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AUTHOR Peng, Samuel S.; Korb, Roslyn
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ABSTRACT

This paper addresses the issue of the equitable participation of minorities in higher education. Evidence of the magnitude of the problem is presented in discussions which address: (1) enrollment trends; (2) the persistence of minority students in academic study; and (3) the time required of minority students to complete their academic studies. It is noted that the reason for lower participation and attainment rates of minority students in higher education is due more to opportunity rather than choice, and that opportunity is dependent on the resources available (socioeconomic status) and the quality of academic preparation in high school. Examples are provided of the relationship between socioeconomic status and college entry. In addition, how the opportunity for higher education is, in large part, determined by an individual's academic preparation in high school is explored. The long-term solution that is suggested for improving minority student participation in postsecondary education involves the elimination of financial barriers to higher education, improving the home learning environment, and better academic preparation at the precollege level. In the interim, it is suggested that colleges should work more vigorously with high schools to increase minority students' understanding of college education requirements and preparation for moving into higher education. Contains 14 references. (GLR)

Improving Minority Participation in Higher Education: A National Challenge

Samuel S. Peng[1]

National Center for Education Statistics/USED
and Temple University Center for Research in
Human Development and Education

and

Roslyn Korb

National Center for Education Statistics
U.S. Department of Education

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Jean Endo
Chair and Editor
Forum Publications Editorial
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Improving Minority Participation in Higher Education: A National Challenge

The equitable participation of minorities in higher education has been a major educational concern in this country. Over the past two decades or so, numerous programs at the federal, state, and institutional levels have been initiated to improve minority participation. For example, there are federal financial aid programs to help financially needy students (many of whom are minority), and there are special instructional and counseling programs in postsecondary institutions to recruit and retain minority students. In recent years, states also have established many initiatives specifically designed to increase the participation of minorities in higher education (ECS/SHEEO, 1987).

All these efforts are attempts to provide equal educational opportunity to individuals of varying backgrounds. They are also considered a necessity in view of the higher growth rate of the minority population in this country. If current growth rates continue, it is projected that by the year 2080 slightly more than one-half of all Americans will be Hispanic, Asian American, or African Americans (SHEEO Task Force on Minority Student Achievement, 1987). Their educational attainment will not only affect their own individual well-being but also the productivity and resources of this country that are necessary to keep this country competitive in the modern world.

Despite efforts to provide education opportunity, minority

participation in higher education remains a major challenge to educators and policymakers. There is ample evidence for this challenge.

Enrollment Trends

First, as documented by previous studies (Schantz & Brown, 1990; Freund, 1991), although total minority enrollment in both 4-year and 2-year colleges and the total number of degrees conferred have increased steadily over the years from 1978 to 1988, the increases occurred mainly among Hispanic and Asian Americans and, to a great extent, reflect the sizeable growth of these populations. The percent share of undergraduate enrollment of Native Americans remained basically unchanged, while the percent share of African Americans declined over most of this period (tables 1 and 2).

The unchanged or worsening situation is vividly shown by the percentage of certain age cohorts enrolled in higher education; i.e., participation rate. Based on data provided by the Current Population Survey of the U.S. Bureau of the Census, the participation rates[2] in higher education for white students (age 18-24) increased steadily from 32% to 37% over the past decade while the participation rates for Hispanic students fluctuated

[2] The annual estimates of participation rates are subject to large sampling errors. Estimates may fluctuate significantly from one year to another. To reduce this problem, the annual estimate in figure 1 is smoothed by using the average of three years' estimates. For example, the 1980 participation rate estimate is the average of estimates from 1979, 1980, and 1981.

around 29%, and the participation rates for African Americans declined steadily from 29% in 1979 to 27% in 1984 (figure 1) and since then has started to increase. In 1987, the participation rates for African Americans and Hispanics remained at about the same level as in 1979 while whites had increased over 5 percentage points. The gaps between whites and both Hispanics and African Americans were thus larger in 1987 than 1979.

Insert Figure 1 about here

Persistence

The differences in participation rates between whites and minorities further increased at the upper levels of education because African American, Hispanic, and Native American students have lower persistence rates. This finding is based on an analysis of the ratios of degree shares to enrollment shares 4- and 2-years earlier, for 4-year and 2-year degrees, respectively. If minority students completed degrees in the same proportions as they were enrolled, the ratios should be equal or close to 1. A ratio of less than 1 indicates that some proportion of students who enroll in higher education institution do not persist to completion. As shown in Figure 2, white students in 4-year schools had a ratio greater than 1 on this indicator[3] and minorities, except for Asian

[3] A ratio greater than one may occur as a result of several circumstances, including, not only higher persistence rates (a higher proportion of degree recipients than enrollees for a particular racial/ethnic group) but also, for example, larger numbers of transfers into the institution for one racial/ethnic

Americans, had ratios less than 1. This suggests that, except for Asian Americans, minorities tended to have lower persistence rates than whites. A similar pattern is also seen in the two-year colleges (see Figure 3). A lower share of associate degrees were awarded to minorities in the two-year college than their enrollment 2-years earlier would predict. Among minorities in 4-year colleges blacks had the lowest ratio; in 2-year colleges, Native Americans and Hispanics had the lowest ratios, suggesting the lowest persistence rate.

