develop the necessary skills of a proficient researcher. Because of his knowledge, experience, and guidance in doctoral study, I will be a much better educator. To Dr. Nelson, I wish to extend my greatest appreciation for his guidance throughout the doctoral process at the University of Pittsburgh.

Finally, University of Pittsburgh Web Master Mr. Rick T. Taylor assisted with the technical development of the survey portion of this dissertation study. Rick extended his invaluable knowledge and technical skills with assisting with the direction and completion of the Web-survey. I will be forever indebted to this young professional for his kind and patient assistance, and for the expedient completion of this dissertation.

1.0 CHAPTER

1.1 INTRODUCTION

“...We are confronted primarily with a moral issue. It is as old as the scriptures and it is as clear as the American Constitution. The heart of the question is whether all Americans are afforded equal rights and equal opportunities, whether we are going to treat our fellow Americans as we want to be treated...This is one country.”

-President, John F. Kennedy

June 11, 1963

Institutions of higher learning face considerable challenges in meeting the educational needs of a diverse population in American society. As the numbers within the college-age cohort of 17-24 years increase and the resources to meet the needs of these students decrease, colleges and universities are confronted with the dilemma of providing equal educational opportunity for increasingly diverse segments of the college-age population.

As members of American minority groups increase the demand for equal higher education access for their children to pursue quality postsecondary education, certain conditions are present that may limit or impede minority students' ability to compete successfully for the limited resources and seats in the four-year institution. This study was concerned about the admissions process in the state of Pennsylvania and the factors that influence minority students' access to four-year institutions.

Higher education is one of the most highly valued commodities in a democracy where the free-market economy exists. In this type social system, competition for the best is the norm, merit-based advancement prevails, and individual achievement is the rule. Jencks and Riesman (1969, 1977) submit that educational attainment and certification attainment in open democratic societies will ultimately determine life chances, the quality of life, and socio-economic status for individuals. This fact underscores the importance of higher education for all members of democratic and capitalist societies.

Howard R. Bowen in his 1977 higher education study, *Investment in Learning* states that college graduates earn 38% to 44% more over the course of a lifetime than non-college graduates. It is therefore imperative that administrators' and educators in higher education recognize the importance of developing the full potential of all of America's students.

It is an assumption that all citizens within democratic societies can pursue their postsecondary career aspirations with equal access to quality four-year baccalaureate degree education. However, with the great variances in secondary-level educational quality, academic preparation of students, families ability to finance, and meeting academic qualifications for four-year higher education, great inequities exist for access in the American system of higher education.

In the development of American higher learning, there have historically existed separate and unequal systems of postsecondary education for women and minority group members. Gender preferences in admissions and elitism are also part of the history. In the postmodern era (Bergquist, 1995) business partnerships in collaboration with institutions of higher education, have recognized the need to prepare adequately all of America's citizens to meet the needs and the demands for a highly educated workforce of the future (Bikson & Law, 1994; Dalstrom,

2001; Mangan, 2002). Most educators would agree that access to quality education in four-year colleges and universities is the cornerstone for this investment in human capital.

The Business-Higher Education Forum (BHEF) in its national report, *Investing in People: Developing All of America's Talent on Campus and in the Workplace* (2002), opens the dialog on diversity by emphasizing the benefits of higher education in a democratic society. It is important to maximize the potential of all Americans according to this report, and equal educational opportunity is a necessary condition for mobility.

The BHEF (2002) Diversity task force outlined several policy statements that explain their position on the need to secure the future of America by preparing its entire people.

This report notes that:

- **Sustained efforts** must be made to remedy discrepancies in the elementary and secondary educational opportunities provided to American children, and to continue to expand access and opportunity in higher education.
- **Benefits to a democratic society:** Evidence shows that encountering a range of racial, ethnic, and cultural perspectives on campus enhances students' preparation for full participation in a diverse, democratic society.
- **Benefits to Learning:** Racial and ethnic diversity on campus enhances the learning environment for everyone.
- **Benefits to business and the economy:** The benefits that accrue to college students who are exposed to racial and ethnic diversity during their education carry over into the work environment.

In essence, equal educational opportunity benefits each individual. Moreover, by adequately providing equal educational opportunity, American society and its people as a whole will benefit.

Concerning the issue of equal opportunity educational access, a compelling statistic from the Educational Testing Service (ETS) outlined in the BHEF report, sums up the argument for greater investment in human capital by stating; (the),

Education of all Americans profoundly benefits the national economy, if Hispanics and African-Americans had the same education and commensurate earnings as whites, 'there would be an upsurge in national wealth' of 113 billion annually for African-Americans, and 118 billion for Hispanics (BHEF, p. 15).

1.2 OVERVIEW OF THE STUDY

This study examined issues of access, the administrative process, and admissions policy in four-year institutions of higher education in the Commonwealth of Pennsylvania. More specific, the focus was directed to the 108 four-year public and private colleges and universities in this state (PA Department of Higher Education, 2002). This study also examined college and university qualifications for admission, policies and procedures for promoting greater access, and four-year entry rates for minority students.

The study examined the perceptions and opinions of Admissions personnel, and policy- and decision-makers in Pennsylvania's four-year private and public colleges and universities. This study made the implicit assumption that the problem of minority student four-year college access was best examined from the perspective of those higher education professionals who work directly in the administrative areas of Admissions and institutional policy development at Pennsylvania's four-year institutions.

Moreover, the admissions personnel have direct contact with secondary schools and potential students; they actively recruit, and make the decisions to offer admission. These administrators are also instrumental in recommending and awarding the appropriate amounts of financial aid for minority students to matriculate at four-year baccalaureate degree-granting institutions.

This study was borne out by numerous interviews in the area of college admissions, and from information garnered from professional associations, and through 25 years of admissions experience in equal opportunity higher education. Based on a comprehensive assessment of the feedback, this study viewed the issue of minority student access and matriculation in four-year colleges and universities in the Commonwealth of Pennsylvania as a problem area relevant for further research and examination.

1.2.1 Need for the Study

Critical to the future workforce development of America and to the Commonwealth of Pennsylvania in particular, is the need to fully educate its masses. In the state of Pennsylvania, its minority constituents are viable stakeholders in higher education. Issues of higher education access are of particular interest as these citizens strive to participate as full partners in the American experience. In order to address the concerns of various publics in the Commonwealth of Pennsylvania, this study of minority student access to four-year higher education opportunities was important for several reasons:

First, issues of access, admissibility, and financial assistance to attend four-year institutions will ultimately determine the absolute numbers of minority students who are able to meet admissions requirements and enroll in these particular institutions. There was a need to address these issues through research on the problem of admissibility factors, financing, and preparation. Also of importance was the need to assess minority students' capabilities to compete successfully for entry. Due to socio-economic, and in part, cultural implications, all of these determinants define minority students' readiness for postsecondary education. There was a specific need to identify some of the most important factors in the problem of increasing access.

Second, it was necessary to focus this study on the potential minority college-available students in the age cohorts of 17- to-24 years who might aspire to gain entry to the state's four-year public and private baccalaureate degree-granting universities. For example, United States Census data and projections for the years 2000-2015 indicate that the ages 17 to 24-year cohorts of African-American, Hispanic, and to some extent Native-Americans, entail a relatively youthful, and rapidly growing population nationwide, and particularly in the state of Pennsylvania. This research study was influenced by the need to provide greater access to higher education for these students.

There was also a specific need to identify the key issues that affect minority student access to four-year higher education in the state of Pennsylvania. The knowledge need for the research was to identify the determinants necessary for improving rates of entry. This research investigation made the explicit assumption that this was best achieved by an examination of the perspectives and opinions of higher education administrators' that work in the area of college admissions.

These groups of professionals are confronted with the dilemma of evaluating and recommending, or denying admission to the minority student population on a day-to-day and year-to-year basis. These particular administrators are the important decision-makers in the admission process. Moreover, they view the problems and the issues for access for minority students from a unique administrative perspective.

This research study also recognized the need to develop new administrative strategies, forward recommendations, and develop policy options for improving the opportunities for access for minority students in Pennsylvania. The focus was on long-term solutions, setting goals for

improving minority access, and developing affirmative objectives that are transparent, legal, achievable, and designed to sustain successful college matriculation for these students.

1.2.2 Thesis Statement

The research problem that was examined in this study was predicated on the following proposition:

If Pennsylvania's administrative policy and decision-makers in its four-year public and private institutions of higher education gain a comprehensive understanding of the issues that address the needs of the minority college-aged population, they can then endeavor to develop successful strategies and programs that influence these students' rates entry into postsecondary education. Then, they can begin to develop a more transparent view of institutional admissions policies that operate within the framework of the laws, and thereby positively affect long-term access and promote strategic initiatives for improving rates of entry for minority students.

The thesis promotes the idea that there was a knowledge need for comprehensive information and the dissemination of the research findings to four-year higher education institutions on the issue of access for minority students in the state of Pennsylvania.

1.2.3 Purpose of the Study

Four-year colleges and universities in the state of Pennsylvania are in need of principles and standards for minority student recruitment. Each institution has specific admissions criteria and qualifying standards, goals for diversity, and institutional policies on equal opportunity access for all students. In most cases, higher education institutions are in need of new knowledge in order to identify the problems related to increasing diversity in Pennsylvania's

four-year colleges and universities. This research attempted to identify points of convergence in strategies for improving access for minority students.

Some of the specific objectives for conducting this research were:

- To develop strategies aimed at increasing minority student enrollments in Pennsylvania's four-year public and private institutions of higher education.
- To develop policy options aimed at improving minority student access at the four-year level.
- To develop a "best practices" model of minority student recruitment for Admissions personnel in Pennsylvania's four-year institutions.
- To develop and compile a base of usable knowledge for use by educators and administrators for addressing the issue of increasing diversity in Pennsylvania's four-year colleges and universities.

The conceptual frame of the study was focused in higher education administration and college student personnel. The study examined historic issues in higher education for minority groups; the political and economic implications of access; and, conducted a survey that was focused on the Admissions personnel in four-year colleges and universities who shared a unique insight on access for minority college-bound students in the state of Pennsylvania. The outcomes of the research, are intended for use by the subjects of the study.

The audience for this study was found within higher education institutions. An essential objective of the study was to compile comprehensive and useful information on the issues relevant to improving minority student access to four-year colleges and universities in the state of Pennsylvania. Therefore, it is posited that the perceptions, opinions, and the perspectives of the higher education admissions personnel targeted in this study, form the basis for a research examination on the problem for minority student access to baccalaureate-degree education in this state.

The study utilized the survey method for research. This approach to the educational research presented through this study provided the most salient information important to addressing the issue of minority student access in Pennsylvania's four-year colleges and universities.

1.2.4 Background of the Problem

Over the last quarter of the 20th century in American higher education, increasing diversity on four-year campuses and improving minority student access to these institutions has proven to be a complex task. There are many facets of the minority students' enrollment issues in higher education. Each particular element presents its own set of complexities in the areas of access, admissibility, affordability, preparation for college, cost, and students' ability to finance, institutional selectivity factors, and the legal implications that are immersed in the college admissions process.

In regard to access issues, Christopher Jencks and David Riesman stated in their 1969, and 1977 volumes of the *Academic Revolution* that American higher education is a relatively new experience for the nation's minority populations. They note that it was not until after the Second World War in the years 1940 through 1955 that higher education opened its doors for mass education for all citizens.

The nation's first legally mandated experience with affirmative action policies for higher education commenced with the G. I. Bill of 1944 (Goodchild & Wechsler (Eds.), 1997). The Congress of the United States enacted this statute in an effort to provide supplemental financial assistance to the returning armed service personnel. These efforts at mass education were affirmative initiatives by the Congress of the United States to promote increased access and

inclusion for groups of Americans that historically could not afford to attend college in meaningful numbers.

According to Jencks & Riesman (1969, 1977) and Goodchild & Wechsler (1997), the second wave of higher education inclusion commenced in 1958 with the infusion of extensive amounts of federal resources to postsecondary education. These financial resources were appropriated through the National Defense Education Act (NDEA). Its goal was to advance the role of science in America, and to provide additional financial resources for the masses to attend college.

The authors' (Jencks & Riesman, 1969) further submitted that at the mid-point of the 20th century America was still a predominantly industrial-based society. Therefore, the certification for the high school diploma was generally the education credential that was appropriate for this generation. A college education in many ways was not entirely affordable to the majority of Americans and was still considered an exclusive professional endeavor in an industrial-based society.

In this particular era (i.e., 1940s, 1950s) not many minority persons were able to take full advantage of the financial-based opportunities for higher education access. There are various reasons for these phenomena, with the most salient explanation that is provided by scholars of higher education history, involves the exclusionary policies and practices of predominantly white four-year colleges and universities toward the admission of members of minority groups (Levine, 1986).

Minority groups achieved their greatest level of access to the predominantly white (PWI) four-year institutions of higher education in the decade of the 1960s through President John F. Kennedy's education reform policies, and through his Executive Orders (No. 10925) for

Affirmative Action. President Lyndon Baines Johnson's Great Society civil rights policies (Executive Orders, 11246 [1965] and 11375 [1967]) and anti-poverty programs also provided additional means for minorities to attain greater access to higher learning and postsecondary training.

At the cornerstone of these federal initiatives was the Elementary and Secondary Education Act of 1964 (ESEA, HR 9567-PL 89-329); (Young & Exum, 1981); the Higher Education Act of 1965 (HR PL 89-752), in addition to the Higher Education Amendments of 1966 (U. S. Department of HEW, 1965; 1966); (Goodchild & Wechsler, 1997, pp. 777-779). The federally mandated Civil Rights Acts of 1964 also provided for affirmative action in higher education admissions for minorities in higher education institutions that utilized federal resources (Title IV, 42, U.S.C. 2000c-62; Title VI, 42, U.S.C. 2000d 2).

In the modern era of universal higher education of the 1970s, (Jencks & Riesman, 1969, 1977) the problems for accessed minority students' four-year college admission continued. A very important issue that surrounds the equal access problem appears to lie in the distribution of minority students within higher education institutions by type. A demographic analysis of the research problem for examination in this study denotes that approximately 70% of minority students in American higher education are still concentrated at the two-year junior/community college level and are not enrolled in four-year baccalaureate-degree granting colleges and universities today (Quimbita, 2000); (Henriksen, 2000).

There are a multiplicity of factors that have been influencing the minority student college enrollment phenomena over time, and this plan for research attempts to examine the perceptions of higher education administrators in Pennsylvania for their assessment of the four-year minority access problem.

During the last quarter of the twentieth century, American higher education has been confronted with legal issues that involve affirmative action in admissions for minorities at both the undergraduate and graduate levels. Educational researchers, scholars of legal studies, higher education administrators, politicians, and various publics appear to cite the 1978 landmark U. S. Supreme Court's decision in the *University of California Regents v. Bakke*, 438, U. S. 265 (1978) as the historic benchmark in the decline of affirmative action policies in college admissions. However, the research and the evidence for this phenomenon are not clear nor convincing; and subsequently, there still exists a wide variance of opinion on the causes for the decreasing enrollments of minority students at the four-year college level.

In graduate and professional education, the issues that encompass access are more transparent; if minority students are not in the undergraduate pipeline, they are least likely to reach the higher levels of graduate education in significant numbers.

Education theorists and national opinion surveys suggest that public opinion has shifted away from supporting affirmative action policies in higher education and are now promoting merit-based college admissions, merit-based financial aid, in addition to increasing the amount of loans to college-bound students (McPherson & Shapiro, 1991). This shift in public policy might entail profound socio-economic implications for minority- and low-income students to gain access to quality four-year higher education (*Chronicle of Higher Education*, 2/25/02).

By review, the Executive Branch of the U.S. government has instituted a major revision of the 1964 ESEA that promotes the implementation of the new 2001 No Child Left Behind Act (NCLBA) education reform policies (2001, 2002). Under these specific education reform policies, and their federal statutes, the issues of accountability, emphasis on standardized testing,

school choice, and improving student achievement within the nation's public school systems are the focus.

Concerning minority students' preparation for postsecondary education, the goal of the NCLB Act is to assure that all of America's children are adequately prepared to meet academic challenges by way of educational achievement, and meeting basic education competency requirements. The state of Pennsylvania has joined in the educational reform and accountability in education movement by requiring its public schools to meet basic competency requirements within the standards set forth by the Pennsylvania System of School Assessments (PSSA). It is the goal of the new policy to prepare adequately all secondary-level students for post high school success.

In regard to increasing higher education access for minority students, the impetus for educational reform in American higher education appears to be drifting away from race-based admissions and toward policies of race-sensitive admissions (Bowen & Bok, 1998), (Bowen & Rudenstine, 2003). In race-sensitive admissions policies a number of factors are considered, and not specifically the race status of the applicants.

Concerning significant legal issues in higher education, in the year 1978, Associate Justice Lewis Powell, presiding on the United States Supreme Court, drafted the deciding opinion in the *Bakke v. California Regents* (1978) case. He noted that higher education occupies a unique tradition in American history. He further affirmed that the Fourteenth Amendment to the U.S. Constitution might guarantee equal protections under the law for individuals; but he also opined that we should take caution with laws for higher education because the rights of these entities are also protected under the First Amendment to the U. S. Constitution. These laws and

statutes are established by the legal precedents of academic freedom, and through freedom of speech (Goring, 1999).

In further review of the legal issues that impact higher education, Associate U. S. Supreme Court Justice Lewis Powell (Bakke, 1978) noted that colleges and universities in America have always entertained the exclusive right to admit students of their choice. Thus, in perhaps what can be termed an irony in the history of American higher education, it is presently the colleges and universities of this nation that are leading the initiative for greater inclusion and diversity in the student body.

Determining institutional policy on selectivity and admissibility factors for all applicants is an exclusive tradition in American higher education. However, four-year private colleges and universities appear to have more legal and administrative discretion in setting admissions policies for enrolling a more diverse student body than do public institutions. The legal ramifications of seeking diversity and overview of this process by the nation's higher Courts in admissions were considered a relatively modern phenomenon in American higher education (Goring, 1999).

1.2.5 Summary

The issue of minority student access must consider several elements in the research examination. To proceed with one developmental sequence (e.g., financing) for analysis, the research investigation might dismiss important interrelationships, influences, and other variables that deserve consideration in such a study. The following elements of the problem of minority higher education are highlighted in this research study on access:

1. Academic preparation and college access
2. Admissibility factors and qualification standards
3. College pricing in the state (i.e., affordability)
4. Minority students' ability to finance higher education
5. The influence and impact of standardized tests
6. Institutional policy on access to underrepresented students
7. Merit versus affirmative action in admissions, and
8. The legal implications that pertain to increasing diversity in four-year institutions of higher education.

Each of the elements of minority students' higher education access shares a certain level of interdependence. Together, these factors are multifaceted and complex, but address the implications for minority students' access to higher education.

This research attempted to discern which elements have been most influential to the access process for minority students in the state of Pennsylvania. In addition, by gaining a better understanding of the issues that pertain to improving minority student access through systematic research, we might then begin to develop new strategies, and implement administrative policies that entail positive long-term solutions to the problem.

2.0 CHAPTER

2.1 STATEMENT OF THE PROBLEM

The purpose of this study was to examine higher education administrators' perceptions and opinions of minority students' access by conducting a survey on the issue to four-year colleges and universities in the state of Pennsylvania. The target group for this study is the individuals who share the administrative responsibility for determining admission to the four-year baccalaureate degree granting colleges and universities in this state.

In this study admissions personnel are surveyed and institutional policies examined on the issues of accessibility, preparation, admissibility, and affordability. In addition, the legal implications for increasing diversity were examined in this research. The study is concerned with both public and private four-year institutions of higher education in the state of Pennsylvania. The issues for examination are selectivity factors and admissions standards for four-year baccalaureate degree study.

This study attempted to address a fundamental question that pertains to access to four-year higher education for minority students: "What keeps minority and low-income students out of four-year colleges and universities in the state of Pennsylvania; preparation or money?"

2.1.1 Problem Statement

The study examined the following problem:

How do Pennsylvania's four-year baccalaureate degree-granting institutions attempt to increase minority student enrollments and develop admissions policies for improving access that are framed within the context of the law?

2.1.2 Elements of the Problem

Several elements of the problem formulated the basis for this study. The problem elements for examination will be inclusive in the research design. They related specifically to the research questions:

- Accessibility and equal opportunity higher education
- Preparation for four-year higher education entry
- Admissibility
- Affordability, and the
- Legal implications of access

2.1.3 Research Questions:

1. What degree of importance do administrative policy- and decision-makers in Pennsylvania's four-year public and private institutions of higher education place on providing access for minority college-age students?
2. What degree do administrative policy and decision-makers in Pennsylvania's four-year public and private institutions of higher education perceive that preparation for postsecondary education directly or indirectly influences minority student access?

3. What do administrative policy and decision-makers in admissions in Pennsylvania's four-year public and private institutions of higher education perceive as the most significant challenges are to increasing, and sustaining campus diversity and promoting institutional policies and programs that improve admissibility for traditional-age minority students?
4. To what degree do administrative policy and decision-makers in Pennsylvania's public and private four-year baccalaureate degree-granting perceive that financing in higher education directly or indirectly affects access and the rates of enrollments for Pennsylvania's minority college-age students?
5. What are the perceptions of administrative policy and decision-makers in Pennsylvania's four-year public and private institutions of higher education concerning the impact of the legal challenges of affirmative action, special admissions programs, and the legal implications of diversity-focused access polices on the rates of enrollments for the Pennsylvania minority college-age population?

2.1.4 Assumptions

The assumptions in this research study were:

1. Administrative and admissions personnel in Pennsylvania's four-year colleges and universities share a unique perspective on the problems and the education-related issues that involve access, recruitment, and enrollment of college-age minority students.
2. This study forwards the principal assumption in this research that there is are no four-year institutions of higher education in the state of Pennsylvania that has policies that directly or indirectly impede the admission of minority college-age students that meet its academic qualifications.

2.1.5 Limitations of the Research

This study had the following limitations in its research design:

1. “Other race” minority students and foreign-born minorities are not the focus in this study because the research indicates that this group is not perceived to have problems with gaining access and entry to four-year colleges and universities in the state of Pennsylvania.
2. The focus of this study is centered on American-born, African-American, Hispanic, Asian-Pacific Islander, and Native-American students who are Pennsylvania residents.
3. This study does not have a focus on minority access at the graduate and professional school level in higher education.

2.1.6 Delimitations of the Research

This research entails the following delimitations in its design:

1. This study is limited to an administrative population in one state.
2. No students were surveyed in this study.
3. No college faculties were surveyed in this study.
4. The targeted group in this study shares the same administrative characteristics.

2.1.7 Definition of Terms

Accessibility refers to the ultimate classification of each institution in terms of its admissibility and affordability for different types of students. An institution is determined

“accessible” only if it is both affordable and admissible (Lumina Foundation for Education, 2002).

Admissibility refers to the types of students an institution enrolls relative to the average preparation of students in that state, as measured by standardized test scores. In this study, an institution is “admissible” if it enrolled students with test scores consistent with the 25th to 75th percentile range of test scores for college-bound high school graduates from its own state (Lumina Foundation for Education, 2002).

Affordability refers to the price of attending a specific institution relative to the financial resources of prospective low- and median-income dependent and independent, and minority students. This term focuses on college prices and students’ resources, as well as the extent to which federal, state and institutional financial aid helps several types of students at more those 142 degree-granting institutions in the state of Pa (Lumina Foundation for Education, 2002).

Cost of Attendance – The amount it will cost a student to go to school. The educational cost includes tuition and fees, on-campus room and board, or a housing and food allowances for commuters and off-campus students, books, supplies, transportation, child care, cost related to disability, and miscellaneous personal expenses.

Expected Family Contribution (EFC) – The amount of money that the Federal Government expects each family to contribute to the student’s education based on the filing of the Free Application of Federal Student Aid (FAFSA).

First-time freshman – An undergraduate student who has not previously attended college (PA Department of Higher Education, 2003).

First-Generation students – Are students that are the first individuals from their immediate families to attend any type of institution of higher education.

Freshman – A first-year undergraduate student (PA Department of Higher Education).

Low-income dependent students are generally 17 to 24 year-olds from families whose incomes were in the bottom quartile of all families with dependents and whose head of household was 45 to 65 years of age and live in the state of Pennsylvania.

Low-income independent students are those students between the ages of 17 to 24 years whose own income ranks them among the bottom quartile of all households in the age range based on the vital/demographic statistics in that state.

Median-income dependent students are those students between the ages of 17-to-24 years from families whose incomes were in the middle quartiles of all households in the age range based on the vital/demographic statistics in that state.

Median-income independent students are those students between the ages of 17-to-24 years whose own income ranks in the middle quartile of all households in the age range based on the demographic statistics in that state.

Minority Students in this study are comprised of native-born African-American, Hispanic, and Native-American populations.

American Indian/Alaskan Native is person-having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition (PA Department of Higher Education, 2003).

Asian/Pacific Islander- is persons having these distinct ethnic backgrounds: Asians; Chinese, Filipino, Japanese, Asian Indian, Korean, Vietnamese, Cambodian, Hmong, Laotian, and Thai; Pacific Islanders; Polynesian, Hawaiian, Samoan, Tongan, Micronesian, and Guamanian (Source: U.S. Census Bureau, 2000).

African-American/Black – a person having origins in any of the black racial groups of Africa and are native born to the United States of America.

Hispanic – A person of Mexican, Puerto Rican, Cuban, Central, or South American or other Spanish of origin, regardless of race. In this study, they consist only of American citizens, and residents of the state of Pennsylvania.

Preparation – the degree to which a high school graduate has developed appropriate academic skills and educational qualifications to gain admission to four-year baccalaureate degree-granting institutions.

Private Institutions – institutions listed in the following categories: private state-aided institutions, private colleges and universities, and theological seminaries (PA Department of Higher Education, 2003).

Public Institutions – institutions listed in the following categories: state universities, and state-related commonwealth universities (PA Department of Higher Education, 2003).

Scholarships and Fellowships – A category of college expenditures that applies only to money in the form of outright federal Pell Grants, grants and trainee stipends to individuals enrolled in formal course work either for credit or not. Aid to students in the form of tuition fee remissions is included (PA Department of Higher Education, 2003).

State of Residence (In-State, Out-of-State) – A person's permanent address as determined by evidence as a driver's license or voter registration. For entering freshmen, residence may be the legal residence of a parent or guardian (PA Department of Higher Education, 2003).

Tuition – The typical nine-month charge for a full-time student. Calculated averages include full-time in-state students attending day school at the main campus.

Undergraduate – A student enrolled in a four- or five-year bachelor’s degree program, in an associate’s degree program, a certificate program or in a vocational-technical four-year program (PA Department of Higher Education, 2003).

2.1.8 Summary

The problem for examination in this study focused on the perceptions of higher education Admissions personnel Pennsylvania’s four-year colleges and universities on the issue of minority access variables. From the literature review of this study, a set of survey questions will be developed that suggest the most pertinent questions that involving the issue of minority students’ access to Pennsylvania’s four-year colleges and universities. The survey items to be developed from the review of the literature will be based on the insights, research, and scholarly publications from experts in the areas of; equal opportunity education, elementary and secondary education, higher education, higher education policy forums, business, case law, the Congress of the United States, and higher education administration.

This study was based on descriptive research (Eichelberger, 1989; Isaac, 1994). The objective is to describe a set of phenomena that examines the problem of minority student higher education access. The study was focused through the perceptions and opinions of higher education administrators in the area of Admissions and ACT 101 Legislation for access. The target group of the study consists of the personnel that set admissions policies and make admissions decisions in Pennsylvania’s four-year public and private baccalaureate degree-granting institutions.

Chapter III reviews historically significant and current research related to the topic of the study.

3.0 CHAPTER

3.1 REVIEW OF THE LITERATURE

3.1.1 Introduction

This chapter reviewed historically significant and current research that was related to the topic of the proposed study. The literature review was linked to the five elements of the problem examined in the study. This literature review was developed in five mini-sections that reflect on the elements of the problem; 1) Access, 2) Preparation, 3) Admissibility, 4) Affordability, and 5) Legal-Institutional implications of diversity-focused admissions policies. A synopsis of college student development and diversity issues for minority students in higher education summarizes the review of literature. The conceptual frame of the study is in higher education management.

The historical review in this study develops in two parts. Part 1 addresses the issues of race, access, and presents an historic synopsis of the development of higher education in America for minority groups. In examining of the topic of access for minorities, the review does not focus specifically on the development of historically black colleges and universities in the United States. That particular topic remains the subject of separate study. In Part 2 of the historical overview, a modern social history of higher and equal opportunity education are chronicled for the state of Pennsylvania.

3.2 HISTORICAL OVERVIEW OF THE RESEARCH LITERATURE

“...Democratic liberty must work in the context of equality if it is to be acceptable.”

Alexis C. H. de Tocqueville, Democracy in America, 1831

In the history of American higher education, the subject of access has its education and social histories rooted in economics and class structure. Access to higher education throughout America’s history is not inextricably linked to race status. Historians contend that access to higher learning in America has been more closely associated with elitism and preferential treatment by gender (Goodchild & Wechsler, 1997).

A review of the history of access in American higher education illustrates that accessibility is principally associated with a family’s capacity to afford college tuition. Concerning the economic determinants of higher education access, the interrelationships and the implications of social class and college attendance prevails in any historic era.

3.2.1 Synopsis of Minority Access in Higher Education

Any discussion of access and equality of education for minority groups in America must start with the race question. In 1831, and in his 1836 companion volume, *Democracy in America*, the French political scientist Alexis de Tocqueville addressed the issue of race relations in America (Edited by Henry Reeve, 1945). In his treatise on the social influences of democracy de Tocqueville observed that America was a “new country” comprised of three races; Anglo, African, and Native-American, and equality of opportunity would determine if this great experiment in democracy would achieve success or fail (p. 484).

When de Tocqueville addressed the problems of minorities in Colonial America, and through the historic period of the early 19th century, he observed that the white races of the new nation would be served best by educating other race groups to Anglo ways to preserve their newfound civilization and democracy. The French political scientist offered that equality is important to the ideals of the new Republic.

Alexis de Tocqueville (1831) cautioned that the Negro race would begin to demand equality, and the conditions for inter-class conflict, confronting issues of social justice and economic parity, and the quest for freedom would imperil the existence of the whites if the minority inhabitants of the newly established nation were not provided with education and socialization to Anglo ways.

It is important to involve this historical discussion with the observations and insights of de Tocqueville because he, along with economist Adam Smith of Great Britain (i.e., [Scotland] 1776) were two of the most prolific social scientists of this historical period. Their methods of social research followed systematic principles (Eichelberger, 1989) and scientific methods for inquiry on the human condition (Stark, 1992).

Moreover, de Tocqueville in particular was an outside observer to the new American experience. He utilized what contemporary social scientists' consider as the field observation method of research and presented views and socio-political analyses that were devoid of nationalism and cultural influences (Stark, 1985, pp. 66-69).

Alexis de Tocqueville (1831) also observed that white Christian groups were primarily undertaking the education of Africans in the new civilization. These societies were associated with the churches that were founded by the Protestant religious orders in America. In his treatise on democracy, de Tocqueville noted that the Christian movement in America would ultimately

lead in the elimination of the peculiar institution of slavery (Reeve, 1945; Franklin, 1947; Stamp, 1956).

In the early decades of the 19th century, de Tocqueville observed that 90% of the Negro population in America resided in the southern states. He opined that the Anglo races had but three choices in addressing the issue of equality; a) Free the African race and provide a means to education, b) Free the Africans, and ultimately engage in inter-class conflict without providing education and proper socialization, or, c) Sustain slavery. American history documents that the southern states chose the slavery option (Reeve, 1945).

Tocqueville also observed that the state of Pennsylvania by the year 1831, had remained the frontline stronghold of democracy for the northern states and would not permit the slave trade to progress beyond its borders (p. 365). The state of Pennsylvania has a long and important history in both the freedom and education of persons of African descent.

Social historian J. D. Anderson (1988) and Jencks & Riesman (1969, 1977) documented that in the first half of the 19th century the movement toward Negro higher education was led by white Christian groups of the north. Jencks and Riesman (1969, 1977) noted that white philanthropy to the newly established Negro institutions of higher education had no hidden agenda and its aim was to provide equality of education for the Negro race (p. 418). Jencks and Riesman (1969, 1977) also document that the entire faculty in the early Negro institutions for higher education was white until the last decades of the 19th century.

Anderson (1988) documents that between the years 1870-1890 nine federal land grant colleges were established in the Southern United States system of private Liberal Arts colleges. These institutions of higher learning for Negroes were established under the Morrill Land Grant

Act of 1862 (Rudolph, 1962), and the Second Morrill Act of 1890 (Goodchild & Wechsler, 1997); (Rudolph, 1962).

Anderson (1988) found that between the years 1865 to 1935 Negro higher education institutions were supported through the interrelationships between philanthropy and the black community (In, Goodchild & Wechsler, 1997). He noted that four particular groups supported Negro higher education during this era (p. 436):

1. Missionary philanthropy
2. White benevolent societies
3. Negro philanthropy, and
4. Industrial philanthropy

During the 19th century, persons of the Negro race had limited opportunities for higher education in the Northern states (Franklin, 1976). Oberlin College in the state of Ohio educated the earliest people of African descent in higher education. Oberlin College was established by church missionaries and has the distinction of being the first four-year college in America to admit female students. By the year 1835, Oberlin College had established a 35% Negro college enrollment (Goodchild & Wechsler, 1997).

The prospects for education and higher learning for the Native-American and the Spanish races (i.e., Hispanic) were not appropriately addressed during 19th century America. In the writings of Alexis de Tocqueville (1831) and various other historians, the indigenous Native-American people, and the cultures of the Spanish (i.e., Catholic) had engaged in war and political conflict with the Anglo race for the entire 19th century.

During the last quarter of the 19th Century the Congress of the United States (Butterfield, 1994) addressed the education of the Native Americans'. One of the most highly recognized

institutes for educating Native Americans was the Carlisle Indian School founded in the state of Pennsylvania in 1879 (National Park Service, 2002).

During the early years of the Indian School, it was under the administrative leadership of Brigadier General Richard Henry Pratt and the legendary Glenn “Pop” Warner. This school produced many of the most notable Native Americans of the 20th century. Its most recognized alumnus was the famous Oklahoma Sac and Fox Native American, Jim Thorpe (www.lup.com). The Carlisle school closed its doors in the year 1918.

Around the turn of the 20th Century, Negroes had obtained more opportunities for higher education in northern-based colleges and universities. However, as is consistent with the history of American higher education, these individuals consisted of those Negro students who could afford to attend these institutions or those that could pay tuition through various means of employment (DuBois, 1903).

In the early 20th century there were over 36 historically black colleges and universities established in the United States’ system of higher education (Anderson, 1988, p. 438). However, the question remained “how many of the potential Negro college-ready students could afford to attend these colleges?” DuBois (1903) noted that the Negro race still had important concerns with literacy in the early 20th century. DuBois then proposed that at least one-tenth of the Negro race (i.e., males) be trained for leadership positions in society through advanced higher education (1903).

One particular aspect of access for minorities runs through the historical thread of the early period research on higher education (de Tocqueville, 1831, (1945); Rudolph, 1962; Jencks & Riesman, 1969, 1997; & Anderson, 1988). These scholars contend that the institutions of higher education that were established for minorities have never reached the same level in

financial resources, governmental support, in endowments, and in comprehensive educational quality as the predominantly white colleges and universities in America. Modern day historians and educators contend that inequities in the quality of these institutions persist today (Rudolph, 1962; Jencks & Riesman, 1969, 1972). The colleges and universities that are sponsored through the United Negro College Fund still need more money and financial support.

Alexis de Tocqueville (1831) presented prophetic insights for the development of American democracy. He suggested that the new Republic could not survive as two Americas. As de Tocqueville had suggested in his review of race relations and the new democracy, inter-group conflict would prevail if equality of opportunity were not socially and legally mandated in America.

In examining the nature and history of American race relations there were two European scholars that directly addressed the race and equality issue in their principal research; de Tocqueville in the early 19th century, and the Swedish economist Gunnar Myrdal in his 1944 treatise, *An American Dilemma*. Both were outside observers to the American experience and each viewed racial inequality as a recurring problem for democracy.

A part of Myrdal's continuing legacy is noted that in the year 1939 he hired two young doctoral psychology students Kenneth B., and Mamie Clark to assist with his research on the Negro problem in democracy. The Clarks' research with the historic "Doll Studies" became an important legal element in the 1954 *Brown v. Board of Topeka Kansas* school desegregation case. Their research conclusions demonstrated the harmful psychological effects of the separate but equal education system on minority schoolchildren in America (Guthrie, 1976).

Tocqueville prophecies on social equality and social justice were echoed over 150 years later in a radio and television *Report to the Nation* (1963) address at the zenith of the American

Civil Rights Movement. Sitting President, John F. Kennedy commented in that address to the nation; "... (that), in America, you cannot say to 10 percent of the population that their children can't have access to quality education and remain a true democracy" (June 11, 1963).

Then President, John F. Kennedy (1962) is quoted from a previous address:

Americans are free, in short, to disagree with the law but not to disobey it. For in a government of laws and not of men, no man, however prominent or powerful, and no mob however unruly or boisterous, is entitled to defy a court of law. If this country should ever reach the point where any man or any group of men by force or threat of force could long defy the commands of our court and our Constitution, then no law would stand free from doubt, no judge would be sure of his writ, and no citizen would be safe from his neighbors. [September 30, 1962]

The pronouncement of a national "moral crisis" in President Kennedy's 1962 report to the nation was forwarded in response to the rioting and the southern resistance that surrounded the Civil Rights Movement, equal education opportunities, and the issues of social justice for African American citizens in particular. At the center of the conflict in higher education was the college admission of James Meredith. Meredith was the first black student to be enrolled at the University of Mississippi at Oxford, in 1963 (Williams, 1988).

Concerning equity and social advancement, sociologists note that (higher) education and social stratification are closely related entities in the American democratic order (Davis & Moore, 1945).

Concerning the interrelationship between social class and educational attainment in America, in the year 1967 sociologists' Peter Blau and Otis Dudley Duncan tested a hypothesis on social stratification in the United States that confirmed that the particular type of open democracy in this nation offered what is termed as "long distance mobility" (In, Stark, 1988). In long distance mobility, individuals are able to move from the lower status in society all the way to the top in one generation (In Stark, 1992). This also helps to explain what de Tocqueville

observed more than two centuries ago. Blau and Duncan (1967) posited that a great number of successful people in America made the leap from the bottom to the top of the occupational ladder (Stark, 1988, 1992).

The literature indicates that for minority groups, educational attainment, credentialing, the utilization of current technology and higher learning provides the most appropriate vehicles for social advancement in an open democratic society. According to Blau and Duncan, without the prospects for equal opportunity and post-high school education persons in the United States are least likely to change their social status (1967). Their research conclusions substantiate the fact that access to higher education is particularly important for social mobility for persons of color, and for the economically disadvantaged in America.

In the year 1968, in a study directed by Otto Kerner and commissioned by President Lyndon B. Johnson to survey the causes of the nation's social and civil unrest, the National Advisory Commission on Civil Disorders concluded that America was moving toward two societies; one black, one white – separate and unequal (Kerner Commission, 1968). The report marshaled evidence on an array of problems that fell with particular severity for African-Americans; overt poverty, high unemployment, poor schools, inadequate housing, and discrimination. The report also addressed the lack of educational opportunities for the nation's largest minority group.

In summary, in a follow-up study on inequality in America two Harvard social scientists' found that access to higher education, social class, family background, credentialing, and financial resources for higher education provide the necessary vehicles for the majority of Americans to realize their aspirations in an open democratic society (Jencks & Riesman, 1972).

The study concluded that educational attainment for the underprivileged is essential for social progress, inclusion, and for social justice in American society.

While examining the comparative social policy issues that were found in the 1972 Jencks and Riesman studies; Jencks and Burtless (2003) found that while the U. S. economy is growing, it is uneven, with some segments of American society enjoying enormous increases in their incomes, others almost none (Chapter III; page 4). In the year 2000, they report, inequality among the social classes and racial minorities is the highest that it has been in 60 years.

The authors cite the reasons for the disparity as rising earnings inequality. Jencks and Burtless (2003) suggest that technology has also increased the relative compensation of the well educated, and that immigration has swelled the ranks of the poorly educated and the poorly paid.

The evidence cited by Jencks and Burtless (2003) suggests that inequality does not appear to correlate with the growth rates of economies. The evidence cited in the 2003 study also appears to be unclear whether inequality diminishes the chances of low-income children to climb the economic ladder.

A conclusion that seems to be prominent in the recent research by Jencks and Burtless (2003) is that economic inequality inevitably tilts political influence and schooling opportunities toward the wealthy in America. As various education theorists in this literature review have shown; governmental and educational social policies might strongly influence who gets ahead in America. However, similar research by Aaron, Lindsay, and Nivola (2003) demonstrate that African-Americans in particular have made strong economic gains since the year 1972.

A recent summary of economic research by Strobe (2004), and published through the Associated Press cites evidence that the income gap in America has widened between high and low paid workers. The evidence they cite states,

The wealthiest 20% of households in 1973 accounted for 44% to 50% of the total U. S. income, according to the Census Bureau. Their share jumped to 50% in 2002, while everyone else's fell. For the bottom fifth, the share dropped from 4.2% to 3.5% (p. 1).

The economic study further states that, "new government data also shows that present tax cuts [e.g., 2002-04] have shifted the overall tax burden to the middle class from the wealthiest Americans" (p. 2). This has profound implications for education.

Data provided by the National Center for Education and Statistics (2004) show that in the year 2004, the state of Pennsylvania had the second highest costs for higher education in the nation. This also has profound implications for access to higher education for all college-age students; traditional, non-traditional, and adult, low- and middle income, and minorities who were residents of this state.

3.2.2 National Trends and Statistics on Access

Current research and vital statistics recently published by the College Entrance Examination Board (CEEB, 2002) indicate that the first-year students in the college class of 2002-03 is comprised of the most diverse group in the history of American higher education.

This (CEEB, 2002) research report shows that in the year 1965 approximately six million individuals were enrolled in higher education institutions in the United States (*Chronicle of Higher Education, Almanac Issue*, 2001-02). In the year 2001, according to the report, there were approximately 15.4 million students enrolled in American higher education institutions. At this rate of increase, the research study determined that American college enrollments are doubling every 20 years (CEEB, 2002).

Demographic data reported for the baseline year of 1960 indicates that the United States (U. S.) population consisted of 180 million residents. In the year 1965, the population of the U. S. totaled 194 million residents. In the year 2000, the decennial U. S. Census reported 286 million residents. At the reported 1.6% annual rate of change (*U. S. Census, 2000*), the data indicates that it will take approximately 87 years for the U. S. population to double from the index year of 1960 (*Statistical Abstract of the United States, 2001*). As the research indicates, in the United States College enrollments are increasing by 100% each 20 years.

The data presented in Figure 3.1 illustrates that high school graduation rates in the middle states region will peak around the year 2008; then, decline incrementally toward the year 2012. This trend has important access implications for Pennsylvania’s colleges and universities.

Number of Public High School Graduates, 1993-2012: Middle States

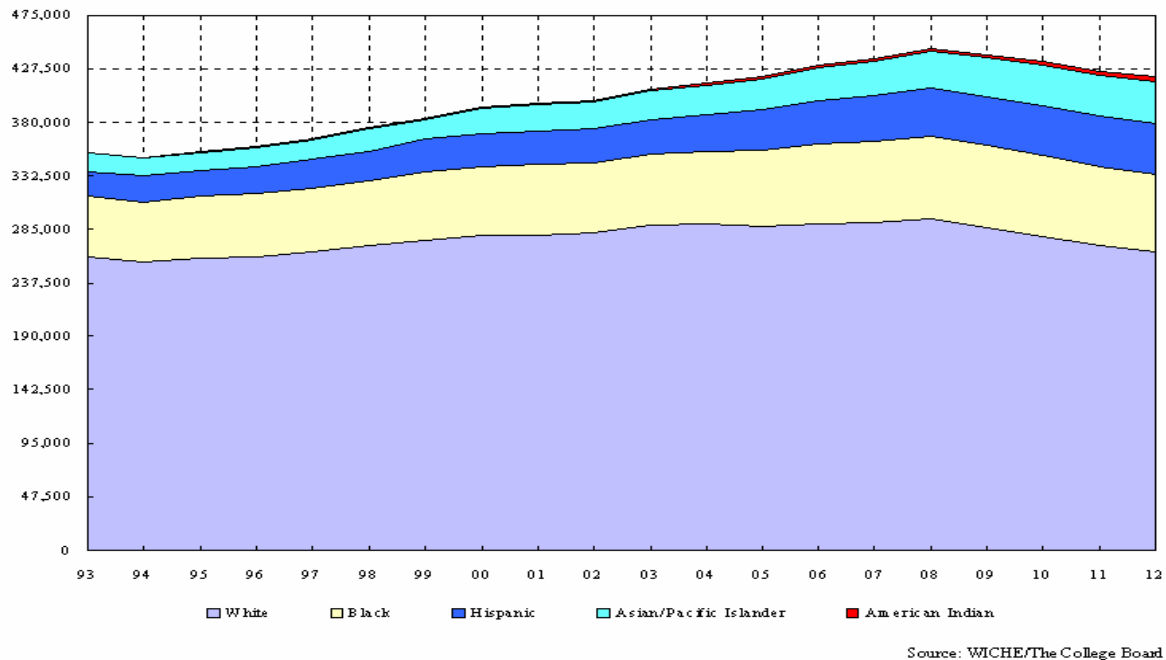
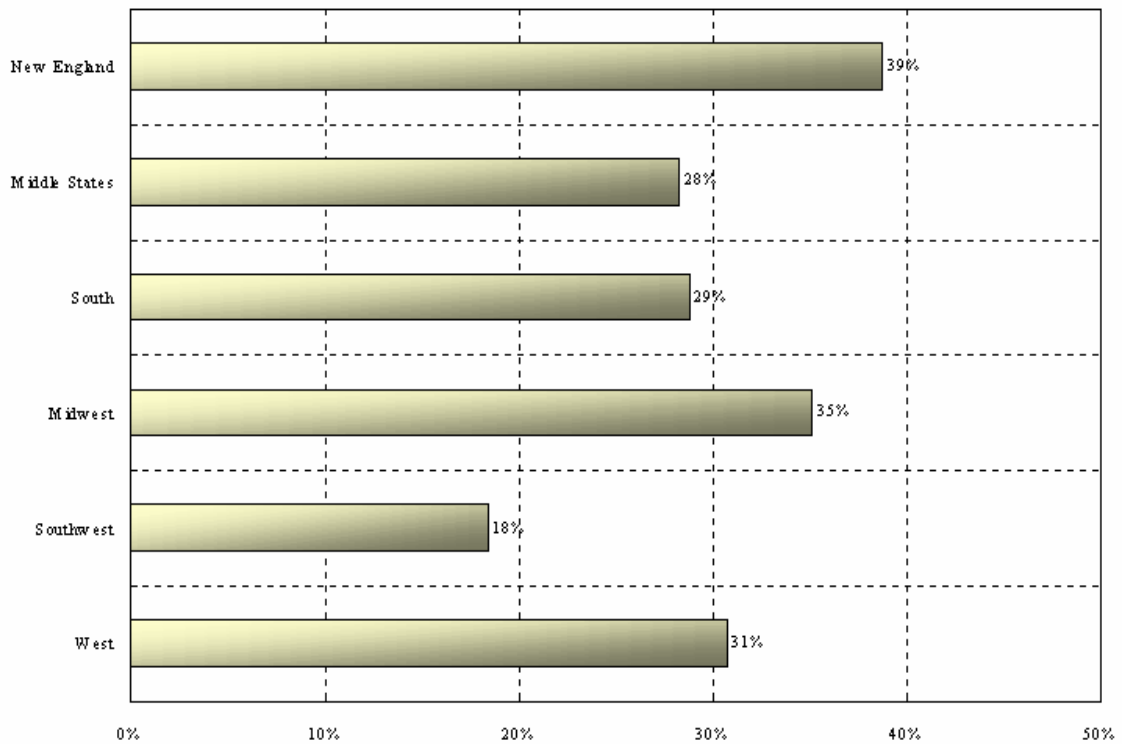


Figure 3-1 Number of Public High School Graduates, 1993-2012: Middle States

According to the projected enrollment, trends that are detailed in the *Chronicle Almanac Report* (2001) it is estimated that college enrollments in the United States will increase by 8.0%

from the index year of 1999 through the 2004-05 academic years. The report also indicates that the estimated enrollment rate for black students is increasing more slowly and is not projected to reach the 8.0% per annum growth level until the year 2012 [See Figure3.2].

Percent Change in Number of Public High School Graduates, 1994-2012, by College Board Region Black Students



Source: WICHE/The College Board

Figure 3-2 Percent Change in Number of Public High School Graduates, 1994-2012, by College Board Region Black Students

The *Chronicle of Higher Education* (2001-02) and the American Council on Education (ACE) 2002 data in Figure 3.3 show that Asian students comprise the fastest growing minority

group in American higher education. College enrollment is increasing for all minority groups, however, higher education enrollments for majority Americans appears to be leveling. However, there is a far greater number of majority persons of college age in the United States and the data must be viewed from this perspective.

Growth in College Enrollment by Ethnic Group 1977-1996

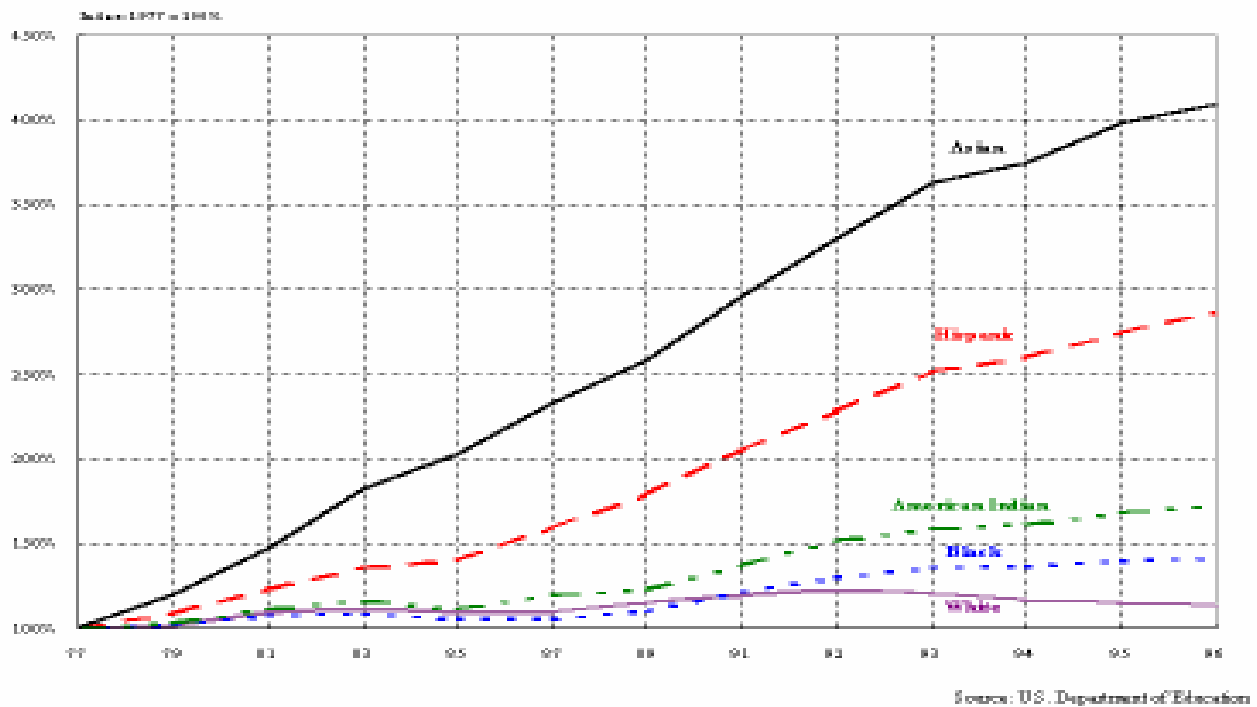


Figure 3-3 Growth in College Enrollment by Ethnic Group 1977-1996

The *Chronicle of Higher Education* data profiles indicate that women are currently enrolled full-time at a 20% higher level than are male students in American colleges and universities in 2001-2002. Female students were also enrolled at a significantly higher rate than males on a part-time basis (*Chronicle of Higher Education*, 2001-2002). The report also notes that the traditional college-age cohorts of 17-24 are projected to increase in enrollments by 8.0%

through the 2004-05 academic years. According to this report this rate of increase slows down considerably after the 2006-07 academic year.

Percent Change in Number of Public High School Graduates, 1994-2012, by College Board Region American Indian/Alaskan Native Students

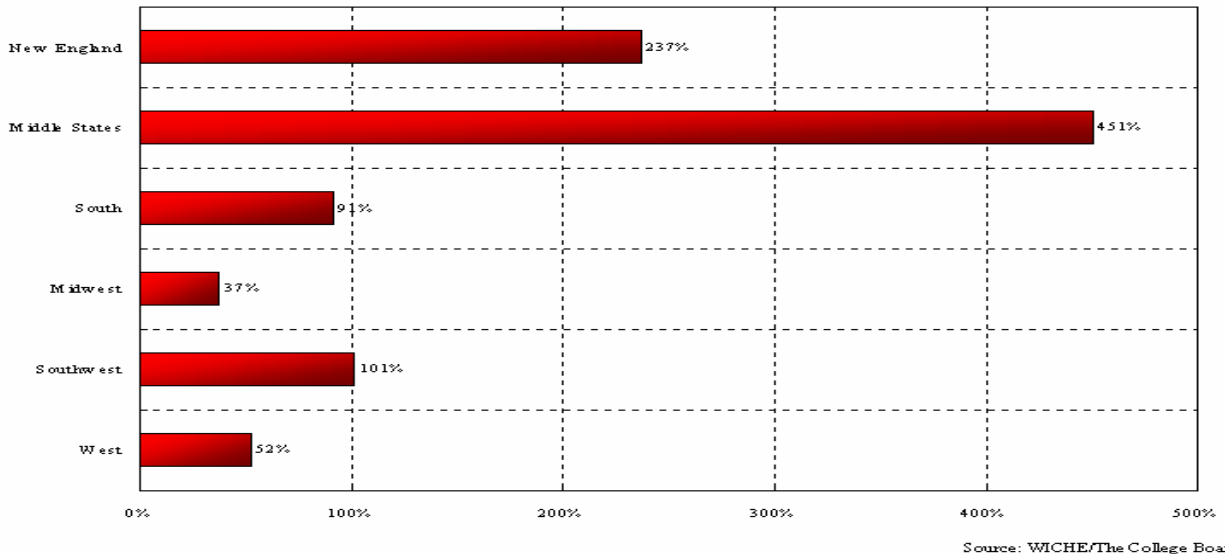


Figure 3-4 Percent Change in Number of Public High School Graduates, 1994-2012, by College Board Region American Indian/Alaskan Native Students

According to the data projections presented in Figure 4, the growth of the Native-American student population will be greatest in the Middle Atlantic region. This rate of growth has important implications for higher education access for these students in the state of Pennsylvania. However, the U. S. Census (2000) data indicates that the overall Native-American population is relatively small in Pennsylvania. Thus, the increases in absolute numbers of these students attending college are viewed best from this perspective.

The data that are illustrated in Figure 3.5 indicate that the growth of Hispanic high school graduates is projected to be greatest in the south. These students most likely reside in the

southwest region of the United States. However, the 10.2% growth rate for Hispanic high school graduates has interesting implications for the state of Pennsylvania in the Mid-Atlantic region. Pennsylvania has a large Hispanic youth population in the eastern area of the state. Moreover, unlike other minority groups, the Hispanic population shows a higher than average rate of immigration to the state of Pennsylvania (U. S. Census, 2000).

Percent Change in Number of Public High School Graduates, 1994-2012, by College Board Region Hispanic Students

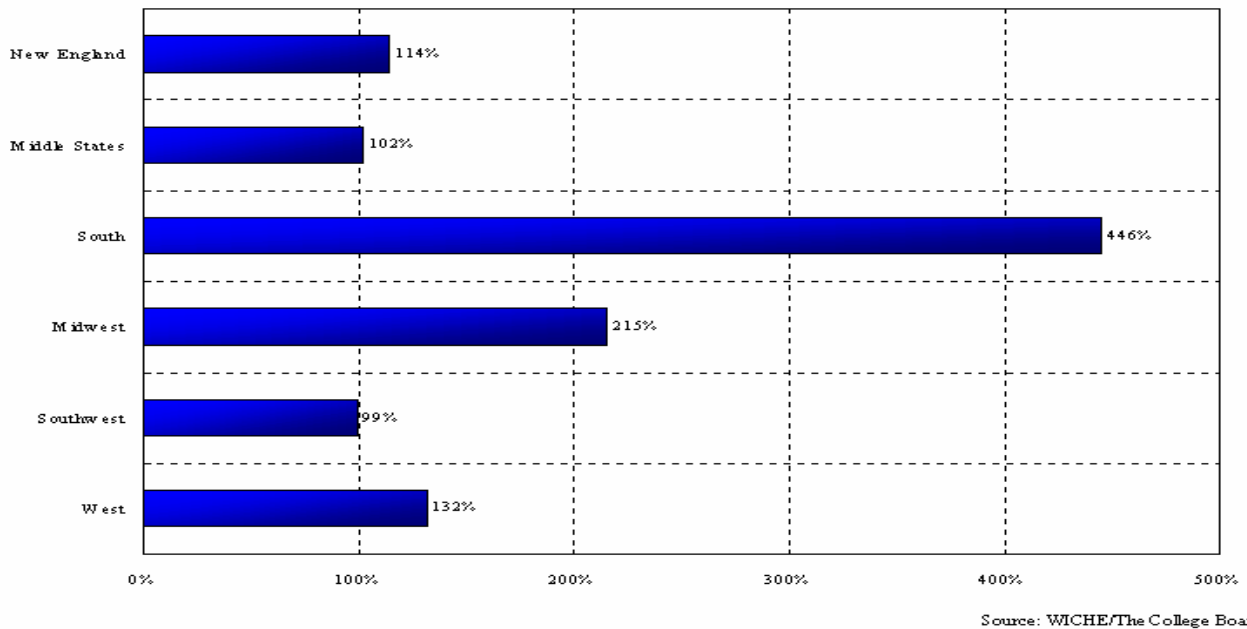


Figure 3-5 Percent Change in Number of Public High School Graduates, 1994-2012, by College Board Region Hispanic Students

3.2.3 U. S. Census Data

The U. S. Census data indicate that for the year 2001 African-American's comprise 12.3% of the United States population (33 million; U.S. Statistical Abstract, 2001). The Hispanic population now comprises 14.0% of the U. S. population, and is estimated at 38 million persons. According to the U. S. Census for the year 2003, the Hispanic sector is now the nation's largest minority. The statistics also indicate that the Hispanic group has a relatively young population and a higher than average birth rate.

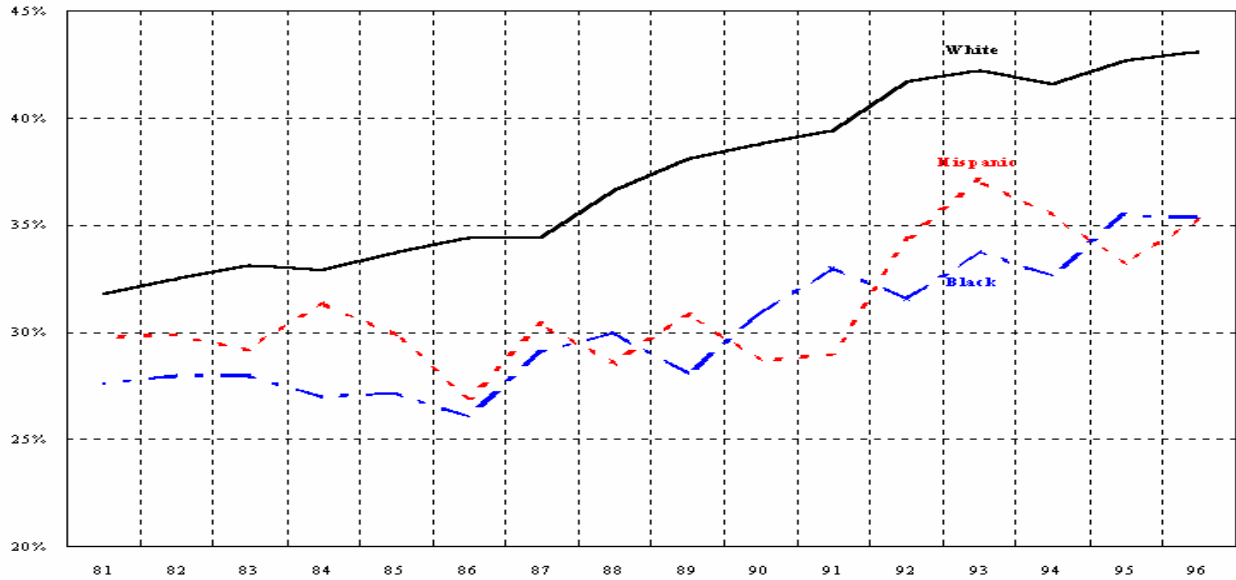
Some recent (2001) data figures for American higher education institutions show that approximately 1.64 million African-American students, 145,000 Native-American students, one million Asian-American students, 1.316 million Hispanic students, and 11 million white students are currently enrolled in the nation's colleges and universities (*Chronicle of Higher Education*).

National demographic data indicate that the proportion of minority students in higher education at public four-year institutions is approximately 25.1%, and at public two-year institutions, the statistics indicate that there is a 33.3% rate of enrollment. An objective of this research is to evaluate the distribution of minority students in Pennsylvania's higher education institutions by type (*Chronicle of Higher Education, 2001*).

In addition, national collegiate enrollment data indicates that the traditional (i.e., 17-to-24 years) minority student college-age cohort is enrolled at private four-year institutions at the rate of 24.2%, and at two-year private institutions at 34.8% (*Chronicle of Higher Education, 2001*).

The national statistics on higher education indicate that approximately 67% of minority students are enrolled in two-year postsecondary institutions as opposed to four-year institutions (*Chronicle of Higher Education, 2001*). The data illustrated in Figure 3.6 indicates that there still exists a significant disparity in college enrollment rates by ethnic origin.

College-Going Rates of High School Graduates Aged 18 to 24 by Ethnic Group, 1982-1996



Source: U.S. Census Bureau

Figure 3-6 College-Going Rates of High School Graduates Aged 18 to 24 by Ethnic Group, 1992-1996

The American Council on Education (ACE) publishes yearly reports on the status of minority higher education in the United States through its Special Office of Minorities. In a Report published, (The), *2001-2002 Nineteenth Annual Status Report on Minorities in Higher Education*, the following information on minority participation in higher education was extracted:

3.2.4 High School Completion

- In 2000, 77% of African Americans ages 18 to 24 completed high schools, an increase of nearly one percentage point from the previous year.
- African American women were the main reason for the increase, as they experienced a gain of 2 percentage points from 1999.

- Hispanics reported a 59.6% high school completion rate in 2000, which was slightly above the rate for the previous year.
- The high school completion rate for Hispanic women increased by more than 2 percentage points, while the rate for Hispanic men declined slightly.

3.2.5 College Participation and Educational Attainment

- College participation rates among all high school graduates ages 18 to 24 declined slightly in 2000 largely due to a small increase among whites. College participation rates have increased substantially during the past two decades but show no improvement from 1966 through 2000.
- African Americans and Hispanics continue to trail whites in 2000 in the college participation rates of high school graduates ages 18 to 24. The rate for African-Americans is unchanged since 1999 at 39.4%, while the rate for Hispanics increased nearly 5 percentage points to 36.5%. Both groups had lower participation rates than whites, which had a participation rate of more than 43%.
- More than 17% of African Americans ages 25 to 29 had completed two or more years of college in 2000. This is the highest rate in the past two decades, though African Americans continue to lag behind whites in this category.
- Less than 10% of Hispanics ages 25 to 29 completed four or more years of college in 2000. This rate has fluctuated considerably during the past but has shown no gain since 1966.

3.2.6 College Enrollment

- After a lengthy period of stagnation, overall college enrollment increased by 2% from 1998 to 1999, with nearly identical gains at two- and four-year institutions. All racial and ethnic groups realized small gains for the year, including whites, whose enrollment had declined throughout the 1980s and 1990s.

- College enrollment among students of color has increased by more than 48% during the past decade, including a gain of nearly 15% since 1995. For the most recent year, minority students registered an enrollment gain of 3.3%.
- Students of color had their largest enrollment increase, 5.6%, at the graduate level in 1999. They also exhibited progress at the undergraduate level, with an increase of 3.1%, and nearly 2% at the professional school level (www.acenet.edu/programs/omhe/status-report/e-summary.cfm).

This review of the literature also examines some of the major policy positions on access for minorities from the perspective of higher education policy consortiums in the following section.

3.2.7 Higher Education Policy Statements on Access

The American Association of State Colleges and Universities (AASCU) published its *2003 Public Policy Agenda* on higher education. The AASCU endorses several areas of higher education for State Colleges and Universities. The Council for Opportunity in Education directs the organization's policies on access and inclusion. The mission of the AASCU is to lead and shape public policy at the state and federal levels. This public policy agenda is an annual report on higher education.

The AASCU (2003) report states that its public policy positions are founded on an uncompromising commitment to serve the best interests of the nation's students. Accordingly, and for the AASCU, the positions articulated in the *Public Policy Agenda* are rooted in the following ideals:

- Higher education is a common good that serves the interests of society and provides individual returns to students.
- America's public higher education system is the embodiment of the nation's democratic ideals.

- State Colleges and universities are committed to providing access to quality undergraduate and graduate programs.
- The responsibility for investing in public higher education should be assumed equitably by all beneficiaries.
- The primary purpose of federal financial aid is to guarantee access to higher education.
- The primary purposes of state higher education appropriations are to keep student tuition at a reasonable level and to ensure program integrity.
- Families should be encouraged and empowered to save for and assume their share of the higher education expenses of their student(s), and
- No American should be denied the opportunity to pursue higher education for lack of financial resources (www.aascu.org, pp. 11-12).

In review of the AASCU's (2003) public statement on access and inclusion, the following policy positions was extracted from this document:

...Providing access to the baccalaureate for a rapidly growing, increasing diverse population will be a formidable challenge for higher education, but access alone is not enough. Persistence and success in attaining a higher education should be viewed as equally important policy priorities, especially for groups most at risk of non-completion (p. 37).

3.2.8 AASCU's Policy Statements on Access and Inclusion

- AASCU will advocate for increased funding for the programs falling under Title III of HEA, specifically those that aid public Historically Black Colleges and Universities (HBCUs) and Hispanic-serving institutions (HSIs), and Alaska Native and Hawaiian serving institutions.
- AASCU also calls on Congress and the Administration to advocate for increased funding for programs falling under Title V of HEA (Developing Hispanic-serving institutions), and will work for reduction or elimination of the two-year wait out period for previous grant recipients.
- AASCU will advocate for increased funding of the TRIO and GEAR UP programs, specifically for expansion of those programs to reach community-based institutions and other groups that serve

underrepresented students. The TRIO programs have a proven record of reaching out to junior and senior high school students who would not otherwise aspire to higher education, thus making them worthy of more than a level of funding recommendation by the Administration.

- AASCU supports the Child Care Access Means Parents in School Program, which provides supplemental funds to institutions to establish/support campus-based child-care programs that primarily serve the needs of low-income students who receive Pell Grants.

3.2.9 Affirmative Action in College Admissions

The 2003 AASCU report states:

Policy debates related to affirmative action at the nation's colleges and universities have been among the most contentious in recent years. With the U. S. Supreme Court poised to review the precedent established in the landmark Bakke case, AASCU calls on policymakers and higher education leaders to engage affirmative action issues within a thoughtful, forward-looking, and student-focused framework (p. 38).

3.2.10 AASCU's Policy Statement

AASCU supports the principle that racial and ethnic diversity in college and university enrollment is a compelling state interest, as articulated in the U. S. Supreme Court's 1978 decision of Bakke v. Regents of the University of California. In the face of current challenges to this principle, AASCU urges states and their institutions and systems of higher education to affirm the value of diversity in all aspects of the academy, and to explore legally permissible means to foster that diversity (p. 38).

The following policy statements are forwarded by the American Council on Education (ACE) and relate directly to the issues of higher education access. The ACE serves as one of America's most prestigious policy forums on higher education. This organization has addressed the issue of diversity in higher education from various perspectives, however, the consensus of opinion remains consistent. The ACE policy positions are premised on the ideal that minority participation in higher education is a necessary and desired goal in this nation (ACE, 2001).

The American Council on Education (ACE) does not directly call for preferential affirmative action policies in American higher education. The organization also stated that it does not support race-specific or race-based admissions policies in higher education. The message that is forwarded as a policy position by the organization supports diversity in American colleges and universities, minority student access, and increasing the level of minority participation in higher education (ACE, 1999b).

For many years, the ACE has sought to be a force for promoting diversity in American higher education. Their policies were intended to directly address the needs of minorities and women who are considered underrepresented groups. The ACE first addressed access issues for minorities following the passage of the Civil rights Act of 1964 and when Title IX was instituted in 1972 (ACE, 1999a).

In its commitment to affirmative action in higher education, one of the ACE's most celebrated accomplishments in the last 20 years was the issuance of the 1988 report, *One Third of a Nation*. This research report drew attention to the lagging participation of minorities in higher education and set a goal of proportional representation by the year 2000. The higher education community looks to the ACE to lead the defense of affirmative action programs and policies in American higher education (1995). The organization called for increasing minority participation in higher education and suggests that there is still massive work to be done (1999b).

The ACE endorses the report, *Compelling Interest: Examining the Evidence on Racial Dynamics in Higher Education*. This report attempts to dispel what it terms misconceptions about racial dynamics in higher education. Some misconceptions about the higher education of minorities that are cited in the report include: a) past inequities in educational opportunities for racial and ethnic minority groups have been sufficiently addressed; b) merit can be defined by

test scores; c) fairness is best achieved through race-neutral policies; and, d) diversity programs only benefit minority students (ACE, 2001).

Listed are several policy statements that were addressed in the 2001 ACE Report:

- White youngsters have greater access to high quality elementary and secondary than do minority children in the United States school systems.
- Trent (2002) noted that African-Americans and Latinos have made only modest gains in undergraduate enrollment in the nation's research institutions in the last 15 years, and that a significant gap continues to exist between these students and whites.
- Taylor (2002) noted that tests were designed to predict first-year college grades and nothing more. The misuse of tests to determine admissions and financial aid has narrowed the opportunities for students of color.
- Tests must be used appropriately in evaluating students for admission.
- Tests are not infallible and comprehensive measures of merit.
- Institutions should base admissions and financial aid decisions using other tools that measure the wide range of students' talents.
- Race-neutral policies in higher education admissions have little meaning, and have little impact because race still matters in American society (Jones, 2002).
- Milem (2002) submits that diversity on campus is beneficial for all students, as well as for society.

The report concludes that policies are still necessary to address past and current racial discrimination, and urges institutions to expand their definitions of merit, and to integrate diversity into all dimensions of the campus

<http://www.stanford.edu/~hakuta/RaceInHigherEducation.html>).

3.2.11 Summary

The first section of the literature review presented an abbreviated and selective history of higher education access in America for minority groups. This section also examines demographic trends in population and in college enrollments to emphasize the great necessity for higher education in a technological and advanced society.

The ACE (1995) and U. S. Census (2000; 2001) statistics indicate that minority group birth rates in America are currently seven times higher than that of the white population. This fact has profound implications for the future of American higher education enrollments. There are likely to be more minority students available for higher education in the ensuing years because of these trends.

The research literature on access also demonstrates that American higher education has a stake in promoting diversity and equal access. Some of the reasons include:

1. Higher education must protect its own interests by developing and maintaining its available pool of potential students for the present, and future.
2. Minority students are viable customers to higher education institutions of the present, and future; and this talent pool must be cultivated.
3. Affirmative action policies in higher education must be distinguished from affirmative interventions by colleges and universities to increase diversity.
4. Birth rates of the nation's white population is significantly lower than that of minority groups, and more potential students will emanate from minority groups in the future.
5. Developing all of the nation's talent is for the overall good of American society.
6. Future workforce needs are dependent upon a highly educated populace; and that,
7. Promoting diversity and increasing participation in higher education for America's minorities is morally correct.

The following section examines the issue of access and minority student higher education enrollments specifically for the state of Pennsylvania.

3.3 HIGHER EDUCATION ACCESS IN PENNSYLVANIA

3.3.1 Introduction

“...I repose in this quiet and secluded spot, not from any natural preference for solitude, but finding other cemeteries limited as to race, by Charter rules, I have chosen this that I might illustrate in my death the principles which I advocate through a long life, equality of man before the Creator.”

Thaddeus Stevens (1792-1868), U. S. Senator, Pennsylvania

This section of the literature review begins to focus specifically on access to higher education in the Commonwealth of Pennsylvania. This sector represents the locus of the ensuing research study on accessibility for minority students. The objectives are to review historical literature on the subject, overview demographic data for Pennsylvania, and to prepare the foundation for the survey-based study on minority student access.

The state of Pennsylvania is recognized as the “cradle of liberty” of the United States. About the nation’s history on providing minority persons higher education, this state has led in the pioneering efforts to address the issue of access to higher education. This review incorporates both an historic and contemporary analysis of the issues for higher education access for minority students. In addition, it is an objective of this research to examine current data and vital statistics for an analysis on the future of minority higher education participation in the Commonwealth of Pennsylvania.

3.3.2 History of Minority Higher Education in Pennsylvania

As de Tocqueville noted, the state of Pennsylvania would not permit the institution of slavery to progress beyond its borders (1831). Thereby, with support from the abolitionist movements and the religious societies of the northern states, in addition to various philanthropic interests, these particular stakeholders sought to establish the first educational institutions for the colored race to obtain higher learning in America (Stampp, 1956).

In the year 1837, Cheyney University of Pennsylvania was chartered as the first historically black higher education institution in America (Cheyney National Alumni Society (CNAS, 2003). Richard Humphreys, a Quaker philanthropist (CNAS, 2003), founded Cheyney University of Pennsylvania.

In 1829, Richard Humphreys wrote his will bequeathing the sum of \$10,000.00 to 13 fellow Quakers and charged them to design, “an institution... to instruct the descendants of the African race in school learn, in the various branches of the Mechanic arts, trades and agriculture, in order to prepare, fit, and qualify them to act as teachers” (CNAS, 2003). The first historically black college was located in the City of Philadelphia. The school was then known as the Institute for Colored Youth. The Institute for Colored Youth assured a free education for qualified young people.

In the year 1854, the nation’s second historically black college was established in the state of Pennsylvania. It was known as the Ashmun Institute (Soul of America – Black Colleges, 2003; www.soulofamerica.com/colleges/overview.html). This all-male college claimed to be the first institution in the world to provide higher education in the arts and sciences for blacks. In 1866, the college was renamed Lincoln University in honor of the slain 16th President of the United States, Abraham Lincoln.

The historical record of Lincoln University traces its charter to the early years of the 19th century and to the philanthropy of its founder, John Miller Dickey, and his wife, Sarah Emlen Cresson (www.lincoln.edu).

Historian Frederick Rudolph (1962), and other scholars suggest that the earliest institutions for colored youth were not by any means up to the traditional college standards of this historic period. These early institutions were more akin to preparatory schools according to Anderson (1988). Christopher Jencks and David Riesman documented that what is considered the first real college degree conferred from colored institutions was awarded in the year 1862 (1969, 1977).

3.3.3 Politics and Higher Education

This historic overview recommends reading and about the life and political career of lawyer, and United States Senator, Thaddeus Stevens (1792 – 1868). Thaddeus Stevens championed both the legal and civil rights of the Negro race during what is considered by historians as the Middle Period (i.e., 1840 – 1880) in American historiography (Stampp, 1956). Under Senator Stevens' guidance and leadership in the Pennsylvania State Legislature (1833-41), and in the U. S. Congress (1849-53, House; and 1859-1868, Senate) the legal rights for Negroes ([i.e., 13th, 14th, and 15th, U. S. Constitutional Amendments] also referred to as the “Slave Amendments”; Stampp, 1956) were adopted following the Emancipation Proclamation in the year 1862 (Franklin, 1947, 1976).

American political history recognizes that Senators Thaddeus Stevens of Pennsylvania and Charles Graham Sumner of the Commonwealth of Massachusetts proposed, and sponsored

the 13th, 14th, and 15th Constitutional amendments for the protection and enfranchisement of the newly emancipated Negro citizens of the United States (Cromwell, 1968).

Senator Thaddeus Stevens was a resident of Lancaster, Pennsylvania (Spartacus Educational, 2002). He emanated from the same geographical proximity of the Quaker colonies. This particular geographic region was also at the hub of the Underground Railroad in the North (Stampp, 1956; Franklin, 1976; and Huggins, 1977). History notes that many great Pennsylvania leaders and abolitionists emanated from this region of the state.

In the literature review on the legal aspects of admissions in American higher education, the 14th Amendment to the U.S. Constitution is referenced in each case. In perhaps another interesting paradox of American history, it would be 110 years later that an applicant who was denied admission for graduate and professional school would cite the Equal Protection Clause of the 14th amendment to the U. S. Constitution as the foundation of his landmark legal challenge in higher education college admissions. The legal case was the *University of California Regents v. Bakke*, 438, U. S. 265 (1978).

3.3.4 Equal Opportunity Access in Pennsylvania: ACT 101

In the year 1971, the state of Pennsylvania enacted legislation that was aimed at providing equal opportunity access for higher education for economically disadvantaged students. The legislative plan for equal opportunity higher education was designated as ACT 101 (PA Department of Higher and Adult Education, 2001). The ACT 101 program is funded by the Pennsylvania state legislature and is administered through the Department of Education (PDE). The Pennsylvania Department of Education (PDE) provides funding to approximately 78

colleges and universities (public, private, and community) across the Commonwealth (www.pdehighered.state.pa.us).

The ACT 101 programs are synonymously termed (Equal) Educational Opportunity Programs (EOP). All colleges and universities in the state of Pennsylvania, including two-year, four-year, and community colleges are eligible for these programs (PDE, 2000).

The purpose of the ACT 101 program is threefold: First, the program is designed to assist economically disadvantaged and low-income students to gain access to higher education. The ACT 101 legislation is not color-bound and family income that is based on a percentage of federally established poverty income guidelines determines the criteria for eligibility.

Second, the program has an academic component that affords the eligible participants admission to participating institutions based on special qualifying criteria.

The admission threshold is different at each particular institution. Most colleges and universities, no matter how selective, employ a “marginal admits” admissions review category for its applicants. The participants under the ACT 101 programs will generally fit into this type of admissions category.

Third, the ACT 101 program provides supplemental instruction and academic support assistance throughout the participants’ college matriculation (Campbell, 2001). Campbell (2001) and others have also developed and implemented some innovative educational strategies for the ACT 101 programs that support the use of supplemental instruction (Henson & Shelley, 2003) and utilize developmental courses for the participants to upgrade their academic skills for college achievement (Tomlinson, 1989).

The priorities for college admission under the ACT 101 guidelines are extended to first-generation college students. The ACT 101 state-supported programs have seldom been subject

to public controversy because its intent was never to target the race of the participants for inclusion. The participants must be academically or economically disadvantaged; therefore, African-American, white, and other race college-bound participants that meet its qualifying criteria are eligible. This program also has a state residency requirement for eligibility (www.pdehighered.state.pa.us).

One of the more innovative and distinguishing characteristics of the ACT 101/EOP model is that they also provide summer pre-college preparation components. These supplemental academic programs are based on developmental education strategies for assuring success for under prepared admits (Tomlinson, 1989). The educational objectives of the summer academic component are remediation and readiness for college. Its goals are to accelerate its participants toward traditional academic proficiencies by the beginning of the institution's regular fall term. One of the many spill-over benefits to participation in these types of developmental summer components is that it also provides for pre-college adjustment for first-year, and first-generation college students (Astin, 1993b), (Terenzini, et. al., 1996).

Access to higher education and financial support is included for the ACT 101 program participants in the state of Pennsylvania. ACT 101 participants must be first-year students and eligible for academic support services throughout their four-to-five year college matriculation (Campbell, 2001; ACE, 2002). Veterans of the United States armed services are also eligible for the program (www.pdehighered.state.pa.us).

3.3.5 PA Department of Education Statistical Profiles

Concerning this literature review, it is necessary to estimate the number of potential minority students that might be admissible to higher education institutions in the state of Pennsylvania.

The following information and the tables have been extracted from the Pennsylvania Department of Education (PDE) for analyzing and disaggregating the data on access. The purpose of this analysis is to review (i.e., minority); 1) enrollment trends, 2) college residency by race and type of institution, 3) by degrees conferred by race, and 4) for enrollment projections for minority students that are residents of the Commonwealth of Pennsylvania. The literature review examines a 15-year sequence of (PDE) longitudinal data for the years 1988-89 to 2002-03. Information presented on the PDE site states:

Pennsylvania has a wide assortment of institutions serving postsecondary/higher education. The number of institutions legally authorized to grant degrees are 130 colleges and universities and 87 private and licensed schools in the year 2000” (www.pdehighered.state.pa.us).

A list of Pennsylvania colleges and universities is as follows:

14	State Universities*
4	State-Related Universities*
8	Private State-Aided Institutions*
14	Community Colleges**
88	Private Colleges and Universities*
16	Theological Seminaries
6	Private Two-Year Colleges
1	College of Technology* (www.pdehighered.state.pa.us); (PDE, 2003).

* (106 Pennsylvania four-year institutions of higher education are referenced for the research sample frame).

** (Selected 2 community colleges for transfer research and data).

3.3.6 Demographics

The U. S. Decennial Census for the year 2000, and the *Statistical Abstract of the United States*, 2001, (SA, U.S.) indicate that the population of the state of Pennsylvania is approximately 12.4 million residents (SA, U.S., 2001, p. 25). Pennsylvania is presently the seventh highest populated state in the Union.

The demographics indicate that persons in the 18-24 year cohorts consist of approximately 1,094,000 persons in the state of Pennsylvania (SA, U.S., 2001). Census data are not reported in the traditional college-age cohorts of years 17-24 (e.g., 18-24 yrs., 2000 Census). However, a segmentation of the Census data indicates that approximately 350,000 17 year-old persons reside in the state. Therefore, it is estimated that the state has approximately 1.45 million potential college students in the 17 to 24-age cohort.

The decennial 2000 Census indicates that from the decades of 1990-to-2000, the State of Pennsylvania had one of the lowest percentage rates of change in population, at 3.4% growth. This rate of change is in the lowest 10% in the nation (SA, U.S., 2001, p. 7). In addition, the demographic profile of the state of Pennsylvania indicates that it has the nation's third highest population of older individuals, 65 years and over (p. 7).

Table 3.1 Demographic Profile of the State of PA From the 2001 Decennial Census Tract

Category	Population Counts	Percentage (%) of Population
White	10,484,000	85.4
Black	1,225,000	10.0
Hispanic	394,000	3.2
Asian	330,000	1.8
Native-American	180,000	.1
Hawaiian	3,000	(2) <5000-0.05
Some other race	188,000	1.5
Two or more	142,000	1.2

Source: SA, U.S., 2001, pp. 26-27.

The data indicate that there are a large number of persons in the state of Pennsylvania that identify their race as something other than white. The total minority cohort represents approximately 20% of the recorded population for the year 2001. The demographic data also indicate that the Hispanic population has a high rate of in-migration to the state of Pennsylvania. Moreover, as previously documented, minority groups generally have birth rates several times higher than that of whites (ACE, 1995). The vital statistics also indicate that minorities have a relatively high number of youthful persons in their demographic cohorts (U. S. Census, 2000).

Second, most demographers assert that in the United States (i.e., Census) in general, there exists at least a 15% to 20% undercount in the minority population (Stark, 1992). The true numbers of minority populations are difficult to ascertain in any particular state because of this phenomena. Elementary and secondary school enrollments are usually the best source of record for minority children in a particular state.

Based on the index year of 1990- to the year 2000, the rate of change in Pennsylvania for minority groups is +7.2% and +1.4% for whites. At this rate of change it is estimated that the absolute numbers of residents in the 18-24 year cohort will be 50% white and 50% other/minority by the year 2040 (SA, U.S., 2001). The demographic statistics have interesting implications for potential traditional-age college students and for future enrollments in postsecondary education for Pennsylvania residents.

Pennsylvania Department of Higher Education (PDE) data for minority groups is disaggregated according to fall enrollments by race, residency by institution type, and number of degrees conferred by race. In this way, it is determined that the data might indicate the true measure of accessibility of higher education opportunity for minorities.

Presented is higher education access data for the state of Pennsylvania as reported for college enrollments, 1988-to-2000 (See Table 3.2) below.

Table 3.2 College Enrollment Statistics State of PA Institutions of Higher Education

Race	1988	1998	2000
White (Non-Hispanic)	88.4%	82.7%	86.7%
Black	6.1%	8.2%	6.5%
Alaskan/Native-American	.2%	.3%	.2%
Hispanic	1.0%	2.0%	1.3%
Non-Resident Alien	2.4%	3.1%	2.7%
Asian	1.9%	3.7%	2.6%

Source: PDE; 1988, 1997, 1999, & 2000.

An examination of the data indicates that whites experienced a modest decline in higher education enrollment over the 10-year period 1988 to 1998. The data indicate that black students made modest gains in enrollment relative to their proportion in the total state population. The data also illustrate that both Asian and Hispanic students doubled their enrollment numbers over a ten-year period. However, the data should be assessed from the perspective of each sector's absolute numbers in the total population in the state.

For example, a 100% increase might represent only modest gains in absolute numbers of certain college enrollees. The figures on Native-American students indicate that their absolute numbers in the population of Pennsylvania are low. Therefore, small increments in total college enrollment gains are expected. The data show that white students experienced modest enrollment gains since the 1998 figures, while blacks and all other minorities in the state of Pennsylvania either remained stable or declined in four-year college enrollment.

The (PDE) 1999 data that segments minority students by race and institutional category (Appendix D; Table 17) indicate that black students are over-represented in the state's public and private two-year colleges. All other minority groups in this state have a similar enrollment

profile with the exception of Asian students. Asian students are distributed in four-year colleges and institutions on a basis that is representative to their proportion in the state's total population. However, for in-state African-American students, the 14 Pennsylvania State Commonwealth Universities have representative numbers of these students that is only slightly below the enrollments in the state's community college systems.

The category of degrees conferred by race is included in this analysis in order to highlight the implications of transferability. The data yield interesting characteristics that are applicable to enrollment projections, enrollment planning, and for access. The data (Appendix E, Table 23) highlights four-year baccalaureate education for the years 1997-98. A review of minority group educational outcomes indicate that Asian students attained bachelor's degrees at a 61.6% rate, Hispanics, a 61.4% rate, Native Americans, a 56.4% rate, and African-Americans, at a 52.7% rate.

These data are enlightening from the standpoint that the population of African-Americans in the state of Pennsylvania is more than twice that of any other minority group. The data also indicate that these particular students might not be transferring, or being retained in four-year colleges and universities in direct proportion to their relative numbers in the state's population. The data also indicate that African-American students are not completing four-year baccalaureate degrees in direct proportion to their total enrollment numbers (PDE, 1997-98; Appendix E, Table 23).

3.3.7 Summary

Research Question #1 applies to this section of the research:

What degree of importance does administrative policy- and decision-makers in Pennsylvania's four-year public and private institutions of higher education place on providing access for minority college-age students?

The data-centered examination indicates that minority students are not enrolling in four-year colleges and universities in direct proportion to their total numbers in the population of the state of Pennsylvania. Further study and research is needed to assess what is influencing this phenomenon.

The section on preparation for higher education reviews literature from scholars in the field of elementary, secondary, and higher education to address the issue of equity and accessibility in higher education.

3.4 PREPARATION FOR COLLEGE

The purpose of this section of the study is to examine the scholarship related to minority student learning and achievement. When the issue of college entry is addressed, there are various reasons why minority students are, or are not gaining equal access to four-year baccalaureate education. This examination takes the long-range view of minority achievement and access by beginning with the education issues that lead to attaining the appropriate qualifications for four-year college entry.

3.4.1 Early Intervention

The review starts with an assessment of the recent work of Hugh B. Price, past President of the National Urban League of America. In his recent text, *Achievement Matters* (2002) he addresses issues of academic achievement for minority children and outlines the roles and responsibilities of their parents in the education process. This text is not presented as pure academic scholarship in education. The text was developed for academic and for popular reading. However, this text addresses many of the most important issues for the early years of education and achievement for minority children in American school systems.

The work of Hugh Price (2002) starts by making the distinction between what he terms the “achievement gap” and the “preparation gap” in the early education of minority children. Price contends that the emphasis in the education of these children is misplaced. Although educational research documents that there exists a significant achievement gap in the early education of minority children, the author views the “preparation gap” as being the more critical focal point.

The scholarship of Hugh Price (2002) places emphasis on education as the great equalizer in American society. His position, is, that education is the key to accessing opportunity and getting ahead in this country [America]. His thesis is validated by the assertion that, “the most educated one is, the least likely to be unemployed” (p. 3).

Price (2002) suggests several considerations for the early year’s education of minority children:

- a. Eighty-five percent of all jobs in contemporary society are skilled or professional. The bottom line is that one needs a solid education in order to succeed in the Information Age economy of the 21st century.

- b. Youngsters who can barely read by the fourth grade face a steep uphill climb the rest of the way through school and later in life (p. 2).
- c. The days of letting minority children view academic achievement as irrelevant, unimportant, “uncool,” or “acting white” are long gone (p. 3).
- d. Experts contend that parents are their first teachers.

Price notes that the vast majority of black children attend public schools. Therefore, “beyond doing what we must at home, improving public schools that perform miserably is the other key to boosting the achievement levels of children” (p. 5). Price (2002) submits that black and Latino 12th -graders in urban schools stack up about equally with white suburbanites in the eighth grade. In addition, those middle-class black students in integrated suburban schools generally lag behind their white and Asian classmates.

The preparation issue is refocused in the work of Jean Anyon (1981) who conducted research on the affects of social class and school knowledge. Both studies (i.e., Price, 2002) recognize the need for all students, regardless of social class, to have access to “quality-focused” (early) educational experiences.

Price’s (2002) work acknowledges that these achievement gaps are set along ethnic and economic lines in American education. His research presents an alternative but realistic view of the early childhood education of minority children. The author defines the preparation gap more specifically as:

It is the gap between what poor and minority children know vs. what they need to know in order to meet state academic standards, move from one grade to the next, and eventually graduate from high school. There is also that gap between what they can do and what they must be able to do in order to land good jobs and get into college and trade schools (p. 14).

This discussion of appropriate schooling outcomes and achievement substantiates what various other educational psychologists’ have found (Heyns, 1978; Anyon, 1981; Shumow,

2001; & Landgraf, 2002) in early minority childhood education. This “preparation gap” widens as these students move through elementary school. Price (2002) contends that the elementary school years are a defining experience for children that will heavily shape their lives all the way through adolescence and beyond.

In a classic study on the effects of school and learning outcomes, Barbara Heyns (1978) conducted an experiment in education that determined the effects of continued schooling on poor and minority children. Heyns (1978) conducted research that measured the amount of achievement that is lost from the previous school year in elementary and middle school children (In, Stark, 1992).

Heyns’ (1978) results provided strong evidence that schooling matters much more to some kinds of children than to others. Minority and economically disadvantaged students declined precipitously over the summer vacation based on the study, while the scores of more affluent children remained stable. What Heyns found means that, rather than merely maintaining differences children bring to school, schools greatly improve the academic situations of poor children (In, Stark, 1988, 1992).

When minority and economically disadvantaged schoolchildren were provided with supplemental summer learning activities, the results of the Heyns (1978) study indicated:

The single summer activity that is most strongly and consistently related to summer learning is reading. Whether measured by the number of books read, by the time-spent reading, or by the regularity of library usage, reading during the summer systematically increases the vocabulary test scores of children (p. 33).

Heyns’ (1978) findings also suggest that schools might be much more effective for minority and poor children if the school year was extended.

The issue of effectively educating low-income and minority children is not new social policy in America. In the year 1964, The Congress of the United States instituted, upon the

recommendation of the President of the United States, implemented the Elementary and Secondary Education Act (ESEA). The goal of the education reform initiatives contained in the ESEA (1964) was to effectively close what Price (2002), and others term the “preparation” and “achievement” gaps for economically disadvantaged and minority children. The objective was to reduce the disparity in educational achievement between these children and the more socially advantaged children in America.

Federally sponsored educational initiatives aimed at early-year interventions for minority children have over a 40-year history in the United States. The most popular of these initiatives has been the Head Start Program (Young & Exum, 1982). In the year 2003, a new debate is prominent in the U.S. Congress and in the Executive Branch that directs the Project Head Start educational policies to focus on early childhood learning activities versus childcare and social learning skills (USOE, 2003). The new policy focus targets academic preparation at the earliest levels of education for America’s underprivileged children (NCLBA, 2001).

The preparation debate has spilled over into the U. S. Congress concerning the spending of federal resources to improve minority and economically disadvantaged students’ achievement. The U.S. Congress appears to take the position that spending more money for compensatory programs has not guaranteed success, and that the federal government could use its resources wisely for overall education reform (NCLBA, 2001). Research studies from the U.S. Department of Education indicate that since 1966, the federal government has spent 321 Billion (in today’s dollars [2006]) to assist disadvantaged children.

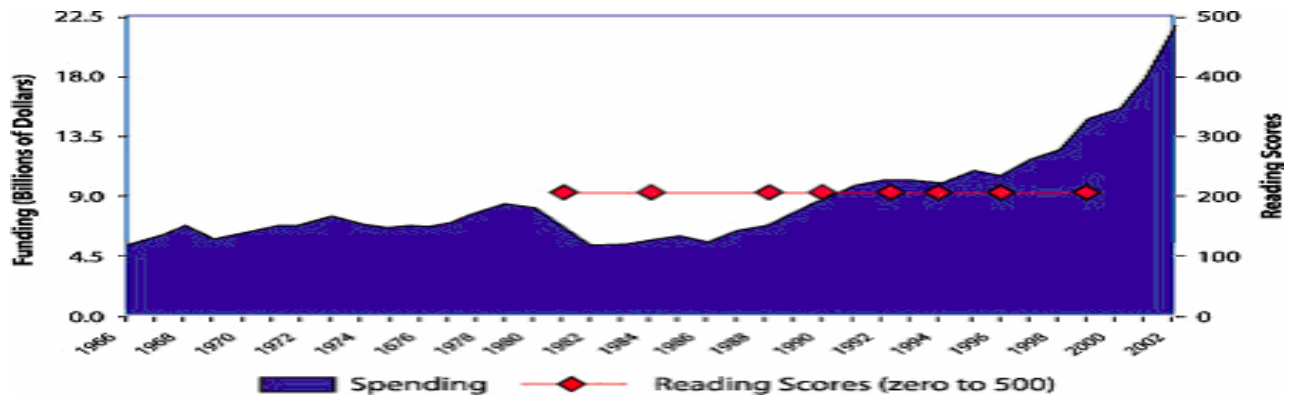


Figure 3-7 Documentation of Federal Spending on Education Programs

Source: www.nochildleftbehind.gov.

The USOE research (NCLBA, 2001) illustrates that despite increased spending:

- Less than one-third of our nation’s fourth graders read proficiently
- Reading performance has not improved in more than 15 years
- Less than 20% of our nation’s 12th graders score proficiently in math, and
- Among the industrialized nations of the world, our 12th graders rank near the bottom in science and math (NCLBA, 2001).

In the year 2001 and in an unprecedented bi-partisan effort by Congress the United States government instituted a major revision of the 1964 Elementary and Secondary Education Act (ESEA). The new education reform initiative is entitled, the *2001 No Child Left Behind Act* (NCLBA). The new federal education policies place emphasis on preparation and achievement in K-12 level schools. The *No Child Left Behind Act* holds our nation’s elementary and secondary schools accountable for effective learning and achievement outcomes. According to the review of the NCLBA of 2001 policies and statutes, all states must implement statewide accountability systems that are intended to:

- Set academic standards in each content area for what students should know,
- Gather specific, objective data through tests aligned with those standards,
- Use test data to identify strengths and weaknesses in the system,

- Report school academic performance and achievement to parents and communities,
- Empower parent's to take action based on school information,
- Recognize schools that make progress, and
- Direct changes in schools that need help.

<http://www.nochildleftbehind.gov/next//overview/overview.html>.

In the Commonwealth of Pennsylvania the NCLBA education reform policies are implemented through a statewide Pennsylvania System of School Assessments (PSSA) program. The purpose of the PSSA assessments is to evaluate how each school district is meeting its educational objectives for student achievement. The PSSA assesses the achievement development of pupils at levels, 5th, 8th, and grade 11. The results of the PSSA are used in various ways by the PDE, state funding sources, and by local education authorities [See Appendix H].

However, the NCLBA federal policies also ensure that state and local officials have the flexibility to find local solutions to local problems (NCLBA, 2001):

- Encourages using federal money to solve local problems, not to subsidize bureaucracies, and
- Principals and administrators will spend less time filling out forms and dealing with federal red tape. They will have more time to focus on student achievement.

However, there are several distinctions between the 1964 ESEA, and the 2001 NCLB Act, as noted from the research. For instance, in the year 1964 the reform policies under the ESEA focused more on raising achievement levels of economically disadvantaged students in America. Conversely, the NCLBA of 2001 is structured as a comprehensive plan that targets all

of the nation's students for improved educational achievement. In noting some further distinguishing characteristics of the 2001 NCLBA, the policy guidelines note that:

- It only funds curricula and teaching methods that are scientifically proven to work.
- Under the NCLBA, the federal government will invest in educational practices that research evidence has shown to be effective in improving student performance.

The NCLBA (2001) gives every parent the information, options, and freedom to get their sons and daughters out of failing schools. The research on minority student preparation and achievement is indicating that the NCLBA approach is the most salient means to address current education problems with this group. Past educational research also demonstrates that,

- 1) Many parents of poor and minority parents do not take full advantage of these innovative educational initiatives designed to assist their children; and,
- 2) The parents of minority and poor children might not receive the appropriate information and guidance on new educational programs and school district policies. Therefore, the lapse time for when these initiatives are most beneficial to minority and economically disadvantaged students varies disproportionately (Young & Exum, 1982).

In the state of Pennsylvania, a pertinent example of the effective use of NCLBA funding for improving the reading skills of low-achieving students can be found in an innovative education initiative entitled, the Classroom Plus Program (PDE, 2003).

The *Classroom Plus* initiative provides each family of low-reading achievement elementary level pupils (i.e., grades three to six with a \$500.00 (PDE, 2003) voucher/grant to supplement tutoring for improving their children's educational performance in reading and mathematics (PDE, 2003). The grants are awarded directly to the families of the student(s) and can be used for reading development, and for the tutorial programs of their choice. The participants must be reading at least one year below grade level on an approved standardized assessment that measures reading achievement in grades three through six (PDE, 2003). The

Classroom Plus voucher/grants are not income-bound, and might be utilized for private tutoring, or in state approved after-school academic programs for children.

Shumow (2001) found that there is a significant impact on improving educational achievement for children who attend after-school academic programs. Pierce and Vandell (1999) also demonstrated that academically at-risk children who attended after-school programs more frequently, as compared with children who attended less often, developed better work habits in their school classrooms, attended school more often, and endorsed less aggressive strategies to resolve conflicts with peers.

Educational research by Shumow (2002) further suggests that children from high-risk backgrounds have the most to gain from after-school programs in terms of educational opportunity. The research studies on the affects of extending the traditional school day for low-achieving children shows that this specific intervention strategy positively impacts academic improvement and promotes success in educational activities.

Price (2002) offers the following recommendations to the parents of minority and economically disadvantaged children:

1. Get an early start on making sure these children become good readers by reading to them from the time they are toddlers, and having them read to you as soon as they are able.
2. Be sure that they read for fun because this builds a love of learning and discovery through reading, and besides, practice makes proficient readers.
3. Establish appropriate routines at home, like creating quiet time for homework and recreational reading, and limiting the amount of television they can watch.
4. Visit libraries, bookstores, and book fairs with your children so that they can see that reading is important to you and that it should be to them.

One of the important elements that stand out in Price's (2002) recommendations for effective education interventions is that none of these practices will cost the parent's any significant amount of money.

However, Hugh Price (2002), and Majors & Jolliffe (2001a; 2001b) also suggest that since black, Latino, and Native-American youngsters usually lag way behind in school their parents must stay on the lookout against their children losing ground. Price (2002) presents some ways that the parents of these children should hold schools accountable, and implement some good family practices around education:

1. Given the tendency of black youngsters to slip backward around the third or fourth grade, you should be especially alert for any backsliding in these grades even if they did well in the early years.
2. Monitor each report card and make sure your child is performing at grade level or better. Ask to see data and test scores.
3. Talk frequently to your children about what is happening in class. Look for signs that they are extremely bored, disengaged, dropping out, or withdrawn from school.
4. Challenge any suggestions by the schools to place your child in special education. Insist on receiving a second opinion about whether the placement is necessary.
5. Keep your children from falling under the influence of friends and classmates who say achievement isn't important, and,
6. Seek assistance from relatives, and community support persons to invest in your child's education (Price, 2002).

The review of federal education policy clearly indicates that there exists an influential "camp" in the U. S. Congress who contend that preparation is the key element necessary for building and for sustaining minority children on the path of academic achievement (Burd, 2002). Educators, policymakers, and parents appear convinced that the early-years of academic achievement, enhanced preparation, quality of schools and school outcomes, and the use of

appropriate educational interventions will provide the impetus for success for minority children on the “road to higher education” in America.

3.5 REVIEW OF URBAN EDUCATION

A review of urban education is appropriate for this study because over seventy% of minority and low-income students attend public schools and reside in urban areas (*Beating The Odds, II*; 2002). This cohort will represent the largest potential and future minority students for higher education in states that have urban centers. This examination seeks to review some of the research literature on the quality of education in urban-centered school systems. The objective is to evaluate how these particular school systems might affect access to four-year baccalaureate-degree higher education for minority students. The state of Pennsylvania has two large urban school districts that are included in the national study, *Beating the Odds, II* (2002).

In a 2002 summary report on the status of urban school districts, Casserly found that test scores are on the upswing in these school systems. The author is referring to achievement assessments for the K-12 level. The annual city-by-city analysis, conducted by the Council of Great City Schools, also found that some of the urban districts are narrowing the achievement gap between white students and their African-American and Hispanic peers on state tests. The report is most encouraging because it highlights significant improvements in mathematics (Reid, 2002).

The *Beating the Odds, II* project studied the test scores of 57 urban districts in 35 states examining gains in scores from the first year their state assessments were administered to the

year 2001. This study included two of the largest urban school districts in the state of Pennsylvania; Philadelphia, and Pittsburgh.

Casserly (2002) acknowledged that despite the gains, many of the urban districts' test scores fall below state and national averages (Reid, 2002). The legislative mandates for these urban school district's to improve is contained in the federal language of the 2002 No Child Left Behind Act, according to the report.

The Council of Great City Schools published its 2002 study, *Beating the Odds II* to give the nation a look at how inner-city schools are performing on the academic goals and standards set by the states. This research lists some of the following conclusions:

1. The nation does not have an assessment system that allows for national comparisons.
3. Not all gaps are closing, but the data indicate progress, and
4. Every effort was made to report achievement data in a way that was consistent with the new, *No Child Left Behind Act* (p. 5).

The report reviewed several categories for analyses. For this examination, the racial/ethnic gaps in student scores on state assessments were also reviewed. Some of the key findings were:

1. Mathematics achievement has improved in urban schools.
2. Gaps in math achievement in urban schools may be narrowing.
3. More urban school districts showed math gains in 2001 than in 2000.
4. Urban school achievement remains below national averages in math.
5. Reading achievement in urban schools has improved on state tests.
6. Gaps in reading achievement in urban schools may be narrowing.
7. More urban school districts showed reading gains in 2001 than in 2000.
8. Urban school achievement in reading remains below national averages.

The (2002) report acknowledges that big-city systems are different from other schools. In addition, they serve a demographically different student body. The (2002) report indicates that the contextual differences are significant and should be considered in any study of urban school achievement. The Council (2002) report identified three broad factors that warrant attention in future policy studies about improving achievement in these school systems:

- **Factor 1:** The nation cannot raise achievement across the board without paying attention to the significant percentage of students enrolled in urban schools.
- **Factor 2:** Students in urban schools are more likely than other students to be African-American, Hispanic, or Asian American; to come from low-income families; and to come from non-English speaking homes.
- **Factor 3:** Urban schools often lack adequate financial resources. (BTO II, 2002).

The Report indicates; In the category of **Percentages of Cities with gains in Math**; cities whose math scores improved faster than the state in *all* grades tested included Birmingham, Broward County (Ft. Lauderdale), Long Beach, Philadelphia and Pittsburgh (p. 10). The results demonstrate positive outcomes for the two Pennsylvania urban school districts. The data indicate that only five of 57 cities showed this improvement in math across all grade levels.

- In the category of **Percentage of Cities with Gains in Reading**, cities whose reading scores improved faster than the state in *all* grades tested included Atlanta, Birmingham, Dallas, Houston, **Philadelphia**, and Rochester (p. 21).

The City of Pittsburgh is included in the second category of cities whose reading scores improved faster than the state in *half or more* of the grades tested. Twenty-five of the 57 urban districts that were evaluated are included in this category. Based on the results of the city-by-

city analysis of achievement in urban school districts the overall achievement outcomes appear to be promising for the state of Pennsylvania.

Presented are some demographic characteristics of students that were enrolled in our Great City Schools aggregate:

- Students in the Great City Schools are far more likely to come from low-income homes than the average students nationally.
- In the 1999-2000 school years, 62.4% of students in the Great City Schools were eligible for a free lunch subsidy, compared with the national average of 37.7%.
- About 26.8% of the nation's free lunch eligible students are enrolled in the Great City Schools.
- Some 92% of the nation's Great City School systems have poverty rates (free lunch eligibility) that are higher than their states.
- The Great City Schools serve a higher proportion of English language learners than the average school system across the country.
- About 70% of Great City School students are African-American or Hispanic, compared with 33% nationally.

The data are reported in Appendix H present summary results from the Pennsylvania System of School Assessments for the years, [1996, base year] 1999 to 2001 (U. S. Department of Education, National Center for Education Statistics [NCES]). The statistical profile illustrates the aggregate education data for the cities of Philadelphia and Pittsburgh; Pennsylvania's two major urban school districts (*Beating the Odds II*, 2002, pp. 168-171).