Insert Figures 2 & 3 about here

The lower enrollment and persistence rates of minority students are also supported by data from the National Longitudinal Study of the High School Class of 1972 (NLS:72) and the High School and Beyond of the 1980 senior and sophomore cohorts (HS&B). As presented in Table 3, among those who entered college immediately after high school graduation, African Americans and Hispanics had lower cumulative enrollment rates six years after high school and, for those who enrolled immediately after high school, lower persistence rates, beginning the first year of enrollment.

Insert Table 3 about here

The issue of equitable minority participation in higher education

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group relative to others.

education is further complicated when the type of institution is considered. Minority students are more likely to attend 2-year institutions than white students. Based on annual enrollment data provided by the National Center for Education Statistics, U.S. Department of Education, the percent of white students enrolled in 2-year colleges ranged from 34% to 37%, while the percent of African Americans ranged from 42% to 44% and Hispanics, from 54% to 56%. Asian American students ranged from 40% to 43% and Native Americans ranged from 54% to 56% (Snyder, 1990, table 190). Furthermore, a relatively high proportion of African American and Hispanic students attended minority-dominated institutions (table 4). About 37% of African Americans and 21% of Hispanics attended 4-year colleges where more than 50% of students were minorities. About 30% of African Americans and 42% of Hispanics attended predominantly minority institutions.

Insert Table 4 about here

These attendance patterns may result in different kinds of education or training, since 2-year schools and minority-dominated schools may have different educational missions and resource allocations that could strongly affect student persistence and attainment. For example, a lower proportion of faculty had doctoral degrees and a higher proportion of instructional faculty were part-time in 2-year institutions as compared to 4-year institutions (Russell, et al, 1991). Additionally, as found by a

survey of colleges, 55% of entering freshmen in minority-dominated institutions as compared to 27% of entering freshmen in non-minority-dominant institutions participated in at least one remedial instruction program (Mansfield, Farris, & Black, 1991). This suggests, perhaps, that minority-dominated institutions have different academic environments than other institutions.

Time to Completion

Finally, among those who persist to a bachelor's degree, minorities tend to take longer to complete their degree. Based on a survey of 1985-86 baccalaureate degree recipients, about 28% of whites as compared to 16% of African Americans and 18% of Hispanics completed the bachelor's degree program four years or less from high school graduation. In contrast, 32% of whites as compared to 46% of African Americans and 33% of Hispanics completed the program over eight years since high school graduation (table 5).

Insert Table 5 about here

In summary, African American, Hispanic, and Native American students have multiple setbacks in attaining a baccalaureate degree. They have higher high school dropout rates, particularly those students in disadvantaged communities such as inner cities and poor rural settings (Snyder, 1990). In some inner cities, the dropout rates are over 40%. Those who do graduate from high school are less likely to enter higher education. Minority students who

enter postsecondary education are more likely than white students to enroll in junior or community colleges; and, minority students are less likely than white students to complete a degree at any level (one-, two-, or four-year degree, table 3). Moreover, among those who do complete a bachelor's degree, minority students tend to take longer to complete their degree than white students. All these cumulative circumstances indicate a continuing problem with the educational attainment of minority students.

A Question of Personal Choice

A question then is: Why do minority students have lower participation and attainment rates in higher education than majority students? Is the phenomenon a matter of personal choice or a matter of opportunity? Choice suggests that students prefer such alternatives as work or military service to a college education. Opportunity suggests that students want a college education but are not able to obtain it because of a lack of resources and/or preparation. Some possible answers to this question are presented below.

Data indicate that minority participation in higher education is more an opportunity issue than a choice issue. Based on students' own responses to a question about how much education they plan to get, (in HS&B and the National Education Longitudinal Study of 1988 (NELS:88)), it was found that the majority of students (over 80% in NELS:88 and 65% in HS&B), regardless of racial/ethnic background, aspired to some education beyond high school, and

African American students aspired to the same level of higher education as white students although Hispanic and Native American students had somewhat lower aspirations than others. It was also found that more tenth graders in 1980 than eighth graders in 1988 planned to get a trade school education or some college education, and fewer planned to complete at least a 4-year degree. This indicates, perhaps, an increased awareness of students in the need to be realistic in setting their higher education goals and/or possible inter-cohort differences that reflect the stronger emphasis on higher education in 1988 than in 1980 (table 6).