In the state of Pennsylvania, over 70% of minority students reside in center-city areas and attend urban schools (NCES, 2002). This group represents the cohort of students that are moving toward higher education in the state. Their progress and educational attainment in these urban-based school systems needs to be monitored all the way through to higher education in order to identify progression, and regression of learning achievement. However, overall, the

research on educational reform in urban school systems is to date, inconclusive. Moreover, the summary conclusions of the national studies on urban education indicate that the quality of the educational experience in urban school systems needs better accountability and still requires significant improvement (NCLBA, 2001).

3.5.1 Policies of *The College Board*

The College Board (CEEB) represents one of most influential organizations for developing education policy in the United States. *The College Board* also sponsors the Educational Testing Service (ETS). The ETS administers the largest battery of college entrance examinations (e.g., Scholastic Aptitude Test [SAT]) in the United States and abroad.

In this study, it is recognized that policy positions on access that are forwarded by *The College Board* (CEEB) has the full attention of the United States Congress. The organization also sponsors significant research in all aspects of minority student achievement and learning. This review will also highlight various policy positions of the (CEEB) on education reform and its implications for minority student access to higher education.

The review opens with the testimony before the U.S. Congress by Kurt Landgraf, Chief Executive Officer of the Educational Testing Service (ETS). Landgraf (2001) outlines the position of the ETS and The College Board on policy (March 8, 2001). He states that, “it is important to understand the value of testing and the vital role it should play in education reform” (p.1). And, that, “test results can also provide useful data to guide sound policy decisions.” His direct testimony from the hearings is summarized, “...I believe the President’s education reform proposal, “No Child Left Behind”, is the right thing for our country, and it is doable...” (p. 3)

Landgraf (2001) further states that, “it is a misuse of tests when nothing is done to change poor results” (p.4). Landgraf is referring to increasing accountability in closing the achievement gap between white and minority students in the United States.

The ETS (2001) defines the “achievement gap” as the difference in school performance tied to race or ethnicity.” Landgraf (2001), notes that this gap does not appear to be closing. He cites data over a period of thirty years from the National Assessment of Education Progress (NAEP) which shows that achievement among students overall has gradually increased in math and remained about the same in reading and science (p. 5). Nevertheless, he notes that the gap between white and black students has been widening over the past 10-15 years in mathematics and reading in middle and high school. The gap between Hispanic and non-Hispanic students also persists, according to Landgraf’s testimony (p. 5). The policy position by the ETS is to secure the data necessary in order to close the disparities (p. 5).

Concerning educational reform policy, the ETS is in direct agreement with the No Child Left Behind Act’s (NCLBA) focus on securing school-by-school report cards with mathematics and reading test results broken down by ethnicity, gender, poverty, disability, and English proficiency. These results are then linked to school factors such as, a) time on task, b) teacher qualifications, c) preparation and placement, and d) Alignment of curriculum and standards (pp. 5-6). These practices, it is submitted, will help educators diagnose problems and design remedies to improve student achievement across all groups (p. 6).

The policy positions on reform that were forwarded by the ETS are extensive. However, they each have important implications for minority student access for higher education. The ETS (2001) report presents strong policy positions concerning the disparities in minority and

white students' achievement, "It is unconscionable that in the United States of America... we have a test score gap" (p. 6.).

It appears that the policies on educational reform by the States, the U.S. Federal Government, and the Educational Testing Service (CEEB) are in direct relation to the NCLBA of 2001. The review of federal policy clearly indicates that testing, using the test results, and accountability in standards of achievement is the wave of the future in education reform. Based on the research, it appears that these education policies might benefit minority students in a very positive way.

In contrast, the National Association for the Advancement of Colored People (NAACP) opened its national convention by forwarding policies positions that were aimed directly at fighting the stubborn academic disparities that persist between white and minority students in public schools (Cobb, 2002). The research cited by the nation's preeminent civil rights organization noted that,

Educators and sociologists do not agree on a single reason for the academic gap, but most tend to believe that the socio-economic differences that still exist between a majority of black, Hispanic and white students are key (Cobb, p. 2.).

The NAACP cited evidence from the year 2000 National Assessment of Education Progress report where 74% of white students met the "basic achievement" standard in 12th grade mathematics, while only 31% of black students met basic achievement levels. The NAACP appears to have shifted its focus to dealing with the achievement gap as the largest civil rights problem in education today.

Kurt Landgraf (2002) and others contend that policy on education reform should focus on three critical factors that will promote success; 1) a substantial commitment of resources, 2)

sufficient time, and a 3) great and sustained effort to fix problems related to achievement in the nation's students.

In an Opinion Dynamics Survey (2002), the ETS found that Americans overwhelmingly back requiring states to annually test students to determine if standards are not being met (p. 1). Thus, the ETS backs the education reforms submitted under the NCLBA that calls for high standards, strong accountability, and annual standards-based assessments. Landgraf (2002) submits that,

The challenge before us is to muster the political, moral, and professional will to improve public education. We must provide the resources to help teachers teach and help students to learn.

The research on minority student access is demonstrating that a national movement is underway that will catapult the next generation of minority students toward higher education with improved skills and academic proficiencies.

The CEEB programs provided further research on minority student access and achievement in the nation. In a report by Vernez and Krop, (1999) *Projected Social Context for Education of Children: 1990-2015*, National Task Force on Minority Achievement (CEEBA), the researchers present an analysis of possible changes in the racial/ethnic composition of the student-age population in the United States.

Vernez and Krop (1999) disaggregated the data by social class. They found that there is a strong relationship between students' socio-economic status (SES) as measured by family income and parent education level. They assert that high SES students tend to be much more successful academically than low SES students, not only in the United States, but also in all industrialized nations.

The Vernez and Krop (1999) research also concluded that African-American, Latinos, and Native Americans have a much higher percentage of low SES students and much lower percentage of high SES students than is the case for the non-Hispanic white majority and Asian-Americans. They assert that there continues to be large within-social-class differences in academic achievement among major racial/ethnic segments of the American population. This is the case, they state, whether social class is defined in terms of family income or parental educational level.

The Vernez and Krop (1999) study suggests that, if the number of Latino immigrant students from families in which the parents have little formal education grows as rapidly as indicated by the projections (1990-2015), it will probably be necessary to make large investments over the next two decades to strengthen elementary and secondary schools serving these youngsters.

This policy recommendation has implications for the state of Pennsylvania which has experienced a rapid growth of the Hispanic and migrant populations in the 1990-to-2000 decade (U.S. Census, 2001, U.S. Statistical Abstract, 2001).

Finally, the Vernez and Krop (1999) report summarizes by issuing these projections, if the number of middle-class African-American and Hispanic students grows substantially in coming years, working to improve schools that many of these students attend could be an increasingly important means of raising the overall achievement levels of these groups (p. 9).

Moreover, they submit, "Unless there is a corresponding expansion in the size of the selective sector of colleges and universities, admission competition at these institutions could intensify considerably" (p. 9).

The CEEB (1999) sponsored a companion report, *Priming the Pump: Strategies for Increasing the Achievement of Underrepresented Minority Undergraduates* by, Gandara and

Maxwell-Jolly. This report underscores information on trends in minority achievement that are worth noting in the literature review. Gandara and Jolly (1999) present the fact that in the United States today, the white population is shrinking relative to non-white groups and the dramatic increase in ethnic minorities is felt disproportionately among the school-age population (p. 5). They note that the Latino population is the fastest growing, with a median age in years of 26.7 in 1998, and its fertility rate, which is the highest of all major groups, combined with sustained immigration, means that the Latino population will continue to grow at a disproportionately high rate in the coming years.

The Gandara and Jolly (1999) study is examined for the following issue,

“Students from minority backgrounds remain seriously underrepresented at the higher academic achievement levels. They form the largest portion of students who drop out of high school and who are, therefore, unprepared to continue their education beyond the secondary level” (p. 6).

The authors’ of the report characterize this phenomenon as the “pipeline problem” and is referred to as “leakage” in the pipeline.

Gandara and Jolly (1999) concluded that, “the loss of minority students to the educational system begins in the secondary schools” (p. 6). Gandara and Jolly presented statistics from the National Center for Education Statistics (NCES, 1997) that showed; the high school drop-out rates for whites, as 8.6%, 12.1% for African-Americans, and 30% for Latino and Native-American students in the 16-to-24 year old bracket.

The literature that is highlighted in this section indicates some social dilemmas for educational reform, and for minorities. There is a need to fix the problems of minority achievement, high school completion, and promote successful college entry.

The next section examines some of the major education initiatives undertaken past and present, to address the problem of improving minority participation rates in post secondary education.

3.5.2 Pre-College Programs

This section examines some of the major educational programs and strategic initiatives that have been undertaken to prepare minority- and economically disadvantaged students for successful college entry.

The purpose of pre-college programs is to “level the playing field” for students who aspire to higher education. Pre-college programs have a dual purpose of remediation/readiness or advanced preparation. Based on the selectivity factors of a specific institution, pre-college programs are necessary to bring individual students up to its academic standards. Pre-college programs are appropriate for all students, and usually focus on the academically under-prepared and first-generation students (Cross, 1976, 1979; Jones & Watson, 1990; Oesterreich, 2002a, 2002b).

One the nation’s first attempts to provide equal access for college entry for low-income and disadvantaged students in America was sponsored under the U.S. Elementary and Secondary Act of 1964 (ESEA), (Young & Exum, 1982). Under the ESEA, three specific pre-college programs are mandated. These projects are designated as the TRIO programs. The pre-college components of the TRIO programs are Project Upward Bound and the Talent Search program (Exum & Young, 1981). The third element of TRIO consists of the Student Support Services (SSS) program for higher education institutions.

These federally sponsored programs were designed to provide compensatory education and college preparatory assistance to low-income and economically disadvantaged students (Young, 1980; Exum & Young, 1981; Young & Exum, 1982).

The purpose of the Project Upward Bound program is to assist secondary-level students' gain the skills and motivation necessary to pursue, and to matriculate successfully in a postsecondary course of study (Exum & Young, 1981). These programs operate year-round academic components that are housed in institutions of higher education. The purpose of the education model was twofold; 1) It was necessary to provide a means to bridge the gap between high school and college for first-generation and low-income students; and, 2) Participation in the program presented deliberate attempts to create motivation for higher education by providing participants with access to the college environment while still in high school (Young & Exum, 1982). Upward Bound programs are bound by federal accountability through standardized testing, achievement development, and the successful college entry of its participants (Young, 1980).

The ESEA provides for a companion program to the Upward Bound program that is called Talent Search (USOE, 1965). Talent Search programs are pre-college entities that can be based in a community setting, or in a high school environment. The goal of the program is to provide education-related services to economically disadvantaged students for college searches, financial aid assistance, college visits, and counseling for postsecondary entry (USOE, 1965).

The third elements of the TRIO programs were designated as Student Support Services (SSS). The SSS program is not pre-college component; however, the purpose of this program is to bridge the gap between high school and college for academically and economically eligible participants (Terenzini, et. al, 1996). An extensive array of campus-based support services is

provided for the program participants upon higher education entry. For example, at the University of Pittsburgh this academic support model is placed under the University Challenge for Excellence Program (UCEP).

Federally sponsored programs under the ESEA of 1964 are not color-bound. The common characteristic in the TRIO programs is that they determine eligibility through family income status. Historically, these programs have not been subject to public controversy because of this policy. Secondly, these programs were bound by quantitative accountability for education outcomes. These programs are subject to bi-annual federal review and must be meeting their mandated objectives for outcomes and evaluative review (Young, 1980; Young & Exum, 1981, Young & Exum, 1982).

Another example of a federally sponsored pre-college model is the GEAR UP program. This education model is unique in the respect that it matches colleges and universities in partnerships with local high- and middle schools that serve minority and low-income students. The GEAR UP program is popular in the Congress of the United States because it focuses on preparation at earlier levels than the TRIO programs (Burd, 2002). The GEAR UP pre-college model starts with the middle-school level of (e.g., seventh grade) education.

However, Exum and Young (1981, 1982) submit that, no matter how much these types of compensatory education models promote academic success among the economically needy participants; they only service a relatively small number of these students in need of pre-college preparation.

Presented are several examples of successful pre-college education models that have withstood the test of time and have produced significant positive outcomes:

1. A Better Chance Program
2. The GEAR UP Program - (De-funded, 2004).
3. Upward Bound Programs for Migrant Children (TRIO)
4. Upward Bound Math and Science programs (TRIO)
5. Project Upward Bound (TRIO) – (De-funded, 2004)
6. Talent Search Programs (TRIO) – (De-funded, 2004)
7. Educational Opportunity Centers (EOC); (TRIO)
8. INVESTING NOW – University of Pittsburgh
9. The Ronald E. McNair Program for Graduate Minority Students (TRIO), and
10. Grow Up Great – Pittsburgh National Bank’s 10 year, 100 million-dollar commitments to improving early childhood education.

The state of Pennsylvania, and particularly within its State System of Commonwealth Universities, utilizes the comprehensive ACT 101 summer program component for pre-college preparation (Campbell, 2001). The distinction in the ACT 101 summer model is that they are specifically designed as “bridge programs” (Terenzini, et., al, 1996) that serve to upgrade the college-readiness skills of its admitted first-year participants.

Heather Oesterreich (2000a) also presented some characteristics of effective urban college preparation programs. She notes that college preparation programs for minority youth living in low-income neighborhoods help them develop the skills, knowledge, confidence, and aspirations they need to enroll in higher education. Oesterreich (2000a) also suggests that pre-college programs that offer comprehensive approaches and combine a variety of services have the largest impact on college access for minority youth in low-income neighborhoods.

Oesterreich (2000a) also found that the most effective college preparation programs are of substantial duration and focus on “readiness” rather than “remediation.” She submits that

most federal and state programs should require pre-college services to begin no later than the seventh grade and continue through to the twelfth grade [See, GEAR UP]. In terms of good educational strategy, Oesterreich (2000a) stated, “the key element of a college preparation program is its ability to provide students with the information and experiences necessary for postsecondary attainment.”

Educational researchers, that include Oesterreich (2000b) and others, determined that there is a great need to develop pre-college programs for minority youth. She (2000b) notes that the number of Asian American, Latino, and African-American students in higher education has increased, but not in proportion to the increase in these groups at large in the United States. Oesterreich (2000b) stated that the gap between the number of white students and the number of African-American and Latino students has actually grown, with socio-economic status the greatest determinant of college enrollment and persistence for all students.

The Oesterreich (2000a, 2000b) research concludes that college preparation must begin as early as possible. In addition, she notes that college preparation programs that work to bridge the racial and economic gaps in college admittance, attendance, and graduation rates must recognize the multiple factors influencing their efforts and on students’ lives.

Longitudinal research conducted on federal programs and for university-centered pre-college programs indicate that the long-term outcomes are positive and appropriate for low-income and minority students’ to improve access to higher education.

The following section addresses the transition step between two-year and four-year higher education access for minority students. Its problems, positive aspects, and implications for transferability were examined.

3.5.3 Community Colleges and Transferability

Community- and two-year colleges provide another transition step for minority students aspiring to four-year baccalaureate degree education. Current research data indicates that 66% to 70% of minority college-bound students enroll in two-year public- and private institutions (PDE, 1999, 2000, & 2001; CEEB, 2002; *Chronicle of Higher Education*, 2001).

This review examines the implications of college choice behavior for minority students in relation to their rates of transfer to four-year colleges and universities. Research studies indicate that multiple phenomena are affecting the minority student two-year college enrollment and transfer process.

Paulsen (1990) noted that over the previous thirty years colleges have developed two basic market-oriented desires. He states that colleges want to plan and forecast their enrollments more effectively, and they want to influence the college-going decision-making process of desired students. Research by Riesman (1980) also indicates that the greatest markets for community colleges are its urban consumers.

Paulsen (2000) submits that general economic recessions can stimulate enrollment by making job market opportunities for college graduates relatively superior to non-college graduates [See, Bowen, 1978]. Paulsen (2000) then asserts that, when conditions in the college job market deteriorate, enrollment tends to favor colleges emphasizing professional or vocational curricula. However, he further posits that, when job market opportunities increase, enrollment tends to favor colleges emphasizing traditional liberal arts and sciences curricula (Paulsen & Pogue, 1988).

The research on college choice behavior relates to minority students in several ways. Paulsen (2000) determined that studies of college choice behaviors has shown a propensity to

estimate the effects of institutional and student characteristics on the probability that a particular individual will choose a particular college. Paulsen (1990) and Riesman (1980) agree that understanding the enrollment effects of such characteristics can help enrollment managers tailor and target their college's marketing mix of programs, prices, and places to those students possessing characteristics similar to those who most often matriculate at their college.

Additional research by Manski & Wise (1983) has shown that students are now about equally sensitive to changes in the major parts of college cost: tuition, room and board, commuting, financial aid, and foregone earnings. Manski & Wise (1983) conclude that students will pre-select institutional categories across all levels of institutional selectivity, cost, and distance from home.

For minority students however, the goal for transferability is to obtain the baccalaureate degree. According to Richardson and Bender (1986), an implicit assumption is that students who begin at an open access institution will if successful, be able to move to other institutions providing different and more advanced opportunities.

Richardson & Bender (1986), and Cross (1976, 1979) note that larger numbers of urban minorities turn to the community college rather than the university as their point of access to higher education. Cross (1976), termed these urban learners as the "New Students" to higher education who have enrolled in postsecondary institutions the universal access era of the 1970s.

Cross, (1976, 1979) and Richardson and Bender (1986) assert that these (i.e., "New") students usually come with severe academic deficiencies, ranging from basic skills deficits to limited or inadequate math and science backgrounds. Research from these studies determined, that because of the educational backgrounds of minority students, they are more likely to be advised to enter a vocational program rather than a transfer program.

However, Richardson and Bender (1986) assert that the preponderance of the evidence suggests that students who complete the two-year academic programs at the community college perform reasonably well after they transfer.

Richardson and Bender provide the following policies and activities to promote “best practices” in the community college transfer process:

- Provide scholarships for transfer students
- Reserved dorm space for mid-year transfers
- Coordination of Veteran’s benefits
- Dual enrollments
- Strong articulation agreements

Richardson and Bender (1986) note the following strategies that are being implemented in urban community colleges:

- Offering university courses on community college campuses
- Concurrent enrollment at both universities and community colleges
- Improved orientation programs, and
- Utilizing peer counselors, mentors, special courses, and outside speakers as role models who assist students in defining career objectives and developing educational plans designed for the students’ achievement.

Finally, in examining the context of the community college pathway to the four-year baccalaureate degree Sanoff (2003), of the Lumina Foundation provides some enlightening statistics; these data are cited from the ACE Report titled *Access and Persistence* (2002):

Fifty-seven percent of students who started at four-year institutions in 1989-90 with the intention of earning a bachelor’s degree had earned that degree by 1994. In contrast, only 8% of freshmen at two-year institutions in 1989-90 had earned bachelor’s degrees by 1994.” Researchers have found that students in community

colleges are far less likely to earn a four-year degree than those who start out at a four-year college (Lumina, 2003, p.16)

3.5.4 Summary

The purpose of this section of the research was to address the issue of college preparation. The objective was to develop the “pipeline-to-college approach” and follow the educational achievement and preparation of minority students through the elementary and secondary education systems.

When early intervention education strategies for minority children is examined the research of Majors and Jolliffe (2001a, 2001b), and Price (2002) demonstrate that there is exists a regressive achievement phenomena for minority youth that educational psychologists’ characterize as, “the fourth grade syndrome.” This represents the grade level (i.e., 4.0) where minority children’s academic achievement usually starts to decline.

Other educational theorists agree that the problems of achievement persist for minority students, incrementally, and throughout the 4.0- to- 12.9 educational experiences when they lag behind their peers in the elementary-level basic skills. This phenomenon has long-range and serious implications for this population to gain equal access to generally admissible, selective, and competitive four-year colleges and universities.

In this study, research question #2 addresses the issue of preparation for four-year college attainment:

What degree do administrative policy and decision-makers in Pennsylvania’s four-year public and private institutions’ of higher education perceive that preparation for postsecondary education directly or indirectly influence minority student access?

The following section of the literature review on minority access will highlight the element of admissibility for minority students in four-year baccalaureate-degree education.

3.6 ADMISSIBILITY FOR HIGHER EDUCATION

3.6.1 The Lumina Studies on Higher Education Access

The Lumina Foundation studies on *Unequal Opportunity: Disparities in College Access Among the 50 States* (2002) notes that “accessibility” for all colleges requires two components: admissibility (whether a college admits typical college-bound students in that state) and affordability (whether such students can afford to attend). The report states that, the extent to which accessibility varies among states is more often a function of whether colleges are affordable than of their admissions criteria.

The Lumina Studies national project also provides a good foundation for defining admissibility. The Lumina (2002) report defines institutional admissibility in terms of the types of students an institution enrolls relative to the average preparation of the students in that state as measured by standardized test scores. Further, the report states, “the fundamental question of admissibility is the extent to which different institutions within a state admit typical college-qualified students from that state” (p. 11).

Concerning the college admission of any traditional-age prospective student, the following Lumina (2002) research study finding is appropriate:

...A student’s academic preparation is an important factor influencing which types of colleges that student is able to attend. Even when high school graduates have both the desire and the financial resources to attend college, those who did not complete a rigorous program of college preparatory courses or who received

poor grades are unlikely to gain admission at many schools. At the other end of the spectrum, highest-achieving students have a wide array of options (p. 11).

The definition of admissibility as set forth by the Lumina report (Kipp, 2002) is conceptually meaningful to this research examination for several reasons. An explicit assumption in the examination of minority student access makes this point as transparent as possible; in American higher education, “there exists no institution that refuses admission to qualified students based on race status.” The converse is more probable; colleges and universities are in general engaged in stiff competition for the academically qualified minority student.

The Lumina Studies (2002) research notes that the starting point for determining the admissibility of each institution is its self-designated selectivity rating. In this national survey, the institutions in each state were then divided between those that were generally admissible for average college-qualified students and those that were not (See Appendix F). In the college rankings and admissibility profiles, the average Scholastic Aptitude Score (SAT) was calculated between the 25th percentile and 75th percentile for that particular institution (Kipp, et. al., 2002; Astin, 1971). This measure defined general admissibility.

The Lumina Studies (2002) report notes that a state’s community and technical college system can represent the core of admissible public institutions. In this comprehensive national profile of colleges and universities, the state of Pennsylvania ranks high, in relation to the large number of open-admission, public community colleges. For the state of Pennsylvania in particular, the Lumina (2002) report also notes that,

Seventy-three of the 104 four-year colleges and universities are private institutions. All of its 33 public two-year institutions are generally admissible, but just 55% of its public four-

year and 33% of its private four-year institutions are. Consequently, only 57% of all its institutions are generally admissible.

The Lumina (2002) report shows that 50% to 74% of public four-year institutions in Pennsylvania are generally admissible, and 100% of its public and private two-year colleges are generally admissible. In this report it is important to note two specific items, 1) the report refers to average students qualified for admission based on the profile of overall profile college-bound students of that particular state, and 2) it utilizes the average SAT scores of students in that state for its anchored reference point for evaluation of admissibility.

The Lumina (2002) report also shows that nearly 80% of recent high school graduates and almost all independent students who enroll in college attend an institution in their home states

3.6.2 Standardized Testing

Chenowith (1998) reviewed data from a Mellon Foundation study that assessed the SAT scores achievement of African-American students (e.g., this group is by far the largest minority cohort in the state of Pennsylvania; U.S. Census, 2000). The Mellon study noted that only about 5,000 of the roughly 224,000 students who score 1200 or better on the SAT are African-American. The Mellon Foundation research is concerned about the profiles of these high-achieving African-American test-takers.

The Mellon Study (1998) found that high-scoring African-American students have fewer advantages than their white counterparts do. Moreover, that they are more likely to come from families with lower incomes and with fewer college degrees than whites with similar scores are. The report states that,

Those charged with selecting entering classes for prestigious colleges and universities need to look beyond the numbers, and students' SAT scores, to understand the challenges that they may have faced in becoming top performers (p.4).

Presented are some of the key findings from the Mellon Foundation study:

- African-American students who score high on the SAT come disproportionately from the South, from private Catholic schools, from the suburbs, and from families with less income than their white counterparts.
- African-American students who score high on the SAT tend not to participate in non-academic extra-curricular activities.
- African-American students who score high on the SAT take rigorous course work. Most take calculus and even more take honors English.
- On the average, African-American students who score high on the SAT live in neighborhoods with higher percentages of poor children, single parent households, adults without college degrees, high school dropouts, and non-English speakers than their white counterparts do.

The Mellon study also found that although the vast majority of African-American students with high test scores attend public school they represent only 4% of the African-American males and 3% of African-American females attending public schools. The Mellon Study (1998) seems to indicate that there is a correlation between attending private and catholic schools and scoring high on the SAT. The Mellon Foundation study also noted that African-Americans with high test scores also apply to slightly more competitive schools than their white counterparts.

In the competition to recruit high achieving college-bound minority students, it is also important to take note of the tendency for the high achieving, and high scoring African-American students to pursue, and to attend out-of-state colleges and universities (Young, 2001).

The Mellon Foundation (1998) report concludes that, “because the pool of high scoring applicants is so shallow, colleges and universities have a clear stake in improving blacks’ pre-college preparation” (p. 6).

In the discussion of diversity-focused admissions procedures and evaluation, there is an alternate view of the minority access and standardized testing issue (Jackson, 1998). In a report published in *The Journal of Blacks in Higher Education* (JBHE, 2002), the racial scoring gap between minorities and white students was examined. This evaluative study found that,

... In the 12-year period between 1976 and 1988, the black-white scoring gap on the Scholastic Assessment Test (SAT) closed significantly. The improvement in black scores was so strong that some educators predicted that within a generation the black-white gap would disappear altogether.

The review goes on to state, “since 1988 the racial gap in SAT scores has become wider, and there is no compelling evidence that any improvement is in the offing” (p. 8).

The JBHE (2002) report states that in 2002, the average black (i.e., national) score on the combined math and verbal portions of the SAT was 857. The mean white score on the combined math and verbal SAT was 17% higher at 1060. The report notes that the major factor in the SAT racial scoring gap is family income. There is a direct correlation between family income and SAT scores (CEEB, 2002). The JBHE (2002) report notes that for both blacks and whites, as income goes up so do test scores.

Many of the factors that were described in the JBHE (2002) study help to explain the racial scoring gap on college placement exams. Presented are some elements from the report that might prove meaningful:

1. Clearly, one of the main factors is that black students across the board are not being adequately schooled to take the tests.

2. Public schools in many neighborhoods with large black populations are under-funded, inadequately staffed, and ill equipped to provide the same quality of secondary education as is the case in predominantly white suburban school districts.
3. Data from The College Board confirms that black students who take the SAT have not followed the same academic track as white student.
4. Black students who study hard are often the subjects of peer ridicule. They are accused of “acting white” by other blacks. This so-called “ghetto-chic” in the form of peer pressure to shun academic pursuits undoubtedly has a dragging effect on average black SAT scores.
5. Even middle-class blacks tend to be brought up in segregated surroundings. They are not taught the pathways and modes of thinking that are embedded in white culture and reflected on standardized tests. Black families that urge their children to go to college are often first-generation college graduates.
6. School administrators and guidance counselors often believe that black students are less capable and less able to learn. They routinely track black students at an early age into vocational training or into a curriculum that is not college preparatory and,
7. African-Americans students tend to score lower than any other American minorities on the standard college placement exams.

Astin (1971; 1993a, 1993b) submits that colleges and universities are certain to review quantitative data for selectivity factors and for the institutional fit of its student population.

The JBHE (2002) report further asserts that,

It is important to note how these test scores will affect African-American higher education in the event that the current effort to ban race-sensitive admissions at colleges and universities becomes standard practice at all institutions of higher education. Under an admissions system in which race can no longer be used as a positive factor in the admissions process, standardized test scores will almost certainly become a more important component in deciding who is admitted and who is rejected at our leading colleges and universities.

The JBHE (2002) report concludes that, “the latest statistics on standardized test scores for college admissions show clearly that if race-neutral admissions policies are applied nationwide, blacks will be almost totally excluded from admission to the nation’s highest-ranked colleges and universities”.

In a summary examination of the research on standardized testing, and minorities in the United States, Christopher Jencks and Meredith Phillips (1998) provide an alternative analysis on the issues. Jencks and Phillips found that:

- IQ and achievement scores are sensitive to environmental change.
- Black-white differences in academic achievement have also narrowed throughout the twentieth century, and
- When black or mixed-race children are raised in white rather than black homes, their pre-adolescent test scores rise dramatically (p. 2).

This 1998 research conducted (i.e., Jencks & Phillips) by the Brookings Institution concluded that, “Reducing the test score gap is probably both necessary and sufficient for substantially reducing racial inequality in educational attainment and earnings” (p. 3)

The (1998) research conclusions on the affects of testing also contradict the conclusions in *Inequality*, 1972 that argued that reducing cognitive inequality would not do much to reduce economic inequality (p. 3). Jencks now contends that the reasons for this are that the world has changed. The 1998 study found that for minorities with test scores at, or above the national median, their incomes rose from 62% to 96% of the white earnings average in the United States.

3.6.3 Recruiting Minority Students

Present and future trends in population growth (Statistical Abstract of the U.S., 2001) and for participation rates in higher education reveal that minorities in the United States are a dramatically increasing, but seriously undereducated segment of society (Astone & Nunez-Womack, 1990).

This section reviews some of the implications of pursuing a diverse student body by colleges and universities and the role of leadership in this process. The majority of America's 33,000 colleges and universities (Peterson's Guide, 2001) have affirmative action plans for increasing diversity and improving access to higher education for minority groups.

In the modern era, the post-WW II wave of equal opportunity in higher education commenced with the Civil Rights Act of 1964, the 1964 ESEA, and with the Higher Education Acts of 1965, and 1966 (Preer, 1981). Social policy dictated that the appropriate funding and resources for students, and to higher education institutions, would be provided for equal opportunity and mass education (USOE, 1965; Jencks & Riesman, 1969, 1977). Most of the social policy initiatives for equal opportunity education were an integral part of President Lyndon Baines Johnson's, Great Society's War on Poverty federal programs.

According to Astone and Nunez-Womack (1990), both access to higher education for minorities and institutional commitment to diversity is important to successfully recruiting minority students. Astone and Nunez-Womack (1990) assert that the institution's primary role in the recruitment of minority students begins with organizational integration of programs aimed at diversity and strong institutional leadership. The authors note that, "higher education institutions are the traditional centers for scholarly debate, research, innovation, and change in social policy".

Astone and Nunez-Womack submit that, "a more ethnically and racially diverse campus environment begins with the commitment to this goal by the institution's Governing Board and the college president" (p. 39). Terrell also asserts that the fundamental commitment to a diverse student body must be expressed in the institution's mission statement (Terrell, 1992). In plain

terms, the commitment to a diverse student body has to start at the President's office in higher education, according to these education theorists'.

Concerning minority recruitment in the institutional structure of colleges and universities, Astone and Womack (1990) noted that minorities usually enter the institutions in one of two ways; by traditional recruitment means, and by admission through special programs designed to support equal access. By either means the authors assert, these administrative structures should be integrated into the comprehensive organizational plan of the institution.

In the era preceding the 1978 *University of California Regents v. Bakke* legal decision, higher education actively promoted affirmative action policies and goals that were aimed at increasing diversity. In the past quarter of a century, the task has become more difficult, and more complex for the nation's colleges and universities to meet diversity-focused goals for recruiting special populations (Lollis, 1997; Wilds, 2000).

3.6.4 Race-Sensitive Admissions Policies

Race-sensitive admissions policies and minority focused recruitment strategies are not new to American higher education. This review revisits the Oberlin college example of 1835 where deliberate efforts were made to enroll, and to educate persons of African ancestry.

In the modern era, and from the inception of the 1964 Civil Rights Act there have been many policy initiatives and affirmative attempts to include minority persons in all of America's colleges and universities. According to Sedlacek (1999), this represents the period in the history of American higher education where significant numbers of minority students were actively recruited and enrolled in predominantly white institutions (PWI's).

In America, race is in fact, a distinguishing characteristic (Franklin, 1976; Bowen & Rudenstine, 2003) and consideration of race pursuant to college access has been a prominent feature in higher education admission for decades. According to Riesman (1980) most American institutions of higher education view minority students as consumers, or more appropriately stated, as their “customers”.

In the post-Bakke era, race-sensitive admissions policies in higher education have come under strict scrutiny in legal and public debates on access (Days, 1984; Bell, 1992). This review attempts to examine and describe some of the principal arguments for, and against the use of race status as qualifying criteria for college admission.

The past and present research literature on this subject notes that there have seldom been any legal challenges to race-sensitive admissions’ policies in undergraduate-level higher education. The problematic areas for affirmative action admissions in higher education have taken place in the graduate and professional education arenas of higher learning (Renner, 1998). Today, the after effects of the legal challenges to affirmative action in college admissions have “trickled down” to the undergraduate level. The implications for race, and accessibility, at the undergraduate level, affect many more individuals in terms of social justice, and for the promise of equal educational opportunity (Whitman, 1998).

Bowen and Rudenstine (2003) present some arguments for the continued use of race-sensitive admissions policies in American colleges and universities. After review of the literature on the subject, it is clear that two “camps” of opinion and legal policy have evolved around the issue of race-sensitive admissions.

Past President of Princeton University, William G. Bowen, and head of the Mellon Foundation leads in the national effort to promote and sustain diversity in college admissions. In

their 1998 text, *The Shape of the River*, William G. Bowen and former Harvard University President, Derek Bok closely examined the subject of racial diversity in American higher education.

The arguments set forth in *The Shape of the River* are compelling, and are definitively affirmative for promoting diversity in American higher education. The authors' substantiate their arguments with data that demonstrate the multitude of successes for minority students that have matriculated at selective four-year private institutions in America. However convincing the arguments might be in this classic study, the research that was presented through *The Shape of the River* is somewhat inadequate in the sense that it applies only to selective four-year private liberal arts colleges. These types of institutions are usually more competitive and will generally have a higher academic quality of (minority) students from which to choose. However, Bowen and Bok's (1998) research study clearly indicates that minority students have been highly successful in (highly-) selective institutions (Hunt, et. al., 1994; Hurtado, et al., 1998; Chang, 2000).

Bowen and Rudenstine (2003) outline a number of issues that are related to the need for the continuation of education policies that are prevalent in race-sensitive admissions:

1. The twin goals served by race-sensitive admissions remain critically important.

Bowen and Rudenstine (2003) define these two purposes as, a) to enrich the learning environment by giving all students the opportunity to share perspectives and exchange points of view with classmates of varied backgrounds; and, b) to serve the needs of the professions, of business, of government, and of society more generally by educating larger numbers of well-prepared minority students who can assume positions of leadership, and

2. Private colleges and universities are as likely as their public counterparts to be affected by the outcome of this debate.

Bowen & Bok (1998) suggest that Title VI of the Civil Rights Act of 1964 subjects all institutions that receive federal funds to any court determinations as to what constitutes “discrimination”.

3. Race-sensitive admissions policies involve much “picking and choosing” among individual applicants; they need not be mechanical, are not quota systems, and involve making bets about likely student contributions to campus life and, subsequently, to the larger society.

The authors’ contend that admissions officers at both private and public institutions have been pursuing race-sensitive policies that entail considering race among a number factors.

Sedlacek (1999) defines these qualifying factors as, “non-cognitive” variables.

4. Selectivity and “merit” involve predictions about on-campus learning environments and future contributions to society.
5. Paying special attention to any group in making admissions decisions entails costs; but the costs of race-sensitive admissions have been modest and well justified by the benefits.
6. Progress has been made in narrowing the test-score gaps between minority students and other students, but gaps remain.
7. There are alternative ways of pursuing diversity, but all other substitutes for race sensitive admissions have serious limitations.
8. Reasonable degrees of institutional autonomy should be permitted-accompanied by a clear expectation of accountability.

Bowen and Rudenstine (2003) assert that,

. . . the widely acclaimed heterogeneity of the American system of higher education has permitted much experimentation in admissions, and has discouraged the kinds of government-mandated uniformity that we find in many other parts of the world.

Bowen and Rudenstine note that colleges and universities have always been held accountable for their policies and decisions (e.g., by Trustees).

9. Race matters profoundly in America; it differs fundamentally from other “markers” of diversity, and it has to be understood on its own terms.

William G. Bowen, along with Derek Bok, (1998) and Neil Rudenstine (2003) lay out a compelling argument for the necessity of diversity in American higher education. However, there are also alternative views on the diversity issue in American higher education.

In contrast, Nathan Glazer (1978), in his essay, *Affirmative Discrimination: Ethnic Inequality and Public Policy* challenged the federal government's shift in social policy from individual's rights to group rights. The book was written (1975, revised, 1978) in the pre-Bakke (1978) era, and first utilizes the descriptive term, "reverse discrimination" in higher education admissions. Glazer (1978) argued that the United States Constitution is "color-blind" and that preferential treatment for any person or group in America is illegal and is in fact, unconstitutional.

The argument for race-neutrality in admissions policy has not changed in the last quarter century in America (ACE, 1999c). In all diversity-sensitive debates over college admissions and affirmative action policy this Constitutional argument is at its foundation (Days, 1984; Bell, 1992, Lollis, 1997, and Bloom, 1998). Thus, based on the evidence and the legal precedents in college admissions, and in the affirmative action legal challenges of the previous 25 years [i.e., 1978-2003], the race-neutrality argument has been a compelling and powerful force with which to contend (ACE, 1999c).

3.6.5 Summary

When examining the debate over the continuation of race-sensitive policies in American higher education the research conclusions presented by Bowen and Levin (2003) in *Reclaiming the Game* are most transparent. They contend that after forty-plus years of meaningful progress in promoting diversity in America's colleges and universities, no shift in legal or public policy

will stem this tide. Moreover, they contend that America's colleges and universities will eventually find other ways to achieve the same goals.

The section that addresses admissibility for higher education is linked to research question #3:

What do administrative policy- and decision-makers in admissions at Pennsylvania's four-year public and private institutions of higher education perceive as the most significant challenges to increasing and sustaining campus diversity and promoting institutional policies and programs that improve admissibility for college-age minority students?

3.7 ISSUES OF AFFORDABILITY

The issue of minority student access to higher education is multifaceted and complex (Preer, 1981, Tomlinson, 1989). One of the most important factors to consider in access to higher education is affordability. In this study, the issue of affordability for minority students is examined from two dimensions; 1) college pricing for affordability, and, 2) minority students' ability to finance education at four-year colleges and universities.

3.7.1 College Pricing

One of the essential questions that is addressed in this research involves, "what keeps low-income and minority students out of colleges and universities, preparation or finance? (Burd, 2002). Both factors are highly significant to this research study.

The Lumina Foundation Studies (2002) define the concept of college financing in this context; "affordability depends upon the relationship between college prices and the available financial resources of different students at particular institutions within each state" (p. 16).

The research literature review is concerned with the affordability ratings of colleges and universities in the state of Pennsylvania in particular. More specifically, the review focuses on the pricing of its four-year institutions and how it affects low- and median-income students.

In classifying institutions in terms of their affordability, the Lumina Studies (2002) report used three principal factors:

1. The annual price that a particular type of student is expected to pay with,
2. The amount that the student (and parents, in the case of dependent students) can be expected to contribute toward meeting that price, and
3. The amount of financial aid that the student can expect to receive (p. 21).

The three possible finance classifications as outlined by the Lumina Studies (2002) research are:

- Affordable without borrowing
- Affordable with borrowing, and
- Unaffordable

The Lumina (2002) data indicate that of the states with major disparities in the% of affordable private four-year institutions for low- and median income students, Pennsylvania is one of fourteen states that is represented in this particular category. The study indicates that the state of Pennsylvania does not have a system of four-year private institutions that are relatively affordable to students who do not possess the full capacity to finance higher education.

The Lumina (2002) report indicates that just seven states have 40 or more private colleges and universities (i.e., Pennsylvania included), (p. 24). For the state of Pennsylvania, in the year 2002, just 4% of these institutions are affordable to low- and median-income students (p. 23, Table 4). The 2002 Lumina report details affordability ratings for colleges and

universities in all 50 states. A listing of the Pennsylvania data is included in Appendix F of this dissertation. A summary review from the Lumina Foundation (2002) Studies shows that:

- Forty-four percent of Pennsylvania's generally admissible public and private institutions are unaffordable for dependent low-income students.
- Forty-one of Pennsylvania's 64 public institutions (64%) are accessible to college-qualified, dependent low-income students.
- Only five of Pennsylvania's eighty private institutions (6%) are accessible to college-qualified, dependent low-income students.
- Low-income college-qualified students have far fewer affordable choices than do median-income students.
- None of the admissible public four-year institutions in Pennsylvania were affordable for low-income college-qualified students without borrowing. All of these institutions are affordable to median-income college-qualified students without borrowing (Appendix F).
- In 1998, 64.1% of Pennsylvania's recent high school graduates enrolled in college, and
- Pennsylvania colleges and universities attract far more high school graduates from other states as first-time freshmen (22,270) than Pennsylvania graduates who leave to enroll in other states (14,885). Nearly 21,200 of these applicants enroll at Pennsylvania four-year institutions.

College pricing is a complex process that is dependent upon institutional size and type (Herzlinger & Jones, 1981). College pricing in publicly supported institutions is dependent in large measure upon the level of state appropriations to higher education (Bowen, 1980; Herzlinger & Jones, 1981). In addition, in any given year(s), college pricing is dependent upon economic conditions in that particular state, and in the nation as a whole for both private and public institutions (Breneman & Nelson, 1981).

In a related issue, Johnstone (1986) states that most private (e.g., four-year Liberal Arts) institutions sometimes utilize an accounting process termed "discounting" when enrolling a

larger proportion of low- and median-income students. In the discounting process, the college partially finances the education of these students through scholarships, or institutional loans, and/or incurs a degree of economic loss.

However, recent research by the Educational Testing Service (2003) showed that four-year private colleges also discount tuition and fees for all types of students to keep the competitive edge in enrollments; www.ets.org/aboutets/americaspeaks/2003find.html.

A question for this study to pose is, “how many low-income students can a private four-year college afford to enroll if this population is not entitled the appropriate financial support necessary to adequately finance their education?” The studies on higher education finance clearly indicate that college pricing has a negative impact upon low- and median-income students’ accessibility for higher education (Manski & Wise, 1983; King, 1999 & Nora, 2001).

The Lumina Studies data (Kipp, 2002) yields relevant information for this research literature review:

Enrollment is up; the total undergraduate enrollment increased from nearly 7.4 million students in fall 1970 to 12.2 million in fall 1998. Nearly two-thirds of the growth took place at public two-year institutions, where enrollment jumped from 2.2 million to 5.3 million. This is an increase of 39%. Part-time enrollment more than doubled, from 2.1 million to 4.8 million (pp. 7- 8).

- At public four-year institutions, undergraduate enrollment increased by nearly 1.3 million. Average enrollment decreased slightly at these institutions.
- Tuition and required fees increased nearly tenfold in current dollars and more than doubled in constant dollars at all types of institutions between 1968-69 and 1998-99 (p. 8).
- College participation rates among 18-24 year olds increased for all ethnic groups between 1972-73 and 1998-99. At the same time, participation rates among 18-24 year old black and Hispanic high school graduates, and particularly among all black and Hispanic 18-to-24 year-olds, continue to lag behind those for whites. Race and income still make a difference in terms of who goes to college (p. 9).

The Lumina Studies (2003) research indicates that in terms of high school graduate's college-going rates at degree-granting institutions, the state of Pennsylvania is in the nation's highest-ranking sector at 64%. Based on the Lumina Studies data for the year 1998, the 64% college-going rate is the fifth highest in the United States.

In 2004 research on college costs, Dickeson [Lumina Foundation for Education] submits that American higher education is confronting a series of significant issues created by the multiple impacts of four forces. Dickeson (2004) contends that the forces have intensified and been set on a collision course that is driving up college costs:

- Increased demand, [e.g., higher education is seen as a means to achieve economic, social and political goals for more people].
- Diminished capacity, [e.g., some institutions enroll students who are unlikely to succeed without extra support services, but these services are often cut in hard times].
- Economic and fiscal problems, [e.g., States play a critical role in funding higher education. Virtually all states cut higher education appropriations in the most recent fiscal year (i.e., 2004-05); and,
- Demands for accountability, [e.g., in a time of scarce resources, and at the urging of concerned constituents, state and federal officials are increasingly demanding justification for the higher costs of higher education].

3.8 FINANCING HIGHER EDUCATION FOR MINORITY STUDENTS

The Commonwealth of Pennsylvania has one of the nation's largest and most proficient agencies for the dissemination of state-based financial resources for the support of higher education access. In Pennsylvania, financial resources for college-bound students are provided through the Pennsylvania Higher Education Assistance Agency (PHEAA), (www.pheaa.org).

The PHEAA agency provides state grants to all Pennsylvania income-eligible state residents. The resources are distributed in two forms; grants and loans, and are disbursed directly to the student. The PHEAA state grants are designated for undergraduate-level higher education (www.pheaa.org). The Stafford Loan is available to both undergraduate and graduate-level enrollees. In the one exception, the special PLUS Loan is approved for the parent on behalf of the dependent student. The PHEAA PLUS Loans are designated for higher-income families.

The Pennsylvania-sponsored higher education appropriations and financial resources (i.e., PHEAA awards) are considered very generous by comparative state standards. PHEAA eligibility is for both public and private institutions. Depending upon the cost of the institution the grant-in-aid awards may vary (i.e., by family income), and guaranteed loan amounts might also vary by institution type and cost of attendance (i.e., public or private), (www.pheaa.org).

However, with Pennsylvania being the nation's seventh most populous state (U.S. Statistical Abstract, 2001) and with a high (64%) college going rate (Kipp, 2002), the question is then posited, "are there adequate financial resources available to distribute over the total need of its most financially-needy students?"

The issue of total available resources has profound implications for Pennsylvania's low- and moderate-income students in financing baccalaureate education over a four-to-five year period.

According to student development research by Alexander Astin (1993a, 1993b), and the American Council on Education (2002b), the majority of today's undergraduate students are requiring at least five academic years to complete their baccalaureate-level education. However, financial aid resources are limited to the amount of eight semesters of student eligibility for state grants (www.pheaa.org) in Pennsylvania; this is also the case for the federal Pell grants. The

remaining year(s) of college costs must be covered by supplemental loans (Manski & Wise, 1981), or from the expected family contribution (EFC).

Recent research shows (NCES, 2001) that the majority of minority and low-income college students generally require additional years to complete college-level baccalaureate-degree programs (ACE, 2002b). Subsequently, the students that are least able to pay tuition will ultimately have to finance their remaining college education with a higher percentage of loans and with family support according to the research and financial assessments by McPherson & Shapiro (1981).

For minorities and for most students in general, the rate of college attendance in the United States has a positive correlation with socio-economic status (CEEB, 2001). With this being the case, many of the nation's major policy-making agencies for higher education are supporting increased state and federal aid to all college students, and for low- and median-income students in particular.

The research on college cost and financial assistance clearly indicates that the lack of financial resources for college attendance adversely affects the low- and median-income college-bound students' access to higher education more than any other sector in American society (CEEB, 1999).

3.8.1 Summary

Concerning low-income college-bound students, the research conducted by Manski & Shapiro (1981) indicate that based on the recent trends in higher education there will be a higher percentage of student-based loans in financial aid packages.

However, Howard Bowen (1977) submits that investment in higher education pays off significantly for individuals in American society. College is still a very good investment in America, and delayed gratification (Bowen, 1977; Stark, 1986; 1992) is important for economically disadvantaged students and their families to understand.

Updated research on college affordability that is sponsored by the Lumina Foundation for Education (2004) indicates that the “affordability gap” in American higher education is widening. The Lumina study, *Collision Course* (Dickeson, 2004), cites several important factors that impact low- income and minority students’ access to higher education; 1) double digit annual increases in tuition and fees, 2) reduced state higher education budgets, 3) declines in the purchasing power of student grant aid, 4) increased student debt burden, and, 5) heighten demand for institutional accountability.

According to the research studies conducted by Christopher Jencks and David Riesman (1972), the most important factor in minority students’ education is to “graduate” from college in order to realize fully the long-term economic benefits of higher learning. For Jencks and Riesman (1972), just attending college is not enough to benefit. This is an important message for all students who aspire to attend institutions of higher learning in America.

The research literature that is examined in this mini-section is linked to Research Question #4:

To what degree do administrative policy and decision-makers in Pennsylvania’s public and private four-year baccalaureate degree-granting perceive that financing in higher education directly or indirectly affects access and the rates of enrollments for Pennsylvania’s minority college-age students?

The following section addresses significant legal questions that are related to the issue of access to higher education for minorities in American society.

3.9 LEGAL IMPLICATIONS OF ACCESS

“...Higher Education has built-in headwinds”

William O. Douglas, (1898-1980)
Associate Justice, Supreme Court of the United States (1939-1975)

The purpose of this section on the legal implications of access is to review and describe some of the specific legal cases that affect and have influenced higher education policy. The strict interpretation of the case law is reserved for legal scholars. In this review, the facts and legal precedents in case law were examined for their applicability to the issues of access in American higher education.

3.9.1 Case Law: 25-Year Trends; 1978-2003

In the review of case law that pertains to higher education, the legal rulings of the United States Supreme Court in the previous 25 years has had tremendous impact on education in general, and on American higher education in particular. The legal battleground in this regard, has been focused under the broad umbrella of affirmative action policies and its legality under the United States Constitution, Title IV, and Title VI, of the Civil Rights Act of 1964, and more specifically, Section 2, of the Equal Protection Clause of the Fourteenth Amendment to the U.S. Constitution.

In previous cases regarding affirmative action in higher education, particularly *Sweatt v. Painter*, and *Defunis v. Odegaard*, both were upstaged by the 1978 *University of California Regents v. Bakke* decision, which set the stage for modern legal interpretations of the validity of considering race, ethnicity, or minority status in admission to institutions of higher education in America.

The Bakke (1978) case is a complex and unique entity in American legal history. In the United States of America, and historically, the majority group of the nation has rarely heretofore brought charges of “discrimination” to the Courts of law. The concept of “racial discrimination”, because of the nation’s history, and the race group status of its minority citizens, has long been the exclusive legal province of racial minorities in America (Glazer, 1978). The Bakke Case (1978), in an abstract sense, stands the American legal system on end and introduces the concept of “reverse discrimination” in modern legal jurisprudence (Glazer, 1978; Lithwick, 2002).

In this study, it is appropriate to review some of the principal arguments, and describe the rationale for the legal decisions in the Bakke (1978) case. This benchmark case still serves as the legal foundation in the pursuit of diversity and access in the postmodern era of American higher education.

The American Council on Education (1978) and the American Association of Law Schools (AALS), under the direction of Wayne McCormack, and a host of legal scholars from around the nation edited a legal treatise on the 1978 Bakke case: *The Bakke Decision: Implications for Higher Education Admissions*. In the report, the legal team reviews the facts of the decision and analyzes them from the standpoint of their impact upon race-conscience remedies for admissions in higher education. The Report is an analysis of the Bakke (1978) decision and includes several opinions by the Justices of the U. S. Supreme Court. The report seeks to assist educators and educational policymakers to understand the rationale of the Supreme Court’s decision.

Some of the legal opinions and the facts of the Bakke (1978) case are herewith presented, (McCormack, et al., 1978):

A basic conclusion that is drawn from this report is that the Supreme Court of the United States has recognized the authority of institutions of higher education to continue under certain circumstances their affirmative action programs” (p. v).

Legal scholars noted (McCormack, et al.) that, in regard to the Bakke (1978) decision, the Supreme Court did address the validity of race-conscious admissions, but did not speak with a single voice (p. 1). The complexity in the case derives from the fact that there were six different opinions, because there was no opinion of the Court. In the ruling, the Supreme Justices decided four against race-conscious admissions policies, and four Justices ruled in favor; Justice William Powell cast the deciding vote for the majority against, and thus, authored the majority opinion in the case. Powell’s decision is still considered to be the neutral position; there were many elements to this complex case [See, *University of California Regents v. Bakke*, 438, U.S. 265 (1978)].

In short summary, Alan Bakke, a white applicant applied to the Medical School at the University of California-Davis in 1973, and in 1974. He was denied admission to the medical program each year. At issue was the fact that of the 50 seats available in 1973, eight were reserved for minority candidates; and in 1974, when the entering class was increased to 100 slots, the special admissions program reserved 16 seats for minority candidates. The essence of Bakke’s argument was that his academic credentials were more appropriate for admission to the medical school than the lesser-qualified 16 minority students that were admitted under the special program. The candidate charged that he faced discriminated because of his race.

The foundation of this legal case is premised on unlawful discrimination against individuals in violation of Section 2, of the Equal Protection Clause (U.S. Constitution, Amendment 14), and Title VI of the 1964 Civil Rights Act (*University of California Board of Regents v. Bakke*, 438 U.S. 265 (1978)).

The text of the crucial language of the pertinent constitutional and statutory provisions is as follows: The equal protect clause of the Fourteenth Amendment provides: [N]or shall any state ...deny to any person within its jurisdiction the equal protection of the laws.

Title VI provides in pertinent part (section 601):

No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefit of, or be subjected to discrimination under any program or activity receiving federal financial assistance.

In the comprehensive legal review of *Bakke v. California Regents* (1978), McCormack, et al., (1978) extracted the following issues for the consideration of race and ethnic origin in higher education admissions policies:

Since it was the first occasion for the Supreme Court to enter this difficult area, it is not surprising that it would leave many questions for further development in later cases. In addition, they assert, "It is also not surprising that the Court would leave substantial latitude for educational and governmental leadership to be exercised (p. 1).

Presented are two important points addressed in the legal review of the (1978) Bakke decision:

1. In public institutions subject to Title VI, a two-track admission program in which a specific number of seats is reserved exclusively for applicants from designated minority groups is impermissible in the absence of appropriate legislative, judicial or administrative findings; and
2. A properly constructed race-conscious admission program is legally permissible under certain circumstances (p. 2).

McCormack, et al., (1978) stated that,

the principal issue presented by the Bakke (1978) case is whether a higher education institution using a selective admission program may adjust that program by giving explicit preference to qualified members of identified racial or ethnic groups who would otherwise be denied admission (p. 2).

In a related legal point in the Bakke (1978) decision, the first glimpse of the First Amendment issue is raised in the admissions debate when the Justices comment,

It is elemental that educational institutions are free to make admission choices as they wish unless some rule of law intercedes to place limits on the range of available choices (p. 3).

In this element of the legal opinion, the Supreme Court has left a great deal of room for institutions to make decisions in the admissions area, and, even greater latitude for judicial, legislative, and administrative decision, according to McCormack, et. al, (1978).

Legal scholars note that the Bakke opinion was essentially a 4-1-4, decision. Associate Justice, Lewis Powell wrote the opinion that became the majority ruling.

Justice Powell further commented on the First Amendment issue in his decision by stating, “that the attainment of a diverse student body is a constitutionally permissible goal, supported by first amendment values embodied in the concept of academic freedom” (Bakke, 438, U.S. 265 (1978)). In addition to the faculty’s own First Amendment interest in selection of students, he found that, “it is important for these future leaders to be exposed to a “robust exchange of ideas,” and that a diverse student body will help promote that function” (McCormack, et. al., 1978, p. 14).

McCormack et al., (1978), cite Justice Powell’s opinion, and concluded that he perceived educational diversity to constitute a constitutional interest protected by the First Amendment. This conclusion arises in two ways: First, academic freedom protected by the First Amendment includes the authority to make judgments about the selection of the student body. Secondly, academic freedom of the school thus becomes a compelling state interest through the First Amendment (p. 30). In addition, “A school may be free to identify, in exercise of academic

freedom, other qualities that it considers important but there may be limits to this freedom” (p. 31).

In drafting what became the majority opinion of the Court, Justice Powell left broad latitude in interpreting the Bakke (1978) ruling. Justice Powell maintained, according to various legal scholars, “that these concerns might carry more force in undergraduate schools, but maintained their importance at the graduate and professional level”. McCormack (1978), and others, noted that, “for these reasons, Justice Powell concluded that the goal of promoting diversity in the student body was a compelling government interest.” (p. 9)

In reference to this clause in the Bakke (1978) decision, America’s institutions of higher education have been working within this broad legal framework to promote diversity of the student body in race-conscious, (i.e., race-sensitive admissions [sic., year 2000 terminology]) admissions policy over the ensuing 25 year period; 1978-present.

However, the legal scholars, (McCormack, et al, 1978) noted that many issues apply to the concept of diversity in higher education, and that two fundamental points apply in all of the opinions of the Justices:

First, the equal protection clause applies only to state action. The relation of a private institution to the state through funding or otherwise may be such that its action is considered state action and the equal protection clause is thus held applicable. Secondly, the Courts differently from other bases view racial and ethnic bases for distinctions among persons. Race is said to be a suspect classification. Today’s concern to promote equality and to prevent social divisiveness requires that when race is used, judicial scrutiny of the classification be closer than when less sensitive factors are used. Any level of judicial scrutiny under the equal protection clause involves an examination of the objectives and the means chosen to obtain those objectives (p. 9).

In the Bakke Case (1978), Justice Powell decided that Title VI and the Constitution imposed identical restraints upon race-conscious admissions policies. He concluded that a school might not establish a special admission program under which non-minorities are excluded

from competing for a certain number of places, but that a school may use race as a factor in making admissions decisions from among the entire pool of applicants (McCormack, et. al., 1978, p. 12). For Powell, the use of racial and ethnic criteria is not per se invalid, “their use must be ‘precisely tailored to serve a compelling government interest’” (University of California Regents v. Bakke, 438, U.S. 265, (1978)).

Twenty-five years later, Justice Powell’s description of race-permissible factors in admissions decisions opens the door to what is now considered “race-sensitive” admissions policies. In the race-sensitive modality, a number of factors are considered in diversity-focused admissions. Justice Powell opined,

In such an admissions program, race or ethnic origin may be deemed a ‘plus’ factor in particular applicant’s file, yet it does not insulate the individual from comparison with other candidates for the available seats. ...Such qualities could include exceptional personal talents, unique work or service experience, leadership potential, maturity, demonstrated compassion, a history of overcoming disadvantage, ability to communicate with the poor, or other qualifications deemed important (*Bakke v. Regents of California*, 438, U.S. 265, (1978)).

Justice Powell concludes his statement on diversity in admissions by adding:

In short, an admissions program operated in this way is flexible enough to consider all pertinent elements of diversity in light of the particular qualifications of each applicant, and to place them on the same footing for consideration, although not necessarily according to the same weight.

In promoting access through diversity, America’s colleges and universities have been operating within its policies and statutes for over 25 years. Days (1984), Bloom (1998), and Goring (1999), assert that the broad latitude in Justice Powell’s Bakke (1978) opinion left ample room for colleges and universities to promote, and to maintain diversity goals in their admissions policies and practices.

Patricia Gurin (1999) of the University of Michigan, also asserts that admissions policies and programs that are precisely tailored and appropriately structured to meet strict scrutiny under

the Constitution's provisions in Bakke (1978), are in fact, legally permissible. In race-sensitive admissions policies, a number of factors are considered for admission, and the race factor should carry equal "weight" in the decision-making equation (O'Neil, 1988; Bowen & Bok, 1998; Kane, 1998; Gurin, 1999; Bowen & Rudenstine, 2003).

The implications for race-sensitive policies in higher education are compelling. In reviewing the legal elements in the landmark Bakke (1978) decision, two items are most transparent, 1) race factors and preferential treatment of minority status are the principal elements of contention, and 2) the structural components of race-based special admissions programs have not met strict scrutiny under the law.

At this point in the legal review section, it is important to restate the central thesis of this dissertation topic:

If Pennsylvania's administrative policy- and decision-makers in its four-year public and private institutions of higher education gain a comprehensive understanding of the issues that address the needs of the minority college-age population, they can then endeavor to develop successful strategies and programs that positively impact these' students rates of entry into postsecondary education. In this way, they can begin to develop a more transparent view of institutional admissions policies that operate within the framework of the laws, and thereby positively impact long-term access, and promote strategic initiatives for improving the rates of entry for minority students.

The thesis for this study promotes the idea that there has been a relative lack of uniformity in the policies and procedures for structuring, and operating admissions programs for diversity in American higher education. Justice Powell, and the Supreme Court, permitted broad latitude in admissions policies, but clearly, to be applied within the framework of the laws.

Before leaving the legal review of the Bakke (1978) case by McCormack and others, an additional issue regarding cases in higher education was put forward by the panel that involved the use of race in awarding financial assistance to students.

Citing the McCormack (1978) report:

The sources of law that may be brought to bear on issues of financial aid include federal statutes, federal constitutional principles, and state laws. Not each of these sources applies to each type of financial aid. The legal posture of a financial aid program thus depends upon on whether it is a direct distribution of federal funds, school distribution of federal money designated for a specific purpose, expenditure of private funds in a private school, expenditure of funds from a private foundation affiliated with a public institution, expenditure of general funds by a public institution or distribution of state money designated for a particular purpose (p. 54).

Legal scholars note that the ruling in Bakke (1978) holds relevant to these various types of expenditures only insofar as federal law applies to each.

However, here is where it is determined that the legal panel erred in its judgment on the use of federal funds, “that to the extent that a school is operating a valid special admissions program, minority set-aside for financial aid is valid as a necessary incident of the school’s efforts to achieve its goal by attracting minority students. Because the rationale for financial aid distribution ties closely to the rationale for special admissions, perhaps the safest course is to model the financial aid program to be similar to the admission plan that the school has adopted” (McCormack, et. al., p. 56).

The past 25 year history in higher education case law has proven that this approach might have been legally flawed. In a review of the financial assistance issue and race-based awards, the American Council on Education (ACE), (1999) found that Title VI of the 1964 Civil Rights Act applies to student recruitment, admissions, and financial aid programs.

The ACE (1999) report presents some key factors in the review of policies in special admissions programs:

- The use of separate procedures, tracks, criteria, or committees for white and minority applicants.
- The number and weight of criteria used in such decisions other than race.

- The availability of alternative, race-neutral criteria such as class and geography, and their likelihood of providing similar diversity.
- The relationship of such programs to the stated educational mission of the institution, taking into account its service area and the relevant applicant pool (pp. 88-91).

A race-targeted financial aid program founded to remedy discrimination has also been struck down by a federal court in *Podberesky v. Kirwan*, 38 F. 3d 147 (4th Cir. 1994), *cert. denied*, 115 S. Ct. 2001 (1995) thus invalidating a scholarship program for African-American students only in formerly *de jure* segregated state systems of higher education (ACE, 1999). It is important to note however, that the precedent set in *Podberesky v. Kirwan*, only holds in the 3rd Circuit federal Court of the United States.

The ACE (1999) notes that The U.S. Department of Education has issued policy guidance setting forth the circumstances under which race-targeted financial aid is permissible under Title VI as interpreted by the federal government, in 59 *Fed. Reg.* 8756 (Feb. 23, 1994), [See, 1997, *Kidd v. National Science Foundation*].

Recent legal cases that have implications for higher education include the following:

Hopwood v. Texas, 78 F.3d 932 (5th Cir.), *cert denied*, 116 S. Ct. 2580 (1996). This case, according to the ACE report, asserted contrary to Justice Powell's opinion in *Bakke* (1978), that diversity does not provide a compelling interest for race-conscious decisions in student admissions (1999). However, the *Hopwood* case involves graduate and professional education, and the diversity-focused admissions policies of the Law School at the University of Texas.

In, *Wessman v. Gittens* (1998), the First Circuit Court of Appeals assumed the *Bakke* (1978) is still the law, criticized the *Hopwood*'s court's rejection of student diversity as a compelling state interest, and acknowledged that diversity serves valuable educational goals (ACE, 2001).

In, *Smith v. University of Washington Law School* (2000), the Ninth Circuit embraced Justice Powell's opinion in *Bakke* (1978), and rejected the Hopwood (1996), holding. The Court held student body diversity to be a compelling state interest and that the U.S. Constitution permits race-consciousness in admissions decisions (ACE, 2001).

In, *Johnson v. Board of regents of the University of Georgia* (2001), the Eleventh Circuit declined to decide whether diversity in education can be a compelling state interest, but held unlawful a University of Georgia admissions policy that awarded applicants "points" for qualities including minority status (ACE, 2001).

In the year 2003, the University of Michigan legal challenges brought the precedent that was set in *University of California Regents v. Bakke*, 438, U.S. 265 (1978) back to the attention of the United States Supreme Court. The more recent court rulings on affirmative action in higher education have each been decided by the Federal Circuit Courts.

In the current University of Michigan legal challenges on affirmative action policies in admissions, notably *Gratz v. Bollinger* (2000), one federal judge upheld the University's current race-conscious undergraduate admissions policy based on his view of *Bakke* (1978) as binding precedent and evidence presented of the compelling educational need for diversity (ACE, 2001). In the companion case, *Grutter v. Bollinger* (2001) at the University of Michigan, another Federal Circuit judge held unconstitutional the University's law school admissions process finding that the University targeted fixed numbers of minorities (ACE, 2001).

However, Justice Powell's view in the *Bakke* (1978) case is evident in the University of Michigan legal examples; one Circuit Judge rules race-sensitive policies permissible in undergraduate education, while the other Circuit Court Judge decides that race-sensitive policies are unconstitutional in graduate and professional education?

In a recent legal study, Orfield & Whitley (2001) present a compelling and convincing argument for the need for diversity in American law schools, and in American legal education. Their focus is on the long-term needs of a rapidly changing society, and for the American workforce of the future.

The dual University of Michigan legal cases are presently under review by the Supreme Court of the United States in April of the year 2003. The outcomes of the legal cases were expected to be decided in June of the year 2003.

In summary, one specific issue that is inclusive in each of the legal cases cited on affirmative action in higher education in the 25 year period since Bakke (1978), is that, at each level of the U. S. Court system, the Judges' and the Justices' are requesting "hard evidence" (i.e., quantifiable) of the past and present effects discrimination. This point is prominent in the thread of the legal rulings on each affirmative action legal challenge. Without the quantifiable evidence for past and the present effects of societal discrimination in education, there have been very few affirmative action-centered legal cases since the Bakke (1978) ruling that has upheld the explicit or implicit use of race in admissions decisions in American higher education.

3.9.2 Update on the 2003 University of Michigan Legal Cases

Gratz et al. v. Bollinger et al.

No. 02_516. Argued April 1, 2003—Decided June 23, 2003
Reversed in part and remanded.

Grutter v. Bollinger et al.

No. 02_241. Argued April 1, 2003--Decided June 23, 2003
288 F.3d 732, affirmed.

In two of the most crucial legal cases involving American higher education in the past 25 years since the Bakke (1978) decision, the Supreme Court of the United States has again undertaken the task of examining the intricacies of the race and college access national debate.

In the decision on the University of Michigan challenges, unlike the Federal Sixth Circuit Court, the U S Supreme Court held unconstitutional the University of Michigan's undergraduate admissions policy. The undergraduate admissions policy used the race factor as an unequal weight in their decision process. Six factors were utilized in the Michigan admissions process; five had equivalent weights. The high court decided that this policy violated the essence and spirit of Justice Powell's 1978 opinion in Bakke. The high Court reasoned that the use of the race factor in this particular admissions policy was "not narrowly tailored to achieve respondents' asserted interest in diversity, 'the policy violates the Equal Protection Clause'" (Cornell, 2003).

The Court's contention was that the Michigan undergraduate admissions policy for freshman applicants does not provide the individualized consideration that Justice Powell contemplated. The Michigan policy made race a decisive factor. The high court ruled that the policy also violated the federal statutes in Title VI (Cornell, 2003).

The United States Supreme Court decided in *Grutter v. Bollinger* that the University of Michigan Law School followed an official admissions policy that sought to achieve student body diversity through compliance with the *Regents of Univ. of Cal. v. Bakke*, 438 U.S. 265. The U. S. Supreme Court asserted that considering race in admission decisions must be individualistic and consider all factors equally. The Court felt that the Michigan Law School program met the test of strict scrutiny and presented a compelling government interest for diversity; and, thereby affirmed the decision of the lower Court (Cornell, 2003).

Finally, these particular legal cases point clearly to a continued need for structured and uniform policies that function within the framework of the law regarding race-conscious admissions practices in American colleges and universities. Improvising on federal law will ultimately lead the university toward the direction of the Supreme Court on these socially delicate matters.

3.9.3 Percentage Plans and Access

Percentage plans that focus on promoting diversity in higher education are political entities that have been imposed on the body of higher education. The “percentage-plan” admissions concept emanates from the legal disputes that surround race and admissions policies. This synopsis of the percentage plan model will describe the structure and the purpose of these new initiatives.

The January 2001 American Council on Education (ACE) report describes the percentage plan models in this manner:

In *Hopwood v. Texas* (1996), the Fifth Circuit Court of Appeals declared the use of race in admissions illegal in the binding states, Mississippi, Louisiana, and Texas. In reaction to this decision, in 1998 Texas created a “percentage plan” guaranteeing admission to students who graduate within a specific percentile of their high school class (p. 6).

The ACE (2001) report notes that in the state of Texas any student graduating in the top 10% of his or her class is guaranteed admission to any state college or university. Further, the report states, two states, Pennsylvania and Colorado, have debated the adoption of a percentage plan. Pennsylvania abandoned its proposal to offer admission to the top 15% of high school graduates after reviewing arguments offered by opponents of such initiatives (ACE, 2001).

Presently, the states of California (e.g., top 4%), and Florida (e.g., top 20%) have adopted statewide percentage plans (ACE, 2001). The report (ACE, 2001) notes that the use of percentage plans is a relatively new approach for promoting student diversity in higher education and little is known about the outcomes of such efforts.

Percentage plans for diversity in higher education is currently a controversial subject (USCCR, 2003). Detractors of these plans note that in Florida, white students compose 59% of the high school seniors, but make up over 67% of students in the top fifth. While on the contrary, blacks comprise 23% of seniors and only 14% of the top fifth of their high school classes (ACE, 2001). The ACE (2001) report indicated that,

By assuring access to the top 10% of students from all high schools, weak or strong, it may inadvertently have blocked access to minority, and majority students who have attended very strong high schools, who have not graduated in the top 10%, but who would perform better at the University than students who have graduated in the top 10% from weaker schools (p. 11).

In recent evaluations of the percentage plan concept, extrapolated from the staff report of the U.S. Commission on Civil Rights (USCCR), indicate that of all minorities, Asian Americans are benefiting most from these initiatives. The USCCR report noted:

- One study found that admissions strategies that relied on SAT scores resulted in a greater number of rejections of otherwise qualified minority and low-income students.
- Test scores are often used to determine recipients of merit awards and scholarships. Because high-income students tend to score higher, there is greater potential that these awards will be given to students who do not need them.
- The current research (USCCR, 2003) indicates that the percentage plan concept has spawned a number of issues and changes for higher education in states that employ this model; and,

- White and Asian American students are more likely to attend four-year institutions, whereas black, American Indian/Alaska Native and Native Hawaiian/Pacific Islander students are more likely to attend two-year institutions or vocational schools. In 1999, minorities accounted for 24.8% of students enrolled in four-year institutions and 33.4% of those enrolled in two-year institutions.

The Executive Summary (USCCR, 2003) report concludes that, “If percentage plans grow in popularity, it is inevitable that the numbers, and subsequently the proportions, of minority students pursuing higher education will decrease”. The report also indicates that providing appropriate financial support and academic assistance for students included under the percentage plan concept is essential. And, that this can best be achieved through TRIO-based programs to all students that are eligible for them.

In summary, the ACE (2001) analysis, and the government summary (USCCR, 2003) of the Percentage Plan assessment is warning of enrolling students that are not adequately prepared for four-year college study. Both reports encourage the state and federal governments to commit to multi-faceted and inclusive admissions processes that incorporate adequate financial aid and academic support services for minority and low-income students admitted under the percentage plan models.

For administrators and student development practitioners’ in higher education it is concluded that minority students who come to four-year colleges and universities inadequately prepared are more likely to fail, and are the students that are least likely to graduate (Tinto, 1975; Astin, 1993a, 1993b). A summary statement from the USCCR Report (2003) notes that,

Because high schools differ so substantially in the academic abilities of their students and the level of difficulty of their curricula, all applicants who graduate above a certain class rank cannot be treated equally. These efforts however well intentioned are ineffective in achieving any meaningful racial and ethnic diversity in selective institutions (p. 14).

Educators and politicians appear to agree that the research and the long-term outcomes of percentage plan models are undetermined. Longitudinal research data are necessary in order to evaluate their long-range impact on improving access and diversity in American higher education according to researchers and evaluators of these programs (USCCR, 2003).

3.9.4 Graduate and Professional Education

In this literature review, graduate and professional education is not the principal focus. In this examination of minority access, the “pipeline-to-college” approach is the research focus. In this way, the approach demonstrates that four-year baccalaureate degree access represents the ultimate means to obtain graduate-level education for minority students.

For minority students, and like all other American college graduates, one’s personal academic qualifications, and in large measure, test scores (e.g., GRE, LSAT, MCAT, and GMAT) will determine access to higher levels of learning (ACE, 2002). However, the “pipeline” does not end at the doors to the four-year academy. Graduate-level educational opportunities were continued for those students who successfully complete baccalaureate degrees. The following summary points were presented on the implications for minority student access to graduate and professional education in the American system of higher education:

In this regard, and as Peter Blau and Otis Dudley Duncan (1967) suggested, that in the American occupational structure the most prestigious and highest-paying employment opportunities in this society are found in the fields of medicine and law (Davis & Moore, 1945, Tumin, 1953). Therefore, it follows that the most controversial legal decisions concerning affirmative action cases in higher education have emanated around admission to these professional Schools and academic programs (Patterson-Stewart, et. al., 1997; ACE, 1999).

Competition among the nation's top graduates is very rigorous in the arenas of medicine and law, and the assurance of equality of representation and diversity has usually been controversial.

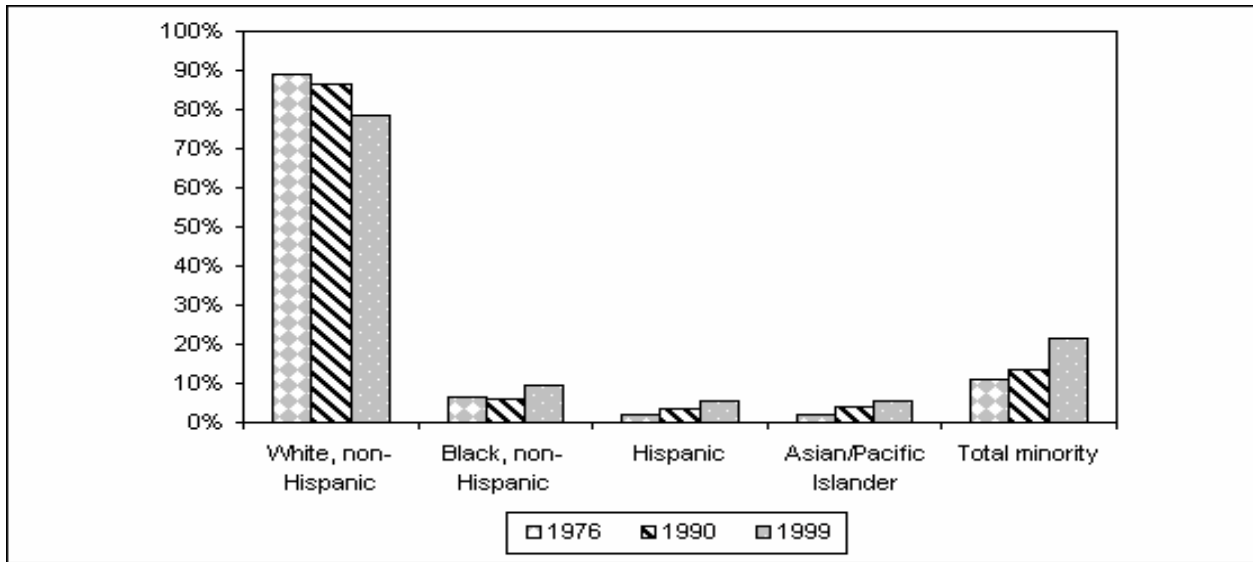


Figure 3-8 Racial/Ethnic Composition of Graduate Students, 1976-1999

Source: U.S. Department of Education, NCES, Digest of Education Statistics, 2001

Moreover, as the ACE 19th Annual Status Report notes (2002) there has also been a precipitous decline in the number of minority students in graduate and professional education in the United States. However, the question remains, what is contributing to these phenomena at the graduate level? This could pertain to a multiplicity of factors, however, at the professional level the key element for minority student access is affordability and the ability to secure financial support for graduate-level studies (ACE, 2002).

3.9.5 Summary

As the legal research indicates, the issue of affirmative action policies in higher education continues to ferment, and is on the national agenda on equity in education. As the late US

Supreme Court Associate Justice, William O. Douglas commented in several legal opinions, “higher education has its own built-in headwinds.”

However, with careful review of the legal issues that surround diversity and higher education admissions policies, several key points are worth noting. First, higher education cannot discount its role in causing the administrative and legal problems that are associated with the race and admissions issue. This review shows that many of the admissions policies that were implemented, and the programs that were developed around diversity were clearly outside the framework of the federal statutes and the law. Second, access and diversity goals at the undergraduate, and graduate and professional levels of higher education are not compatible issues and should be approached differently.

Thus, based on this brief review of the legal aspects of access in higher education, the fifth research question for examination in this study is applied:

What are the opinions of administrative policy- and decision-makers in Pennsylvania’s four-year public and private institutions of higher education on the impact of the legal challenges of affirmative action, special admissions programs, and the legal implications of diversity-focused access policies on the rates of enrollments for the minority college-age population?

The next section will summarize the literature review on access and diversity for this study. The summary will focus on student development research in higher education.

3.10 SUMMARY: ACCESS AND DIVERSITY IN HIGHER EDUCATION

3.10.1 A Synopsis of Student Development Research

This section summarizes the literature review with a brief synopsis of student development research on access. The focus is on diversity and the first year of college entry for minority students.

Levine (1993) defines the notion of diversity in the modern context of pluralism or multiculturalism on college campuses. In addition, Levine (1993) indicates that the concept of what constitutes diversity on college campuses has changed depending upon who is defining its goals. For example, diversity has been previously conceptualized in higher education as the incorporation of historically underrepresented groups of students into the collegiate experience. Previously, according to Levine (1993), adding diversity to a campus simply meant improving access.

Levine (1993) notes, that colleges and universities in the United States generally assign the responsibilities for “diversity” to student affairs. He states that the student affairs professional areas have hired the largest numbers of minority staff than the rest of the administrative units, developed staff and training programs on diversity issues, and created an array of cultural activities for the entire campus community.

Levine also found that, no group on campus is less involved in the diversity agenda than the professorate. In addition, Levine’s research study indicated that there was a surprisingly, and general lack of institutional commitment to diversity by the highest-ranking executives in colleges and universities. Levine (1993) stated that the most probable reason for the lack of diversity emphasis is that today there are no systematic incentives for faculty and departments to

engage the diversity agenda. Levine (1993) reached several conclusions from his study on campus diversity:

- Diversity is poorly defined on campus.
- Goals for diversity are unclear.
- Most colleges and universities lack comprehensive and systematic plans.
- In general, presidents are not providing adequate leadership.
- Students are divided, and tensions around diversity are high.
- Faculty for the most part has abdicate
- Student Affairs is being asked inappropriately to assume almost full responsibility for the diversity agenda.
- The college curriculum has largely peripheral zed or neglected diversity, and
- Diverse populations are highly underrepresented in the student bodies of colleges and universities.

Levine (1993) concluded the research by stating that,

. . . there is no chance that the issue of diversity will go away in the 1990s. Demographics indicate that our campuses will only grow more diverse as the numbers of 18-year old whites diminish, and the proportions of people of color and older adults increase (p. 342).

In the year 2000, the American Council on Education (ACE) and the American Association of College and University Professors (AAUP) teamed to produce a report on the status of diversity in American higher education. The (2000) report is entitled, *Does Diversity Make a Difference?* In this particular research study the focus is on diversity in the college classroom setting. However, the report does in fact provide excellent background information on the status of diversity on college campuses in general.

Presented are some selected issues on diversity that are extracted from the Executive

Summary:

- Upwards of two-thirds of faculty members surveyed, believe that their universities value racial and ethnic diversity.
- More than 90% of faculty members indicated that neither the quality of students nor the intellectual substance of class discussion suffers from diversity.
- The vast majority of faculty members reported that student diversity did not lead them to make significant changes in their classroom practices.
- Racial and ethnic diversity in the classroom is necessary, but not sufficient in and of itself, for creating the most effective educational environment.
- Racial and ethnic diversity increases the educational possibilities of the classroom, and
- Multi-racial/multi-ethnic classrooms enhance educational outcomes.

Upon review of the quantitative data that is included in the comprehensive study (ACE, AAUP, 2000), it appears that the survey results clearly support the campus-wide benefits of diversity. The survey research results for the year 2000 indicate that white students have both a high, and an overall positive attitude toward the values of diversity. The Levine research on diversity in 1993 indicated that most students on America's campuses garnered somewhat misconstrued opinions on the value of diversity in higher education. The majority of the research studies on the impact of diversity have been focused on America's predominantly white (PWI's) colleges and universities.

The ACE and AAUP (2000) study concluded that both students and faculty were better informed on the issues of diversity today, and therefore, understand its academic benefits, and generally support its principals.

3.10.2 Minority Students in American Higher Education

In the modern era, the largest mass infusion of minority students into the predominantly white institutions took place in the mid-1960s (Sedlacek, 1999). During this era mass appropriations of federal financial support for higher education opportunities was provided through the Johnson Administration's War on Poverty social campaigns. Support for equal opportunity higher education was also forthcoming through the Higher Education Acts of 1965, and 1966 (Goodchild & Weschler, 1997).

As America's predominantly white institutions of higher learning opened its doors to black and minority students in the decade of the 1960s the issues were premised around social justice, affirmative action, and equal educational opportunity (Young & Exum, 1981). Historical evidence demonstrates that the intelligence of black, and minority students did not improve because of opening access (See, Pascarella, et. al, 1996); conversely, the research seems to be indicating that affordability and the availability of financial assistance for the neediest students were principally responsible for the 1960s minority access enrollment surge (Carney, 2001).

Presently, policy papers from the Harvard Graduate Consortium on Urban Equity indicate that financial aid policy that is structured on education tax credits are examples of plans that fail to benefit the neediest students, yet emerge as politically popular tools for education policy by targeting high- and middle-income families (Carney, 2001). In the report, Thomas Mortensen found that only 8.5% of students from the poorest 25% of U.S. households will enter and complete a four-year college degree by age 24, whereas 60% of students from households in the top 25% will complete a college degree by that age (*HGSE News*, 2002).

Theresa Perry (2003) addresses the diversity issue in American higher education by examining some of the issues that confront African-American students who attend predominantly white institutions.

Perry (2003) submits that African-American students succeed in educational settings that have a leveling culture, a culture of achievement that extends to all of its members (See, Weidman, 1989). She further notes that African-American students succeed in higher education institutions that in them- or in special programs, intentionally craft a social identity for African-American students as achievers.

Perry (2003) also asserts that the African-American community should work harder to transmit the educational philosophy of achievement to its children and youth (e.g., See, Price, 2002). For Perry, this attitude carries over to the college experience.

Perry concludes that Black students, irrespective of class, background, and prior level of academic preparation will have difficulty achieving in institutions that are individualistic, highly stratified, and competitive, and that make few attempts to build and ritualize a common, strong culture of achievement that extends to all students.

Student development theorists', Tinto, (1975), Astin, (1993a, 1993b), Pascarella and Terenzini, (2000), and Chang (1999, 2000) each emphasize that the first-year of college is the most critical to students' success and persistence. Tinto (1975) and Astin (1993b) indicate that over 50% of all freshman students in America's colleges and universities drop out after the first year. Astin (1993a) and Chang (1996) indicate that the college attrition rate for minority students is significantly higher than that of white first-year students. Many of these student development theorists' hypothesize that the lack of diversity experiences on America's predominantly white colleges and universities adversely affects minority student persistence

(Levine, 1993; Milem, 1994; Astin, 1993a, 1993b; Chang, 1996, 1999; Chickering & Gamson, 1987, 1991; Hurtado, et al., 1998; Sedlacek, 1999).

3.10.3 Summary

In concluding the examination of research literature, noted student development theorist Albert B. Hood (1980) opined that, “in America, not every student goes to college, but in this country, there is a college for everyone”. In the United States system of higher education, students must possess the appropriate self-motivation to pursue, and to complete a program of four-year study. Moreover, what the research on college student development does indicate is that different kinds of students might require special assistance in gaining access to four-year colleges and universities. They might also require supplemental academic assistance for completing their baccalaureate higher education programs.

Most studies indicate that minority students’ access to higher learning is an important component of America’s future workforce needs (Bowen, 1977; Dalstrom, 2001; Mangan, 2002; BEHF, 2002). The conclusions of these student development theorists’ affirm what we perhaps already know, “that diversity in American higher education does make a difference.”

3.11 CONTRIBUTION THIS STUDY WILL MAKE TO THE LITERATURE

The literature review in this study was structured as usable knowledge. It presents the status of education-related research on the issues that pertain to minority students’ access and diversity in American, and particularly, Pennsylvania colleges and universities. The research is presented as education information.

This review of the literature sets forth a “*Cook Book*” approach to examining the research on the topic of minority students’ access to higher education. It is suggested that Researchers, Counselors, and Educators will review this information and strive to develop palatable solutions to the issues that involve improving minority students’ access to four-year higher education. This research might be particularly helpful to Admissions personnel in the four-year baccalaureate degree-granting institutions in the Commonwealth of Pennsylvania.

Moreover, it might also prove meaningful to readers to acknowledge that the research literature review was framed from the African-American perspective. In social research, it is perhaps a common fallacy to assert that there is no bias. The “worldview” of the investigator is always a prominent factor in the approach to any particular research problem. In all education and in social research, however, it is essential to provide the appropriate controls for personal biases and for the effects of cultural influences (Eichelberger, 1989). Most important, however, is to ensure that the design of the research method provides for objectivity in the research, develops systematic procedures for examining the problem, and employs unobtrusive measures to reach salient and reliable conclusions through the conduct of inquiry (Stark, 1992).

Chapter 4.0 will describe the methodology that is relevant to the research study.

4.0 CHAPTER

4.1 RESEARCH METHODOLOGY

This chapter describes the research procedures of the study. The purpose of the study was to examine Admissions personnel's perceptions and opinions regarding the issue of minority students' degree of access to four-year higher education in the Commonwealth of Pennsylvania. The subjects of the study were the Directors/Deans of Admission and Vice-Presidents/Directors' of Enrollment Management who hold the administrative responsibility for determining access policy to four-year institutions in this state. In addition, this study targeted special admissions/administrative personnel who serve as ACT 101 Coordinators in the Pennsylvania State System of Higher Education. The ACT 101 programs in higher education institutions promote special admissions for the state's minority, first-generation, and economically disadvantaged college-bound populations.

Admissions personnel were surveyed and institutional policy was examined for higher education accessibility, preparation, admissibility, affordability, and legal institution-related issues as they pertain to minority students' four-year college access.

The study surveyed both public and private four-year baccalaureate degree-granting institutions. The issues for examination were focused on selectivity and admissions standards and how they affect access to Pennsylvania's four-year colleges and universities. A primary

emphasis of this study was premised on two fundamental issues that pertain to access for the minority college-age population in the Commonwealth of Pennsylvania:

1. The level of educational preparedness necessary for minority college-bound students to pursue, and gain entry to four-year baccalaureate degree-granting institutions in greater numbers; and,
2. Examining the issues that pertain to affordability, college costs, and the ability of minority students to adequately finance four-year higher education in Pennsylvania.

4.1.1 Assumptions

The principal assumption in this study asserts; that, with all things being equal, the four-year baccalaureate degree-granting institutions of higher education in the state of Pennsylvania are open and accessible to all college-bound students who qualify under their institutional standards for admission.

This study assumed that higher education administrators who are associated with the responsibility area of Admissions possess a unique view of the academic qualifications and financial status for all students in general and minority students in particular..

4.1.2 Problem Statement

This study examined:

How do Pennsylvania's four-year baccalaureate degree-granting institutions effectively increase minority student enrollments and develop admissions policies for improving access that are framed within the context of the law?

4.1.3 Elements of the Problem

Several elements formulated the basis of this study. All are inclusive in the research design and relate specifically to the research questions examined:

- Access
- Preparation
- Admissibility
- Affordability, and
- Legal-Institutional
- Research Questions

The research questions examined in this study were:

4.1.4 Research Questions

1. What degree of importance do administrative policy- and decision-makers in Pennsylvania's four-year public and private institutions of higher education place on providing access for minority college-age students?
2. To what degree do administrative policy and decision-makers in Pennsylvania four-year public and private institutions of higher education perceive that preparation for postsecondary education directly or indirectly influences minority student access?
3. What do administrative policy and decision-makers in admissions in Pennsylvania's four-year public and private institutions of higher education perceive as the most significant challenges for increasing enrollments, sustaining campus diversity, and promoting

institutional policies and programs that improve admissibility for traditional-age minority students?

4. To what degree do administrative policy and decision-makers in Pennsylvania's public and private four-year baccalaureate degree-granting institutions perceive that financing in higher education directly or indirectly affects access and the rates of enrollment for Pennsylvania's college-age minority students?
5. What are the opinions of administrative policy and decision-makers in Pennsylvania's four-year public and private institutions of higher education on the impact of the legal challenges to affirmative action, special admissions programs, and the institutional implications of diversity-focused access policies on the rates of enrollment for the Pennsylvania college-age minority population?

4.1.5 Research Design

This study was based on descriptive research (Eichelberger, 1989). The objective was to describe a set of phenomena that measure the perceptions and opinions of higher education admissions personnel on the issue of equal opportunity four-year college access for minority students in the state of Pennsylvania.

This research was developed in the positivist frame and is quantitative in orientation. The survey study was based on primary research. The advantage to this survey study is that all of the people and data are real. The objective was to survey and accurately measure a set of responses to a given set of inquiries that describe educational and social phenomena.

4.1.6 Inferences In The Research

- The subjects' perceptions of the minority enrollment issues will positively affect institutional policy toward improving access.
- The subjects' knowledge of the extent of the minority access problem will lead to policies that improve four-year admission rates for these students.
- New information on access will lead to new policy initiatives designed to increase the minority enrollment in four-year institutions of higher education in the state of Pennsylvania.

4.1.7 Scope of the Study

The Pennsylvania Department of Higher and Adult Education statistics indicate that there are 142 Colleges and Universities in the state of Pennsylvania that are legally authorized to grant degrees (PDE, 2003). This number includes 18 public four-year, and 88 private four-year institutions [4-State Related, 14-State Universities, 88-Private Colleges and Universities]. The study surveyed 106 four-year institutions of higher education and 2 community colleges. One hundred twenty Vice Presidents of Enrollment Management, Directors' of Admission, and ACT 101 Coordinators comprised the target group for the study. Of the 108 institutions surveyed in the study, several institutions did have more than one respondent based on the availability of the targeted subjects. The scope of the survey study was statewide.

4.1.8 Research Methodology

This study utilized evaluative survey research in the methodology (Salant & Dillman, 1994). A descriptive 60-item questionnaire was utilized [See, Appendix B].

4.1.8.1 Subjects

This study was principally concerned with the perceptions of admissions personnel regarding access to baccalaureate degree study. Vice-Presidents/Directors' of Enrollment Management, Dean of Admission, Associate Directors of Admission, and ACT 101 Directors' were surveyed regarding minority students' access to four-year institutions of higher education in the state of Pennsylvania. These were subjects of the research. Several ACT 101 Directors were targeted for the study because these personnel possess the institutional authority to recommend admission for minority, first-generation and economically disadvantaged students at participating Pennsylvania four-year institutions. Their decisions to admit are based on the special admissions criteria that are approved by the State of Pennsylvania Legislature under ACT 101. Thus, all of the aforementioned administrative personnel directly or indirectly influence decisions on admission or determine institutional policy on four-year access. Each subject in the study shared these characteristics.

4.1.8.2 Sampling Methods

Several methods were used to access the sample and compile the data for this study:

1. The sample frame of 108 institutions was compiled from information listed on the Pennsylvania Department of Education (PDE) Website under the caption Educational Names and Addresses (EdNA). This web site also lists each institution's (e.g., [http://www.\[XYX\].edu](http://www.[XYX].edu).) Web-address.
2. The sampling frame consisted of the 106 four-year public and private baccalaureate degree-granting institutions of higher education and two community colleges in the state of Pennsylvania.
3. The List Frame consisted of the 120 administrators who serve as Directors of

Admissions, Directors of Enrollment Management, and ACT 101 Directors' in Pennsylvania's 106 four-year baccalaureates degree-granting institutions of higher education and two community colleges.

4. The list frame for the study was developed from the EdNA on the PDE Website. The names of the sample units were extracted from each institution's Website
5. A Web-based questionnaire was developed and sent to the target group via email and returned electronically [See, Appendices B, and C].
6. Several institutions had the opportunity to provide one or more responses to the questionnaire based on the targeted subjects of the study.
7. The researcher spent the period of four years [i.e., 2001-05] interviewing and compiling personal business cards from the target population. This was achieved by attending regional College Fairs and various professional higher education Conferences within the state of Pennsylvania. This information was utilized to assist in the development of the List Frame for the survey study.

A convenience sample (i.e., non-probability) survey method was utilized for the survey (Salant & Dillman, 1994). In approximately one-fifth of the 106 Pennsylvania four-year institutions of higher education, the administrative position of Vice-President/Director of Enrollment Management was present. This number was approximately 25 positions. At several institutions in the study, the Vice-President of Enrollment Management also served as the Director of Admissions and was the chief administrator of the Admissions Responsibility Unit. These personnel were the administrative supervisors of Admissions Directors, or served in place of an Admissions Director. Directors of Enrollment Management are often responsible for institutional policy-making on entry decisions.

4.1.8.3 External Validity

The principle of purposive sampling was validated in this study by including a representative sample of admissions personnel from the 108 four-year private and public institutions throughout the state of Pennsylvania (Salant & Dillman, 1994). In this regard, external validity was satisfied in this study based on the geographic representation of the participating institutions [See, Appendix I].

In addition, to secure external validity, it was important in the study to include a representative number of both four-year private and four-year public schools by institutional type (e.g., Research I & II; Private four-year) for the accessible sample frame. This procedure was necessary in order to establish a salient level of external validity in the research results.

4.1.8.4 Internal Validity

Survey-based studies must prevent internal threats in the research design and promote precision by assuring that the instrument is pre-tested and meets the demands for accurately measuring the desired phenomena (Salant & Dillman, 1994; Thomas, 2004). The survey instrument in this study was pre-tested extensively to establish internal consistency and reliability (Isaac & Michael, 1994; Thomas, 2004). The survey instrument was also pre-tested and adjusted for internal stability because it was the principal measurement device in this quantitative-focused study (Thomas, 2004). The survey instrument consisted of a self-developed questionnaire; therefore, the construct validity of the survey items was also an important element for reliability in the research design (Isaac & Michael, 1994).

In this regard, it was important that the survey items in the instrument were developed from the literature review to align with the five research questions, assure content validity, and accurately measure the phenomena under study for the research problem. According to Dillman

(2000), well-designed and pre-tested questions prevent extensive levels of measurement error in the survey.

4.1.8.5 Instrumentation

This study utilized Likert (1932, 1967) scaling methods to measure variables. Means, percentages, and data summations were utilized to calculate and measure the strength of the responses. One of the important elements in developing and pre-testing the Web-survey instrument was to assure that the questionnaire did not “lead the respondent(s)” (Salant & Dillman, 1994) and assure item objectivity (Isaac & Michael, 1994; Eichelberger, 1989). Pre-testing was utilized extensively to fine-tune the questionnaire, correct grammatical issues with the wording of the questions, and to adjust the ‘timing’ of the instrument.

In the questionnaire design, closed-ended, forced choice survey items were utilized (Salant & Dillman, 1994). The Likert-type scaling procedures incorporated a five choice response set in addition to a No Opinion and a Does Not Apply choice set for each question. In the Web-survey design, the five choice response set was intended to measure the degree of disagreement-to-agreement with each statement: For example;

- (1) = Low/Negative---to--- (5) = High/Positive – [A] No Opinion – [B] Does Not Apply
Disagreement-----Agreement
1--Strongly Disagree
2--Disagree
3--Neutral
4--Agree
5--Strongly Agree

A—No Opinion
B—Does Not Apply

The Web-based questionnaire used in this study was designed in such a way that all of the survey questions had to be completed before the instrument could be submitted

electronically. However, each respondent also had the option to respond to any question/variable through the [A] No Opinion, or [B] DNA variables.

In this research design, the items that were outlined in the following survey question matrices were formatted to address Research Questions 1 through 5. It was important to distinguish when the survey questions were soliciting personal opinion, and when the survey items were requesting the respondents to answer on behalf of their institution. The disaggregated information was then used to segment institutional policy questions from personal perceptions in order to gain clearer insight to the structural and administrative aspects of higher education access.

Concerning the research methods for the study, a Survey Question Matrix [See, Table 4.1] was developed to distinguish the ‘type’ of questions that were presented in the survey. The survey questions consisted of three types; 1) demographic information, 2) questions that required a personal response and, 3) items that asked the respondents to answer on behalf of their institutions regarding access policy.

Table 4.1 Survey Question Matrix

Institutional Information	Survey Items	Type of Survey Questions	
		Opinion/Perceptions (#)	Institutional/Policy (#)
Research Question(s)			A and B
1. Access	(1-12)	5, 6, 7, 8, 9, 12	1, 2, 3, 4, 10, 11
2. Preparation	(13-24)	13, 17, 18, 19, 20, 21, 22, 23, 24	14, 15, 16
3. Admissibility	(25-34)	25, 27, 28	26, 29, 30, 31, 32, 33, 34
4. Affordability	(35-45)	35, 36, 40, 41, 42, 43,44	37, 38, 39, 45

		Type of Survey Questions	
Institutional Information		Opinion/Perceptions (#)	Institutional/Policy (#)
Research Question(s)	Survey Items		A and B
5. Legal Issues	(46-55)	47, 49, 50, 51, 52, 53, 54, 55	46, 48
Summary Question		56, Preparation [A] Affordability [B]	
Demographic Data Set		C, D, E, & F [Descriptive Information]	

4.1.9 Data Collection Procedures

This study utilized a Web-based questionnaire as the principal data collection tool (Dillman, 2000, Thomas, 2004). An Internet-based email pre-notification was sent to each member of the list frame two weeks before the initial mailing of the Web-based questionnaire. In addition, a return receipt request was sent with the Web [email] pre-notifications. The cover letters and the Web-based questionnaires were distributed from the high-tech University-based Servers. The survey pre-notification email(s) and the follow-up notices were sent from a home-based Broadband DSL-ready system.

For the Web survey, an electronic return receipt was included with the questionnaire. After two weeks, a follow-up email message and second cover letter was sent to each subject who had not responded to the initial survey mailing. The Web-based survey was re-submitted to the target group at each follow up. After a period of three weeks, a follow-up telephone call was made to each subject of the study who had not yet completed the survey. The second follow up involved sending a personal email from the remaining list frame for the target group, and submitting a third cover letter along with the Web-questionnaire.

Each questionnaire was assigned a unique institutional code to assure respondent confidentiality. All data were treated in group fashion. According to the pre-testing analysis, the questionnaire was designed to have taken approximately 15 minutes to-20 minutes to complete.

The research plan for this survey study consisted of a nine-week process for distributing and collecting the data from the Web-based questionnaire. The research plan for the survey study was as follows:

- Week 1: Sent pre-notifications via email;
- Week 2: Updated all incorrect email addresses from the pre-notifications by using the 'Return Receipt' feature in the Microsoft Outlook Express [copyright] home-based email system;
- Week 3: Distributed the Web-based Questionnaire;
- Week 4: Followed up with telephone contacts;
- Week 5: Sent the first follow-up after two weeks;
- Week 6: Used telephone contacts and sent email follow up to remaining List Frame non-respondents;
- Week 7: Emailed the second follow up letters and questionnaires from the remaining Web-based List Frame;
- Week 8: Used telephone contacts for final follow through, and;
- Week 9: Closed the survey portion of the study at the end of week nine.
- Allowed an additional week for late responses from the remaining ;
- List Frame [send last email follow up/reminders].
- Concluded the Survey Research Plan and summarized the data set. Sent personal 'Thank You' email letters to each respondent in the survey study.

4.1.10 Data Analysis

Data from the questionnaire was transposed from the Web-survey database and processed through the Microsoft Excel [Copyright] program. In addition, various sections of the Web-survey data sets were processed through the Statistical Package for the Social Sciences (SPSS-v.13.1). The study used interval level data as its scale of measurement. The data from this study were quantified using a summated rating scale. Likert-type scale mean scores were summated for each item in the Web-survey. Percentages for each item in the survey were also calculated. For this study, the graphic and quantified information, in addition to the data tables, figures, and charts provided for the illustration of the mathematic results.

4.1.11 Limitations

This study had the following limitations:

1. This study focused on undergraduate level higher education.
2. In this study, the principal focus was on American-born or naturalized, Pennsylvania in-state traditional college-age residents (18-24) of: African-American, Hispanic, Asian/Pacific Islander, and Native-American decent; Not other “students of color”, out-of-state minority students, or minorities from foreign nations.
3. This study limited its analyses of the problem of minority student access to the admissions personnel in four-year private and public institutions who make admissions decisions and set institutional policies on access.

4.1.12 Delimitations

1. This study was limited to a population in one state.
2. No students were surveyed in this study.

3. No college faculties were surveyed in this study
4. All subjects in the study shared the same characteristics.

4.1.13 Summary

The measurement design of this study was quantitative. The frame of the research was positivist. The calculations utilized summated rating scales for each survey item. The mean scores and the strength of the negative or positive response to each survey question measured the degree of disagreement-to-agreement for each item. The survey items in the questionnaire were unidirectional from negative to positive (Likert, 1932, 1967). However, it was recommended by Thomas (2004) and others, that the survey items be transfixed in such a way that various questions would elicit negative directional responses to avoid a ‘positive-response syndrome.’ This method required recoding of various questions in the final survey data sets.

The survey study required a measure of precision in the research design and incremental discrimination within and among the survey items [i.e., 1-to-5 point Likert Scale]. Thereby, a five-point, seven-unit response set was utilized for each survey item. The No Opinion, and the Does Not Apply (DNA) variables for each question were coded [A] and [B] in the questionnaire so that they would not affect the summated mean scores [e.g. SD-(1) – to – SA-(5)].

These quantitative research procedures were necessary for accurate calculations of the mean scores and percentages in the data sets. From the results, this survey study was able to draw accurate inferences from the data. The following chapter presents the findings of the study.

5.0 CHAPTER

5.1 FINDINGS

This chapter presents the findings of the study. The purpose of this chapter is threefold; 1) to review the data and describe the results in demographic terms, 2) to analyze the data in quantitative expressions using descriptive statistics, and 3) to disaggregate the data examine the results.

The purpose of the survey was to assess the degree to which four-year baccalaureate degree-granting institutions of higher education in the state of Pennsylvania were accessible to the in-state resident minority college-bound population.

In this study, several elements of the problem for examination that pertain to the concept of higher education access were considered. One of the most important of these factors consists of the degree of academic preparation of college-bound minority students. Second, affordability factors that pertain to the costs of higher education in Pennsylvania were examined.

5.1.1 Descriptive Data and Collection Process

The following results were obtained via the nine-week research plan for the Web-survey portion of the study:

First return rate 41/120 = 34.2% – at two weeks
 First follow up 76/120 = 63.3% – at five weeks
 Second follow up 96/120 = 80.0% – final count 9+ weeks

Based on research standards, Web-based surveys, as presented by Thomas (2004) and Dillman (2000), with an 80% return rate for an Internet survey is considered acceptable. The following chart [Figure 5.1] provides an illustration of the nine-week schedule and a profile of the response rates for the Web-survey research plan. The data that are illustrated in Figure 5.1 detail the ‘spikes’ in survey responses as they correlate to the serial points of emphases in the follow up procedures [See Appendix A – Cover Letter dates] in the study.

Total Questionnaire Submissions By Date

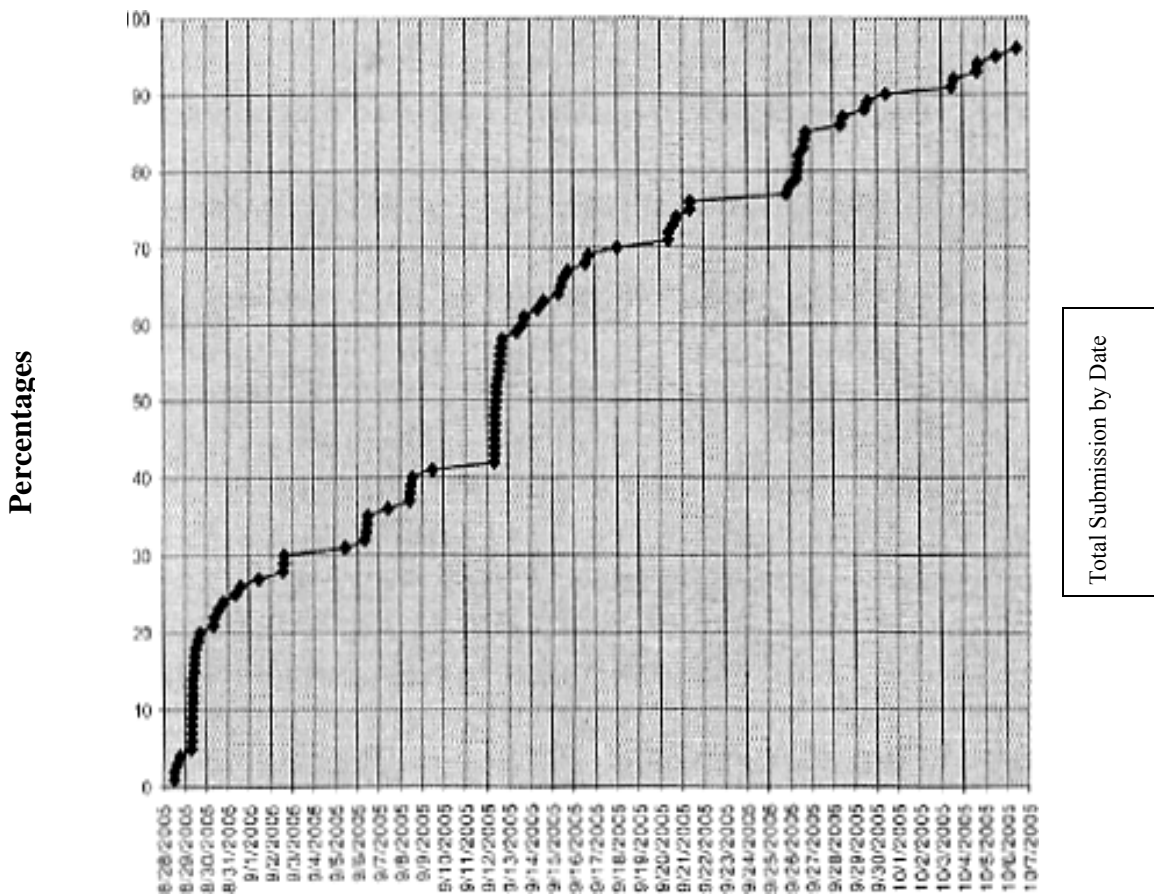


Figure 5-1 Response Rates by Dates and Percentages of Outcomes for the Minority Access Questionnaire

According to Thomas (2004) and Dillman (2000), Internet survey studies with a moderate [Convenience] sample size of N=120 should acquire a return rate of a least 70% to validate reliability in the results.