The high aspirations of the eighth graders are of particular interest and significance because they indicate that when students are young, regardless of racial/ethnic background, they all seem to aspire to obtaining a higher education degree. Students begin to modify their aspirations as they gradually realize what their possibilities are and their potential for attaining the desired higher education that they want.

Insert Table 6 about here

A Question of Resources

Opportunity for higher education, as suggested previously, implies resources and preparation. A good measure of individual resources is the family socioeconomic status (SES) which is a composite of parental education, occupation, and family income. SES is a convenient and documented "explanation" of low minority

participation in higher education because more minorities than whites are from low SES backgrounds. Several studies have found that even after academic ability is controlled, high SES students are more likely than low SES students to enter college (e.g, Peng, 1977; College Entrance Examination Board, 1974). The finding of the relationship between SES and college entry is further supported by the recent High School and Beyond data. As shown in Table 7, students of high SES who graduated from high school in 1980 are two to three times more likely than students of low SES to enter postsecondary education immediately after high school graduation, regardless of racial/ethnic background. SES also explains in part the differences in participation rates among racial/ethnic groups. When SES is considered (i.e., averaging participation rate across four SES quartiles to control for the differential representation of students across SES quartiles), the differences are reduced. In fact, for high SES students, the direction of the difference in college entry between whites and African Americans changes. High SES African American students have a higher participation rate than high SES white students. This finding was also demonstrated for 1973 high school graduates using NLS:72 data (Peng, 1977).

Insert Table 7 about here

It is clear that differences in SES between minorities and whites affect observed differences in white and minority educational attainment. But what can educators do about it?

Educators cannot change a student's family status. They can, however, attempt to determine what aspects of SES are related to educational attainment and outcomes. Clearly, one effect of SES is related to the family's ability to provide financial support for higher education. Since the early 1970's, a number of programs at the federal, state, and institutional level have been established to meet student financial need, and a substantial proportion of minority students participate in these programs (Korb, et at, 1988). However, there is still debate about the adequacy, packaging strategies, and delivery of the assistance as well as the relative effectiveness of various programs (Carter & Wilson, 1990). Nevertheless, the issue of financial disparities has been recognized and actively addressed.

The effect of low SES is also reflected in the home learning environment which in turn affects students' preparation for higher education. Previous studies have found that low SES parents are less communicative with their children, provide fewer learning opportunities at home, have lower educational expectations for their children, and are less involved in school, all of which are important factors in student learning (e.g., Peng & Lee, 1991). Since minority parents, on average, have lower SES than white parents, they are less likely to provide adequate educational support and opportunity at home for their children; and improving family education may be one approach for helping minority students from low SES backgrounds.

A Deeper Look at the Problem

Opportunity for higher education is, in large part, determined by an individual's academic preparation in high school. Minority students, on average, have poorer academic preparation than majority students. They have poorer grades and lower test scores, and are more likely to attend schools in disadvantaged communities where a substantial number of households are on welfare (Peng, Wang, & Walberg, 1991).

Grade-point average and test scores in high school are powerful indicators of academic preparation. Students with high grade-point averages and test scores are more likely to obtain and complete higher education. Students with mostly A's are more than twice as likely as students with mostly B's to receive a Bachelor's degree within six years after high school graduation, based on NLS:72 and HS&B data (table 8). Since African American, Hispanic, and Native American students have lower grade-point averages and test scores (see Snyder, 1990, pp 115-123 for results from the National Assessment of Educational Progress), it is predictable that they are less likely to obtain a bachelor's degree than white and Asian American students.

Insert Table 8 about here

The effect of SES and academic preparation on participation in higher education was directly examined using HS&B data by regressing participation in higher education onto test scores, high

school grades, parents' education level, and race. Test scores and high school grades may be considered measures of academic preparation. Parental education is an indicator of family SES. Results show that these variables together account for about 21% of the total variance in college participation. The most significant predictor is achievement test scores which account for 13% of the total variance. This is followed by grade-point average (accounts for additional 4% of the variance) and parental education (accounts for another 3% of the variance). Race/ethnicity adds very little to the regression function (about three-tenths of 1% of the variance), indicating that after test scores, grade-point average, and parental education are controlled, there are no significant difference in participation in higher education among racial/ethnic groups.