5.1.2 Demographic Description of the Survey Respondent Group

The subjects for this study were the Admissions personnel in 106 of Pennsylvania's four-year baccalaureate degree-granting institutions. In three instances in the study, senior-level administrators at two community colleges in Pennsylvania were included because the transfer issue concerning minority students from two-year schools to four-year institutions is an important process for higher education access.

In this study, the 106 four-year institutions, and two community colleges comprised the sampling frame of 108 schools. Concerning the list frame of this study, 120-targeted admissions personnel from the 108 institutions were surveyed.

The demographic data presented in Table 5.1 represents the self-identified description of the participants of the study. Demographic item E in the questionnaire posed this question: "Please indicate your administrative title" [See Appendix B].

Table 5.1 Self Identified Administrative Characteristics of the Higher Education Administrators who participated in the Study by Responding to the Web-based Questionnaire

	Code/II)	N	Percent (%)
1.	Vice-President/Director of Enrollment Management	24	25.0
2.	Admissions Director/Officer or Dean	41	42.7
3.	ACT 101/Minority Recruiter*	14	14.6
4.	Associate Director Admissions**	17	17.7
TOTAL		96	100.0

*Several institutions requested that the Admissions' staff Minority Student Recruiter complete the questionnaire. Permission was granted in each case.

**Several institutions in the study requested permission to forward the questionnaire to the Associate Director of Admissions or other line staff. Permission was granted in each case.

In instances where institutions requested permission to forward the questionnaire to the 'appropriate' admissions staff that were considered more qualified to answer this particular survey, permission was extended in 100% of these cases. The survey was explained to the participants that the response from the "institution" was also important [See Table 5.1] to the study.

The data presented in Table 5.2 indicate that the appropriate target group of admissions personnel from the state's four-year institutions responded to the survey. Most interesting is the sector of 24%, or 25% of the administrative policy- and decision-makers (i.e., respondents) who identified their positions as the Vice President or Director of Enrollment Management at their institutions. Sixty percent of the respondents identified themselves either as the Director/Dean of Admissions or as the Associate Director. In this study, approximately 85% of the respondents identified themselves as higher-level Admissions administrators at their institutions.

Concerning the Act 101/Minority Recruiter Admissions respondents, 15% of the target group identified their positions in this category. This study found, that in the majority of administrative Admissions Offices in Pennsylvania's four-year higher education institutions,

there was a specific staff person designated for recruiting minority populations. The target group's results for this survey appear to be valid based on the self-identified demographic profile of the respondents.

In a correlate to Item E in this study, Item F of the demographic profile, asked the number of years that the subjects of the study had worked in the area of higher education admissions. Table 5.2 illustrates the results of Question F from the survey.

Table 5.2 Target Group Self-Reported Number of Years of Administrative Experience in Higher Education Admissions

	RESPONSE	NUMBER OF RESPONSES	PERCENT
1.	1 – 5 Years	18	18.75
2.	6 – 10 Years	9	9.38
3.	11 – 15 Years	18	18.75
4.	16 – 20 Years	18	18.75
5.	21 – 25 Years	17	17.71
6.	26 – 30 Years	11	11.46
7.	30+ Career	5	5.21
	TOTAL	96	100.0

The data in Table 5.2 indicate that based on the total number of years of experience in Admissions that were reported, the results were multi-modal. The number of responses at eighteen appears three times indicating that one group of administrators are relatively new to the lead positions in Admissions at one to five years. In addition, a second cohort in categories three, and four possess multiple years of administrative experience that is referenced by a combined 38% of the target group. Categories three, four, and five represent a range of years experience from 11-to-25 total years on average, for 55% of the respondents. Approximately 16% of the respondents selected categories six and seven, which exhibit 26-to-30, plus years experience in higher education admissions. Five of the 96 respondents [5%] in the study

reported more than 30 years experience in higher education admissions. Over half of the target group reported 20 or more years of admissions experience in higher education.

One of the ways by which external validity was established in the results was through the geographic representation of the four-year institutions of higher education in Pennsylvania. Based on the information that was self-reported for Question D of the demographic profile, the results are outlined in Table 5.3; (Q-D) “Please indicate the Pennsylvania State region or location of your institution”:

Table 5.3 Institutional Response Rates by Self-Reported Regions in the State of PA

Response	# of Responses	% of Responses
1. Western Pennsylvania	40	41.67
2. Central Pennsylvania	21	21.87
3. Eastern Pennsylvania	35	36.45
TOTAL	96	100.0

The data presented in Table 5.3 regarding geographic response rates indicate balance in the spread of institutions that were represented in the survey study.

The data that are displayed in Table 5.4 illustrate the self-reported information on public and private institutions of higher education who responded to the study. Respondents were requested to describe their institution’s status (Q-E):

Table 5.4 Self-Reported Data by Respondents in the Study on Public and Private Institutions of Higher Education by Type

Response	# of Responses	% of Responses
1. Public	33	34.37
2. Private	63	65.63
TOTAL	96	100.0

The data in Table 5.4 exhibits the proportion of private to public institutions in the state of Pennsylvania who responded to the survey. According to data presented from the PDE web site "<http://www.pde.state.pa.us>", 61% of Pennsylvania's baccalaureate degree-granting institutions are listed in the private colleges' category [88/142]. In this study, approximately 66% of the respondents identified their institutions as private and 34% indicated public.

5.1.3 Analyses

This research represents a study on undergraduate higher education. In this descriptive profile, the issues that pertain to minority student access to four-year undergraduate higher education were examined. The survey that was presented to the four-year higher education administrators was designed to address specific issues for Pennsylvania's minority college-bound students' full participation in undergraduate education and for access. The data presented in Table 5.5 illustrate the comprehensive undergraduate full time equivalent (FTE) enrollments of the institutions who participated in the study:

Question A of the survey study posed, "What is the estimated of average undergraduate full time enrollments (FTE) at your institution over the last three years?"

Table 5.5 Undergraduate Full-Time Equivalent (FTE) Enrollment of Respondents'

FTE Enrollment	# of Responses	% of Responses
500 – 1,000	9	9.37
1,001 – 5,000	56	58.33
5,001 – 10,000	16	16.67
10,001 – 15,000	3	3.12
15,001 – 25,000	4	4.16
>25,000	8	8.33
TOTAL	96	100.0

The self-reported data in Table 5.5 are skewed toward the higher proportion of private universities responding to the study. Generally, institutions of higher education with full-time undergraduate enrollments in category number two with 1,000 to 5,000 FTE's will generally represent the private four-year colleges' profile. The data in Table 5.4 reflects this skew toward private colleges with 63/96 or 65.63% reporting in this study and 33/96 public institutions registering at 34.37%. For this study, 75% of the institutions responding reported FTE undergraduate enrollments between 1,000 and 10,000 students. The ratio of four-year private colleges in Pennsylvania is 88/142 at 62%. The ratio results in this survey research study were at 65.625% [See, Table 5.4].

Table 5.6 exhibits the reported estimates of undergraduate minority students who were enrolled (FTE) over a three-year period. "What was the highest percentage of minority students enrolled at your institution in the past three years?"

Table 5.6 Estimated Number of Minority Students Full-Time Enrollments at Four-Year Institutions Over A Three-Year Period

Response	# of Responses	% of Responses
0 - 5%	16	16.67
6 - 10%	30	31.25
11 - 15%	31	32.29
16 - 25%	12	12.50
26 - 40%	5	5.20
41 - 50%	1	1.04
Over 50%*		
Historically Black Institutions	1	1.04
Don't Know*		
TOTAL	96	100.0

*Categories 7, 9 = No Response(s).

The data in Table 5.6 indicate that Pennsylvania's four-year institutions estimate average minority enrollment figures of 6% to 15% over a three-year period. The 'three year average' question might have presented a problem for the respondents principally because the reported figures appear to be relatively 'high' regarding FTE four-year enrollments of minority students in the state of Pennsylvania. One historically black institution of higher education reported part of the study. This question was not relevant to this type of institution whose undergraduate enrollments are usually a majority of minority students.

Higher education statistics on minority enrollments across the United States have been consistent for years [See, *Chronicle of Higher Education Annuals* 1999-2005], and approximate minority enrollments at four-year institutions generally average between 5% to 8% according to national statistics. College enrollment figures for minorities in the state of Pennsylvania should approximate national averages.

Concerning this study, 63% of the four-year institutions in Pennsylvania were reporting 6% to 15% minority enrollments. The self-reported enrollment figures in Table 5.6 are higher than the state of Pennsylvania Census Tract [i.e., *Statistical Abstract* 2001] average of the total minority population(s) at 12% [See, Table 3.1, pg. 57]. The type of minority enrollment figures and percentages that are outlined in Table 5.6 do not indicate a statewide access 'problem' for four-year higher education minority enrollment.

However, it should be noted that self-reported data on minority student four-year enrollments in Pennsylvania tabulated for Table 5.6 appear to be inconsistent with the PDE (1999-2000) data reported in Table 3.2 [See pg. 58]; and [See, Table 16 in Appendix E] for the state higher education enrollment statistics from the PDE.

However, four qualifications were suggested for the findings of the data presented in Table 5.6. First, four-year private colleges tend to have smaller enrollments and higher retention rates for all students and for minorities in particular. Second, a majority of private institutions responded to this study, and the results of survey Question B is skewed in this direction. Third, the demographic survey Question B might have been imperfectly stated, and unclear to the respondents; this item could be subject to ‘measurement error’ (Dillman, 2000). Lastly, the Pennsylvania institutional self-reported minority enrollment percentages included both the in state, and the out-of-state figures. This research study on higher education access concerned only in-state resident students.

Moreover, because of higher student retention rates in private colleges, the three-year averages of minority FTE enrollments would remain higher than average. Private colleges represent the majority of respondents to this study by a 2:1 ratio. The results of the data in demographic Item B of the survey are best viewed from this perspective.

In this study, 80% of the respondents reported three-year average minority enrollments ranging between 5% and 15%. According to national minority enrollment statistics, a 15% minority FTE student enrollment is in the ‘high-range’ for four-year higher education, with the exception of the historically black institutions in the United States.

In summary, the demographic elements of this study are important for establishing the foundation for evaluating quantitative results. These demographic items were also necessary for addressing the five research questions in the study. The demographic profile of the subjects is also essential to understanding the results in the context of the cumulative years of administrative experience in the area of admissions in higher education [See Table 5.2]. The ‘administrative

years of experience' of the target group provided value and established credibility for the responses that were obtained from this survey on higher education access.

The following sections report the findings of the quantitative research sector of the study. In the survey study, items 1 through 55 in the questionnaire represent the quantitative sector. These items appear in full text in Appendix B.

The questionnaire was segmented into five sectors: Access, Preparation, Admissibility, Affordability, and Legal/Institutional. A summary Question #56 on preparation and affordability for minority students' four-year higher education access in Pennsylvania finalized the survey study.

5.1.4 Quantitative and Descriptive Data Findings

In the descriptive research section, the results from Items 1 through 12 of the questionnaire addressed the first research question. This question pertained specifically to four-year higher education access:

Research Question One: What degree of importance do administrative policy- and decision-makers in Pennsylvania's four-year public and private institutions of higher education place on providing access for minority college-age students?

5.1.4.1 Analyses

The data that are presented in Table 5.7 were calculated by Likert-type mean scores on a data set of 1-[Low] to 5-[High] and by the percentages, these data are equivalent to 100% for each question (i.e., Likert, 1.0—5.0 = 100%). The frequency of each response (i.e., 1--5) determined the percentage rates in each item [See Appendix C]. The number of No Opinion and

Does Not Apply responses to each item determined the total N for that specific question. The N/O and DNA responses do not have a numerical weight in the data sets (See Survey Questions 1-12 for Table 5.7 below).

Table 5.7 Survey Questions 1 – 12

#	SURVEY QUESTIONS	MEAN
1	Our institution should remain open to any minority students in the state of Pennsylvania who meet its admission standards.	4.64
2	Our institution views the recruitment of minority students as a priority.	4.18
3	The recruitment of minority students at our university has the full support of the senior administration.	4.34
4	Our institution uses a written plan for equal opportunity access and admissions.	3.82
5	Each PA four-year institution should have an Educational Opportunity/ACT 101 program component to support equal access.	4.12
6	Public institutions offer minority students greater opportunities for higher education access.	3.13
7	The state of Pennsylvania has greater opportunities for equal access to higher education than most states in the Union.	3.03
8	Historically black colleges and universities in the State of Pennsylvania provide minority students greater opportunities for access than predominantly white institutions.	3.10
9	Increasing the minority student population on this campus is important to our institution.	4.33
10	Our institution has adopted specific policies aimed at increasing minority student enrollment.	3.93
11	The recruitment of minority students at our institution has the full support of the Governing Board/Trustees.	4.26
12	Private colleges offer minority students better opportunities for four-year higher education access.	2.81

The respondents were surveyed to indicate their degree of disagreement or agreement (e.g., SD to SA) with each question in the data set. The results are represented in Table 5.8. Each item is forced choice. In addition, every item in the questionnaire required a response or the survey could not be submitted electronically. However, each respondent also had the option of answering No Opinion [N/O] or Does Not Apply [DNA]. In the five data sets, the N/O and DNA responses were not calculated for the mean scores and percentages [See Appendix D – Data Set A].

Table 5.8 Percentages, Counts and Mean Scores for the Results of the Access Sector of the Questionnaire

Question	Answer SD	Answer D	Answer N	Answer A	Answer SA	#	Mean
1	4.21%	2.10%	0.00%	12.36%	81.05%	95	4.64
2	1.04%	7.29%	10.41%	34.37%	46.87%	96	4.18
3	1.05%	5.26%	7.36%	30.52%	55.78%	95	4.34
4	2.38%	8.33%	17.85%	47.61%	23.81%	84	3.82
5	1.20%	4.81%	20.48%	27.71%	45.78%	83	4.12
6	15.38%	19.78%	12.08%	41.75%	10.98%	91	3.13
7	1.63%	21.31%	52.45%	21.31%	3.27%	61	3.03
8	6.49%	28.57%	24.67%	28.57%	11.68%	77	3.10
9	1.06%	4.25%	7.44%	35.10%	52.12%	94	4.33
10	1.08%	9.78%	14.13%	44.56%	30.43%	92	3.93
11	1.09%	3.29%	8.79%	41.75%	45.05%	91	4.26
12	4.65%	37.20%	38.37%	11.62%	8.14%	86	2.81

The results highlighted in Question #1 indicate that higher education administrators felt strongly about total access to four-year institutions in the state of Pennsylvania. The 93% positive response rate [Q-1, Items #4 and #5] for the access question confirms the second assumption of this study (pg. 17); “that all institutions of higher education in the state of

Pennsylvania are equally open and accessible to students of all races.” The data indicate that their degree of affirmation to this principle is cohesive.

For the data set on Access [Table 5.8], please review the information in Table 5.1 of the Survey Matrix (p. 151). The data in Table 5.1 indicate that Question numbered 5, 6, 7, 8, 9, and 12 represent the personal perceptions of higher education administrators on access. Moreover, questions numbered 1, 2, 3, 4, 10, and 11 represent institutional-policy responses. When analyzing the data in this study it is important to distinguish questions that pertain to personal opinion/perceptions from questions that required the respondents’ to answer regarding their institutional policies. These distinctions should add clarity to the responses by disaggregating the data for the analyses.

For example, in this data set the mean responses of Questions #2 and #3 are high which indicate that the degree of positive agreement toward the recruitment of minority students is a priority at these four-year institutions. Policy Question #4 indicates that written plans for recruitment are important to these institutions. Policy Question 10 showed that 75% of administrators surveyed indicated that their institutions have adopted specific policies for recruiting minority students. In policy Question #11, 87% of admissions personnel indicated that the Board of Trustees of their institutions supported the recruitment of minority students.

Results reported for Question #5 indicate that 73% of both public and private four-year institutions are demonstrating a strong commitment to access by supporting the state’s ACT 101 programs where low-income, minority, and first-generation college-bound students might gain entry to these institutions. However, the summative N of 83 indicates that there were 13 no opinions [N=96 =100%] registered. Question #6 is a comparison question for Item #12 in the data set. For Question #6, 53% of the respondents felt that public institutions provide better

access to four-year higher education. Respondents also indicate that 35% disagree on public access, and that 12% indicate neutrality. In Item #12, the question is whether private colleges provide minority students better opportunities for access; clearly, 42% disagree that private colleges provide better access, while 205 of respondents answered above the neutral point (3.0).

Personal opinion Question #7 in Table 5.7 is an item that garnered the lowest response rate with a total N of 61. This question asked if Pennsylvania institution of higher education provided more opportunities for equal access to higher education than most states in the Union. The results in Table 5.8 indicate that 52% answered neutral, or a “true” no opinion. Regarding this issue, 24 % of the respondents agreed and 24% disagreed.

Pennsylvania has two historically black institutions of higher education. Most respondents indicated that these institutions do not provide greater access than predominantly white four-year schools (Q-8); 40% felt that these institutions do provide greater access while 35% of the sample indicated that they do not. The neutral response to Question #8 was 25%.

In sum, 87% of the respondents indicated that increasing minority student access to their institution was important. In terms of Research Question One; these results indicate a relatively strong commitment to providing four-year higher education access to

Pennsylvania’s minority college bound students. These findings will be reviewed in further detail in the summary chapter of the study.

Research Question Two: To what degree do administrative policy and decision-makers in Pennsylvania’s four-year public and private institutions of higher education perceive that preparation for postsecondary education directly or indirectly influences minority student access?

5.1.4.2 Analyses

The data presented in Survey Questions #13 - #24 addresses the second research question which pertains to the degree of academic preparation that higher education administrators in Pennsylvania’s four-year schools perceive that minority students possess for four-year college admission. The issue in the research question of “directly or indirectly influences” pertains to the evaluation of entry credentials, and the decisions to admit based on academic qualifications pursuant to four-year higher education. Survey Questions #13 through #24 focused on the aspects of academic preparation for higher education in this descriptive research (See Survey Questions #13 – #24 for Table 5.8 below).

Table 5.9 Survey Questions 13 – 24

#	SURVEY QUESTIONS 13 - 24	MEAN
13	A "preparation gap" exists in high school academic achievement between the state's majority and its minority college-bound students.	4.02
14	Our institution offers special academic support programs for minority and economically disadvantaged students.	3.94
15	At our institution, the high school grades/achievement of minority students is the best indicator of first-year academic success.	3.73
16	At our institution, the SAT/ACT scores of minority students reflect the average of all entering students.	2.35
17	SAT/ACT scores make it more difficult for most Pennsylvania minority students to qualify for admission at four-year institutions.	3.55
18	Community colleges are the most appropriate entry point for the majority of Pennsylvania's college-bound minority students	2.03
19	Most of Pennsylvania's college-bound minority students are academically under prepared for four-year admission.	2.77
20	Minority college-focused students in our state need early academic intervention and stronger elementary school preparation.	4.11
21	Minority college-bound students in Pennsylvania generally come from academically deficient secondary schools.	3.32
22	The federal "No Child Left Behind" Act promotes good education policy for improving the long-range academic preparation of Pennsylvania's college-bound minority students.	2.39

#	SURVEY QUESTIONS 13 - 24	MEAN
23	Education in urban high schools does not adequately prepare Pennsylvania's college-bound minority population for entry into its four-year institutions.	3.67
24	Minority college-bound students in the state of Pennsylvania would benefit from a stronger secondary school curriculum	4.24

Concerning the findings for the Preparation data set, refer to the Survey Matrix in Table 4.1 (See p. 145) for the distinction between the items that pertain to institutional policy and those of personal opinion on higher education issues.

Questions numbered 14, 15, and 16 represent the institutional-policy items. Questions numbered 13, 17, 18, 19, 20, 21, 22, 23, and 24 address personal perceptions questions. Personal perception/opinion questions were in the majority in the second research sector of the study.

Table 5.10 Percentage, Mean Scores, and Counts for the Results of the Preparation Sector of the Questionnaire

Question	Answer SD	Answer D	Answer N	Answer A	Answer SA	#	Mean
13	0.00%	2.10%	16.84%	57.89%	23.15%	95	4.02
14	2.17%	15.21%	8.69%	33.69%	40.21%	92	3.94
15	1.06%	14.89%	12.76%	52.12%	19.14%	94	3.73
16	12.50%	56.81%	17.04%	10.22%	3.40%	88	2.35
17	2.27%	15.90%	17.04%	53.41%	11.36%	88	3.55
18	22.22%	56.66%	17.77%	2.22%	1.11%	90	2.03
19	6.81%	37.50%	28.40%	26.14%	1.13%	88	2.77
20	0.00%	3.40%	11.36%	55.68%	29.54%	88	4.11
21	0.00%	20.69%	35.63%	34.48%	9.19%	87	3.32
22	21.79%	35.89%	26.92%	11.53%	3.84%	78	2.39
23	1.09%	8.79%	27.47%	47.25%	15.38%	91	3.67
24	1.07%	0.00%	6.45%	58.06%	34.40%	93	4.24

Seventy-three percent of the institutions surveyed indicated that they support academic enhancement programs for the special categories of minority and economically disadvantaged (i.e., low-income) students. These data are represented by the results in Item #14 of the

questionnaire. These two descriptive categories are not mutually exclusive; however, ‘low-income’ status might also pertain to majority students who demonstrate a high level of financial need to attend four-year colleges. The state-sponsored ACT 101 programs were designated to promote greater college access for the first-year, and first-generation students to higher education. The PA ACT 101 programs are not color-bound.

Concerning Item #15 in Table 5.9, 71% of the respondents indicated that high school grades were the best indicator of minority students’ first-year academic success at their institutions. This result is in line with student development research (Tinto, 1975) findings for all students in American higher education (Astin, 1971, 1993a, 1993b). In question #16, 68 % of the respondents agreed that the SAT and ACT scores of minority students who applied did not reflect the average scores of the regularly admitted first-year student population at that institution.

Concerning Research Question #2, the administrators surveyed in this study indicated that the attained SAT/ACT scores had not directly or indirectly negatively influenced their institutional policies on access for minority students. However, the results for Question #17 indicate that 65% of the target group felt that the attained SAT/ACT scores make it more difficult for the state’s minority students to qualify for ‘regularly’ admitted four-year entry.

Preparation for higher education remains one of the most critical elements for evaluation in this research study on access. The personal perceptions of the minority populations’ preparation for baccalaureate-degree study are an important step in the process of gaining entry. Gauging personal opinion on the level of academic preparation for college studies plays an integral part in this process. Question #13 indicates that four-year administrators perceive that a definite “preparation gap” in secondary level achievement between the state’s majority and

minority applicants exists. Eighty-one percent of the respondents in the study indicated that a “preparation gap” exists. Conversely, as indicated in Item #19, 43% of the higher education administrators surveyed did not perceive that most of Pennsylvania’s college-bound minority students were under-prepared for four-year college entry.

The principal assumption in this research study was predicated on the proposition that the state’s four-year Admissions personnel have the ‘optimal’ view of all applicants’ credentials for higher education matriculation. Second, noting the average number of years experience in higher education admissions, the respondents in this survey study [See Table 5.2] validate the findings.

In another meaningful research finding, 79% of higher education administrators in Pennsylvania did not feel that community colleges were the most appropriate point of entry for the state’s college-bound minority students (Q-18). Moreover, when assessing points of entry and preparation, 85% of the state’s higher education administrators felt that minority college-bound students would benefit significantly from stronger elementary school preparation (Q-20). This finding indicates that the target group at least had an opinion of contemporary trends in K-12 education, and also with the educational development of diverse student populations.

However, the 44% positive responses to Question #21, on the academic quality level of high schools attended by minority college-bound students indicated that the subjects perceived the secondary schools attended by this population as being deficient. Forty-four percent of those surveyed indicated that these schools were not academically deficient in preparing minority students for baccalaureate-degree studies.

However, the responses registered in Question #24 indicated that 92% of the target group felt that minority college-bound students in Pennsylvania would benefit greatly from stronger secondary school academic curriculums.

Question #22 solicited an opinion on the federally sponsored educational policy that emanates from the No Child Left Behind Act (NCLB). This Act is structured for improving the academic proficiencies and achievement outcomes of all elementary and secondary-level students and was perhaps inappropriate for higher education administrators to address. Over 58% of the respondents indicated that the 2001 NCLB Act did not offer the appropriate long-range educational policy necessary for improving minority students' college preparation. Conversely, 19% of this administrative group registered a "no opinion" response to this question [See Appendix C]. From this, it can be surmised that the NCLB Act and its policy issues are more appropriate for K-12 level educational administrators. These administrators are directly affected by these federal and state guidelines. Higher education is not in large measure are not bound by the 2002 NCLB statutes for improving education and achievement outcomes.

In the state of Pennsylvania, its largest demographic minority population clusters are located in urban areas. Thus, the majority of the state's potential college-bound minority students will most likely have attended urban public school systems. Question #23 in Table 5.8 addressed the perceived 'quality' of education in the states urban-centered high schools. A tally of the responses for Question #23 indicated that approximately 62% of those surveyed perceived that the urban school systems could use substantial improvement in preparing the state's minority college-bound students for four-year higher education entry.

Research Question Number Three: What do administrative policy and decision-makers in Admissions in Pennsylvania’s four-year public and private institutions of higher education perceive as the most significant challenges for increasing enrollments, sustaining campus diversity, and promoting institutional policies and programs that improve admissibility for the traditional-age minority students?

5.1.4.3 Analyses

Research Question 3 addressed the issue of minority students’ admissibility to four-year institutions of higher education in Pennsylvania. The question evaluates the status of appropriate credentialing and the academic qualifications that are necessary for regular admission and for ‘special’ admission (e.g., ACT 101) to four-year institutions.

Table 5.11 Survey Questions 25 - 34

#	Survey Questions 25 - 34	MEAN
25	Secondary school grades/achievement are the best indicators of minority students' admissibility at our institution.	3.84
26	SAT/ACT scores are not a good indicator of minority students' admissibility to our institution.	3.15
27	All four-year institutions in the state of Pennsylvania should adopt special admission policies that are aimed at providing equal access for minority students.	3.21
28	The admission of greater numbers of minority students to four-year institutions is good social policy for the state of Pennsylvania as a whole.	4.22
29	The most successful minority students at our institution have been transfers from two-year schools.	2.11
30	Our institution should adopt a specific policy aimed at recruiting minority students from two-year colleges.	3.42
31	The Pennsylvania ACT 101 program is an important tool for assisting minority, first-generation, and low-income students gain admission to our institution in greater numbers.	4.12
32	At our institution, most minority students that are admitted will require supplemental academic assistance programs to be successful.	2.73

#	Survey Questions 25 - 34	MEAN
33	Minority students that were admitted to our institution under special programs have been relatively successful when compared to regular admits.	3.72
34	Improving the graduation rates of the state's minority college attendees is a priority at our institution.	3.91

The institutional-policy items in Table 5.11 are outlined in the Survey Question Matrix [Table 4.1] under (Qs) -26, 29, 30, 31, 32, 33, and 34. Admissibility standards are usually determined at the institutional-policy level in higher education (Q-26). In this sector, the Scholastic Aptitude Test (SAT)/American College Test (ACT) issues were addressed as they pertain to admissibility. Four-year institutions in Pennsylvania were indicating at a 76% rate that these scores were not a primary indicator of minority students' admissibility to their institutions (Q-26). This finding is consistent with the data in Table 5.8, Questions 16 and 17. At the majority of PA four-year institutions, the SAT/ACT scores were not considered prohibitive to minority students' admissibility.

Table 5.12 Percentages, Mean Scores, and # for the Results of the Admissibility* Sector of the Questionnaire

Question	Answer SD	Answer D	Answer N	Answer A	Answer SA	#	Mean
25	3.22%	8.60%	11.82%	52.68%	23.65%	93	3.84
26	5.49%	27.47%	24.17%	31.86%	10.98%	91	3.15
27	2.27%	25.00%	31.81%	30.68%	10.22%	88	3.21
28	0.00%	3.29%	8.79%	50.54%	37.36%	91	4.22
29	16.45%	60.75%	17.72%	5.06%	0.00%	79	2.11
30	1.19%	16.66%	32.14%	38.09%	11.90%	84	3.42
31	1.28%	3.84%	12.82%	44.87%	37.17%	78	4.12
32	8.51%	41.48%	21.27%	25.53%	3.19%	94	2.73
33	0.00%	14.70%	17.64%	48.52%	19.11%	68	3.72
34	2.24%	7.86%	13.48%	49.43%	26.96%	89	3.91

*Admissibility: Please refer to Appendix B for Survey Questions

Second, 77% of these institutions indicated that transfers from two-year schools have not been their most academically successful minority students. The trend in Question #29 indicated that more than 76% of these higher education administrators preferred to admit their own four-year minority applicants. Moreover, Question #30 indicated that 50% of those surveyed felt that their institutions should not adopt specific policies for recruiting minority students from two-year colleges and approximately 50% viewed this policy as viable. This finding appears to support the supposition that half of the PA four-year institutions would prefer to recruit and admit first-year minority students as part of their fall-term freshman classes.

In this survey, 82% of the respondents indicated in Item #31 of Table 5.12, that, the State-sponsored ACT 101 program is an important tool for assisting minority, first-generation, and low-income students to gain admission to their institutions in greater numbers. Forty-nine percent of the respondents also indicated that the minority students who were admitted to their institutions would not necessarily require supplemental academic assistance to be successful at their institutions (Q-34). This finding might indicate that half of Pennsylvania's four-year institutions feel that they are admitting "qualified" minority students, or minority students who have demonstrated the potential to be successful in college. In addition, over 76% of the respondents indicated that improving the graduation rates of the state's minority college population is a priority of their institution.

About the personal perceptions on admissibility factors, 38% of the respondents did not feel that all of the state's four-year institutions should adopt special admissions policies aimed at providing equal access to minority students. However, 41% of the respondents felt that this type of policy initiate was viable. The key element in Question #7 might have been in the structure of the wording; all. Institutions of higher education value their autonomy and their capability to

implement policies that serve the best interests of their own institution on admissions-related issues.

Over 87% of the respondents agreed that the admission of larger numbers of minority students to four-year higher education is good social policy for the state of Pennsylvania (Q-28). The findings indicate a high degree of affirmation toward improving the admissibility of minority students to four-year institutions in Pennsylvania.

Research Question Four: To what degree do administrative policy and decision-makers in Pennsylvania's public and private four-year baccalaureate degree-granting institutions perceive that financing in higher education directly or indirectly affects access, and the rates of enrollment for Pennsylvania's college-age minority students?

5.1.4.4 Analyses

Research Question 4 addressed two dimensions of the issue of affordability in higher education. First, affordability in this study pertained to the overall costs of attendance in higher education in Pennsylvania concerning minority students. Second, the companion side of the argument on affordability involves the ability of minority students' and their families to pay the costs of a PA four-year institution. The issue of affordability for four-year study was assessed in relation to the trend toward higher levels of student loans that have been necessary for the state's neediest students to attend four-year schools. Families with lower federal Expected Family Contribution (EFC) indexes also require higher amounts of student loans to cover the costs of attendance (COA) at Pennsylvania's four-year institutions. The issue of affordability is a crucial element in the study of baccalaureate-level access for the state's minority students who aspire to attend PA institutions.

Table 5.13 Survey Questions 35 - 45

#	SURVEY QUESTION 35 - 45	MEAN
35	Higher Education in the state of Pennsylvania has been priced out of the range of most minority students desiring to attend four-year schools.	3.17
36	Pennsylvania government sponsored programs (e.g., PHEAA) do not have adequate financing plans for its most needy students to attend four-year baccalaureate degree-granting institutions.	3.69
37	Our institution provides adequate financial assistance to meet the needs of minority students.	3.40
38	Minority students that attend our institution will require a higher percentage of loans.	3.19
39	All financial assistance at our institution should be based on need regardless of race or ethnic origin.	3.41
40	Higher education in the state of Pennsylvania is affordable to all college-bound students.	2.64
41	Low-income, and minority students should first attend two-year colleges to save on the costs of higher education.	2.27
42	The families of Pennsylvania's college-bound minority students' should start earlier, prioritize, and save a higher percentage of their personal resources for financing higher education.	3.40
43	Financing four-year higher education for minority students is a good long-term investment for the state of Pennsylvania.	4.29
44	PHEAA Grants and Federal grants-in-aid [e.g., PELL] should be increased in favor of Pennsylvania's most financially needy students.	4.45
45	Our institution cannot afford to enroll large numbers of financially needy students (e.g., Discounting process).	3.13

In the sector on higher education Affordability, it was necessary for higher education administrators to conduct a comparative-evaluation concerning the comprehensive costs of attendance for higher education in the state of Pennsylvania. The majority of the survey questions on college costs and affordability were addressed through the personal opinion items of the Survey Question Matrix in Table 4.1 (p. 145).

The personal opinion-centered survey questions were represented by identifiers; 35, 36, 40, 41, 42, 43, and 44 in Table 5.13. For example, concerning Item 35, the data indicate that 38% of those surveyed did not feel that Pennsylvania's four-year institutions of higher education

have been priced out of the range of minority students, while 49% of the respondents viewed this as a valid statement.

The data presented in Table 5.14 below provide a summation of the results of the sector on financing four-year higher education in Pennsylvania.

Table 5.14 Percentages, Mean Scores, and # for the Results of the Affordability* Sector of the Questionnaire

Question	Answer SD	Answer D	Answer N	Answer A	Answer SA	#	Mean
35	4.25%	34.04%	12.76%	38.29%	10.63%	94	3.17
36	3.26%	15.21%	11.95%	47.82%	21.73%	92	3.69
37	6.52%	18.47%	14.13%	50.00%	10.87%	92	3.40
38	4.54%	30.68%	21.59%	27.27%	15.90%	88	3.19
39	9.78%	23.91%	8.69%	30.43%	27.17%	92	3.41
40	17.20%	35.48%	18.28%	23.65%	5.37%	93	2.64
41	19.56%	52.17%	21.73%	4.34%	2.17%	92	2.27
42	2.29%	14.94%	32.18%	41.37%	9.19%	87	3.40
43	0.00%	1.09%	6.59%	53.84%	38.46%	91	4.29
44	0.00%	0.00%	6.52%	41.30%	52.17%	92	4.45
45	7.40%	28.39%	18.51%	34.56%	11.11%	81	3.13

*Affordability: Please Refer to Appendix B for Survey Questions

However, Question #40 in Table 5.13 was designed to provide a counterbalance to Item 35 by posing that, “higher education in the state of Pennsylvania is affordable to all college-bound students”, and not distinctive by “minority” status. Approximately 29% of the administrators surveyed agreed with the statement that all PA four-year institutions were affordable, while 52% of the respondents disagreed with this statement. Assuming that minority students are included in all Pennsylvania college-bound students; this response is contradictory on the comprehensive affordability of four-year institutions in this state.

By including the majority of the state’s college-bound dependent minority students in the “financially needy” category, based on 2005 Title VI guidelines, 68% of the respondents felt that

government-sponsored financial aid programs and policies did not target the obligatory financial assistance for the neediest students. This question (i.e., 36) is a financing policy issue that would pertain to “all” students who demonstrate high financial need, and aspire to attend a PA four-year institution as their first choice.

According to this study, higher education administrators consistently indicated that they would prefer to have their enrollees begin their academic careers in four-year level education. Question #41 in Table 5.13 indicated that 71% of these administrators do not feel that minority students in particular should begin matriculating at two-year colleges in order to reduce the overall costs of four-to-five years of baccalaureate-degree study. Recent trends in higher education indicate that many students are pursuing such a two-year [community] college financing strategy for higher education (Lumina, 2002, 2003, & 2005).

Question #42 in Table 5.13 represents an interesting perception on whether minority families should begin saving earlier for their children’s future college education. Nine percent of the respondents answered “no opinion” and the agreement at 41% and the negative at approximately 17%, this response rate was considered interesting. Perhaps it is a bit unusual for the target group to “perceive” that middle- and low-income families have the capacity to save significant amounts of their resources for future higher education.

As a social policy issue, one might characterize a “needy” family as being relatively unable to “save” significant sums of money for future college education. Question #42 was aimed principally at middle- to upper-income PA minority families’ ability to finance a higher percentage of four-year higher education. This would be based on the based on the expected family contribution (EFC) score [See, Appendix J].

The section on affordability incorporated a specific question that was aimed at Pennsylvania student financial aid policy. Question #44 queried the respondents on implementing financial assistance policy for higher education that scaled student aid in favor of Pennsylvania's neediest students. Approximately 93% of the respondents indicated that this concept would constitute a favorable policy on the distribution of student financial aid. This question represents a current policy issue that has been under consideration by the Pennsylvania State Legislature and the Pennsylvania Higher Education Assistance Agency (PHEAA).

Concerning institutional-policy questions on affordability, Item #37 in Table 5.13 indicated that approximately 60% of the four-year institution surveyed felt that their institutions provided adequate financial assistance to meet the needs of minority students. Surprising however, is the fact that 42% of those surveyed in Item #38 [Table 5.13] felt that minority students who would attend their institutions might require a higher percentage of student loans? Eight percent of the target group indicated a "No opinion" response, while approximately 34% of these administrators disagreed with this statement.

These results are interesting owing to the fact that Table 5.14 data indicate that 66% of the respondents were from private four-year schools where costs are significantly higher than in public institutions. Do these results indicate that in the perceptions of the private four-year institutions, collectively, they determined that their costs were not too expensive?

Question #39 affirms that four-year institutions in Pennsylvania did prefer to follow state and federal laws when awarding student aid regardless of race and need. Question #39 indicated that 57% of the respondents agreed with this policy question. However, this item is also interesting because this legal-oriented policy question had a 34% rate of disagreement. This represents an issue where there could be no 'special consideration' for minority status and

financial assistance; yet many of these administrators disagreed with the student aid policies of their institutions.

In sum, Question #45 in Table 5.13 [See Appendix B] was directed at four-year private institutions. The discounting process for student financial assistance was addressed in this item. Private institutions possess the capability to “discount” tuition and fees for any of its students. However, the neediest students, whether minority status or not, require a higher percentage of the private institution’s available financial resources to attend.

Forty-five percent of the reporting institutions agreed with the statement that they could not afford to enroll large numbers of financially needy students by discounting tuition, with 36% in disagreement. In Question #45, there were 10% of the institutions that registered “no opinion” and 6% reported, “does not apply” [See Appendix C]. It was inferred that the private colleges understood the question in its proper context, and for its applicability to their institutional types.

Research Question Five: What are the opinions of administrative policy and decision-makers in Pennsylvania’s four-year public and private institutions of higher education on the impact of the legal challenges to affirmative action, special admissions programs, and the institutional implications of diversity-focused access policies on the rates of enrollment for the Pennsylvania college-age minority population?

5.1.4.5 Analyses

Research Question 5 addressed institutional-legal issues. This section represented an area of the study that had the potential to produce a high level of what Dillman (2000) terms “non-response” error in the survey. During the pre-testing phase of the survey instrument, the presentation of the “legal-focused” questions was a cause of concern for the pilot group. During

the actual survey research phase, various inquiries were received that requested a clarification of what constituted the appropriate context of “legal” questions for this study.

Regarding the legal-institutional phase of the survey research, several of the initial respondents did not prefer to address legal issues on behalf of their institutions. It was then explained with greater clarity that this study was structured as, 1) an ‘Opinion Survey’, and that, 2) the project constituted a dissertation study, 3) all data would be treated in group fashion, and that 4) all responses to the survey would remain confidential.

Subsequently, with an analysis of the data collected for this element of the study, the section on legal-institutional access compiled a higher percentage of “no opinion” responses for the results [See Table C], than the other four problem elements in the survey study.

Table 5.15 Survey Questions 46 - 55

#	Survey Questions	MEAN
46	The recent U. S. Supreme Court decisions in the 2003 University of Michigan Admissions cases have changed the way that our institution implements minority students' recruitment policy.	2.78
47	Ethnic origin of applicant(s) should be a contributing factor in higher education admissions decisions.	3.33
48	Diversity in the student body is important to our institution.	4.52
49	Social justice in higher education equity is an important investment for the future of our Commonwealth.	4.42
50	The state of Pennsylvania should implement a Percentage Plan Admissions model to promote equity in higher education.	2.47
51	The 1978 Bakke decision slowed the rate of admission of minority students to four-year institutions in the state of Pennsylvania.	2.68
52	Pennsylvania should institute a statewide policy for increasing equity for four-year higher education opportunities.	3.76
53	Each Pennsylvania institution of higher education should have the right to admit the students of its choice without federal or state intervention.	3.25
54	All admissions policies at Pennsylvania four-year institutions of higher education should be framed within the context of the current federal law.	3.46
55	State and Federal laws regarding financial assistance makes it difficult for Pennsylvania's four-year higher education institutions to offer supplemental assistance and special diversity-focused aid to needy minority students.	3.52

Table 5.16 Percentages, Mean Scores, and # for the Results of the Legal/Institutional* Sector of the Questionnaire

Question	Answer SD	Answer D	Answer N	Answer A	Answer SA	#	Mean
45	10.71%	38.09%	22.61%	19.04%	9.52%	84	2.78
47	6.52%	18.47%	18.47%	47.82%	8.69%	92	3.33
48	1.05%	0.00%	6.31%	30.52%	62.10%	95	4.52
49	0.00%	1.05%	10.52%	33.68%	54.73%	95	4.42
50	19.44%	33.33%	30.55%	13.88%	2.77%	72	2.47
51	6.00%	38.00%	38.00%	18.00%	0.00%	50	2.68
52	1.17%	10.58%	23.52%	40.00%	24.70%	85	3.76
53	6.74%	29.21%	11.23%	37.07%	15.73%	89	3.25
54	1.29%	15.58%	24.67%	51.94%	6.49%	77	3.46
55	1.35%	16.21%	18.91%	55.40%	8.10%	74	3.52

*Legal/Institutional: Please refer to Appendix B for Survey Questions.

The data presented in Table 5.16 are correlated with the Questions that are segmented into perception/personal opinion, and those that require an institutional response [See, Table 4.1 (p. 145) of the Survey Question Matrix]. Questions #46 and #48 represent the only items in this section that are constructed in the institutional-policy format. Eight questions in the data set required personal perceptions on the impact of the legal issues regarding higher education. These specific questions, also submitted in the personal opinion format, were considered necessary to address the research questions presented in problem element five of the study.

Question #46 begins this section by examining the legal-institutional opinion concerning the 2003 University of Michigan and United States Supreme Court issues that were presented in *Gratz v. Bollinger*. In *Gratz v. Bollinger, et. al.*, the issues focused primarily on the legality of affirmative action admissions policies in undergraduate higher education. The question for Item 46 queried the subjects to determine if their institutions changed the manner in which they implemented minority recruitment policies since the 2003 *Gratz v. Bollinger* legal decision. For this item, 49% of the target group responded negatively indicating that there were no significant

changes in their minority recruitment policies because of the 2003 U.S. Supreme Court ruling in *Gratz v. Bollinger*. However, what might be more interesting is the fact that 29% of the institutions reported that they did change policies concerning minority admissions because of the legal outcome in *Gratz v. Bollinger*. The question was; therefore, did these four-year institutions determine the need to review their admissions policies on recruiting minorities to bring them back into compliance within the framework of the federal law?

Question #48 addressed the institutional-policy issue of maintaining a diverse student body at the state's four-year institutions. For this question, 92% of the respondents indicated that maintaining a diverse student body was important to their institution. This finding affirms Question #1 [See, Table 5.7] from the Access sector of the questionnaire which implied that an open and egalitarian process exists for the admission of minority college-bound students at four-year institutions in Pennsylvania.

The legal institutional-policy sector of this survey appears to have presented several challenges to the respondents. For Question #47, with the concept of ethnic origin constituting a positive contributing factor in higher education admissions decisions at PA four-year institutions, this obtained a 57% agreement rate. These findings are interesting based on the status and the politics of the race-sensitive recruitment issues in higher education today. These results also affirm the responses for survey Question #48. The results indicate that maintaining diversity on the state's four-year campuses was viewed as an institutional priority.

The respondents to the survey, in large measure, felt that social justice in higher education in Pennsylvania was important to our future as a Commonwealth (Question #49). Approximately 55% of the target group strongly agreed with this statement.

Question #50 represented an important access policy question for higher education in the state of Pennsylvania. In this item, the issue of the utility of a state supported percentage Plan for equity in higher education admissions was presented. Fifty-three percent of the target group indicated that the percentage Plan concept was unnecessary in the state of Pennsylvania to promote equity in higher education admissions. For this question, 23% of the target group registered a “no opinion” response. Approximately 16% of the respondents in Item 50 felt that this type of state-regulated admissions plan was appropriate for higher education equity in Pennsylvania.

Question #51 highlighted the 1978 U. S. Supreme Court decision in Bakke v. The Board of Regents of California. This question sought to gauge the perceptions of the long-term impact on minority admissions of Pennsylvania. This question appears to have been problematic for several reasons: 1) over 46% of the respondents rendered a “no opinion” response to the item, 2) the question has a sequence problem in this survey. Only 50% of the target group responded to the question. The question is not deemed controversial. However, the Bakke affirmative action “question” appears to be out-of-date. Secondly, when reviewing the sequencing of the questions in the legal/institution sector of the survey, Question number 1 regarding the Gratz v. Bollinger 2003 Court decision devalues the relevance of the Bakke (1978) issue from a contemporary perspective.

Various concerns in survey design are only discernable after a large degree of sample data had been compiled. Question #51 regarding the Bakke (1978) legal issue was anachronistic, and it would be prudent to eliminate this item in follow up studies on this topic.

Item #52 was designed to provide a “check” feature for Item #50 of the survey. In this question, the issue of instituting a statewide policy for increasing equity for four-year higher

education opportunities was addressed. For this question, approximately 65% of the respondents indicated that a statewide policy on admissions equity was necessary. For this item, 11% of the target group disagreed with this statement.

Regarding a companion issue, Item #53 of the study presented a statement that Pennsylvania institutions of higher education should have the right to admit the students of their choice without governmental intervention. This question presented a counterpoint to the Gratz (2003) and Bakke (1978) legal issues that restrained four-year institutions from broadening its admissions decisions to build a diverse student body of its choice. The question addressed the autonomy privileges that four-year institutions have in admitting the students of their choice. Approximately 36% of the target group felt negative toward this question while 53% answered in the affirmative. About 11% of the target group registered a “no opinion” response to this item. In some manner, Question #53 leaves room for ambiguity and uncertainty of its intent. Based on the responses to the issues in this study, it appears that Pennsylvania’s four-year institutions of higher education are making strong efforts at inclusion of minority students. The institutions’ perceived that they were being stymied in this process by a number of legal factors.

Concerning survey Question #54, 58% of the subjects felt that all admissions policies should be framed within the context of current federal law. In a sense, this question addresses the issue of social equity in higher education. It also supports the frame of the law as presented in Gratz v. Bollinger and Grutter v. Bollinger in the 2003 [University of Michigan] U. S. Supreme Court cases. Based on the responses in this study, Pennsylvania’s four-year institutions appear to be cognizant of the legal issues that surround diversity-focused admissions policies. The PA four-year institutions seem to be insulating themselves from the types of legal problems as found in Gratz, et.al. (2003) by maintaining admissions policies that are framed within the

context of the law. Subsequently, for Question #54, 19% of the target group registered a “no opinion” response.

In sum, Question #55 in Table 5.16 addressed a legal issue that involves special financial assistance programs and policies concerning minority students. Over 63% of the target group perceived that state and federal regulations regarding financial aid make it difficult for Pennsylvania’s four-year institutions of higher education to offer supplemental financial assistance or special diversity-focused student aid to minorities.

5.1.5 Summary

In this chapter, the findings from the five problem elements addressed in the survey were examined. The findings represent a vast array of opinions and perceptions from admissions personnel in the 106 four-year institutions of higher education and two community colleges. All of the subjects surveyed in this study were directly associated with the administrative area of higher education admissions. All of the subjects of the study shared the same occupational characteristics.

This study was delimited by the fact that no college faculty or students were included in the survey. The cumulative results of this survey were summarized at 96 replies of 120 for an 80% response rate.

Salant and Dillman (1994) suggest that survey studies for a population size with a sample group of 120 subjects to be about evenly split on the characteristic in which are were interested. This includes a sampling error of plus/minus 3%. Concerning the convenience sample utilized for this study, the mathematic results suggest that the variances of the responses for the target population surveyed were valid within +/- 3% at the 95% confidence level [96 of 120 = 80%].

One of the research objectives of this chapter was to link the results of the descriptive study with the five research questions of the dissertation. These research elements were Access, Preparation, Admissibility, Affordability, and Legal/ Institutional represent an integrated concept that runs throughout of this dissertation on minority students' access.

In the concluding chapter of the study, the Summary Question [#56] from the survey was addressed. Moreover, within these concluding pages of the research study, the objective was to disaggregate the data from the survey and examine the quantitative results, associations, and the inferences from the findings. The findings of the study provided the foundation for the conclusions for this research. In addition, the conclusions provided information necessary for the development of policy options aimed at improving minority students' higher education access in the state of Pennsylvania.

Table 5.17 Summary Survey Question #56: Respondents with Percentage Rates for Preparation and Affordability

RESPONSE	# OF RESPONSES	% OF RESPONSES
A = Preparation	53	55.21*
B = Affordability	43	44.79
TOTAL	96	100/0

*Statistically significant at $p < .05 = +/- 3\%$ points

In the final chapter, the study evaluates the research results from the descriptive study, addresses the research questions, provides salient analyses on the findings, and presents implications for further study. Additionally, Chapter 6.0 presents the concluding arguments of this research study.

6.0 CHAPTER

6.1 SUMMARY, IMPLICATIONS, CONCLUSIONS

This chapter presents a summary of the study's findings, implications, and conclusions. This chapter also outlines several policy options for improving minority higher education access and suggests recommendations for research and further study.

The purpose of this study was to examine the perceptions of higher education administrators' at 106 of Pennsylvania's four-year baccalaureate degree-granting institutions and two community colleges on the degree of minority students' access to those institutions. Transfer issues for promoting four-year access were addressed by inclusion of the two-year institutions in the study.

Admissions personnel were asked to rate a series of questions that pertained to the degrees of access, preparation, admissibility, affordability, and legal-institutional issues that lead to baccalaureate degree-granting higher education opportunities for minority students.

A web-survey instrument soliciting information on higher education admissions practices was sent to 120 administrators at 106 four-year schools and two community colleges in the state of Pennsylvania. All levels of higher education institutions by type were represented in the study and the scope of the study was statewide.

The response rate for the study was 82%. All of the electronically returned surveys were fully completed. The questionnaire completion rate was 100% because of the technical design of

the Web-based survey. The survey could not be submitted unless all questions were completed. The survey instrument included 55 quantitative-structured questions that examined the areas of higher education access, preparation, admissibility, affordability, and legal/institutional issues. The questionnaire also included six demographic questions, and one summary question that tied together the two critical elements of the study.

The summary question for the survey was highlighted in Question #56 with the purpose of addressing the issue of academic preparation versus the costs of higher education at Pennsylvania’s four-year institutions. Academic preparation and the cost of attendance were viewed as the principal factors that influenced the degree of four-year access for minority students in the state of Pennsylvania. The results of Question #56 were crucial to the conclusions for this study. The results of Summary Question 56 are presented in Table 6.1.

The issue that was addressed in Question #56, presented: “In your professional opinion, what keeps minority students out of Pennsylvania’s four-year colleges and universities, Preparation or Money?”

Table 6.1 Summary Survey Question #56: Respondents with Percentage Rates for Preparation and Affordability

RESPONSE	# OF RESPONSES	% OF RESPONSES
A = Preparation	53	55.21*
B = Affordability	43	44.79
TOTAL	96	100.0

*Statistically significant at $p < .05 = +/- 3\%$ points

6.1.1 Discussion

The respondents could only choose one item, A or B for Question #56. There were no degrees of opinion for this question. This summary question was included in the study based on the information that was derived from the 1999 U. S. Congressional Hearings on minority and low-income student financial aid for higher education: “What Keeps Minority and Low-income Students out of Higher Education: Preparation or Money?” The summary question/debate from the 1999 U. S. Congressional Hearings were inconclusive. This comparable frame of research format was applied specifically to the state of Pennsylvania for this study.

Several recent policy studies pinpoint the costs of higher education as the principal factor in low-income and minority students’ inability to gain access to four-year higher education institutions in greater numbers (Lumina Foundation, 2004, 2005; CEEB, 2005). The data presented in Table 6.1 indicate that Pennsylvania’s four-year higher education admissions personnel perceived that academic preparation was the primary factor that impeded minorities’ four-year access higher education.

The summated percentages for Question #56, #53 of 96 for 55% for preparation, versus 45% for affordability determined that the differences were statistically significant. However, from an anecdotal, or “birds eye” view, the differences in the data results do not appear to be meaningful. On each side of the argument, there was too much data to ignore. Further analyses of the preparation versus affordability access issue were necessary to reach salient conclusions.

At no time during the monitoring of the survey data for the study, did the issue of affordability as the principal factor, outrank the issue of preparation as the perceived impediment to minority students’ four-year access. However, at the mid-point of the nine-week survey

research, these variables showed an even split at 50%. Preparation, then increased by 10% as the research was completed.

The Lumina Studies Foundation presented data from their 2002 study on the affordability factors for all 50 states, and their institutions of higher education. The Lumina Studies (2002) affordability data for the state of Pennsylvania is presented in Appendix G. These data show that 44% of Pennsylvania's generally admissible public and private institutions were unaffordable for dependent low-income students.

Concerning the 2002 Lumina Studies data, a principal assumption was that the majority of Pennsylvania's "low-income dependent" students could have been categorized as minority, but not exclusively. The Lumina Studies (2002) research reached the following conclusions on the admissibility, accessibility, and affordability ratings for Pennsylvania's four-year institutions [See Appendix G]:

- Forty-one of Pennsylvania's 64 public institutions (64%) are accessible to college-qualified dependent low-income students.
- Only five of Pennsylvania's 82 private institutions (6%) are accessible to college-qualified dependent low-income students.
- Low-income college qualified students have far fewer affordable choices than do median-income students.
- None of the admissible public four-year institutions in Pennsylvania is affordable to low-income college-qualified students without borrowing. All of these institutions are affordable to median-income college-qualified students without borrowing.

These findings demonstrate that the state of Pennsylvania has high accessibility ratings for most of its high school graduates, but those in the low- and median income socio-economic income brackets in the state have severely limited choices for four-year higher education based on the costs of attendance. In the year 2002, the Lumina Studies report found that the costs of

four-year higher education in the state of Pennsylvania was ranked third highest in the United States. However, the Lumina Studies data also showed that in the year 1998, over 64% of Pennsylvania's recent high school graduates enrolled in college. Based on the data outlined in Table 6.1 the conclusions suggest that low-income, and the 45% of minority college-bound students represented in Summary Question #56, were severely limited in four-year higher education choice based on costs.

According to the data presented in Table 6.1, 53 of the 96 PA higher education admissions personnel in this study felt that the lack of the appropriate academic preparation was the primary factor for limiting access to four-year admission. Approximately 55% of the administrators surveyed felt that inadequate academic preparation for minority college-bound students in Pennsylvania impeded their four-year enrollment opportunities.

The data presented in the Tables in Appendix H describe the Pennsylvania System of School Assessments (PSSA) results. These results support the research perceptions of the higher education admissions administrators in the state of Pennsylvania that academic proficiency is a problem for its minority students. The PSSA data illustrate Grade 11 secondary achievement levels for the years 2002 through 2005. These data represent the students (e.g., minority) who are presently enrolled in postsecondary studies or those who will be soon eligible to pursue postsecondary studies.

The PSSA data highlighted in Appendix H show that Asian/Pacific Islander secondary-level students possess high degrees of academic achievement and the appropriate proficiencies in education-related skills according to state standards. In this study on minority students' higher education access, Asian/Pacific Islander students' issues concerning access were principally concerned with affordability. According to the College Entrance Examination Board's (CEEB)

data, these students generally achieve well on standardized college entry tests [See; Figure 3-3, p. 37] and possess a high degree of four-year college admissibility in the state of Pennsylvania.

Concerning PSSA data for the year 2004, Asian/Pacific Islander students achieved proficiency and advanced Math ratings of 70%. For Reading results, this group achieved a 58% proficiency rating. These scores represent the highest achievement level for any subgroup. The PSSA batteries are administered in the spring of a given school year. The 2004 reported PSSA Grade 11-achievement scores represent the first-year students for the college class of fall 2005.

Moreover, because of their higher achievement levels, the Pennsylvania in-resident Asian student is usually highly competitive for academic scholarships at four-year institutions of higher education. The degree to which increased scholarship support might alleviate financial concern for this group of minority students' could not be determined by this study.

Concerning any discussion of "minority students" and access, the Pennsylvania Asian/Pacific Islander students are the exception, and not the rule. Conversely, and for "political" purposes, this study of minority college access centered on issues that concerned African-American, Hispanic, and Native-American students in the state of Pennsylvania.

The data in Appendix H show that through the years 2002 – 2005, African-American students in Pennsylvania held a steady 25% proficiency rating level in Reading in the 11th grade with 49% falling below basic. The proficiency ratings of African-American students in 11th grade Math were 17.5% with 54% below the basic category.

For Pennsylvania's Hispanic students in the year 2004, 18% of grade 11 students showed proficiency in Math, with 62% below basic level. In Reading, their proficiency level on the PSSA was 29%, with 52% below basic for these students.

The PSSA data show that in 2004, 39% of Native-American students scored proficiencies in Math, and 55% were proficient in Reading. For the general category of Economically Disadvantaged students, which might also include majority and first-generation students, slight improvement was demonstrated in the PSSA with 23% proficient in Math and 35% proficient in Reading for the years 2004-05.

According to the results that are detailed in the 2002-2005 PSSA batteries [See, Appendix H], these data support the 67% two-year college enrollment rates for economically disadvantaged and minority students. The relative lack of academic proficiencies appears to be directly and, indirectly influencing this four-year access phenomena in Pennsylvania. Overall, the state's minority students do not appear to be proficient in academic preparation and in basic skills at the secondary level of education. With the PSSA, for secondary-level results that are presented [2002-2005]; it appears that it would remain reasonably difficult for the majority of these students to qualify for entry at the four-year level of higher education.

According to the data in Table 6.1, admissions personnel at the state's four-year institutions perceive appropriate academic preparation as the major factor regarding their capabilities to admit, and to enroll larger numbers of the states' minority college-bound students.

In summary, the data results for Summary Question #56 are too close to accurately conclude that a particular factor, preparation, or money/costs are principally responsible for impeding access to four-year schools for minority students. The more precise conclusion is that these research results indicate that a "measure of each" factor is prevalent. Each issue, preparation, or money should be evaluated for his or her particular implications for minority college access.

6.1.2 Research Questions

In this study, five research questions were presented for examination. The problem statement addressed minority students' legal accessibility to four-year institutions of higher education in the state of Pennsylvania. The five elements of the problem presented in this study consisted of; Access, Preparation, Admissibility, Affordability, and Legal/Institutional. The research questions for the study were developed according to these problem elements.

For this study, the five research questions are addressed. The key term is "addressed." In this study, there was no problem to solve; therefore, "answering" the five research questions was not appropriate for this research paradigm. This fine point of distinction is important to understanding the purpose of the study. The descriptive study sought to assess higher education administrators' perceptions on the importance of the research issues as presented in each problem element.

In the Tables that follow, the degree of importance of the issues presented by the survey questions were ranked according to the strength of the obtained mean scores. Various survey questions were recoded through the Statistical Package for the Social Sciences (SPSS) v 13.1 programs, then, ranked by descending mean scores. Recoding the survey data was also necessary to establish consistency in the direction of the questionnaire items. The following Tables 6.2 – 6.6 represent the survey results re-formatted from the Microsoft Excel [copyright] processed data that are represented in Tables 5.7 - 5.10 in Chapter 5.0.

Research Question One: What degree of importance do administrative policy- and decision-makers in Pennsylvania's four-year public and private institutions of higher education place on providing access for minority college-age students

Table 6.2 Recoded Data Set for the Access Survey Questions with Summations and Descending Mean Scores

Survey Questions	N	Minimum	Maximum	Sum	Mean
1	95	1.00	5.00	441.00	4.64
3	95	1.00	5.00	413.00	4.34
9	94	1.00	5.00	407.00	4.32
11	91	1.00	5.00	388.00	4.26
2	96	1.00	5.00	402.00	4.18
5	83	1.00	5.00	342.00	4.12
10	92	1.00	5.00	362.00	3.93
4	84	1.00	5.00	321.00	3.82
12(a)	86	1.00	5.00	274.00	3.18
6	91	1.00	5.00	285.00	3.13
8	77	1.00	5.00	239.00	3.10
7	61	1.00	5.00	185.00	3.03
Valid N = 12					

^aRecoded Variable -- SPSS v.13.1

Composite Mean Score - 3.84

By scale; the Likert mean scores 1 - 5 in this study transform to 1 = 20th percentile, through 5 = 100th percentile rank by degree of strength. After recoding, all mathematic directions are negative to positive.

Table 6.3 Recoded Survey Questions by Descending Mean Scores

Recoded Survey Questions by Descending Mean Scores: 1 - 12		
#		MEAN
1	Our institution should remain open to any minority students in the state o Pennsylvania who meet its admission standards.	4.64
3	The recruitment of minority students at our university has the full support of the senior administration.	4.34
9	Increasing the minority student population on this campus is important to our institution.	4.32
11	The recruitment of minority students at our institution has the full support of the Governing Board/Trustees.	4.26

Recoded Survey Questions by Descending Mean Scores: 1 - 12		
#		MEAN
2	Our institution views the recruitment of minority students as a priority.	4.18
5	Each PA four-year institution should have an Educational Opportunity/ACT 101 program component to support equal access.	4.12
10	Our institution has adopted specific policies aimed at increasing minority student enrollment.	3.93
4	Our institution uses a written plan for equal opportunity access and admissions.	3.82
12a	Private colleges offer minority students better opportunities for four-year higher education access.	3.18
6	Public institutions offer minority students greater opportunities for higher education access.	3.13
8	Historically black colleges and universities in the State of Pennsylvania provide minority students greater opportunities for access than predominantly white institutions.	3.10
7	The state of Pennsylvania has greater opportunities for equal access to higher education than most states in the Union.	3.03

6.1.3 Discussion

Survey Question 1 is reviewed by noting that four-year institutions of higher education in the state of Pennsylvania have strong positive opinions toward maintaining openness and accessibility for minority students. The strongest mean score represented by survey Question 1 in Table 6.3 evidences this. The institutional degree of commitment to minority access is evidenced by the relative strength of the top six mean scores outlined in Table 6.2. The top six mean score results were scaled above the 80th percentile [= 4.00] in this data set. Question 3 also indicates that the recruitment of minority students has the full support of senior administration(s).

Moreover, the subjects of the study reported that increasing the minority student population at their campus was important to their institution. The subjects of the study stated that minority student recruitment had the support of the Governing Boards of their institutions. Higher education research shows that enhanced minority recruitment and diversity-focused access policies are usually successful if they emanate at the top of the administrative hierarchy, according to research by Randi Levitz and Lee Noel (1999).

In this study, Question #2 in Table 6.2 indicates that as a group, four-year higher education institutions in Pennsylvania view minority recruitment as an administrative priority. Moreover, this study found that these four-year institutions perceived the retention and support of minority students through ACT 101 programs, and its special recruiting authority, as essential to providing college access.

Survey Items 12 (recoded), 6 and 8 in Table 6.2 solicited information on the optimal “type” of institutional fit for Pennsylvania minority students. The respondents did not perceive that the two Pennsylvania historically black institutions offered a better opportunity for four-year higher education access than other public or private four-year institutions in Pennsylvania. Although the respondents indicated that public institutions in Pennsylvania offered better opportunities for access, this comparison runs contrary to the research evidence.

Studies conducted by The College Board (CEEB), the Educational Testing Service (ETS), and the Mellon Study (1998) indicate that minority students share greater access and have higher retention rates at private institutions. In this study, the respondents’ indicated in Question 12, that private colleges and universities in Pennsylvania were not the appropriate fit for minority students’ matriculation. Contrary to the results, minority students fare much better at private institutions because of the academic “culture” of these institutions. The “nurturing”

environmental present at smaller institutions promotes greater minority retention and persistence, according to research conducted by Chickering and Gamson (1987, 1991).

Private four-year institutions tend to be smaller and the “collegiate” socialization processes have greater influence on these students according to student development research conducted by Weidman (1989). The Weidman research provides a structural model on the manner in which the collegiate socialization processes influences student persistence and academic performance. This socialization model is appropriate for examining the college selection process for minority students.

Concerning Research Question #1, the findings demonstrate that four-year baccalaureate degree-granting institutions in the state of Pennsylvania appear to be ‘welcoming’ entities and are fully accessible to minority students who qualify under their admission requirements. Minority students often qualify at the second level of selectivity or through special admission programs at the four-year institutions. The ACT 101 program promotes greater baccalaureate access for minority, first-generation, and economically disadvantaged students at participating institutions.

Based on the evidence found in this research, the degree of commitment to minority student access to four-year higher education in Pennsylvania is relatively strong, is voluntary, and is not driven by ‘political’ pressures.

Research Question Two: To what degree do administrative policy and decision-makers in Pennsylvania’s four-year public and private institutions of higher education, perceive that preparation for postsecondary education directly or indirectly influences minority student access?

In this study, access for minority students was examined through the dimension of academic preparation for higher education entry. The element of academic preparation was

important to this study on access because it neutralized the political discussion of exclusion from four-year higher education opportunities based on race status.

In this study, the conclusions from the research evidence suggest that Pennsylvania's four-year institutions of higher education are fully accessible to all students who qualify. The data in Table 6.3 highlight the degree of the respondents' perceptions toward the importance of pre-college schooling, and how these phenomena relate to the postsecondary readiness of minority students in Pennsylvania.

Table 6.4 Recoded Data Set for the Preparation Survey Questions with Summations and Descending Mean Scores

Survey Questions	N	Minimum	Maximum	Sum	Mean
24	93	1.00	5.00	395.00	4.24
20	88	2.00	5.00	362.00	4.11
13	95	2.00	5.00	382.00	4.02
18(b)	90	1.00	5.00	357.00	3.97
14	92	1.00	5.00	363.00	3.95
15	94	1.00	5.00	351.00	3.73
23	91	1.00	5.00	334.00	3.67
16(a)	88	1.00	5.00	321.00	3.65
22(d)	78	1.00	5.00	281.00	3.60
17	88	1.00	5.00	313.00	3.56
21	87	2.00	5.00	289.00	3.32
19(c)	88	1.00	5.00	284.00	3.23
Valid N = 12					

^aRecoded Variable --SPSS v.13.1

Composite Mean Score 3.80

^bRecoded Variable

^cRecoded Variable

^dRecoded Variable

Table 6.5 Recorded Survey Questions by Descending Mean Scores

Recoded Survey Questions by Descending Mean Scores: 13 - 24		
#		MEAN
24	Minority college-bound students in the state of Pennsylvania would benefit from a stronger secondary school curriculum.	4.24
20	Minority college-focused students in our state need early academic intervention and stronger elementary school preparation.	4.11
13	A "preparation gap" exists in high school academic achievement between the state's majority and its minority college-bound students.	4.02
18b	Community colleges are the most appropriate entry point for the majority of Pennsylvania's college-bound minority students.	3.97
14	Our institution offers special academic support programs for minority and economically disadvantaged students.	3.95
15	At our institution, the high school grades/achievement of minority students is the best indicator of first-year academic success.	3.73
23	Education in urban high schools does not adequately prepare Pennsylvania's college-bound minority population for entry into its four-year institutions.	3.67
16a	At our institution, the SAT/ACT scores of minority students reflect the average of all entering students.	3.65
22d	The federal "No Child Left Behind" Act promotes good education policy for improving the long-range academic preparation of Pennsylvania's college-bound minority students.	3.60
17	SAT/ACT scores make it more difficult for most Pennsylvania minority students to qualify for admission at four-year institutions.	3.56
21	Minority college-bound students in Pennsylvania generally come from academically deficient secondary schools.	3.32
19c	Most of Pennsylvania's college-bound minority students are academically under prepared for four-year admission.	3.23

6.1.4 Discussion

Preparation for higher education entry is a crucial component of access. The data presented in Table 6.3 addressed Research Question #2. The second research question sought to assess whether academic preparation levels directly or indirectly affect entry rates for the minority student college-bound population.

In this data set (Table 6.3), the strongest position taken by the survey group of higher education administrators indicated that minority college-bound students in this state could benefit from academically stronger high school curricula.

It is noted that college admissions personnel evaluate and dissect high school transcripts as part of the selection process. A principal assumption was that these personnel possess the comprehensive data to determine an applicant's readiness for entry into a particular institution. These personnel also extract, evaluate, and quantify the core academic subjects that were completed successfully by the applicants' in secondary schools. In this way, admissions personnel are able to predict/forecast with reasonable probability, the degree to which those applicants might, or might not be successful while matriculating at a particular institution. This quantitative process has proven to be particularly accurate for predicting first-year college success for all students (Astin, 1993; Tinto, 1975).

Admissions personnel evaluate all student applicants' qualifications for admission based on the high school achievement record. Moreover, based on the evidence found through this research, it appears that the minority college-bound population in Pennsylvania would in fact benefit from a stronger curriculum of course offerings. It is determined that stronger curricula would better prepare these students to meet the challenges of baccalaureate-degree studies.

In Pennsylvania, there are approximately 88 private four-year institutions of higher education certified to grant the baccalaureate degree. These private institutions have freshman class profiles that are in the ‘stellar’ range of academic attainment. The selectivity factors are relatively high for these types of institutions, however, each of these institutions utilize special admissions criteria to promote diversity in its student body. Based on the results of this study, and through anecdotal discussions with several Admissions Directors in this state, the task for promoting diversity-inclusion is becoming a more difficult task each year.

The subjects of the study appear to recognize that the key to effective academic preparation for four-year higher education begins with the elementary years of schooling. Question #20 had the second highest mean score in the preparation data set. Educational research indicates (Majors & Joliffe, 2004) that many minority children, and particularly the male gender, begin to fall behind their like classmates in academic achievement and grade-level after the fourth grade year. This evidence is reflected in the standardized (e.g., PSSA) achievement test scores for these students across the entire K-12 spectrum.

While recognizing the degree of the achievement problem in early year’s minority schooling, higher education administrators are generally at a loss when attempting to positively influence educational outcomes at this level. In many instances, Schools of Education at major research universities will provide partnerships with elementary education programs. The goal is to assist with improving learning outcomes of under-achieving children. This strategy represents the most appropriate intervention that higher education can offer.

In the postmodern era, private educational initiatives such as Pittsburgh National Bank’s 10-years “Grow Up Great” Program(s) provide additional resources to positively affect and

improve learning outcomes at the elementary school level. Many minority and low-income children derive the long-term benefits from these compensatory educational initiatives.

Perhaps what is most significant from these survey research findings lies in the fact that the respondents' perceived that a true "preparation gap" exists between the state's minority and the majority students? This finding addresses the "quality" and the "equity" of educational issues. It is essential that we recognize this problem for long-range higher education access and begin to develop strategic educational initiatives to analyze, and decrease the "gap". Then, focus appropriate interventions on the issues that influence disparities in educational proficiencies, affect preparation, enhance motivation for learning, and improve achievement outcomes for the state's minority students.

Moreover, this research found that higher education administrators perceived that the quality of the education in urban school districts in Pennsylvania needed improvement. They suggested that the low academic expectations that were associated with urban-centered schools negatively affected four-year higher education access for minority students. In Pennsylvania, approximately 70% of college-bound minority students emanate from urban public school systems (PDE, 2006).

The higher education personnel surveyed for this study did not perceive that community college transfers presented the best method for increasing minority four-year enrollment at their institutions. The results indicate that most of these administrators preferred to cultivate their own "home grown" talent by admitting first-year minority students with their freshman class. The higher number of private colleges who responded to this survey most likely influenced this particular finding.

This study found that private four-year institutions, as policy, do not encourage a large number of transfers. This policy indirectly influences tuition income. Private four-year schools prefer that their students start there. However, in the postmodern era, a number of Articulation Agreements exist with two-year colleges for the transfer of students to four-year institutions. As a rule, most transfer students will usually require five years to complete their undergraduate studies. Measures of academic credits are generally lost in most ‘transfer’ cases regardless of the articulation agreements.

Pennsylvania’s private colleges and universities have an exceptionally high rate of graduation in a four-year period. These four-year graduation outcomes are associated with special financial incentives for private institutions in the state of Pennsylvania. Therefore, transfer students will generally benefit the larger private institutions, and not the smaller privates whose curricula (e.g., Liberal Arts) are generally structured to be completed in four years of baccalaureate degree study. Thus, it follows that minority student transfer to private institutions is not the norm in Pennsylvania.

The data in Table 6.3 indicate that higher education administrators perceived that the secondary school grades of minority students were the best indicators of future success at their institutions. This information is in agreement with student development research that applies to all matriculating first-year students in American higher education.

The findings of this research indicate that the survey respondents’ did not feel that the state’s minority college-bound students were under-prepared for four-year college admission. Apparently, these administrators perceived that minority students merely required “higher quality” and more intense pre-college academic preparation to meet successfully the challenges of baccalaureate-degree study.

Perhaps one of the more interesting pieces of information that has been extrapolated from the research findings concerned Item #22 in Table 6.3. This outcome addressed the federal No Child Left Behind Act [NCLBA] (2001) educational initiatives, particularly as these policies pertained to the state of Pennsylvania. The majority of the respondents in the study did not agree with the tenants of the NCLB educational regulations for improving long-term learning educational outcomes.

The NCLBA statutes provide guidelines for improving the learning outcomes of minority, poor, and all Pennsylvania schoolchildren. Yet, the higher education administrators in this study felt that more focus needed to center on improving elementary and secondary education outcomes? There exists a contradiction of opinions in this regard.

It was determined through this study that PA admissions personnel regarded the NCLBA (2002) as principally a K-12 education model. The results of this survey concluded that the NCLBA of 2001 was not perceived as a critical element for policy studies on access at the postsecondary level of education.

Concerning the results of this research, it might be concluded that the degree of preparation for higher education for minority students does directly influence their ability to secure admission to Pennsylvania's four-year institutions. Moreover, the respondents suggested that the quality of the academic preparation by minority students seeking college admission directly affected their ability to offer regular admission to minority college-bound students in the state of Pennsylvania.

Regarding the outcomes of this research, the subjects perceived the comprehensive academic preparation of minority college-bound students as a serious issue that needs to become a priority, and improved at the K-12 level of education in the state of Pennsylvania.

Research Question Three: What do administrative policy and decision-makers in Admissions in Pennsylvania’s four-year public and private institutions of higher education perceive as the most significant challenges for increasing enrollments, sustaining campus diversity, and promoting institutional policies and programs that improve admissibility for the traditional-age minority students?

Research Questions 3 addressed the issue of the general admissibility of minority students’ to Pennsylvania’s four-year institutions of higher education. Admissibility pertains to a group, or an individual applicant’s ability to meet the academic, selectivity, and entry criteria based on the institutions requirements. Admissibility also pertains to the students’ competitiveness, and their ability to meet the academic standards of the institutions to which they aspire.

Table 6.6 Recoded Data Set for the Admissibility Questions with Summations and Descending Mean Scores

Survey Questions	N	Minimum	Maximum	Sum	Mean
28	91	2.00	5.00	384.00	4.22
31	78	1.00	5.00	322.00	4.13
34	89	1.00	5.00	348.00	3.91
29(a)	79	2.00	5.00	307.00	3.89
25	93	1.00	5.00	358.00	3.85
33	68	2.00	5.00	253.00	3.72
30	84	1.00	5.00	288.00	3.43
32(b)	94	1.00	5.00	307.00	3.27
27	88	1.00	5.00	283.00	3.22
26	91	1.00	5.00	287.00	3.15
Valid N = 10					

^aRecoded Variable --SPSS v.13.1

Composite Mean Score 3.67

^bRecoded Variable

Table 6.7 Recoded Survey Questions by Descending Mean Scores: 25 – 34

Recoded Survey Questions by Descending Mean Scores: 25-34		
#		MEAN
28	The admission of greater numbers of minority students to four-year institutions is good social policy for the state of Pennsylvania as a whole.	4.22
31	The Pennsylvania ACT 101 program is an important tool for assisting minority, first-generation, and low-income students gain admission to our institution in greater numbers.	4.13
34	Improving the graduation rates of the state's minority college attendees is a priority at our institution.	3.91
29	The most successful minority students at our institution have been transfers from two-year schools.	3.89
25	Secondary school grades/achievement are the best indicators of minority students' admissibility at our institution.	3.85
33	Minority students that were admitted to our institution under special programs have been relatively successful when compared to regular admits.	3.72
30	Our institution should adopt a specific policy aimed at recruiting minority students from two-year colleges.	3.43
32	At our institution, most minority students that are admitted will require supplemental academic assistance programs to be successful.	3.27
27	All four-year institutions in the state of Pennsylvania should adopt special admission policies that are aimed at providing equal access for minority students.	3.22
26	SAT/ACT scores are not a good indicator of minority students' admissibility to our institution.	3.15

6.1.5 Discussion

The issues for examination in this research question concerned the perceptions of higher education administrators on what their most significant challenges were for increasing diversity in the student body.

The data highlighted in Table 6.4, for Question #28, indicate that these administrators' felt positively about higher education access as good social policy, and for its long-term benefits for the state as a whole. These administrators also supported a commitment to providing greater access and promoting diversity by utilizing the special programs that were designed to aid low-income, minority, and first-generation college students with gaining entry to four-year institutions in increased numbers.

For Item #29, as detailed in Table 6.4, admissions personnel indicated that the transfer process was not perceived as the optimal way in which to increase minority four-year enrollments. However, the subjects of the study reported that improving the graduation rates of the state's minority college attendees was a high priority at their institutions. In essence, when minority students' matriculated, the majority of the state's four-year schools indicated that they possessed a strong commitment to successful follow-through, to graduation for this population.

Admissions personnel indicated that the prior high school academic records of minority applicants' were the best barometer on which to gauge admissibility. These institutions also reported that SAT/ACT scores were used as benchmarks for minority students' admissibility to their institutions. However, this result did not address how institutions used these scores, or how much weight was afforded to these particular admissions variables.

Subsequently, and based on the findings from survey Questions #16 and #17 in Table 6.3, these Pennsylvania four-year institutions did not appear to use SAT/ACT scores as a primary decision tool to eliminate minority candidates from admission.

Higher education institutions reporting in this study also perceived that minority students who had been admitted to their institutions, largely, did not require special academic assistance to succeed. Moreover, the four-year institutions reported that they did not view a statewide policy on minority admissions as necessary for increasing their enrollment numbers. It appears that these institutions were not willing to cede autonomy to state agencies to override the admissions policies of their own institutions.

Based on the results from this sector of the study, that focused on admissibility factors, higher education administrators' perceived that improving the high school achievement levels of minority applicants was the greatest challenge to increasing diversity, improving admissibility, and providing greater access for the state's resident minority students.

Research Question Four: To what degree do administrative policy and decision-makers in Pennsylvania's public and private four-year baccalaureate degree-granting institutions perceive that financing in higher education directly or indirectly affects access, and the rates of enrollment for Pennsylvania's college-age minority students?

Research Question #4 presented an issue that was considered a centerpiece of minority college access. This consisted of minorities' ability to afford four-year higher education. Research Question #4 posed this issue for higher education administrators' in the state of Pennsylvania.

The data pertaining to college pricing, cost of attendance, financing, and affordability issues are outlined in the results of Table 6.5. Policy issues as they pertain to student financial aid in higher education were also addressed in this data.

Table 6.8 Recoded Data Set for the Affordability Questions with Summations and Descending Mean Scores

Survey Questions	N	Minimum	Maximum	Sum	Mean
44	92	3.00	5.00	410.00	4.46
43	91	2.00	5.00	391.00	4.30
41(b)	92	1.00	5.00	352.00	3.83
36	92	1.00	5.00	340.00	3.70
39	92	1.00	5.00	314.00	3.41
42	87	1.00	5.00	296.00	3.40
37	92	1.00	5.00	313.00	3.40
40(a)	93	1.00	5.00	312.00	3.35
38	88	1.00	5.00	281.00	3.19
35	94	1.00	5.00	298.00	3.17
45	81	1.00	5.00	254.00	3.14
Valid N = 11					
^a Recoded Variable -- SPSS v.13.1				Composite Mean Score	3.58
^b Recoded Variable					

Table 6.9 Recoded Data Set for Affordability Questions 35-45

Recoded Survey Questions by Descending Mean Scores: 35 - 45		
#		MEAN
44	PHEAA Grants and Federal grants-in-aid [e.g., PELL] should be increased in favor of Pennsylvania's most financially needy students.	4.46
43	Financing four-year higher education for minority students is a good long-term investment for the state of Pennsylvania.	4.30
41	Low-income, and minority students should first attend two-year colleges to save on the costs of higher education.	3.83
36	Pennsylvania government sponsored programs (e.g., PHEAA) do not have adequate financing plans for its most needy students to attend four-year baccalaureate degree-granting institutions.	3.70

Recoded Survey Questions by Descending Mean Scores: 35 - 45		
#		MEAN
39	All financial assistance at our institution should be based on need regardless of race or ethnic origin.	3.41
42	The families of Pennsylvania's college-bound minority students' should start earlier, prioritize, and save a higher percentage of their personal resources for financing higher education.	3.40
37	Our institution provides adequate financial assistance to meet the needs of minority students.	3.40
40	Higher education in the state of Pennsylvania is affordable to all college-bound students.	3.35
38	Minority students that attend our institution will require a higher percentage of loans.	3.19
35	Higher Education in the state of Pennsylvania has been priced out of the range of most minority students desiring to attend four-year schools.	3.17
45	Our institution cannot afford to enroll large numbers of financially needy students (e.g., Discounting process).	3.14

6.1.6 Discussion

The affordability survey results opened with a powerful policy position. Based on Item #44 in Table 6.9, higher education admissions personnel in the state of Pennsylvania collectively agreed that additional financial aid resources were necessary for improving college access for minorities [and, low-income students]. Concerning this item, the minimum response was a 3.0 indicating a cohesive level of positive agreement that both the PHEAA and the Pell Grants should be increased, or scaled in favor of minority and low-income students in Pennsylvania. This outcome suggests that the standard financial aid formulas utilized under the current Title IV regulations should be adjusted to address the full financial need of the students who are least able to pay the costs of four-year higher education study.

In addition, these results also indicate that the policies of awarding campus-based financial aid awards should also be scaled in favor of those students who are least able to pay. This item (i.e., Question #44) represented a significant policy question that has been addressed by the Pennsylvania Legislature and the Pennsylvania Higher Education Assistance Agency (PHEAA) considering increases in student aid in support of increasing higher education opportunities.

The PA administrators felt that supplemental financial assistance policies are not intended for the dependent and independent middle-class (minority) students whose finances and the [Expected] Family Financial Contribution (EFC) index indicate that they can deliver the necessary resources for their dependents' postsecondary educational costs.

However, in a related issue, Item #42 suggests that minority families need to plan earlier and save more for their children's college education. The survey respondents did not have a high level of agreement on this issue.

Concerning private colleges, it is always advantageous to be in position to offer scholarship assistance to the high-achieving minority applicants' regardless of the family's ability to pay. This strategy serves as an institutional incentive to enroll the best and the brightest of diverse students. Most private colleges utilize this type of "discounting" strategy to attract desirable students.

In the sector on affordability, several inconsistencies were noted in terms of financing policy. Item #41 suggests that four-year institutions did not favor minority students' first attending two-year schools to save on costs. This makes sense because four-year schools seek to protect their own interests by meeting yearly their enrollment objectives. However, if over 67%

of the state's minority college-bound students first enroll in two-year institutions, perhaps these institutional transfer policies might require further discussion and review.

Consistent with Item #44, Item #36 showed that the state's four-year institutions would prefer that the principal state funding agency, the Pennsylvania Higher Education Assistance Agency (PHEAA) provide special assistance for minority, and other needy students to attend more four-year institutions in Pennsylvania. Over 57% of the institutions who responded felt that they provided adequate institutional-based financial aid for minority students.

In addition, the majority of the institutions reporting in this survey indicated that financial assistance at their institutions' should be awarded principally by need, and not by minority status, or race. Institutions of higher education indicated that they understood the legal statutes regarding race and student aid, such as those presented in *Podberesky v. Kirwan* (1994); and, reported that their institutions should operate within the context of the current laws in terms of student aid policies.

However, based on the economics and demographics of the state of Pennsylvania, and according to the 2001 U. S. Statistical Abstract, over 70% of the state's college-bound minority students would fall into the full financial need category and would be eligible for appropriate student aid based on their high financial need.

The primary issue facing these PA four-year institutions involves their overall costs of attendance (COA). The COA represents the total amount it will cost a student to go to school (PHEAA, 2005). Most institutions reporting in this study felt that they had not priced themselves out of the range of minority and all Pennsylvania college-bound students in general. However, the recent evidence suggests otherwise.

In the year 2005, The College Board (CEEB) released a study [*Trends In College Pricing*] on higher education institutions that showed that the state of Pennsylvania had the second highest costs of attendance for public institutions in the nation. According to the annual CEEB Survey, the costs for private four-year education in the state of Pennsylvania was rated sixth highest in the nation (*Pittsburgh Post Gazette*, October 19, 2005; pp. A-1 & A-5).

Regarding the CEEB survey data outlined in *Trends in College Pricing* (2005), the figures clearly indicate that students are borrowing heavily to attend Pennsylvania's four-year institutions. The Lumina Foundation Studies (2005) also show that the trend toward higher tuition costs is not moderating, and had continued to increase incrementally each of the past five years. Moreover, there still exists a significant gap in what students receive in aid and what they actually pay according to the reports. The CEEB report showed that tuition costs at public institutions are increasing at a higher rate than private and two-year institutions.

The Pennsylvania Department of Education (PDE) data [See Appendix E] indicate that college costs in this state have outdistanced inflation and cost of living adjustments (COLA) over a period of five years (i.e., 2000-05), [See Appendix E, Figure 2]. In this regard, college-bound students in Pennsylvania have been losing buying power each year. The average student aid increases have been approximately 3% in Pennsylvania over this period, while higher education costs have increased at an 11% rate (PDE, 2005).

The College Board research also indicated that this pricing trend presented a particular problem for socio-economic status and access to college. College Board President, Gaston Caperton, set forth this policy statement from the CEEB 2005-06 Report, *Trends in College Pricing*: "Socioeconomic status and college success cannot be separated from the serious problem of unequal academic opportunity within our schools," Caperton said,

In addition to increasing the affordability of higher education, we need to make sure that students from all backgrounds have the opportunity to prepare for college. As well, all families should be made aware of the financial aid process and the long-term benefits, both financial and personal, of investing in a college education. (p. 12)

It was interesting to discern from the findings of the CEEB study, that Pennsylvania's four-year colleges and universities, and its two-year schools, did not feel that their institutional costs priced potential students out of higher education.

Subsequently, summaries of the research, some evidence, and the recent political posturing in Pennsylvania suggests, that financing four-year higher education in this state was not an impediment to access. The evidence also suggests that affordability and access issues are more critical at the four-year undergraduate-level of higher education where costs are increasing by higher percentages each fiscal year (Lumina, 2005).

This research finding suggests the need for placing emphasis on policy that analyzes the gap [i.e., unmet need] in student aid that remains after the neediest college-bound students in this state have utilized all grants-in-aid, campus-based aid, campus work-study programs, and student loans. During interviews for this research study, several administrators' from Pennsylvania's four-year institutions indicated that the imbalance between student aid packages and college cost of attendance represented a critical problem for minority and low-income students' access. Concerning the administrators' who were surveyed for this study, addressing the aid disparity is what was suggested for supporting policy to scale state financial assistance in favor of Pennsylvania's neediest students.

In addition, as the Lumina Foundation (2002, 2004, 2005), and the CEEB (2005) Studies indicate; for median-income dependent students, and those who have the ability to pay the full college costs; tax credits, home equity, increased borrowing power and low interest loans,

combined with various other finance measures have been advantageous for these students. These finance and government tax policies benefited the middle-class families in recent years.

The results of this research suggest that for the majority of low-income, first-generation, and minority students in Pennsylvania, it is apparent that college costs adversely affect their ability to pursue four-year higher education. Second, based on the PHEAA student aid example data presented in Appendix J, it is concluded that in Pennsylvania a *de facto* double-tiered education system has developed based on college costs. Thus, access is affected by the students' ability to pay, and what particular schools they can attend. This limits choice.

The 2005-06 student aid formulas as presented in Appendix J, suggest that in the state of Pennsylvania, college access for low-income and minority students is limited to the Community Colleges and the State System of Higher Education institutions. This conclusion is based on college pricing structures, costs of attendance, and available student aid.

Concerning Research Question #4, it appears that the state of Pennsylvania higher education administrators perceived affordability as a 'moderate problem', and not as a significant impediment to four-year college access.

The legal issues that confound higher education are unique for these entities and have their own "built-in headwinds". This paraphrase from a late United States Supreme Court Justice opens the final problem element on legal and institutional aspects of higher education and access. In this descriptive survey study, legal aspects of an institution's policy on minority students' access represented a sensitive area for examination. Most institutions who were surveyed, however, were willing to forward their personal, and to a lesser extent, their institutional positions on some of the legal aspects of diversity, race-sensitive admissions, and affirmative action.

Research Question Five: What are the perceptions of administrative policy and decision-makers in Pennsylvania’s four-year public and private institutions of higher education concerning the impact of legal challenges to affirmative action, special admissions programs, and the institutional implications of diversity-focused access policies on the rates of enrollment for the Pennsylvania college-age minority population?

Research Question #5 addressed the elements of legal and institutional policies concerning access to four-year institutions of higher education in the state of Pennsylvania. The

Table 6.10 Recoded Data Set for the Legal-Institutional Questions with Summations and Descending Mean Scores

Survey Questions	N	Minimum	Maximum	Sum	Mean
48	95	1.00	5.00	430.00	4.53
49	95	2.00	5.00	420.00	4.42
52	85	1.00	5.00	320.00	3.76
50(a)	72	1.00	5.00	254.00	3.53
55	74	1.00	5.00	261.00	3.53
54	77	1.00	5.00	267.00	3.47
47	92	1.00	5.00	307.00	3.34
51(b)	50	2.00	5.00	166.00	3.32
53	89	1.00	5.00	290.00	3.26
46(c)	84	1.00	5.00	270.00	3.25
Valid N = 10					

^aRecoded Variable -- SPSS v.13.1 Composite Mean Score 3.64

^bRecoded Variable

^cRecoded Variable

data outlined in Table 6.11 below highlights the results of the Legal/Institutional questions of the study. The majority of these questions were of the personal opinion type.

Table 6.11 Recoded Survey Questions by Descending Mean Scores: 46 – 55

Recoded Survey Questions by Descending Mean Scores: 46-55		
#		MEAN
48	Diversity in the student body is important to our institution.	4.53
49	Social justice in higher education equity is an important investment for the future of our Commonwealth.	4.42
52	Pennsylvania should institute a statewide policy for increasing equity for four-year higher education opportunities.	3.76
50a	The state of Pennsylvania should implement a Percentage Plan Admissions model to promote equity in higher education.	3.53
55	State and Federal laws regarding financial assistance makes it difficult for Pennsylvania's four-year higher education institutions to offer supplemental assistance and special diversity-focused aid to needy minority students.	3.53
54	All admissions policies at Pennsylvania four-year institutions of higher education should be framed within the context of the current federal law.	3.47
47	Ethnic origin of applicant(s) should be a contributing factor in higher education admissions decisions.	3.34
51b	The 1978 Bakke decision slowed the rate of admission of minority students to four-year institutions in the state of Pennsylvania.	3.32
53	Each Pennsylvania institution of higher education should have the right to admit the students of its choice without federal or state intervention.	3.26
46c	The recent U. S. Supreme Court decisions in the 2003 University of Michigan Admissions cases have changed the way that our institution implements minority students' recruitment policy.	3.25

6.1.7 Discussion

In this data set, Question #46c in Table 6.11 addressed the powerful legal issue affirmative action for American colleges and universities. In the aftermath of the 2003 *Gratz v. Bollinger, University of Michigan*, U. S. Supreme Court case, the Pennsylvania institutions were queried if they had changed the ways in which their institutions implemented minority recruitment policies because of the U. S. Supreme Court ruling. Collectively, the majority of these institutions indicated that they did not change any admissions policies in the wake of the University of Michigan decisions.

Over the past 30 years in American higher education, diversity and access issues have been at the center of important legal debates on affirmative action. In this study, Pennsylvania admissions administrators who were surveyed indicated that they strongly supported diversity in the student bodies of their institutions.

In a policy statement on diversity, pre-Michigan 2003 decisions, the University of Pittsburgh joined with several other major institutions around the nation to cast support by an *Amicus Curiae* brief, to the U. S. Supreme Court in support of race-sensitive admissions policies. Race-sensitive admissions policies were considered essential for these institutions to sustain their commitment to maintaining a diverse student body in Pennsylvania's four-year baccalaureate degree-granting institutions.

Concerning Item #52 in Table 6.11, the respondents felt positive about implementing a statewide policy for increasing equity for four-year institutions. In this response set, those surveyed appeared to agree that the "State" should sponsor legislation for equity, and not leave it up to individual institutions to develop their own policy. In contrast, this particular response appears contradictory to several responses in this study that suggests that control of certain

aspects of diversity-focused admissions should not be authorized by the state; thus, thereby removing autonomy from higher education institutions.

An additional policy question in the survey study involved Question #50 regarding Percentage Plan models for access equity. For this item, the Pennsylvania higher education administrators strongly rejected the idea of the need for a Percentage Plan system. In Percentage Plan models, the top [e.g., 5-10-15 percentage] minority of students from a state's secondary schools are guaranteed admission to the state's public colleges and universities. The majority of respondents felt that such a plan for admissions equity would not be an appropriate policy for the state of Pennsylvania. Percentage Plan equity models generally do not affect private institutions; however, both educational entities in this study (i.e., public and private) rejected this concept.

In Item #55, the research re-visited the legality of providing special financial assistance to minority college students. Administrators' at Pennsylvania's four-year institutions reported that they were in favor of supplemental financial aid packages for minority students, but were restricted by current federal laws from providing this type of student aid.

In this study, Question number 47 tied the race and recruiting/access issues together. Seventy percent of Pennsylvania's Admissions personnel who responded indicated that the ethnic origin of college applicants should be a contributing factor in higher education admissions decisions. This question (i.e., #47) intentionally emphasized the terminology, "contributing factor". The question did not state "prominent factor" or "weighted factor". Largely, Pennsylvania's four-year colleges and universities appear to support minority preferential admissions policies based on legacy, promoting diversity, and to an extent, remedying historic under-representation.

In sum, it was important to mention that the respondents did not care to offer meaningful opinion on the impact of the 1978 Bakke decision. In fact, over the last 30 years, colleges and universities have adopted policies on admissions and access that were implemented within the legal purview of Bakke (1978). To this extent particular colleges and universities in the nation felt that they could move beyond the established law in race-sensitive admissions and student financial aid, therein lay the conflict. Based on the research outcomes, non-adherence to precedence in higher education law provided the genesis of contemporary legal controversy. Admissions policies that circumvented the established laws did more harm to minority admissions than good.

Justice Powell's framework for race-sensitive admissions policies in higher education, and student aid in Bakke (1978), was concise and clearly delineated. In many respects, higher education must acknowledge the creation of its own problems by not following the established laws as set forth by the U. S. Supreme Court in Bakke 1978. Because of Pennsylvania's history of equity in higher education opportunity (e.g., ACT 101) controversial legal issues in undergraduate level higher education have not been at issue.

Item #53 represented the "autonomy" question in the legal-institutional problem element. In the majority decision of Justice Powell in Bakke (1978), he opined that higher education must preserve the right to admit the students of its choice. In this sense, Pennsylvania's four-year institutions of higher education could choose to set their own admissions criteria to promote greater minority access. With the extensive number of private four-year institutions in the state of Pennsylvania, autonomy in admissions policy is considered an inherent legal right of these institutions. Based on the results of this study, the majority of four-year private institutions in

Pennsylvania are in strong support of increasing diversity in their student bodies without legal interference.

Concerning access to higher education however, if the history of this issue has taught us anything, it has been shown that college access and social justice for the economically disadvantaged cannot be left to the ‘goodwill’ of the privileged classes. Recent trends of college enrollments for minorities in the state of Pennsylvania demonstrate that there is still need for regulations, laws, advocacy, and policies that promote equity in higher education.

An evaluation of Research Question 5 suggests that the subjects surveyed in this study perceived that it was important to operate within the framework of the law when it involves access, diversity, and affirmative action issues in higher education. However, the findings also indicate that legal rankling over minorities and higher education access has not been a prominent issue in the state of Pennsylvania.

The state of Pennsylvania has considerably more private institutions where college access is influenced principally by affordability. Students and families’ generally select higher education institutions by reputation, the academic majors offered, student aid offers, and costs.

Historically, in this state, the high-achieving and high-ability low-income minority students’ tend to choose private four-year institutions. In Pennsylvania, private four-year institutions have shown a propensity to recruit from this category of minority low- and median-income students. This research examination found that there has not been a historic pattern of excluding minority students from the private institutions of higher education in the state of Pennsylvania.

Concerning Research Question #5, and throughout this study of access, it has been shown that Pennsylvania’s four-year institutions strongly supported special admissions programs that

promote wider access for historically under-represented populations. This study found that Pennsylvania's four-year institutions strongly supported the state's ACT 101 initiatives for equity and access.

The majority of four-year institutions in this state have also implemented federally sponsored Student Support Services (SSS) programs for sustaining access to higher education. These TRIO federally sponsored programs were aimed at access, retention, academic support, and improving the graduation rates of minority, low-income, and first-generation college students. These federally sponsored programs are race-neutral. These programs were not beset with legal challenges because their policy guidelines fell within the federal statutes for meeting a compelling state interest for promoting diversity in higher education.

For this section, the study concluded that the majority of Pennsylvania's four-year institutions felt that they had nothing to hide concerning minority access policies, and did not feel the need to change recruitment policies based on the results of recent U. S. Supreme Court decisions on affirmative action in college admissions.

6.1.8 Summary and Concluding Statements

This study focused on undergraduate higher education. The objectives were to examine higher education admissions personnel's perceptions on the state of equity and four-year access for minority college-bound students in Pennsylvania. Much has been learned from the findings of the study. Moreover, the wealth of data collected from the survey study illustrated important information concerning minority student access to four-year institutions in Pennsylvania.

The conclusions suggest that several interrelated factors influence four-year access for minority college-bound students in the state of Pennsylvania. The study found that

administrators' in Pennsylvania's four-year institutions would prefer to see a higher-level secondary school preparation from the state's minority college-bound students in general.

Additionally, the study established that recruiting minority students from the state's community colleges was not a priority; and, that few policies have been implemented that depend on the transfer process for increasing minorities' access. However, minority two-year transfer students were advised to apply to four-year institutions as part of Articulation Agreements between two- and four-year institutions.

Evidence suggests that minority students in this state have a very low rate of transfer from two- to four-year schools. Concerning the transfer process, PHEAA statistics indicate that a large number of the state's minority college students who start in two-year institutions do not successfully transfer to the four-year level. This research indicates that minority students' would be best served if they began their college matriculation at the four-year level.

Results for the study indicate that financing four-year higher education for low-income and minority students' remains problematic in the state of Pennsylvania. The trend in higher education student aid has been gravitating toward more student loans and borrowing. For low-income and minority dependent students seeking four-year access, the gap between the maximum gift aid and the total amount of the available student loan, particularly for first-year students in Pennsylvania (e.g., \$2,625.00), is too great to overcome [See, Appendix J]. Consequently, these students were unable to afford over 80% of Pennsylvania's public and private four-year institutions of higher education. These data summaries were presented, according to research statistics from the 2002, 2004, and 2005 Lumina Foundation Studies, and the College Board Annual Survey of College Costs, 2005-06.

Results from this dissertation study suggest that four-year schools in the state of Pennsylvania do not view their costs of attendance as being entirely prohibitive to the state's college-bound students in general. Therefore, prioritizing financial access for low-income, first-generation, medium-income, and minority populations, has not been high on their policy agendas.

These research outcomes indicate the formula for improving minority access to four-year schools in the state of Pennsylvania is influenced by several factors. The research findings, and the hard evidence (i.e., standardized achievement testing) demonstrate a relative deficiency of academic preparation for a high percentage of minority students in general. This factor greatly impedes four-year access for a high percentage of these students.

The academic preparation issue cannot be directly influenced through higher education. Inadequate schooling and deficiencies in academic achievement is a significant problem for the elementary, and more specifically, secondary-level education in Pennsylvania. The achievement problem for minority students is evidenced by the annual results of the Pennsylvania System of School Assessments (PSSA). Results of the PSSA standardized assessments over the previous five years, 2000-2005, did not show meaningful achievement progress for minority students [See, Appendix H]. These outcomes represent a disturbing trend for the state of Pennsylvania.

Conversely, educational research shows that in America, socio-economic status and school achievement have a positive correlation. [See, J. Anyon, *Social Class and School Knowledge*, 1980]. Therefore, this research suggests that greater emphasis should be directed at improving the early academic skills and proficiency outcomes of the state's minority students who aspire to higher education. Students, who indicate an interest in college during their earlier years of schooling should be tracked into college preparatory curricula, or 'guided' toward

advanced placement courses. These types of proactive academic interventions are necessary in order to level the access “playing field” for higher education.

Together, the issues of the affordability of the state’s four-year institutions, and improving academic preparedness make increasing access for low-income and minority students a significant challenge. Counselors and educators might positively influence the academic achievement of minority students by placing greater emphasis on utilizing tutorial assistance programs, pre-college academic preparation programs, and accountability for educational outcomes. Several of these policy initiatives are featured under the 2002 *No Child Left Behind* (NCLB) statutes.

However, in this regard, the survey respondents suggest that with the collaboration of the four-year institutions of higher education, support from the Pennsylvania State Legislature, and the re-structured student aid policies of the PHEAA, minority student access is positively affected. These goals might be achieved by appropriating additional resources. As the study results indicate, supplemental educational and financial expenditures might make attending four-year institutions possible for more minority students in the state of Pennsylvania.

Research shows that access to baccalaureate degree-granting institutions in Pennsylvania is influenced by costs. In this study, the findings indicate that Pennsylvania’s four-year institutions were committed to improving minority access, but required additional financial resources in order to meet their future diversity goals. This remains particularly true for private four-year institutions in the state of Pennsylvania.

There exists a tendency to prefer to focus on affordability as the primary factor for minority students’ college access. This is because financing issues are more ‘fixable’ in the short term. However, the subjects in this study concluded that improving academic preparation is the

principal factor for influencing long-term college access for minority students in Pennsylvania. Higher education administrators in this study determined that finding solutions to the early academic issues concerning minority students' achievement outcomes should become a priority in the state.

In conclusion, the results for this study suggest that the state of Pennsylvania does not have a recent history of exclusion within its private colleges and universities. However, this state does in fact have a problematic legacy of the exclusion of low-income, first-generation, and minority students from its “flagship” public universities. Access equity demands improvement in all of Pennsylvania’s public institutions.

Moreover, the issue of academic “qualifications” and “selective” admissions should be tempered with social justice, strategic plans for equity and inclusion, and the appropriate financial support for the state’s resident low-income minority students. Portions of the state’s taxpayers are economically disadvantaged; however, it does not hold that their children do not have the right to aspire to four-year higher education in Pennsylvania.

This study concludes that there needs to be a sharper focus on the trends in minority college access in the state of Pennsylvania. In this way, we might then begin to develop statewide educational plans that target equity in higher education to improve four-year access for these students.

6.1.9 Key Findings

- With reference to Question #56 –, Pennsylvania (PA) Admissions personnel concluded that inadequate academic preparation was the key factor that impeded minority students’ access to Pennsylvania four-year colleges and universities.

- The research study found that viable achievement attainment was a significant factor for minority four-year college access. This finding is validated by the trends and the empirical data that are presented in the 2002-2005 PSSA for the 11th grade classes (PDE).
- Assumption: higher education admissions administrators did not spend extensive amounts of time reviewing PSSA data for PA secondary education (K-12). The results of this study, coupled with the outcomes of the PSSA data, validate the perceived problem with minority academic preparedness.
- The study found that Pennsylvania four-year higher education institutions, as a matter of policy, are fully open and accessible to all in-state/resident minority students.
- Concerning Pennsylvania resident minority students, admissions personnel perceived that PA private colleges and universities did not provide the best opportunities for access to four-year baccalaureate-degree study.
- A majority (95%) of PA 4-year institutions fully supported the principles of the ACT 101 program for access and equity.
- Results of the survey suggest that Pennsylvania might be considered a “Liberal” state politically and educationally. This conclusion is based on a summary of the ‘equity-oriented’ survey questions. Pennsylvania appears to be an optimum state to attend college for minority students.
- Minority students in Pennsylvania receive an inadequate degree of quality K-12 education. Additionally, minority students in Pennsylvania do not share the same advantages, and level of K-12 quality academic ‘preparation’ as does its majority students.
- Urban school systems in Pennsylvania are considered inadequate and do not prepare appropriately its minority students for four-year baccalaureate degree entry.
- In Pennsylvania, minority students’ high school record of achievement is the best indicator for successful college admission.
- In Pennsylvania, the SAT/ACT scores were not used as primary decision tools for the admission of in-state minority students.
- In Pennsylvania, the admissions personnel perceived that most of the state’s minority students are generally admissible to its four-year institutions.

- Student financial aid should be skewed *in favor of* the state's neediest students [Minority families in this category by 80-85% based on PA Census statistics; PA Dept of Labor 2005].
- The available amount of student aid is inadequate for PA low-income dependent, median-income dependent minority students to attend four-year schools in relative numbers.
- Two-year colleges do not necessarily serve the best postsecondary needs of the state's minority students
- The state's minority students should not have to begin higher education in two-year schools because of a lack of financial resources.

Admissions personnel surveyed for this study perceived that:

- Minority student transfers from community colleges were not a priority for increasing enrollments at Pennsylvania four-year institutions.
- PA four-year colleges preferred that minority students begin their college matriculation with their true freshman classes.
- Ethnic background can be a *contributing factor* in admission to four-year institutions in Pennsylvania.
- PA four-year institutions preferred to follow established laws on admissions and student aid policies for [PA] minority students.
- PA four-year institutions did not change their admissions policies as a result of the outcomes of the 2003 U.S. Supreme Court Michigan Cases.
- Admissions personnel felt that their institutions were *generally* affordable to the majority of Pennsylvania's college-bound students.
- Pennsylvania has no recent history of legal challenges or jurisprudence concerning access, and affirmative action in undergraduate higher education.
- Pennsylvania (PDE) needs to monitor, and increase minority enrollments in its largest public institutions of higher education.

6.1.10 Policy Options

Based on the evidence collected from this study, several policy options aimed at improving four-year higher education access for minority college-bound students were set forth:

1. Pennsylvania's four-year higher education administrators strongly support increased financial assistance for the state's minority, first generation, and low-income students in general. Develop a coordinated campaign to present financial requests to the PA State Legislature for the improvement of low-income, and minority student support. ACT 101 does not support the total funding of higher education opportunities.
2. Policy should be proposed through the Pennsylvania Higher Education Assistance Agency (PHEAA) that utilizes new and readjusted formulas for awarding supplemental student financial aid based on family-income, cost of living adjustments, and cost of attendance for four-year higher education in the state of Pennsylvania.**
3. The State's private colleges and universities should receive special allotments of monies awarded by the State Legislature for developing programs aimed at increasing minority enrollments.
4. A 20% reduction in tuition that would be covered by the state to institutions for academically talented in-state minority students who decide to forgo out-of-state higher education and enroll in a Pennsylvania four-year institution.
5. The Pennsylvania Department of Education (PDE) should propose higher education legislation to develop a long-term plan that supports the successful transfer of at least 60% of minority students from two-year schools to four-year institutions in a given year. Both the two-year and four-year schools would receive financial incentives under this plan.

6. Six Regional School Partnership Programs, that divide the state of Pennsylvania into sectors, will link low-performing Secondary Schools with the Colleges and Universities in that Region. These educational research programs would be funded through the Pennsylvania Department of Education (PDE), with Grants and Funding initiatives from the Federal Government under the NCLB Act of 2002.
7. Increase higher education appropriations for the ACT 101 programs by 25% over a three-year period. Use a three-year review cycle for increasing funding for those institutions that improve the access of low-income and minority students by 25% over this period.
8. Limit the amount of student loans that the state's neediest students can receive for four-year higher education study. Supplement, and replace gaps in aid with achievement grants-in-aid. These grants should be based on college graduation in 4.5 years.
9. Set achievable diversity goals for Pennsylvania's four-year institutions of higher education that are linked to financial incentives from the state.
10. The state's public institutions of higher education will be held accountable each year for submitting de-segregation goals, diversity plans, and monitor the outcomes of minority enrollment objectives.

**Passed PA Legislature in June 2005, to be implemented in the 2006-07 academic years.

6.1.11 Implications for Research and Further Study

This study examined the issue of minority students' access to baccalaureate-degree granting institutions in the state of Pennsylvania. Five specific problem elements were examined in the study. Each of the elements were interdependent variables. In addition, the study

examined the following problem statement in the context of the five problem elements: Access, Preparation, Admissibility, Affordability, and Legal-Institutional determinants.

Problem Statement: *How do Pennsylvania's four-year baccalaureate degree-granting institutions attempt to increase minority student enrollments and develop admissions policies for improving access that are framed within the context of the law?*

The research study did not frame a specific problem to “solve”. It was designed to examine pertinent issues that related to college access and affirmative action. The goals of the research were to develop information that could be utilized to address the issues of minority college access in the context of equal opportunity higher education. The study comprised a six-year analysis of affirmative action policies in higher education.

Access to higher education is a complex issue that encompasses several critical elements. These include the legal, financial, political, academic, and implications for social justice and equity. The study also examined recent trends in higher education admissions and the implications of diversity policy. The purpose of the study was to conduct research that answered questions on the status of access equity for baccalaureate-degree study for Pennsylvania minority students. The audience for this research was the subjects of the study.

The research outcomes demonstrated that each institution of higher education in Pennsylvania was determined to operate under the full context of the legal affirmative action admissions policies as confirmed in *Bakke v. Board of California Regents* (1978) and affirmed in *Gratz v. Bollinger*, (2003).

Through this examination on higher education access, it was determined that two pertinent issues came to the forefront on the issue of minority students' higher education opportunities: preparation and affordability. The study had to assure objectivity while taking a

realistic view of the issues, and then establishes a fair appraisal on the state of diversity-focused access policies for higher education in the state of Pennsylvania.

Foremost, the challenges were exceptional in this research study because nationally, and particularly for the state of Pennsylvania, there was a dearth of dissertation studies that focused on higher education access and diversity. The implications for research and further examination on minority college access lie in the degree to which these research findings are reliable.

It is important for research studies of this nature to establish reliability through longitudinal replication. A goal of this research study was to establish a baseline on the status of the issues examined. This particular type of descriptive educational research is necessary for developing new information and creating problem-solving paradigms. These are not difficult tasks; as this study has demonstrated meeting these objectives merely requires cooperation, professional communication, citizen support, the political will, and effective collaboration between the stakeholders in Pennsylvania higher education.

6.1.12 Summary

This research study was framed in the African-American perspective. It was objective. The study presented a balance of the research on the subject of affirmative action in higher education, and a comprehensive survey study of the diversity-related issues for examination. All of the subjects and the data were real.

The survey research segment of the study was wide in scope and permitted all of the subjects to record their opinions in a fair and confidential manner. This study had its credibility established in the salient information that it developed for use by the audience for this research, higher education admissions administrators. It is important for research studies to promote

objectivity and reliability in the results by utilizing “best practices” in social research, and through the appropriate conduct of social inquiry.

6.1.13 Epilogue

This study on college access was inspired by personal experiences in higher education in the United States and abroad. In the year 1975, my first official admissions responsibility involved a two-year appointment as a Graduate Assistant, Graduate Admissions Minority Recruiter at the University of Northern Iowa in Cedar Falls, Iowa.

This commitment to equal opportunity education continued with four appointments in federally sponsored Upward Bound programs. These federal TRIO initiatives were sponsored under the Elementary and Secondary Education Acts (ESEA) of 1964 and were designed to prepare first-generation, minority, and low-income students for college entry. Subsequently, these initial experiences in higher education fostered this commitment to equal opportunity access.

Fourteen years were spent at the Pennsylvania State University instructing in Basic Skills, and Sociology, and working in equal opportunity education through the EOP/ACT 101 programs. This study on affirmative action in college admissions was inspired by the need to address the issues of college access for not only minority students, but for the inherent right to higher education for the low-income and first-generation students in the state of Pennsylvania. This dissertation was essentially an “advocacy study” on access to four-year undergraduate education.

Throughout my career in higher education, encouragement was extended to colleagues involved in equal opportunity education to address the need to conduct databased research in the

areas of compensatory education and affirmative action. Because of a dearth of outcomes-based and data-driven research in these areas, consequently, a series of federally sponsored equal opportunity programs (TRIO) have now been de-funded. The 1964 Upward Bound Project for low-income college-bound students is but one example. The Upward Bound programs were designed specifically to promote access and equity in higher education.

6.1.14 Conclusion

Research on affirmative action in higher education demonstrates that it is still necessary to monitor progress in postmodern American society. As retiring Associate U. S. Supreme Court Justice Sandra Day O'Connor affirmed in her majority opinion in *Gratz v. Bollinger* (2003), “that there is still a need for special attention to access for the less privileged in our society. It remains important to promote diversity in the student bodies of our colleges and universities in America, and will be necessary for [sic, 25] years to come”.

Finally, as we review history, education, and social progress in the 20th and 21st century America, we must not forget the pioneers who had the good conscience and the foresight to make it possible for all people to invest in the American dream through higher learning. In the year 1961, President John F. Kennedy first coined the term “affirmative action” in his Executive Orders [sic, No 10925] for equal opportunity and civil rights. Today, in the postmodern society, the late President’s call for affirmative action still rings in our hearts and in our minds. His charge to us as God-fearing Americans was to treat each person with the dignity and the respect that we expected for ourselves. In his vision, equal opportunity was the key to a healthy nation.

Making higher education more accessible to the less fortunate in our society is part of this solemn pledge for future generations. Promoting wider access to higher learning is the

responsibility of all who work in education and in the political realm. Equity and access is not just the responsibility of minority publics; it is important to the progress of the entire nation. Therefore, it is incumbent upon all Americans to become partners in this process.

With our solemn duty as the guardians of higher learning, we conclude this dissertative discourse with a reminding word from President John F. Kennedy's Inaugural Address in January of 1961:

Finally, whether you are citizens of America or citizens of the world ask of us here the same high standards of strength and sacrifice which we ask of you. With a good conscience our only sure reward, with history the final judge of our deeds, let us go forth to lead the land we love, asking His blessing and His help, but knowing that here on earth God's work must truly be our own.

President John F. Kennedy
Inaugural Address
January 1961

APPENDIX A

SURVEY COVER LETTERS

Pre-Notification for Web Survey
Email
August 15, 2005

Greetings Colleagues:

My name is Eric D. Young, and I am a doctoral candidate in the School of Education [Administrative and Policy Studies] at the University of Pittsburgh. I would like to solicit your assistance with completing an opinion Survey on Minority Students' Access to Four-Year Institutions in the State of Pennsylvania.

The purpose of this memo is pre-notification that I will be forwarding a Cover Letter and a 60-item [i.e., Web-based] questionnaire to your attention in 10 calendar days. I would greatly appreciate your assistance with completing and returning the instrument. It is designed specifically for Admissions personnel.

I obtained your names as Vice Presidents of Enrollment Management, Deans/Directors of Admissions, Special Admissions personnel (e.g., Research), and ACT 101 personnel from the PA State Department of Education's Website, under EdNA [Education Names and Addresses]. Then, I reviewed each institution's Website on the List in the search for Admissions personnel, et al, for this research project. Moreover, I must admit that it was very enlightening to learn so much about each institution from these Websites! There were 108 four-year baccalaureate degree-granting institutions in Pennsylvania to cover.

In closing, I would sincerely appreciate your assistance with this project. I too have spent a number of fruitful years in the area of College Admissions and as an EOP/ACT 101 Coordinator in higher education. Thus, I have a good feel for the Admissions process in higher education from these experiences. The target group for this research study is Admissions personnel.

Thank you in advance for your help; any questions about the research can be forwarded directly to me at this email address; or call (412) 661-5359. I will be happy to elaborate and answer any questions.

Eric D. Young
School Counselor - Holy Family Learning
(Avonworth School District) - Pittsburgh, Pennsylvania.

August 29, 2005

Dear Colleagues:

Research in higher education indicates that in the state of Pennsylvania over 60% of its college-bound minority students enroll in two-year institutions. The purpose of this study is to examine the factors that contribute to these phenomena. The goal of the research is to develop strategies to improve minority students' enrollment in four-year colleges and universities in our state. There are five areas of emphasis in this research, Access, Preparation, Admissibility, Affordability, and Legal/Institutional.

Allow me to take this opportunity to introduce myself; I am Eric D. Young, a doctoral candidate at the University of Pittsburgh. I am in the process of completing a dissertation on Access and minority students' enrollment characteristics in Pennsylvania's four-year colleges and universities.

You are being asked to complete a questionnaire on minority students' access to four-year baccalaureate degree-granting institutions. As a Dean of Admissions, Director of Enrollment Management, or ACT 101 Director in one of the state's 108 four-year degree-granting institutions, your participation is crucial to this research.

You may be assured of complete confidentiality. The questionnaire has an identification number for follow-up purposes only. This is so we may check your institution off the mailing list when your survey is returned. Your name will never be associated with any of the responses received; all data will be treated in group fashion.

An Executive Summary, summarizing the results of the study will be available to any institution. For this Web-based Survey, one will only need to forward an email request to ericdyoung1@verizon.net.

I would be most happy to answer any questions you might have. Please write or call me at (412) 661-5359.

Thank you very much for your participation and kind assistance in this educational endeavor.

Sincerely,

Eric D. Young
University of Pittsburgh – School of Education
Administrative and Policy Studies

September 12, 2005

SURVEY RESEARCH
First Follow Up

Dear Colleagues;

About two weeks ago, you were sent a questionnaire on Minority Students' Access and enrollment characteristics of minority college- [bound] students in the state of Pennsylvania. I am asking for your support for this dissertation project by completing the survey.

The purpose of this dissertation study is to develop research that can be used to improve the enrollment rates of the State's minority students in our four-year baccalaureate degree-granting institutions.

The target group for this study is exclusive and only includes 120 selected Admissions personnel from the 108 four-year baccalaureate degree-granting institutions in Pennsylvania. Therefore, every response is very important to this research.

Be assured that this project constitutes a student-centered dissertation study. All data will be treated in group fashion; confidentiality is assured. Your school and email address has a code for tracking purposes only.

Each person in the study shares the same characteristics. A principal research objective of this study is to reach at least a 50% response rate to validate the results. I will send each respondent an Executive Summary of the results by January 5, 2006.

Thank you very much, and I will be trying to close the survey portion of the study by September 30, 2005 if you can accommodate me.

Sincerely,

Eric D. Young
University of Pittsburgh-School of Education
Administrative and Policy Studies

September 26, 2005

ACCESS SURVEY
Second Follow Up

Dear Colleagues;

A month ago, you were asked to complete a questionnaire on Minority Students' Access to higher education and enrollment characteristics of minority college- [bound] students in the state of Pennsylvania. Your participation is crucial to the success of this study on higher education.

The purpose of this dissertation research is to develop information that can be used to improve the enrollment rates of the State's minority students in our four-year baccalaureate degree-granting institutions.

Be assured that this project constitutes a student-centered dissertation study. There is nothing controversial implied by this research topic. All data will be treated in group fashion; and confidentiality is assured. Your school and email address has a code for tracking purposes only.

The target group for this study is exclusive and only includes 120 selected Admissions personnel from the 108 four-year baccalaureate degree-granting institutions in Pennsylvania. Therefore, every response is very important to this research. Thus far, 67% of Pennsylvania's four-year institutions have responded.

It is important to me to include your institution in the research frame/pool of the study. I will send each respondent an Executive Summary of the results by January 5, 2006.

Thank you very much; and, I will be trying to close the survey portion of the study by October 3, 2005 if you can accommodate me.

Sincerely,

Eric D. Young
University of Pittsburgh-School of Education
Administrative and Policy Studies

APPENDIX B

WEB-SURVEY INSTRUMENT

Please indicate your answer to each question by selecting the category which best describes your perceptions and opinions on the issue. This questionnaire is segmented into five areas that represent the study for higher education access: Access, Preparation, Admissibility, Affordability, and Legal. Demographic items are also included. Please be open and honest about your response to the questions; this survey is confidential. Throughout the questionnaire, "Minority Students" refer to African-American, Asian/Pacific Islander, Hispanic, and Native American students. For the purposes of this survey, students of any racial/ethnic background from countries other than the United States are not included in the definition of "minority students" for this Pennsylvania higher education study. Please try to focus on in-state residents.

All responses to the survey are confidential. All data will be treated in group fashion.

[Institutional Review Board Approval](#)

Questionnaire

- A. What is the average number of students in the Undergraduate FTE at your institution in the last three years? (Please Estimate)
- 500 – 1,000
 - 1,001 – 5,000
 - 5,001 – 10,000
 - 10,001 – 15,000
 - 15,001 – 25,000
 - More than 25,000

B. What is the highest percentage of minority students enrolled at your institution in the last three years? (Please Estimate).

- 0 – 5%
- 6 – 10%
- 11 – 15%
- 16 – 25%
- 26 – 40%
- 41 – 50%
- Over 50%
- PA Historically Black Institution - NA
- Don't Know

Questions 1 through 12 focuses on Access:

Please indicate the degree of your disagreement or agreement with the following statements.

1. Our institution should remain open to any minority students in the state of Pennsylvania who meet its admission standards.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

2. Our institution views the recruitment of minority students as a priority.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

3. The recruitment of minority students at our university has the full support of the Senior administration.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

4. Our institution uses a written plan for equal opportunity access and admissions.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

5. Each PA four-year institution should have an Educational Opportunity/ACT 101 program component to support equal access.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

6. Public institutions offer minority students greater opportunities for higher education access.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

7. The state of Pennsylvania has greater opportunities for equal access to higher education than most states in the Union.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

8. Historically black colleges and universities in the state of Pennsylvania provide minority students greater opportunities for access than predominantly white institutions.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

9. Increasing the minority student population on this campus is important to our institution.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

10. Our institution has adopted specific policies aimed at increasing minority student enrollment.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

11. The recruitment of minority students at our institution has the full support of the Governing Board Trustees.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

12. Private colleges offer minority students better opportunities for four-year higher education access.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

Questions 13 through 24 focuses on Preparation;

Please indicate the degree of your disagreement or agreement with the following statements.

13. A "preparation gap" exists in high school academic achievement between the state's majority and its minority college-bound students.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

14. Our institution offers special academic support programs for minority and economically disadvantaged students.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

15. At our institution, the high school grades/achievement of minority students is the best indicator of first-year academic success:

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

16. At our institution, the SAT/ACT scores of minority students reflect the average of all entering students

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

17. SAT/ACT scores make it more difficult for most Pennsylvania minority students to qualify for admission at four-year institutions.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

18. Community Colleges are the most appropriate entry' point for the majority of Pennsylvania's college-bound minority students.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

19. Most of Pennsylvania's college-bound minority students are academically under-prepared for four-year admission

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

20. Minority college-focused students in our state need early academic intervention and stronger elementary school preparation.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

21. Minority college-bound-students in Pennsylvania generally come from academically deficient secondary schools.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

22. The federal "No Child Left Behind" Act promotes good education policy for improving the long-range academic preparation of Pennsylvania's college-bound minority students

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

23. Education in urban high schools does not adequately prepare Pennsylvania's college-bound minority population for entry into its four-year institutions.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

24. Minority college-bound students in the state of Pennsylvania would benefit from a stronger secondary school curriculum.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

Questions 25 through 34 focuses on Admissibility:

Please indicate the degree of your disagreement or agreement with the following statements.

25. Secondary school grades/achievement is the best indicator of minority students' admissibility at our institution.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

26. SAT/ACT scores are not a good indicator of minority students' admissibility to our institution.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

27. All four-year institutions in the state of Pennsylvania should adopt special admission policies that are aimed at providing equal access for minority students.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

28. The admission of greater numbers of minority students to four-year institutions is good social policy for the state of Pennsylvania as a whole.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

29. The most successful minority students at our institution have been transfers from two-year schools.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

30. Our institution should adopt a specific policy aimed at recruiting minority students from two-year colleges.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

31. The Pennsylvania ACT 101 program is an important tool for assisting minority, first-generation, and low-income students gain admission to our institution in greater numbers.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

32. At our institution, most minority students that are admitted will require supplemental academic assistance programs to be successful.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

33. Minority students that were admitted to our institution under special programs have been relatively successful when compared to regular admits

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

34. Improving the graduation rates of the state's minority college attendees is a priority at our institution.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

Questions 35 through 45 focuses on Affordability:

Please indicate the degree of your disagreement or agreement with the following statements.

35. Higher Education in the state of Pennsylvania has been priced out of the range of most minority students desiring to attend four-year schools.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

36. Pennsylvania government sponsored programs (e.g., PHEAA) do not have adequate financing plans for its most needy students to attend four-year baccalaureate degree-granting Institutions.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

37. Our institution provides adequate financial assistance to meet the needs of minority students.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

38. Minority students that attend our institution will require a higher percentage of loans.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

39. All financial assistance at our institution should be based on need regardless of race or ethnic origin.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

40. Higher education in the state of Pennsylvania is affordable to all college-bound students.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

41. Low-income, and minority students should first attend two-year colleges to save on the costs of higher education.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

42. The families of Pennsylvania's college-bound minority students' should start earlier, prioritize, and save a higher percentage of their personal resources for financing higher education.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

43. Financing four-year higher education for minority students is a good long-term investment for the state of Pennsylvania.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

44. PHEAA Grants and Federal grants-in-aid [e.g., PELL] should be increased *in favor of* Pennsylvania's most financially needy students.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

45. Our institution cannot afford to enroll large numbers of financially needy students (e.g., Discounting process).

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

Questions 46 through 55 focuses on Legal-Institutional:

Please indicate the degree of your disagreement or agreement with the following statements.

46. The recent U. S. Supreme Court decisions in the 2003 University of Michigan Admissions cases have changed the way that our institution implements minority students' recruitment policy.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

47. Ethnic origin of applicant(s) should be a contributing factor in higher education admissions decisions.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

48. Diversity in the student body is Important to our institution.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

49. Social justice in higher education equity is an important investment for the future of our Commonwealth.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

50. The state of Pennsylvania should implement a Percentage Plan admissions model to promote equity in higher education to four-year institutions in the state of Pennsylvania.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

52. Pennsylvania should institute a statewide policy for increasing equity for four-year higher education opportunities.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

53. Each Pennsylvania institution of higher education should have the right to admit the students of its choice without federal or state intervention.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

54. All admissions policies at Pennsylvania four-year institutions of higher education should be framed within the context of the current federal law.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

55. State and Federal laws regarding financial assistance makes it difficult for Pennsylvania's four-year higher education institutions to offer supplemental assistance and special diversity-focused aid to needy minority students.

Strongly Disagree Disagree Neural Agree Strongly Agree No Opinion Does Not Apply

Question 56 pertains to this Summary issue/question:

56. *In your professional opinion; "What keeps minority students out of Pennsylvania's four-year colleges and universities, Preparation or Money?"*

- A Preparation
B Money/Affordability

The following questions are for demographic purposes only:

- C. Is your institution?

- 1 Public
2 Private

- D. Please indicate the PA State region or location of your institution: (This Item is used for external validity and representation in the study)

- 1 Western Pennsylvania
2 Central Pennsylvania
3 Eastern Pennsylvania

- E. Please indicate your administrative title: (This Item is necessary for coding purposes)

- 1 VP/Director of Enrollment Management
2 Admissions Director/Officer or Dean
3 ACT 101 Personnel
4 Other (Admissions related)

F. Approximately, how many years experience do you have in Admissions work in higher education?

- 1 1-5 years
- 2 6-10 years
- 3 11-15 years
- 4 16-20 years
- 5 21-25 years
- 6 26-30 years
- 7 30+ - Career

[**Submit Questionnaire**](#)

APPENDIX C

WEB SURVEY DATA SET A WITH N/O AND DNA VARIABLES

The following report includes all questions, and considers all responses equally; this includes the "No Opinion" and "Does Not Apply" responses. **Number of submitted questionnaires: 96 out of 120 (80% Response Rate)**

Response	Number of Responses	Percent of Responses
QA		
1	9	9.375%
2	56	58.333%
3	16	16.667%
4	3	3.125%
5	4	4.167%
6	8	8.333%
TOTAL	96	100%
QB		
1	16	16.667%
2	30	31.25%
3	31	32.292%
4	12	12.5%
5	5	5.208%
6	1	1.042%
8	1	1.042%
TOTAL	96	100%
Q1		
1	4	4.167%
2	2	2.083%
4	12	12.5%
5	77	80.208%
B	1	1.042%
TOTAL	96	100.0%
Q2		
1	1	1.042%
2	7	7.292%
3	10	10.417%
4	33	34.375%

Response	Number of Responses	Percent of Responses
5	45	46.875%
TOTAL	96	100%
Q3		
1	1	1.042%
2	5	5.208%
3	7	7.292%
4	29	30.208%
5	53	55.208%
A	1	1.042%
TOTAL	96	100%
Q4		
1	2	2.10%
2	7	7.29%
3	15	15.63%
4	40	41.67%
5	20	20.83%
A	5	5.21%
B	7	7.29%
TOTAL	96	100%
Q5		
1	1	1.04%
2	4	4.17%
3	17	17.71%
4	23	23.96%
5	38	39.58%
A	13	13.54%
TOTAL	96	100%
Q6		
1	14	14.58%
2	18	18.80%
3	11	11.46%
4	38	39.58%
5	10	10.42%
A	4	4.17%
B	1	1.04%
TOTAL	96	100%
Q7		
1	1	1.04%
2	13	13.54%
3	32	33.33%
4	13	13.54%
5	2	2.10%
A	35	36.46%
TOTAL	96	100%

Response	Number of Responses	Percent of Responses
Q8		
1	5	5.21%
2	22	22.92%
3	19	19.79%
4	22	22.92%
5	9	9.38%
A	19	19.79%
TOTAL	96	100%
Q9		
1	1	1.04%
2	4	4.17%
3	7	7.29%
4	33	34.38%
5	49	51.04%
A	1	1.04%
B	1	1.04%
TOTAL	96	100%
Q10		
1	1	1.04%
2	9	9.38%
3	13	13.54%
4	41	42.71%
5	28	29.17%
A	1	1.04%
B	3	3.13%
TOTAL	96	100%
Q11		
1	1	1.04%
2	3	3.13%
3	8	8.33%
4	38	39.58%
5	41	42.71%
A	4	4.17%
B	1	1.04%
TOTAL	96	100%
Q12		
1	4	4.20%
2	32	33.33%
3	33	34.38%
4	10	10.42%
5	7	7.29%
A	9	9.38%
B	1	1.04%
TOTAL	96	100%

Response	Number of Responses	Percent of Responses
Q13		
2	2	2.08%
3	16	16.67%
4	55	57.29%
5	22	22.92%
A	1	1.04%
TOTAL	96	100%
Q14		
1	2	2.08%
2	14	14.58%
3	8	8.33%
4	31	32.29%
5	37	38.54%
A	1	1.04%
B	3	3.13%
TOTAL	96	100%
Q15		
1	1	1.04%
2	14	14.58%
3	12	12.50%
4	49	51.04%
5	18	18.80%
A	2	2.08%
TOTAL	96	100%
Q16		
1	11	11.460%
2	50	52.08%
3	15	15.63%
4	9	9.380%
5	3	3.13%
A	5	5.21%
B	3	3.13%
TOTAL	96	100%
Q17		
1	2	2.08%
2	14	14.58%
3	15	15.63%
4	47	48.96%
5	10	10.42%
A	8	8.33%
TOTAL	96	100%
Q18		
1	20	20.83%
2	51	53.13%

Response	Number of Responses	Percent of Responses
3	16	16.67%
4	2	2.08%
5	1	1.04%
A	6	6.25%
TOTAL	96	100%
Q19		
1	6	6.25%
2	33	34.37%
3	25	26.04%
4	23	23.95%
5	1	1.04%
A	8	8.33%
TOTAL	96	100%
Q20		
2	3	3.12%
3	10	10.41%
4	49	51.04%
5	26	27.08%
A	8	8.333%
TOTAL	96	100%
Q21		
2	18	18.75%
3	31	32.29%
4	30	31.25%
5	8	8.33%
A	9	9.37%
TOTAL	96	100%
Q22		
1	17	17.70%
2	28	29.16%
3	21	21.87%
4	9	9.37%
5	3	3.12%
A	18	18.75%
TOTAL	96	100%
Q23		
1	1	1.04%
2	8	8.33%
3	25	26.04%
4	43	44.79%
5	14	14.58%
A	5	5.20%
TOTAL	96	100%

Response	Number of Responses	Percent of Responses
Q24		
1	1	1.042%
3	6	6.25%
4	54	56.25%
5	32	33.333%
A	3	3.125%
TOTAL	96	100%
Q25		
1	3	3.125%
2	8	8.333%
3	11	11.458%
4	49	51.042%
5	22	22.917%
A	1	1.042%
B	2	2.083%
TOTAL	96	100%
Q26		
1	5	5.208%
2	25	26.042%
3	22	22.917%
4	29	30.208%
5	10	10.417%
A	2	2.083%
B	3	3.125%
TOTAL	96	100%
Q27		
1	2	2.083%
2	22	22.917%
3	28	29.167%
4	27	28.125%
5	9	9.375%
A	8	8.333%
TOTAL	96	100%
Q28		
2	3	3.125%
3	8	8.333%
4	46	47.917%
5	34	35.417%
A	5	5.208%
TOTAL	96	100%
Q29		
1	13	13.542%
2	48	50.0%
3	14	14.583%

Response	Number of Responses	Percent of Responses
4	4	4.167%
A	13	13.542%
B	4	4.167%
TOTAL	96	100%
Q30		
1	1	1.042%
2	14	14.583%
3	27	28.125%
4	32	33.333%
5	10	10.417%
A	6	6.25%
B	6	6.25%
TOTAL	96	100%
Q31		
1	1	1.042%
2	3	3.125%
3	10	10.417%
4	35	36.458%
5	29	30.208%
A	15	15.625%
B	3	3.125%
TOTAL	96	100%
Q32		
1	8	8.333%
2	39	40.625%
3	20	20.833%
4	24	25.0%
5	3	3.125%
A	2	2.083%
TOTAL	96	100%
Q33		
2	10	10.417%
3	12	12.50%
4	33	34.375%
5	13	13.542%
A	7	7.292%
B	21	21.875%
TOTAL	96	100%
Q34		
1	2	2.083%
2	7	7.292%
3	12	12.50%
4	44	45.833%
5	24	25.00%

Response	Number of Responses	Percent of Responses
A	5	5.208%
B	2	2.083%
TOTAL	96	100%
Q35		
1	4	4.167%
2	32	33.333%
3	12	12.50%
4	36	37.50%
5	10	10.417%
A	2	2.083%
TOTAL	96	100%
Q36		
1	3	3.125%
2	14	14.583%
3	11	11.458%
4	44	45.833%
5	20	20.833%
A	4	4.16%7
TOTAL	96	100%
Q37		
1	6	6.25%
2	17	17.708%
3	13	13.542%
4	46	47.917%
5	10	10.417%
A	3	3.125%
B	1	1.042%
TOTAL	96	100%
Q38		
1	4	4.167%
2	27	28.125%
3	19	19.792%
4	24	25.00%
5	14	14.583%
A	6	6.25%
B	2	2.083%
TOTAL	96	100%
Q39		
1	9	9.375%
2	22	22.917%
3	8	8.33%3
4	28	29.167%
5	25	26.042%
A	3	3.125%

Response	Number of Responses	Percent of Responses
B	1	1.042%
TOTAL	96	100%
Q40		
1	16	16.677%
2	33	34.375%
3	17	17.708%
4	22	22.917%
5	5	5.208%
A	3	3.125%
TOTAL	96	100%
Q41		
1	18	18.75%
2	48	50.0%
3	20	20.833%
4	4	4.167%
5	2	2.083%
A	4	4.167%
TOTAL	96	100%
Q42		
1	2	2.083%
2	13	13.542%
3	28	29.167%
4	36	37.50%
5	8	8.333%
A	7	7.292%
B	2	2.083%
TOTAL	96	100%
Q43		
2	1	1.042%
3	6	6.25%
4	49	51.042%
5	35	36.458%
A	5	5.208%
TOTAL	96	100%
Q44		
3	6	6.25%
4	38	39.583%
5	48	50.0%
A	4	4.167%
TOTAL	96	100%
Q45		
1	6	6.25%
2	23	23.958%
3	15	15.625%

Response	Number of Responses	Percent of Responses
4	28	29.167%
5	9	9.375%
A	10	10.417%
B	5	5.208%
TOTAL	96	100%
Q46		
1	9	9.375%
2	32	33.333%
3	19	19.792%
4	16	16.667%
5	8	8.333%
A	9	9.375%
B	3	3.125%
TOTAL	96	100%
Q47		
1	6	6.25%
2	17	17.708%
3	17	17.708%
4	44	45.833%
5	8	8.333%
A	3	3.125%
B	1	1.042%
TOTAL	96	100%
Q48		
1	1	1.042%
3	6	6.25%
4	29	30.208%
5	59	61.458%
A	1	1.042%
TOTAL	96	100%
Q49		
2	1	1.042%
3	10	10.417%
4	32	33.333%
5	52	54.167%
A	1	1.042%
TOTAL	96	100%
Q50		
1	14	14.583%
2	24	25%
3	22	22.917%
4	10	10.417%
5	2	2.083%
A	23	23.958%

Response	Number of Responses	Percent of Responses
B	1	1.042%
TOTAL	96	100%
Q51		
1	3	3.125%
2	19	19.792%
3	19	19.792%
4	9	9.375%
A	45	46.875%
B	1	1.042%
TOTAL	96	100%
Q52		
1	1	1.042%
2	9	9.375%
3	20	20.833%
4	34	35.417%
5	21	21.875%
A	11	11.458%
TOTAL	96	100%
Q53		
1	6	6.25%
2	26	27.083%
3	10	10.417%
4	33	34.375%
5	14	14.583%
A	7	7.292%
TOTAL	96	100%
Q54		
1	1	1.042%
2	12	12.50%
3	19	19.792%
4	40	41.667%
5	5	5.208%
A	19	19.792%
TOTAL	96	100%
Q55		
1	1	1.042%
2	12	12.50%
3	14	14.583%
4	41	42.708%
5	6	6.25%
A	20	20.833%
B	2	2.083%
TOTAL	96	100%

Response	Number of Responses	Percent of Responses
Q56		
A	53	55.21%
B	43	44.79%
TOTAL	96	100%
QC		
1	33	34.38%
2	63	65.62%
TOTAL	96	100%
QD		
1	40	41.67%
2	21	21.88%
3	35	36.45%
TOTAL	96	100%
QE		
1	24	25%
2	41	42.71%
3	14	14.58%
4	17	17.71%
TOTAL	96	100%
QF		
1	18	18.80%
2	9	9.38%
3	18	18.80%
4	18	18.80%
5	17	17.71%
6	11	11.46%
7	5	5.21%
TOTAL	96	100%

APPENDIX D

INSTITUTIONAL REVIEW BOARD APPROVAL DOCUMENT



University of Pittsburgh *Institutional Review Board*

Exempt and Expedited Reviews
Christopher M. Ryan, Ph.D., Vice Chair

3500 Fifth Avenue
Suite 105
Pittsburgh, PA 15213
Phone: 412.383.1480
Fax: 412.383.1146
e-mail: irbexempt@msx.upmc.edu

TO: Eric D. Young
FROM: Christopher M. Ryan, Ph.D., Vice Chair *Chris*
DATE: July 29, 2004

PROTOCOL: Minority Students' Access to Four-Year Colleges and Universities: A Pennsylvania Study

IRB Number: 0407103

The above-referenced protocol has been reviewed by the University of Pittsburgh Institutional Review Board. Based on the information provided in the IRB protocol, this project meets all the necessary criteria for an exemption, and is hereby designated as "exempt" under section 45 CFR 46.101(b)(2).

The regulations of the University of Pittsburgh IRB require that exempt protocols be re-reviewed every three years. If you wish to continue the research after that time, a new application must be submitted.

- If any modifications are made to this project, please submit an 'exempt modification' form to the IRB.
- Please advise the IRB when your project has been completed so that it may be officially terminated in the IRB database.
- This research study may be audited by the University of Pittsburgh Research Conduct and Compliance Office.

Approval Date: July 27, 2004
Renewal Date: July 27, 2007

CR:ky

APPENDIX E

PA DEPARTMENT OF EDUCATION HIGHER EDUCATION STATISTICS 1998 – 2003

FIGURE 2
AVERAGE ANNUAL INCREASE IN UNDERGRADUATE IN-STATE
TUITION AND REQUIRED FEES VS THE CONSUMER PRICE INDEX
1993-94 THROUGH 2002-03

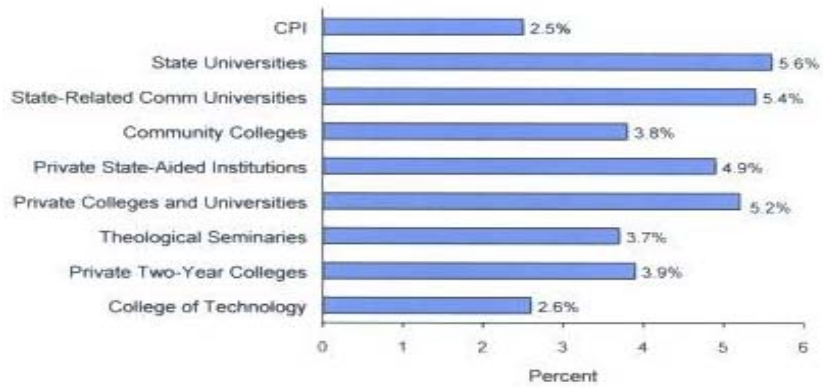


TABLE 16
RESIDENCE OF STUDENTS BY RACE AND INSTITUTIONAL CATEGORY
FALL 2001

	TOTAL	AMERICAN INDIAN/ALASKA NATIVE	ASIAN/ PACIFIC ISLANDER	BLACK NON HISPANIC	HISPANIC	WHITE NON HISPANIC	RACE/ ETHNICITY UNKNOWN
TOTAL 146	583,660	1,618	23,088	51,173	13,377	465,140	29,264
In-State	465,587	1,254	13,947	40,236	8,670	379,625	21,655
Out-of-State	118,073	364	9,141	10,937	4,707	85,515	7,409
STATE UNIVERSITIES (14)	96,813	242	928	5,988	1,320	88,054	281
In-State	80,229	220	850	5,419	1,142	81,338	260
Out-of-State	7,584	22	78	569	178	6,716	21
State-Related Comm. Universities (4)	140,436	318	6,865	13,426	3,291	114,281	2,255
In-State	116,633	237	4,837	8,661	1,974	99,230	1,694
Out-of-State	23,803	81	2,028	4,765	1,317	15,051	561
Community Colleges (14)	106,840	459	3,379	15,841	3,205	77,866	6,090
In-State	105,670	453	3,243	15,608	3,150	77,189	6,027
Out-of-State	1,170	6	136	233	55	677	63
Private S.-Aided Institutions (8)	40,469	102	5,316	3,106	1,304	24,202	6,439
In-State	10,376	46	2,087	1,488	334	11,989	3,432
Out-of-State	21,003	56	3,229	1,618	970	12,213	3,007
Private Colleges and Universities (84)	192,355	469	6,212	11,848	4,097	155,610	14,119
In-State	129,749	277	2,758	8,331	1,959	106,045	10,379
Out-of-State	62,606	192	3,454	3,517	2,138	40,565	3,740
Theological Seminaries (18)	3,378	18	318	473	59	2,445	65
In-State	1,895	14	121	314	27	1,371	48
Out-of-State	1,483	4	197	159	32	1,074	17
Private Two-Year Colleges (5)	2,808	7	84	410	84	2,258	7
In-State	2,474	4	45	334	47	2,037	7
Out-of-State	334	3	19	76	17	218	0
College of Technology (1)	561	3	6	81	37	426	8
In-State	561	3	6	81	37	426	8
Out-of-State	0	0	0	0	0	0	0

Table 9

FALL ENROLLMENTS BY INSTITUTIONAL CATEGORY LEVEL, RACE, AND GENDER

2002

	Total		American Indian/ Alaskan Native		Asian/ Pacific Islander		Black (Non-Hispanic)		Hispanic		White (Non-Hispanic)		Non-Resident Alien		Race/Ethnicity Unknown	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total (147)	276,183	352,814	711	916	11,640	12,707	18,896	34,345	6,067	8,561	209,839	267,909	13,120	9,718	15,910	18,658
Undergraduate	227,190	290,449	611	745	8,892	9,824	16,618	29,446	5,208	7,476	179,181	224,742	5,522	4,772	11,158	13,444
First-Time Freshmen	53,204	64,175	140	172	2,078	2,365	4,060	5,946	1,456	1,950	41,383	49,303	1,072	985	3,015	3,454
First-Professional	9,621	9,097	27	17	1,179	1,319	524	873	308	284	6,878	5,958	255	235	450	411
Graduate	39,372	53,268	73	154	1,569	1,564	1,754	4,026	551	801	23,780	37,209	7,343	4,711	4,302	4,803
State Universities (14)	41,219	60,327	102	129	458	563	2,799	3,584	586	855	35,642	53,509	936	849	696	838
Undergraduate	37,241	51,613	97	108	392	471	2,567	3,064	542	762	32,331	45,909	694	587	618	712
First-Time Freshmen	7,834	10,977	20	22	93	125	675	824	145	211	6,670	9,562	70	72	161	161
Graduate	3,978	8,714	5	21	66	92	232	520	44	93	3,311	7,600	242	262	78	126
State-Related Community Universities (14)	75,194	76,205	153	171	3,653	3,686	5,026	8,991	1,576	1,842	59,358	57,036	4,161	2,802	1,267	1,677
Undergraduate	60,072	58,943	121	104	2,764	2,678	4,138	7,192	1,259	1,456	49,578	45,313	1,199	817	1,013	1,383
Undergraduate	12,498	11,829	19	11	635	622	853	1,428	315	310	10,335	9,120	194	130	147	208
First-Time Freshmen	3,250	2,872	11	10	431	431	194	356	118	109	2,398	1,882	67	55	31	29
First-Professional Graduate	11,872	14,390	21	57	458	577	694	1,443	199	277	7,382	9,841	2,895	1,930	223	265
Comm. College (14)	46,437	70,184	191	285	1,548	1,913	5,182	11,178	1,218	2,479	34,462	49,154	661	764	3,175	4,411
Undergraduate	46,437	70,184	191	285	1,548	1,913	5,182	11,178	1,218	2,479	34,462	49,154	661	764	3,175	4,411
First-Time Freshmen	13,417	17,894	47	81	416	477	1,491	2,338	426	753	9,775	12,569	255	315	1,007	1,361
Private State-Aided Institutions (7)	23,641	22,598	56	60	2,915	2,764	1,176	2,142	730	806	13,144	12,257	2,950	2,067	2,670	2,502
Undergraduate	14,172	12,411	33	31	1,965	1,769	837	1,393	482	520	8,369	6,724	958	683	1,528	1,291
First-Time Freshmen	2,929	2,466	13	12	357	400	152	222	128	102	1,887	1,409	166	103	226	218
First-Professional	2,927	2,998	11	6	435	529	109	220	133	126	1,865	1,782	92	113	282	222
Graduate	6,542	7,189	12	23	515	466	230	529	115	160	2,910	3,751	1,900	1,271	860	989
Private Colleges and Universities (85)	85,342	120,173	187	262	2,757	3,691	4,171	7,956	1,833	2,514	64,160	93,397	4,175	3,156	8,059	9,197
Undergraduate	67,286	95,179	160	214	2,173	2,967	3,588	6,363	1,628	2,210	53,003	75,917	1,928	1,880	4,806	5,628
Undergraduate	15,800	20,492	37	44	561	738	778	1,074	402	558	12,187	16,221	368	357	1,467	1,500
First-Time Freshmen	2,199	2,538	3	0	199	348	61	104	30	39	1,733	1,841	42	48	131	158
First-Professional Graduate	15,857	22,456	24	48	385	376	522	1,489	175	265	9,424	15,639	2,205	1,228	3,122	3,411
Theological Seminaries (16)	2,568	1,377	14	6	268	64	242	262	47	17	1,757	949	214	64	26	15
Undergraduate	200	169	1	0	0	0	6	24	2	1	122	118	59	25	1	1
First-Time Freshmen	28	5	0	0	0	0	0	0	0	0	12	0	16	5	0	0
First-Professional	1,245	689	2	1	114	11	160	193	27	10	882	453	54	19	6	2
Graduate	1,123	519	11	5	145	53	76	45	18	6	753	378	101	20	19	12
Private Two-Year Colleges (6)	1,203	1,904	5	2	35	24	219	228	42	47	873	1,569	23	16	6	18
Undergraduate	1,203	1,904	5	2	35	24	219	228	42	47	873	1,569	23	16	6	18

	Total		American Indian/ Alaskan Native		Asian/ Pacific Islander		Black (Non-Hispanic)		Hispanic		White (Non-Hispanic)		Non-Resident Alien		Race/Ethnicity Unknown	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
First-Time Freshmen	486	486	2	1	13	2	101	58	18	15	345	401	3	3	4	6
College of Tech. (1)	579	46	3	1	6	2	81	4	35	1	443	38	0	0	11	0
Undergraduate	579	46	3	1	6	2	81	4	35	1	443	38	0	0	11	0
First-Time Freshmen	212	26	2	1	3	1	10	2	22	1	172	21	0	0	3	0

Note: Undergraduate data includes first-time freshmen.

APPENDIX F

LUMINA STUDIES APPROVAL DOCUMENT

Lumina Foundation Contact

FROM: "Candace Brandt" <brandt@luminafoundation.org>
TO: edyoung1@stargate.net
SUBJECT: Fw: Lumina Foundation Contact
DATE: Friday, September 12, 2003 9:36 AM

Eric,

You are free to use the resources from Unequal Opportunities as long as Lumina is properly acknowledged as your resource. If you would also like a hard copy of this report, I would be happy to send one to you.

Candace Brandt
Administrative Support
Lumina Foundation

-----Original Message-----

From: Lumina Foundation Contact Form
[mailto: no reply@luminafoundation.com]
Sent: Tuesday, September 09, 2003 7:04 PM
To: Candace Brandt\Subject: Lumina Foundation Contact

Name: Eric D. Young
Email: edyoung1@stargate.net
Institution: University of Pittsburgh-School of Education
Topic: Research

Committee:
Hello,

My name is listed. I am currently a doctoral student at Pitt. My dissertation is on higher education access for minority students in the state of Pennsylvania.

I am writing to seek permission to use the tables on PA from the 2002 Lumina Studies: Unequal Opportunity.

This is great research data and I would like a letter or permission from your organization to use the tables in an appendix of the dissertation.

Could someone email me on whom to contact specifically?

Thank you very much,

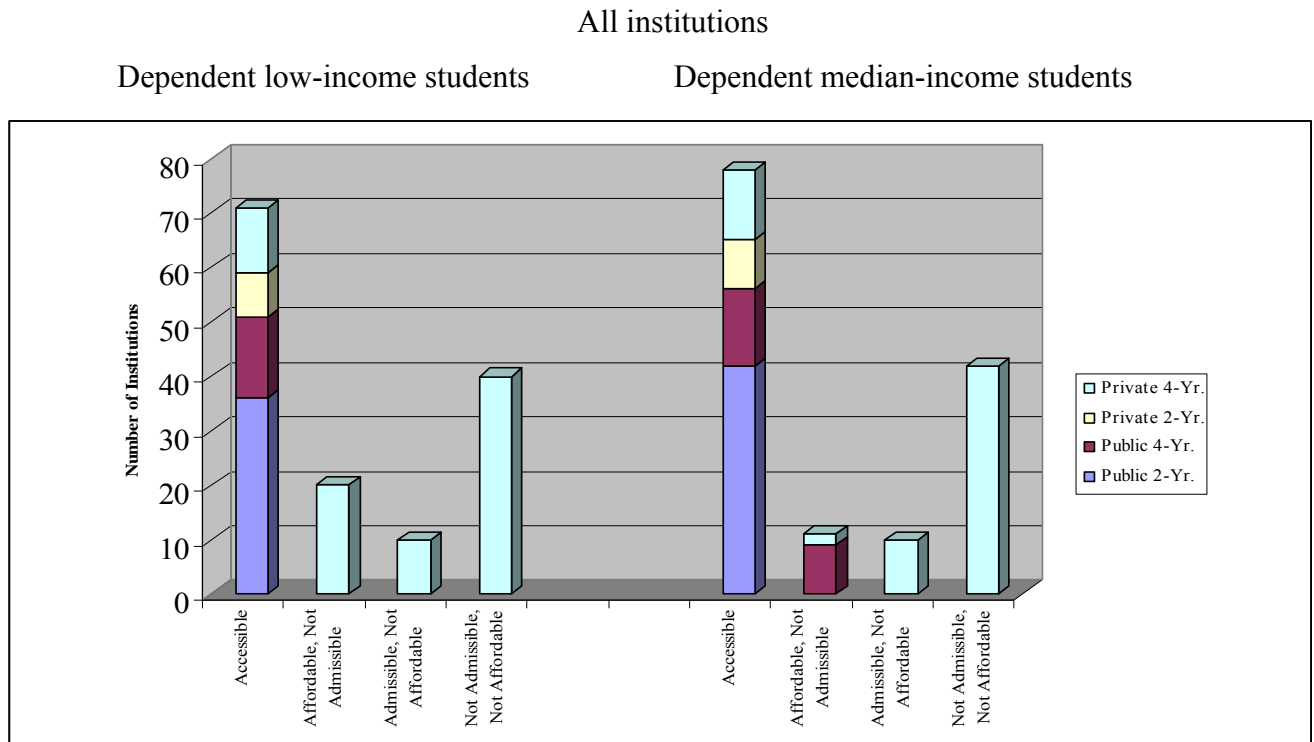
Eric

APPENDIX G

LUMINA STUDIES 2002 DATA ON AFFORDABILITY AND STATISTICAL PROFILES FOR THE STATE OF PENNSYLVANIA

PENNSYLVANIA

44 percent of Pennsylvania's generally admissible public and private institutions are unaffordable for dependent low-income students.



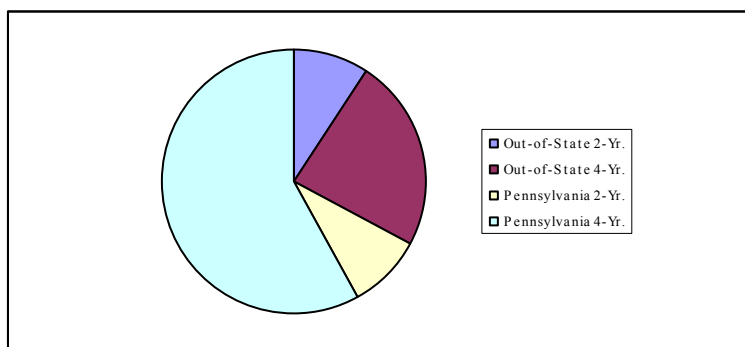
- Forty-one of Pennsylvania's 64 public institutions (64 percent) are accessible college-qualified dependent low-income students.
- Only five of Pennsylvania's 82 private institutions (6 percent) are accessible to college-qualified dependent low-income students.

Admissible institutions

Accessible institutions Two-Year Four-Year	Dependent Low-Income			Dependent Median-Income		
	Without borrowing	Only with borrowing	Not affordable	Without borrowing	Only with borrowing	Not affordable
	17	18	7	39	2	4
	1	10	33	38	2	11

- Low-income college-qualified students have for fewer affordable choices than do median income students.
- None of the admissible public four-year institutions in Pennsylvania is affordable for low-income college-qualified students without borrowing. All of these institutions are affordable to median-income College-qualified students without borrowing.

Tests used in this summary are defunct in the glossary that prepares this series.

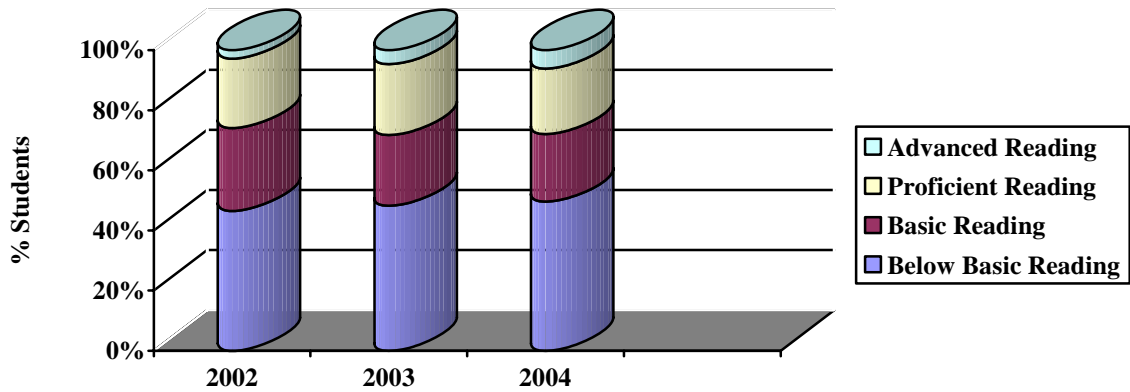


- Pennsylvania colleges and universities attract far more high school graduates from other states as first-time freshmen (22, 270) than Pennsylvania graduates who leave to enroll in other states (14,885). Nearly 21,200 of these arriving freshmen enroll at Pennsylvania four-year institutions.

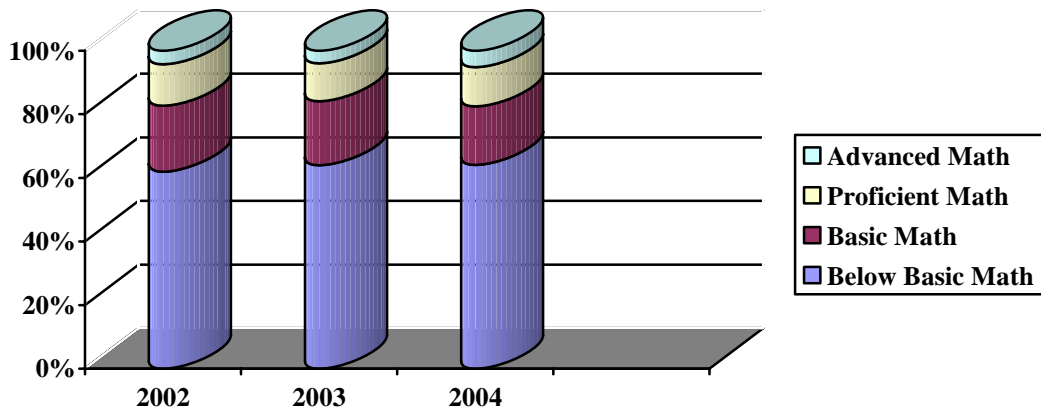
APPENDIX H

PSSA DATA – 2002 – 2004
11TH GRADE ACHIEVEMENT TEST STATISTICS FOR THE
STATE OF PENNSYLVANIA

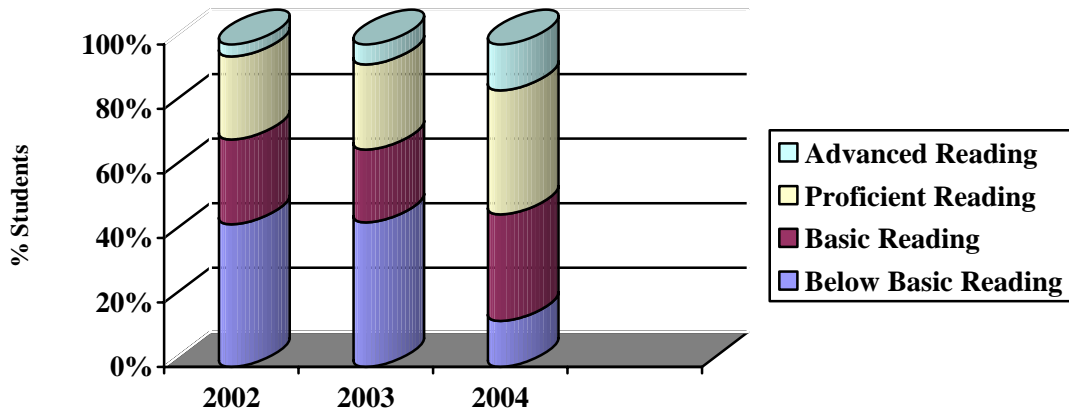
Percent of Black Students Reading 11th Grade 2002 – 2004



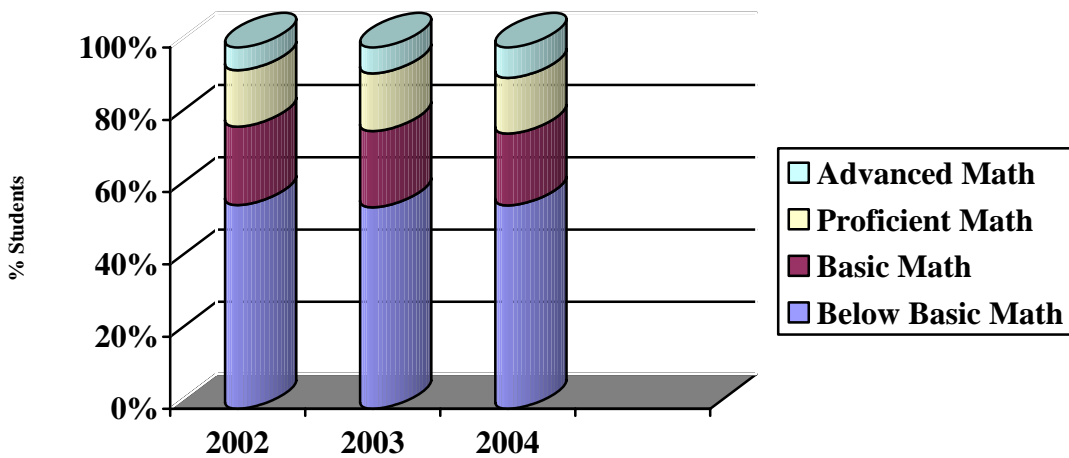
Percent of Black Students Mathematics 11th Grade 2002 - 2004



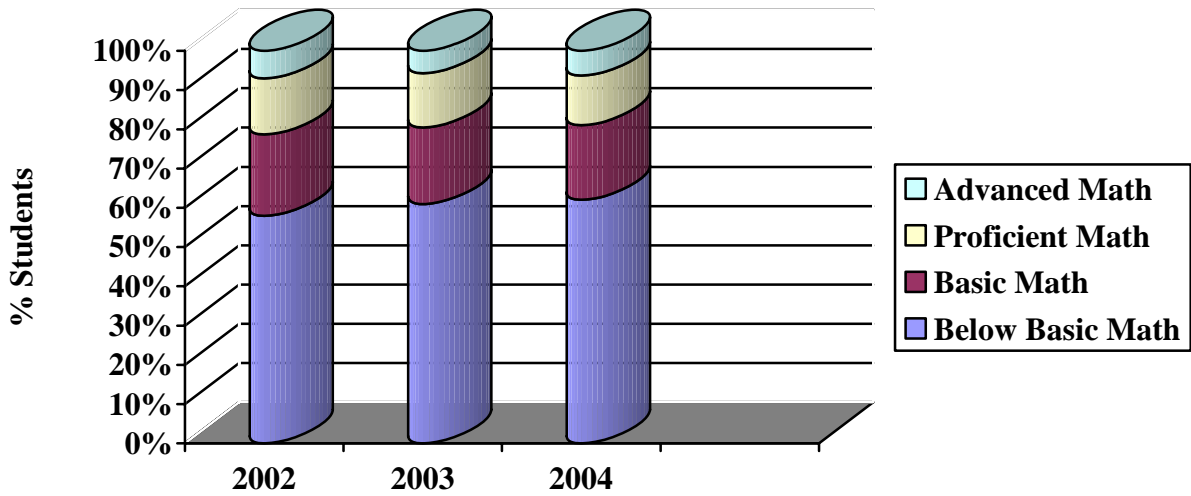
Percent of Economically Disadvantaged Students Reading 11th Grade 2002 – 2004



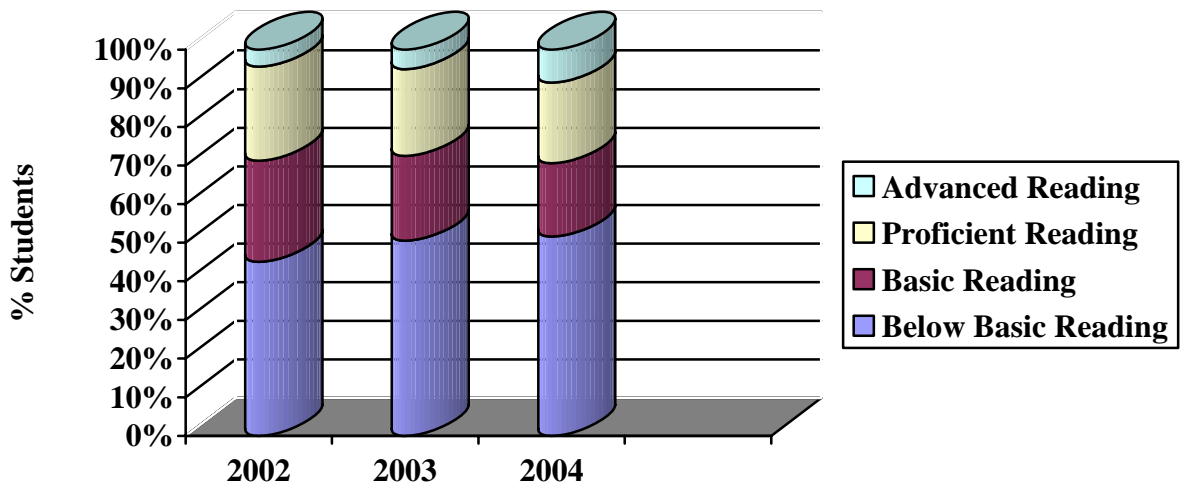
Percent of Economically Disadvantaged Students Mathematics 11th Grade 2002 – 2004



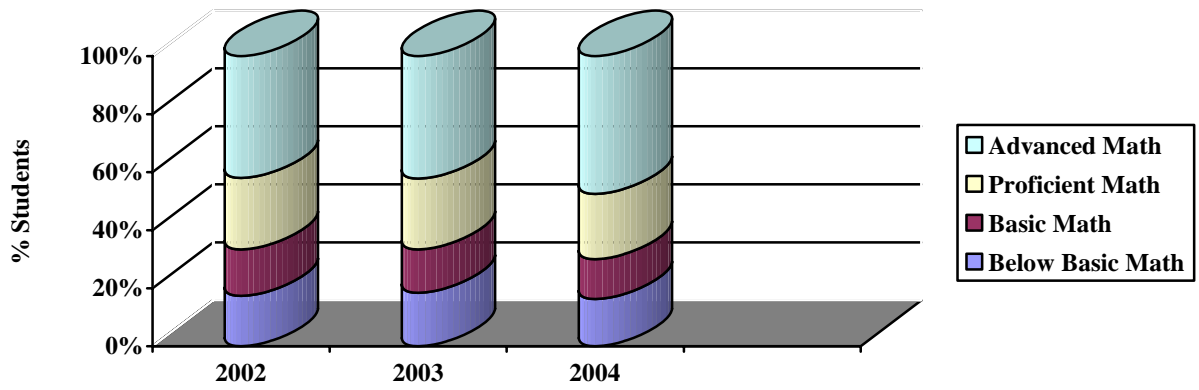
Percent of Hispanic Students Mathematics 11th Grade 2002 - 2004



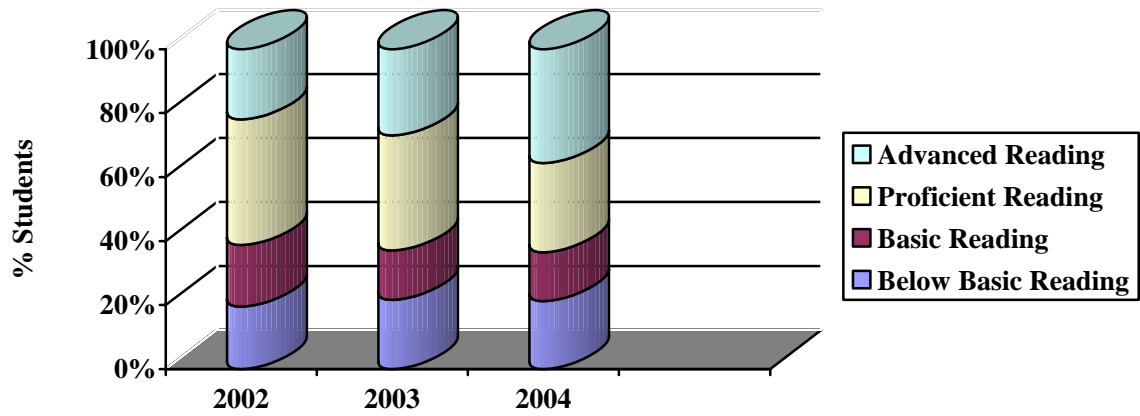
Percent of Hispanic Students Reading 11th Grade 2002 - 2004



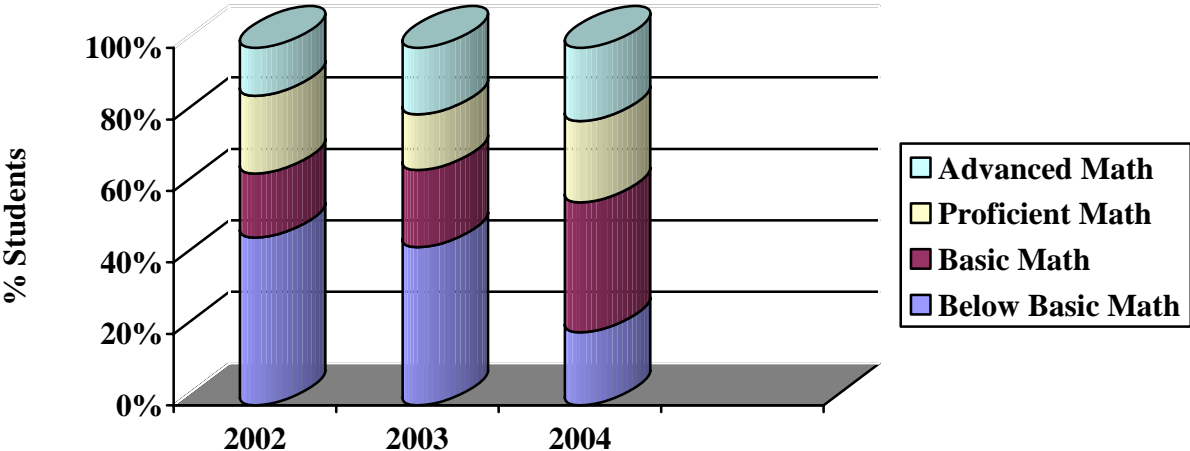
Percent of Asian Students Mathematics 11th Grade 2002 – 2004



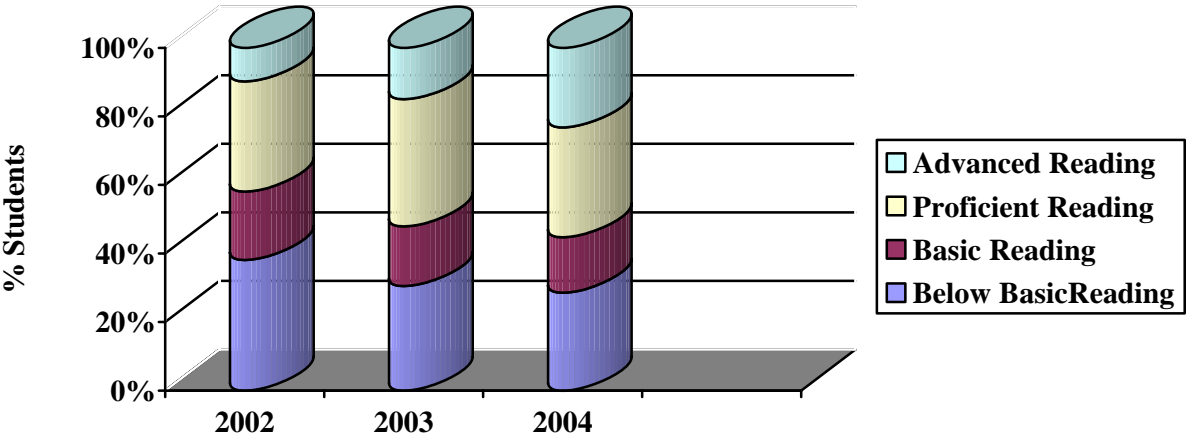
Percent of Asian Students Reading 11th Grade 2002 – 2004



Percent of Native American Students Mathematics 11th Grade 2002 – 2004



Percent of Native American Students Reading 11th Grade 2002 – 2004



**PROGRESS IN STUDENT ACHIEVEMENT
STATEWIDE PSSA RESULTS
2001/2002 – 2004/2005**

PERCENT OF PA STUDENTS PROFICIENT OR ADVANCED

11th Grade	Student Subgroups	2001/02	2002/03	2003/04	2004/05
11 th Grade Math	White	54.1	54.3	54.6	56.4
11 th Grade Math	Black/African American	17.3	15.9	17.4	19.5
11 th Grade Math	Latino Hispanic	21.3	19.5	18.9	23.4
11 th Grade Math	Asian or Pacific Islander	65.6	65.6	70.0	72.2
11 th Grade Math	Amer. Indian or Alaskan	35.2	34.2	45.0	50.0
11 th Grade Math	Multi-Racial Ethnic	40.3	N/A	35.2	35.4
11 th Grade Math	IEP	9.9	9.6	9.0	10.2
11 th Grade Math	LEP	23.4	26.5	28.4	29.2
11 th Grade Math	Economically Disadvantaged	21.9	23.1	23.9	26.2
11 th Grade Reading	White	64.1	64.6	57.1	71.6
11 th Grade Reading	Black/African American	25.9	23.2	27.3	31.7
11 th Grade Reading	Latino Hispanic	28.7	27.5	29.4	35.3
11 th Grade Reading	Asian or Pacific Islander	61.2	62.9	53.5	66.3
11 th Grade Reading	Amer. Indian or Alaskan	41.9	52.1	55.4	59.1
11 th Grade Reading	Multi-Racial Ethnic	52.8	N/A	46.9	49.2
11 th Grade Reading	IEP	13.6	13.8	14.7	18.4
11 th Grade Reading	LEP	5.7	18.1	14.3	19.3
11 th Grade Reading	Economically Disadvantaged	29.4	32.6	33.9	39.4

APPENDIX I

PENNSYLVANIA HIGHER EDUCATION INSTITUTIONS SURVEY STUDY PARTICIPANTS (2005)

The Following Pennsylvania Institutions of Higher Education Participated in the Survey Research Study: August – September 2005

La Salle University	Mercyhurst College
Lafayette University	Millersville University
Lycoming College	Mansfield University
University of Pittsburgh at Johnstown	Lock Haven University
Muhlenberg College	Shippensburg University
Neumann College	Alvernia College
Robert Morris University	Arcadia University
St. Francis College	Temple University
St. Joseph's University	Bucknell University
St. Vincent College	Dickinson College
Seton Hill University	Elizabethtown College
Susquehanna University	Geneva College
Washington & Jefferson College	Haverford College
Waynesburg College	Duquesne University
Westminister College	Carlow University
Widener University	Penn State New Kensington
Wilson College	Penn State McKeesport
York College of Pennsylvania	Carnegie Mellon University
Philadelphia University	East Stroudsburg University
Moravian College	Allegheny College
Holy Family University	Chatham College
Keystone College	Grove City College
Lincoln University	De Sales University
Penn State University Main Campus	Thiel College
Slippery Rock University	Cabrini College
Edinboro University	Penn State Erie - Behrend College
Kutztown University	Lackawanna College
Gannon University	Penn Technical College
Lebanon Valley College	West Chester University of PA

**The Following Pennsylvania Institutions of Higher Education
Participated in the Survey Research Study: August – September 2005**

Clarion University
Swarthmore College
Lehigh University
La Roche College
Chestnut Hill College
Messiah College
Gettysburg College
Philadelphia Bible University
Indiana University of PA
Delaware Valley College
Penn State Community Recruitment Center Pittsburgh
Community College of Allegheny Cty. Allegheny Campus
Community College of Allegheny Cty. South Campus

University of Pennsylvania
University of Pittsburgh

APPENDIX J

**PENNSYLVANIA HIGHER EDUCATION ASSISTANCE AGENCY (PHEEA)
STUDENT AID DATA AND POLICIES EXAMPLES**

Examples of Financial Aid Packages (Based on Two Different EFC's)				
Example #1	School A	School B	School C	School D
Cost	\$ 5,500	\$ 14,000	\$ 23,000	\$ 34,500
- EFC	2,000	2,000	2,000	2,000
= Need	\$ 3,500	\$ 16,000	\$ 25,000	\$ 36,000
Pell Grant	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100
PHEEA Grant	1,400	3,500	3,500	3,500
SEOG Grant	0	0	500	1,000
Scholarships	0	500	5,000	10,000
Perkins Loan	0	1,500	2,000	2,500
Stafford Loan	0	2,625	2,625	2,625
Work-Study	0	1,200	1,500	2,500
Total Aid	\$ 3,500	\$ 11,425	\$ 17,225	\$ 24,225
Unmet Need {Cost Minus EFC+Aid}	\$ 0	\$ 575	\$ 3,775	\$ 7,775
Example #2	School A	School B	School C	School D
Cost	\$ 5,500	\$ 14,000	\$ 23,000	\$ 34,500
- EFC	12,000	12,000	12,000	12,000
= Need	\$ 0	\$ 2,000	\$ 11,000	\$ 22,000
Pell Grant	\$ 0	\$ 0	\$ 0	\$ 0
PHEEA Grant	0	0	0	0
SEOG Grant	0	0	0	0
Scholarships	0	0	5,000	10,000
Perkins Loan	0	0	2,000	2,500
Stafford Loan	2,625	2,625	2,625	2,625
Work-Study	0	0	1,500	2,500
Total Aid	\$ 2,625	\$ 3,125	\$ 11,125	\$ 17,625
Unmet Need	\$ 0	\$ 0	\$ 0	\$ 4,375
Unmet Cost	\$ 2,875	\$ 10,875	\$ 11,875	\$ 16,375
{Cost minus Aid, EFC is partially replaced by Unsubsidized Stafford funds}				

NOTE: Remaining need must be covered by the family, and can be met through a PLUS Loan or Alternative Loan, a payment plan, family savings, a home equity loan, etc.

BIBLIOGRAPHY

- [1] *African-American student's guide to college*. (1998). Princeton Review Staff. Random House, Inc.
- [2] American Association of State Colleges and Universities. (2003). *Public Policy Agenda 2003*. Washington, D.C.: AASCU.
- [3] American Council on Education. (1995). *ACE policy statement on affirmative action*. Washington D.C.: Office of Minorities.
- [4] American Council on Education. (1999a). Making the case for affirmative action in higher education: On the importance of diversity in higher education. ACENET.
- [5] American Council on Education. (1999b). ACE meeting to focus on expanding education opportunities for minorities, women, and persons with disabilities. *ACE Status Report. Vol. 48(14)*. Higher Education and National Affairs
- [6] American Council on Education. (1999c). Race-neutral policies will not resort in equity in education opportunities, report states. *ACE Status Report. Vol. 48(13)*. Higher Education and National Affairs.
- [7] American Council on Education. (1999d). *To touch the future*. Washington, D. C.: American Council on Education.
- [8] American Council on Education. (1999e). *Eye on Washington: Letter to college and university presidents in response to anti-affirmative action efforts*. Stanley O. Ikenberry and Richard T. Ingram.
- [9] American Council on Education. (2000). Students of color continue to make enrollment gains in postsecondary education, but the rate of progress is slowing, ACE report shows. 2001 Annual Status Report on Minorities in Higher Education. *ACE News*.
- [10] American Council on Education. (2001a). Students of color continue to make enrollment gains. *ACE Status Report. Vol. 50(17)*.

- [11] American Council on Education. (2001b). Legal developments related to affirmative action in higher education: An update for college and university presidents, trustees, and administrators. Division of Government & Public Affairs. Washington D.C.
- [12] American Council on Education. (2002a). *Affirmative action in higher education: A current legal overview*. Jonathan C. Alger, Legal Counsel. Washington, D.C.
- [13] American Council on Education. (2002b). Three quarters of college students graduate or remain in school after five years according to federal longitudinal data. *ACE Status Report*. Higher Education and National Affairs.
- [14] American Council on Education. (2002c). On the importance of diversity in higher education. HYPERLINK "http://www.acenet.edu" www.acenet.edu. Washington, D.C.
- [15] American Council on Education & American Association of University Professors. (2000). *Does diversity make a difference?* Washington, D.C.
- [16] American Psychological Association. (1994). *Publication Manual of The American Psychological Association* (4th Ed.).
- [17] Anyon, J. (1981). Social class and school knowledge. *Curriculum Inquiry*, 1(1), 3-42.
- [18] Astin, A. (1971). *Predicting academic performance in college: Selectivity data for 2300 American colleges*. American Council on Education, ACE. New York: The Free Press.
- [19] Astin, A. W. (1993a). Diversity and multiculturalism on campus: How are students affected? *Change*, 25(2), 44-49.
- [20] Astin, A. W. (1993b). *What matters in college?: Four critical years revisited*. San Francisco, CA: Jossey-Bass, Inc.
- [21] Astone, B., & Nunez-Womack, E. (1990). *Pursuing diversity: Recruiting college minority students*. Washington, DC: George Washington University, School of Education and Human Development.
- [22] Babbie, E; Halley, F. and Zaino, J. (2003). *Adventures in Social Research: Data Analysis Using SPSS for Windows, 11.0, v.11.5*. 5th Ed. Thousand Oaks, CA: Pine Forge Press.
- [23] Barron's Educational Series. (1998). *Barron's guide to the most competitive colleges*.
- [24] Bell, D. (1992). Racial realism. *Constitutional Law Review*, 24(2), 363-379.
- [25] Berquist, W. H. (1995). *Quality through access, Access with quality: The New Imperative for Higher Education*. San Francisco: Jossey-Bass Publishers.

- [26] Bikson, T. K., & Law, S. A. (1994). *Global preparedness and human resources: College and corporate perspectives*. Santa Monica, CA: RAND.
- [27] Blau, P. M., & Duncan, O. D. (1967). *The American occupational structure*. New York: John Wiley & Sons.
- [28] Bloom, L. (1998). Hopwood, Bakke, and the future of the diversity justification. *Texas Law Review*, 29(1), 1-73.
- [29] Bowen, H. R. (1977). *Investment in learning: The individual and social value of American higher education*.
- [30] Bowen, H. R. (1980). What determines the costs of higher education? In, D. W. Breneman, et. al., (Eds.). *Finance in Higher Education*. ASHE Reader Series, 113-127.
- [31] Bowen, W. G., & Rudenstine, N. L. (2003). Race-sensitive admissions: Back to basics. *The Chronicle of Higher Education*, *The Chronicle Review*, Section 2, 29(22), b7-b10.
- [32] Bowen, W. G., & Bok, D. (1998). *The shape of the river: Long-term consequences of considering race in college and university admissions*. Princeton, N. J: Princeton University Press.
- [33] Bowen, W. G., & Levin, S. A. (2003). *Reclaiming the game: College sports and educational value*. Princeton, N. J: Princeton University Press.
- [34] Breneman, D. W., & Nelson, S. C. (1981). The future. In, D. W. Breneman, et al., (Eds.). *Finance in Higher Education*. ASHE Reader Series, 129-142.
- [35] Brookings Institution Center on Urban and Metropolitan Policy. (2001). *Radical change in the nation's largest cities: Evidence from the 2000 census*. Washington, D. C.: Brookings Institution, April.
- [36] Brown, B. L. (2001). *Women and minorities in hi-tech careers*. ERIC Digest No. 226: ERIC Clearinghouse on Adult Career and Vocational Education. ED452367.
- [37] Burd, S. (2002). Rift grows over what keeps low-income students out of college: Federal policies could hinge on whether it is a lack of money or a lack of preparation. *The Chronicle of Higher Education*.
- [38] Business-Higher Education Forum. (2002). Investing in people: Developing all of America's talent on camps and in the workplace. *American Council on Education*.
- [39] Butterfield, R. A. (1994). *Blueprints for Indian education: Improving mainstream schooling*. ERIC Digest; ERIC Clearinghouse on Rural Education, ED372898.

- [40] Campbell, M. L. (2001). *Supplemental instruction academic assistance within Pennsylvania's ACT 101 program for disadvantaged students*. Doctoral Dissertation. University of Pittsburgh School of Education.
- [41] Carnevale, A. P., & Fry, R. A. (2000). *Crossing the great divide: Can we achieve equity when generation y goes to college?* Princeton, N. J: Educational Testing Service.
- [42] Carney, R. (2002). Lacking access to education: Panel discusses need for financial aid programs to benefit neediest students. Harvard Graduate School of Education News. HYPERLINK "http://www.gse.harvard.edu" www.gse.harvard.edu.
- [43] Casserly, M. (2002). Beating the Odds II: A City-by-city analysis of student performance and achievement gaps on state assessments. Council of the Great City Schools.
- [44] Chang, M. J. (1996). *Racial diversity in higher education: Does a racially mixed student population affect educational outcomes*. Unpublished doctoral dissertation, University of California at Los Angeles.
- [45] Chang, M. J. (1999). Does racial diversity matter? The educational impact of a racially diverse undergraduate population. *Journal of College Student Development*, 40(4), 377-395.
- [46] Chang, M. J. (2000). It is more than about getting along? The broader educational relevance of reducing students' racial biases. *Journal of College Student Development*, 42(2), 93-105.
- [47] Chenoweth, K. (1998, October). How did they do that? *Black Issues in Higher Education*.
- [48] Cheyney State University of Pennsylvania National Alumni Society. (2003). HYPERLINK "http://www.cheyney.edu" www.cheyney.edu.
- [49] Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 39(7), 3-7.
- [50] Chickering, A. W., & Gamson, Z. F. (Eds.). (1991). Applying the seven principles for good practice in undergraduate education. *New Directions for Teaching and Learning*, No. 47. San Francisco, CA: Jossey-Bass, Inc.
- [51] Civil Rights Act. (1964). Title IV, 42, U.S.C. 2000c-62.
- [52] Civil Rights Act. (1964). Title VI, 42, U.S.C. 2000d 2.
- [53] Clark, J. V. (1999). *Minorities in math and science*. ERIC Digest: ED433216.
- [54] Cobb, K. (2002). *NAACP's focus shifts to education disparities*. Houston Chronicle, July 12.

- [55] College Entrance Examination Board. (2001). *2001 College bound seniors are the largest, most diverse group in history: More than a third are minority, but gap remains.*
- [56] Cornell University Legal Information Institute. (2003). *Supreme Court of the United States. Gratz v. Bollinger et al.: Certiorari to the United States Court of Appeals for the Sixth Circuit.*
- [57] Cornell University Legal Information Institute. (2003). *Supreme Court of the United States. Grutter v. Bollinger et al.: Certiorari to the United States Court of Appeals for the Sixth Circuit.*
- [58] Cromwell, J. W. (1968). *The Negro in American History.* New York: Johnson Reprint Corp.
- [59] Cross, K. P. (1976). *Beyond the open door: New students to higher education.* San Francisco: Jossey-Bass Publishers.
- [60] Cross, K. P. (1979). *Accent on learning.* San Francisco: Jossey-Bass Publishers.
- [61] Dalstrom, C. C. (2001). Private sector shares responsibility for improving higher-education access. USA Funds, Annual Report; HYPERLINK <http://www.usafunds.org> www.usafunds.org.
- [62] Davis, K. & Moore, W. E. (1945). Some principles of stratification. *American Sociological Review*, 10, 242-249.
- [63] Days, D. S. (1984). Minority access to higher education in the post-Bakke era. *University of Colorado Law Review*, 55(4), 491-514.
- [64] *Defunis v. Odegaard*, 416 U. S. 312 (1974).
- [65] Dickeson, R. C. (2004). *Collision Course: Rising College Costs Threaten America's Future and Require Shared Solutions.* A Policy Brief from the Lumina Foundation for Education, Inc.
- [66] Dillman, D.A. (2000). *Mail and Internet Surveys: The Tailored Design Method.* New York: John Wiley and Sons.
- [67] Du Bois, W. E. B. (1903). The talented tenth. Published as the 2ND Chapter of *The Negro Problem.* New York: James Pott & Company.
- [68] DuBois, W. E. B. (1903). *The souls of black folk.* San Francisco: Jossey-Bass Publishers, 1997 Edition.

- [69] Educational Testing Service. (2001). Using assessments and accountability to raise student achievement: Based on the testimony of Kurt M. Landgraf, President and Chief Executive Officer, Educational Testing Service. March 8.
- [70] Educational Testing Service. (2002). *ETS: How to increase the number of persons of color in science and engineering professions*.
- [71] Eichelberger, R. T. (1989). *Disciplined Inquiry: Understanding and Doing Educational Research*. New York: Longman, Inc.
- [72] *Elementary and Secondary Education Act of 1964* (ESEA, HR PL 89-329). US Department of Education.
- [73] Exum, H. A., & Young, E. D. (1981). A longitudinal assessment of academic development in a summer upward bound program. *Community/Junior College Research Review*, 5(4), 339-350.
- [74] Franklin, J. H. (1947). *From slavery to freedom: A history of American Negroes* (1st Ed.). New York: A. A. Knopf.
- [75] Franklin, J. H. (1976). *Racial equality in America*. Chicago: University of Chicago Press.
- [76] Glazer, N. (1975, 1978). *Affirmative discrimination: Ethnic inequality and public policy*. New York: Basic Books, Inc., Publishers.
- [77] Goodchild, L. F., & Wechsler, H. S. (1997). *The history of higher education* (2nd Ed.). ASHE Reader Series. MA: Simon & Shuster Custom Publishing.
- [78] Goring, D. (1999). Affirmative action and the first amendment: The attainment of a diverse student body is a permissible exercise in institutional autonomy. *University of Kansas Law Review*, 47(3), 591-654.
- [79] Gurin, P. (1999). *The compelling need for diversity in higher education*. Ann Arbor, MI: University of Michigan.
- [80] Guthrie, R. V. (1976). *Even the rat was white: A historical view of psychology*. Allyn & Bacon.
- [81] Gratz v. Bollinger, No. 97-75231 (E.D. Mich. Filed Oct. 14, 1997).
- [82] Grutter v. Bollinger, No. 97-75928 (E.D. Mich. Filed Dec. 3, 1997).
- [83] Halpern, R. (1999). After-school programs for low-income children: Promises and challenges. *Future of Children*, 9(3), 81-95.

- [84] Hartle, T. (1981). Bakke, Defunis, and minority admissions. *Public Administration Review*, 41(5), 595-601.
- [85] Henriksen, J. S. (1995). *The influence of race and ethnicity on access to postsecondary education and the college experience*. ERIC Digest; ERIC Clearinghouse on Community Colleges, ED386242.
- [86] Henson, K. A., & Shelly, M. C. (2003). The impact of supplemental instruction: results from a large, public, mid-western university. *The Journal of College Student Development*, 44(2), 250-259.
- [87] Herzlinger, R. E., & Jones, F. (1981). Pricing public sector services: The tuition gap. In, D. W. Breneman, et. al., (Eds.). *Finance in Higher Education*. ASHE Reader Series, 1996, 143-157.
- [88] *Higher Education Amendments of 1966*. United States Congress.
- [89] *Higher Education Act of 1965*. (HR PL 89-752). United States Congress.
- [90] Hood, A. B. (1980). *Hood's 'factory theory' of college student development*. The University of Iowa. E. F. Linqvist College of Education.
- [91] *Hopwood v. Texas*, 78 F. 3rd 932 (5th Cir. 1996)
- [92] Huggins, N. I. (1977). *Black Odyssey: The Afro-American ordeal in slavery*. Vintage Books Edition. (January 1979).
- [93] Hunt, P. F.; Schmidt, J. A., & Boyd, V. S., & Magoon, T. S. (1994). The value of the undergraduate experience to African-American students. *Journal of College Student Development*, 35(4), 282-288.
- [94] Hurtado, S.; Milem, J. S., & Clayton-Peterson, A. R., & Allen, W. R. (1998). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. *The Review of Higher Education*, 21(3), 279-302.
- [95] Hurtado, S.; Milem, J. S., & Clayton-Pederson, A. R., & Allen, W. R. (1999). *Enacting diverse learning environments: Improving the climate for racial/ethnic diversity in higher education*. ERIC Digests; ERIC Clearinghouse on Higher Education, ED430513.
- [96] Isaac, S., & Michael, W. B. (1997). *Handbook in research and evaluation* (3rd Ed.). San Diego, CA: Educational and Industrial Testing Services.
- [97] Jackson, D. (1998). Lower court had it right: Test scores can't be the only criterion. *The Los Angeles Daily Journal*, VIII (251), p. 6. col. 1.

- [98] Jencks, C., & Riesman, D. (1969, 1977). *The academic revolution*. Chicago: University of Chicago Press.
- [99] Jencks, C., & Riesman, D. (1972). *Inequality: A reassessment of the effects of family and schooling in America*. New York: Harper.
- [100] Jencks, C., & Phillips, M. (1998). America's Next Achievement Test: Closing the Black-White Test Score Gap. *The American Prospect*, 9(40).
- [101] Jencks, C., & Burtless, G. (2003). *American inequality and its consequences: Agenda for the nation*. Eds. Aaron, H., Lindsay, J., & Nivola, P. Brookings Institution.
- [102] *Johnson v. Board of Regents of University of Georgia*, 106 F Supp. 2d 1362 (S D. Ga. 2000) passim.
- [103] Johnstone, D. B. (1986). The United States: Higher education in the U.S. In D. W. Breneman, et. al., (Eds.). *Finance in Higher Education*, pp. 227-246. ASHE Reader Series.
- [104] Jones, D. J., & Watson, B. C. (1990). "High Risk" students and higher education: Future trends. ERIC Digest. ERIC Clearinghouse on Higher Education, ED325033, Washington, DC.
- [105] *Journal of Blacks in Higher Education*. (2002). Report. The expanding racial scoring gap between black and white SAT test takers. HYPERLINK "http://www.jbhe.com/latest/37_b&w_sat.html" www.jbhe.com/latest/37_b&w_sat.html.
- [106] Kane, T. (1998). Racial and ethnic performances in college admissions. *Ohio State Law Journal*, 59(3), 971-996.
- [107] Kennedy, J. F. (1963). *Report to the Nation*. The U. S. Library of Congress.
- [109] *Kidd v. National Science Foundation*, No. 97-2005-A (ED Va.). Center for Individual Rights. Washington, DC. HYPERLINK <http://www.nsf.gov>
- [110] King, J. E. (1999). *Money matters: The impact of race/ethnicity and gender on how students pay for college*. Washington, D C.: American Council on Education.
- [111] Kipp III, S. M.; Price, D. V., & Wohlford, J. K. (2002). *Unequal opportunity: Disparities in college access among the 50 states*. Lumina Foundation for Education: New Agenda Series.
- [112] Landgraf, K. (2002). *Education reform: Measuring success*. ETS on the issues. Educational Testing Service, HYPERLINK "<http://www.ets.org>" www.ets.org.

- [113] Landsberg, B. (1995). Balanced scholarship and racial balance. *Wake Forest Law Review*, 30(4), 819-829.
- [114] Lee, J. B. (1999). How do students and families pay for college. In *Financing a College Education: How it Works, How its Changing*. Phoenix: Oryx Press.
- [115] Levine, A. (1993). *Higher Learning in America 1980-2000*. Baltimore: The Johns Hopkins University Press.
- [116] Levine, D. O. (1986). Discrimination in college admissions. The American College and the Culture of Aspiration, 1915-1940. Ithaca, N. Y.: Cornell University Press. In *Goodchild & Wechsler, The History of Higher Education*, 510-527.
- [117] Levitz, R.; Noel, L. & Richter, M. (1999). Strategic moves for retention success. *New Directions for Higher Educatio.*, 1999(108), John Wiley & Sons.
- [118] Likert, R. (1967). *The Human Organization: Its Management and Value*. McGraw-Hill.
- [119] Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 140, 5-53.
- [120] Lithwick, D. (2002). The legal fiction of “diversity”: Good intentions and the unraveling of affirmative action. *Slate*.
- [121] Littleton, R. (1998). *Developmental education: Are community colleges the solution?* ERIC Digest. ED414982.
- [122] Lollis, K. (1997). The right to education. *Black Law Journal*, 6(2-3), 265-275.
- [123] Lumina Foundation for Education. (2005). *Focus. Dreams detoured: Rising college costs alter plans and threaten futures*.
- [124] Lumina Foundation for Education. (2003). *Focus. Restricted access: The doors to higher Education remain closed to many deserving students*.
- [125] Majors, R. G., & Jolliffe, J. (2001a). *The black education revolution*. Taylor & Francis, Inc.
- [126] Majors, R. G., & Jolliffe, J. (2001b). *Educating our black children: New directions and radical approaches*. Taylor & Francis, Inc.
- [127] Mangan, K. S. (2002). Alliance calls for efforts to increase number of minority students earning business degrees. *The Chronicle of Higher Education*..
- [128] Manski, C. F., & Wise, D. A. (1983). *College choice in America*. Cambridge: Harvard University Press.

- [129] Mauch, J. E., & Birch, J. W. (1998). *Guide To The Successful Dissertation: A Handbook For Students and Faculty* (4th Ed.). New York: Marcel Dekker, Inc.
- [130] McCormack, W., (Ed.). (1978). *The Bakke decision: Implications for higher education admissions*. A Report of the ACE-AALS Committee on Bakke. Washington, DC: American Council on Education and the Association of American Law Schools.
- [131] McPherson, M. S., & Shapiro, M. O. (1991). Changing patterns of college finance and enrollment. In, D. W. Breneman, et. al., *Finance in Higher Education* 163-179. ASHE Reader Series. MA: Pearson Custom Publishing.
- [132] Milem, J. S. (1994). College, students, and racial understanding. *Thought and Action*, 9(2), 51-92.
- [133] Myrdal, G. (1944). *An American Dilemma: The Negro problem and modern democracy*. New York: Harper Collins.
- [134] NASPA. (2000). *Diversity on campus: Reports from the field*. Washington DC: Magnificent Publications, Inc.
- [135] National Advisory Commission on Civil Disorders. (1968). *Kerner Report*.
- [136] National Park Service. (2003). *The Carlisle Indian School*.
- [137] *No Child Left Behind Act of 2001* (NCLB). U. S. Department of Education.
- [138] Nora, A. (2001). *How minority students finance their higher education*. ERIC Digest. ERIC Clearinghouse on Urban Education, No. 171, EDO-UD-01-0.
- [139] O'Neil, R. (1988). Preferential admissions revisited: Some reflections on Defunis and Bakke. *Journal of College and University Law*, 14(3), 423-434.
- [140] Orfield, G; Marin, P. & Horn, C. (2005). *Higher Education and the Color Line: College Access, Racial Equity, and Social Change*. Harvard Education Publishing Group.
- [141] Orfield, G., & Whitley, D. (2001). Diversity and legal education: Student experiences in leading law schools. In *Diversity Challenged: Evidence on the Impact of Affirmative Action*. Boston: The Civil Rights Project, Harvard University.
- [142] Oesterreich, H. (2000a). *Characteristics of effective urban college preparation programs*. ERIC Digest No. 159; ED448244.
- [143] Oesterreich, H. (2000b). *The technical, cultural, and political factors in college preparation programs for urban minority youth*. ERIC Digest No. 158; ERIC Clearinghouse on Urban Education. ED448243.

- [144] Palkot, S. (2002). Study suggests black students scoring lower in college. From the report: Profile of Undergraduates in U. S. Postsecondary Education Institutions: 1999-2000. *Daily Texan*.
- [145] Pascarella, E. T.; Edison, M., & Nora, A., & Hagedorn, L. S., & Terenzini, P. (1996). Additional evidence on the cognitive effects of college racial composition. *Journal of College Student Development*, 37(5), 494-501.
- [146] Patterson-Stewart, K. E.; Ritchie, M. H., & Sanders, E. T. (1997). Interpersonal dynamics of African-American persistence in doctoral programs in predominantly white universities. *Journal of College Student Development*, 38(5), 489-498.
- [147] Paulsen, M. B. (1990). *College choice: Understanding student enrollment behavior*. ERIC Digest. ASHE; ERIC Clearinghouse on Higher Education. ED333854.
- [148] Paulsen, M. B., & Pogue, T. F. (1988). Higher education enrollment: The interaction of labor market conditions, curriculum, and selectivity. *Economics of Education Review*, 7(3), 275-290.
- [149] Pell Institute for the Study of Opportunity in Higher Education. (2004). *Raising the graduation rates of low-income college students*. Wash. DC. HYPERLINK "<http://www.pellinstitute.org>" www.pellinstitute.org.
- [150] Pennsylvania Higher Education Assistance Agency (PHEAA). (2003). HYPERLINK "<http://www.pheaa.org>" www.pheaa.org.
- [151] Perry, T. (2003). Tackling the myths of black students' intellectual inferiority. The Chronicle of Higher Education. *The Chronicle Review*, 19(22), b10-b12.
- [151] *Peterson's Guides to Two- and Four-year Institutions*. (2001).
- [152] Pierce, K. M., & Vandell, D. L. (1999). Experiences in after-school programs a children's adjustment in first-grade classrooms. *Child Development*, 7(03), 756-767.
- [153] PDE. (2003). PA Department of Education. *The ACT 101 Guidelines*. PA Higher/Adult Ed., HYPERLINK "<http://www.pdehighered.state.pa.us>" www.pdehighered.state.pa.us
- [154] PDE. (1999). *PA Department of Education. Statistics. College and Universities Education Digest*. PA. Higher and Adult Education, 1997-98 Data Files, HYPERLINK "<http://www.pdehighered.state.pa.us>" www.pdehighered.state.pa.us .
- [155] PDE. (2000). *PA Department of Education. Statistics. College and Universities Education Digest*. PA. Higher and Adult Education, 1998-1999 Data Files, HYPERLINK "<http://www.pdehighered.state.pa.us>" www.pdehighered.state.pa.us

- [156] PDE. (2001). *PA Department of Education. Statistics. College and Universities Education Digest. PA. Higher and Adult Education, 1999-2000 Data Files*, HYPERLINK "http://www.pdehighered.state.pa.us" www.pdehighered.state.pa.us .
- [157] PDE. (2002). *PA Department of Education. Statistics. College and Universities Education Digest. PA. Higher and Adult Education, 2000-2001 Data Files*, HYPERLINK "http://www.pdehighered.state.pa.us" www.pdehighered.state.pa.us .
- [158] PDE. (2001). *PA Department of Education. Statistics. College and Universities Education Digest – 1999-2000 Appendix A Glossary. PA Higher/Adult Ed.* HYPERLINK "http://www.pdehighered.state.pa.us" www.pdehighered.state.pa.us .
- [159] *Pittsburgh Post Gazette*. (2005). Colleges in Pennsylvania are the Costliest in the U. S. October 19, p. A-1, A-5.
- [160] *Podberesky v. Kirwan*, 38 F. 3d 147, 1994 U.S. App. LEXIS 29943.
- [161] Ponder, H. (1996). Change in the air: Looking to forge stronger relationships. *Black Issues in Higher Education*, 13(2), 16-19, 22, 24, August 22.
- [162] Preer, J. L., (1981). *Minority access to higher education. Report I.* AAHE-ERIC/Higher Education Research Report No.1.
- [163] Price, H. B. (2002). *Achievement matters: Getting your child the best education possible.* New York: Kensington Publishing Corp.
- [164] Quimbita, G. (1991). *Preparing women and minorities for careers in math and science: The role of community colleges.* ERIC Digest; ERIC Clearinghouse for Junior Colleges, ED333943.
- [165] Reid, K. S. (2002). Test scores still on upswing in urban school districts. *Education Week*. 21(42), p. 6.
- [166] Renner, K. E. (1998). Redefining the issue of racial preference: Minority access to higher education. *Change*, 30(2), 26-33.
- [167] Richardson, R. C., & Bender, L. W. (1986). *Students in urban settings: Achieving the baccalaureate degree.* ERIC Digest; ASHE, ERIC Clearinghouse on Higher Education, ED284518.
- [168] Riesman, D. (1980). *On higher education: The academic enterprise in an era of rising student consumerism.* San Francisco: Jossey-Bass Publishers.
- [169] Robinson, T. L., & Ting, R. L. (1998). First-year academic success: A prediction combining cognitive and psychosocial variables for Caucasian and African-American students. *Journal of College Student Development*, 39(6), 599-610.

- [170] Rowley, D. J., & Lujan, H. D., & Dolence, M. G. (2001). *Strategic change in colleges and universities: Planning to survive and prosper*. San Francisco, CA: Jossey-Bass Publishers.
- [171] Rudolph, F. (1962). *The American college and university: A history*. New York: Random House, Inc., Vintage Books.
- [172] Sanoff, A. P. (2003). Restricted access: The doors to higher education remain closed to many deserving students. *Lumina Foundation Focus*, 1, 4-23.
- [173] Stark, R. (1988, 1992). *Sociology*. Calif.: Wadsworth Publishing, Inc.
- [174] Sedlacek, W. E. (1999). Black students on white campuses: 20 years of research. *Journal of College Student Development*, 40(5), 538-551.
- [175] Salant, P., & Dillman, D. A. (1994). *How to conduct your own survey*. New York: John Wiley & Sons, Inc.
- [176] Shumow, L. (2001). Academic effects of after-school programs. ERIC Digest; ED458010.
- [177] Smith, A. (1776). *An inquiry into the nature and causes of the wealth of nations*.
- [178] *Smith v. University of Washington Law School*. 2 F. Supp. 2d 1324, 1334 (WD Wash. 1998), 44.
- [179] *Soul of America – Black Colleges*. (2003). HYPERLINK "http://www.soulofamerica.com" www.soulofamerica.com.
- [180] Spartacus Educational. (2002). *Biography of the Life of Thaddeus Stevens*. HYPERLINK <http://www.spartacus.schoolnet.co.uk/SevensUSA.html> www.spartacus.schoolnet.co.uk/SevensUSA.html.
- [181] Stage, F. K., & Hamrick, F. A. (1994). Diversity issues: Fostering campus-wide development of multiculturalism. *Journal of College Student Development*, 35(5), 331-336.
- [182] Stamp, K. (1956). *The peculiar institution: Slavery in the ante-bellum south*. New York: Random House.
- [183] Strobe, L. (2004). Income gap widens between high and low paid workers. *Associated Press*, August 16, 1-4.
- [184] *Sweatt v. Painter*, 339 U.S. 629 (1950).

- [185] Terenzini, P. T.; Rendon, L. I., & Upcraft, M. L., & Millar, S. B., & Allison, K. W., & Gregg, P. L., & Jalomo, R. (1996). The transition to college: Diverse students, diverse stories. In, F. K. Stage., et. al., *College students: The evolving nature of research*. ASHE Reader Series, 54-65.
- [186] Terrell, M. C. (1992). *Diversity, disunity, and campus community*. National Association of Student Personnel Administrators (NASPA), Inc.
- [187] Thomas, S. J. (2004). *Using web and paper questionnaires for data-based decision-making: From design to interpretation of the results*. California: Corwin Press.
- [188] Thomas, W. B., & Stankowski, E. F. (2002). *No wind for their sails: The betrayal of America's urban youth*. Ohio: Wyndham Hall Press.
- [189] Tierney, W. G. (1993). *Building communities of difference: Higher education in the twenty-first century*. Westport, CT: Bergen & Garvey.
- [190] Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research* 45, 89-125.
- [191] Tocqueville, A. C. H. de. (1831). *Democracy in America*. Edited by Henry Reeve (1945).
- [192] Tomlinson, L. M. (1989). *Postsecondary developmental programs. A traditional agenda with new imperatives*. Washington D.C: ERIC Clearinghouse on Higher Education.
- [193] Trueblood, D. L. (1999). The college student personnel worker and responsibility for equal educational opportunity for all youth. *Journal of College Student Development*, 40 (5), 468-475.
- [194] Tumin, M. M. (1953). Some principles of stratification: A critical analysis. *American Sociological Review*, 18, 387-394.
- [195] *University of California Regents v. Bakke*, 438 U. S. 265 (1978).
- [196] University of Pittsburgh. (2003). Statement by the University of Pittsburgh On Its Filing of an Amicus Curiae Brief in Support of the University of Michigan in Two Affirmative Action Admissions Cases before the U.S. Supreme Court. News From Pitt, Monday, February 24, 2003. HYPERLINK http://www.pitt.edu/news/030217_amicus.html
- [197] *University Times*. (2002). Pitt officials endorse ruling that race can be a factor in admissions. The University of Pittsburgh, Vol. 34, No. 19, May 10.
- [198] U. S. Census Bureau: Statistical Abstract of the United States: 2001. *The National Data Book* (121 Edition). U. S. Department of Commerce.

- [199] U. S. Census Bureau. (2002). *United States Census 2000*. U. S. Department of Commerce.
- [200] U.S. Commission on Civil Rights (UCCR). (2003). Beyond percentage plans: The challenge of equal opportunity in higher education. Staff Report. HYPERLINK <http://www.usccr.gov>.
- [201] U. S. Constitution. (1866). *Fourteenth Amendment, Equal Protection Clause 2*.
- [202] U.S. Department of Congress. (1961). *Executive Order 10925*.
- [203] U.S. Department of Congress. (1965). *Executive Order 11246*.
- [204] U.S. Department of Congress. (1967). *Executive Order 11375*.
- [205] U.S. Office of Education. (USOE).
- [206] Weidman, J. C. (1989). Undergraduate socialization: A conceptual approach. In, John C. Smart (Ed.). *Higher Education: Handbook of Theory and Research*. New York: Agathon Press.
- [207] Ware, L. (1996). 'Hopwood' disregarded the U. S. black experience. *The National Law Journal*, 18(34), A23, col. 3.
- [208] *Wessman v. Gittens*. 160 F. 3d 790 (1st Cir. 1998)
- [209] Whitman, R. (1998). Affirmative action on campus: The legal and practical challenges. *Journal of College and University Law*, 24(4), 637-670.
- [210] Wilds, D. J. (2000). *Minorities in higher education 1999-2000*. Seventeenth Annual Status Report, Washington, D. C.: American Council on Education, 2000.
- [211] Williams, J. (1988). *Eyes on the prize: America's civil rights years 1954-1965*. New York: Penguin Books.
- [212] Wisconsin State Department of Public Instruction. (2003). HYPERLINK "http://www.dpi.state.wi.us" www.dpi.state.wi.us *Milwaukee Journal*, February 22.
- [213] *Wooden v. Board of Regents of the University System of Georgia*, 32F Supp. 2d 1370 (1999).
- [214] Young, E. D. (2005). Web-Survey Data Set: For the dissertation: HYPERLINK http://www.education.pitt.edu/survey/minority/ericyoung_surveyreport.asp

- [215] Young, E. D. (1980). A longitudinal study on the academic development of selected participants in a mid-western upward bound project. ERIC Clearinghouse on Urban Education. ED 193402.
- [216] Young, E. D. (2001). PEST Analysis: A report on trends and forecasts for the years 1990-to-2010. Unpublished student research project at the University of Pittsburgh, School of Education. Administrative & Policy Studies 3104; College and University Strategic Planning.
- [217] Young, E. D. & Exum, H. A. (1982). Upward bound and academic achievement: A successful intervention. *Journal of College Student Personnel*, 23(4), 291-299.