While these results render minority status, per se, insignificant as an explanation of lower participation rates, they do not fully account for observed differential participation rates or differences in attainment levels. It must also be recognized that more minority students attend schools in disadvantaged communities where over 50% of the children in the school participate in free or reduced-price lunch programs. Based on NELS:88 data, 36% of Black, 39% of Hispanic, and 40% of Native American, as compared to 7% of white students attended such schools (Peng, Wang, & Walberg, 1991). In general, these schools tend to have lower student achievement scores and more student behavioral problems than their counterparts in other communities. Although

the low achievement levels and student problems may be attributable primarily to students' disadvantaged backgrounds, they, nevertheless, create an environment that is not conducive to effective schooling and learning. Thus, students attending schools in disadvantaged communities may receive a poorer high school education than students in other communities. Moreover, even among those minority students who eventually attend a postsecondary institution, African American and Hispanic high school students are less likely to take those high school courses that would facilitate higher education persistence and completion (table 9).

Insert Table 9 about here

Long-Term Solutions

The above findings provide strong clues for strategies for increasing minority participation in higher education. In addition to providing financial aid to eliminate finances as a barrier to higher education and helping low SES parents improve the home learning environment, better academic preparation at the precollege level will help get to the root of the problem. Many minority students are at a disadvantage in competing with majority students in entering and completing higher education because many minorities cannot meet the academic expectations of the higher education system. It is estimated that, on average, minority students are about one to two years behind white students in academic

preparation at the precollege level. To overcome such disparities at the college level is a difficult challenge to students and to institutions as well.

Thus, the current educational reform which emphasizes improving the academic skills of elementary and secondary school students will definitely help low SES minority students in preparing them for higher education. Improving schools in disadvantaged communities, such as the inner city and poor suburban and rural areas, is imperative and should be a top national priority because a majority of minority students are enrolled in these schools (Peng, Wang, & Walberg, 1991). Unless the quality of education in these schools is improved, participation and persistence of minorities in higher education, particularly at the 4-year college and university level, will remain low because a significant portion of minority students will not be adequately prepared for a college education.

Short-Term Approach

While the proposed long-term solution has the potential for getting to the root of the problem, it is a national challenge and will take some time to realize. In the interim, some short-term approaches will be needed. Colleges should work more vigorously with high schools to increase minority students' understanding of college education requirements, particularly the high school courses that would facilitate their transition to, and persistence in, higher education. Colleges could also provide summer programs for both potential and entering students to improve basic academic

skills such as writing and mathematics; and, for students who enter, colleges should continue to provide support and tutorial services to minorities during the school year. This would facilitate minority students' adjustment to vigorous academic work and help prevent them from dropping out.

A National Challenge

In summary, the low participation of minorities in higher education is a national concern. Minorities have lower entry and persistence rates. They are also more likely to attend lower level institutions. These patterns, if they continue, will have a serious impact on the human resources of this country, particularly in high-tech areas, since the minority population is increasing at a much faster rate than the majority population. Improving minority students' opportunity for higher education is a must for the future well-being of our society. It should be an important national goal for higher education and a challenge to educators at all levels.

Footnote

1. This paper was written when the author was serving as a senior research associate at the Temple University Center for Research in Human Development and Education under the Interagency Personnel Act program of the U.S. Department of Education.

References

Black, M., (1989). Minority student issues: Racial/ethnic data collected by the National Center for education Statistics since 1969. Washington, DC: National Center for Education statistics, U.S. Department of Education.

Carter, D., & Wilson, R., (1990). Minority participation in higher education. Washington, DC: American Council on Education.

College Entrance Examination Board (1974). Equality of educational opportunity: Effects of poverty and minority status. New York: College Entrance Examination Board.

Education Commission of the States and the State Higher Education Executive Officers, (1987). Focus on minorities: Trends in higher education participation and success. Denver, Colorado: State Higher Education Executive Officers.

Freund, W. H., (1991). Race/Ethnicity Trends in Degrees conferred by Institutions of Higher Education, 1978-1979 through 1988-1989. National Center for Education Statistics, U.S. Department of Education.

Korb, R., Schantz, N., Stowe, P., Zimbler, L (1988). Undergraduate Financing of Postsecondary Education: A Report of the 1987 National Postsecondary Student Aid Study, National Center for Education Statistics, U.S. Department of Education.

Mansfield, W.; Farris, E.; & Black, M., (1991). College-level remedial education in the fall of 1989, FRSS38, the National Center for Education Statistics, U.S. Department of Education.

Peng, S. S. (1977). Trends in the entry to higher education: 1961-

1972. Educational Researcher, 15-18.

Peng, S. S., & Lee, R. M. (1991). Home variables that make a difference: A study of 1988 eighth graders. Manuscript being reviewed for publication.

Peng, S. S.; Wang, M. C.; & Walberg, H. J., (1991). Demographic disparities among inner-city children: A national profile. Manuscript being reviewed for publication.

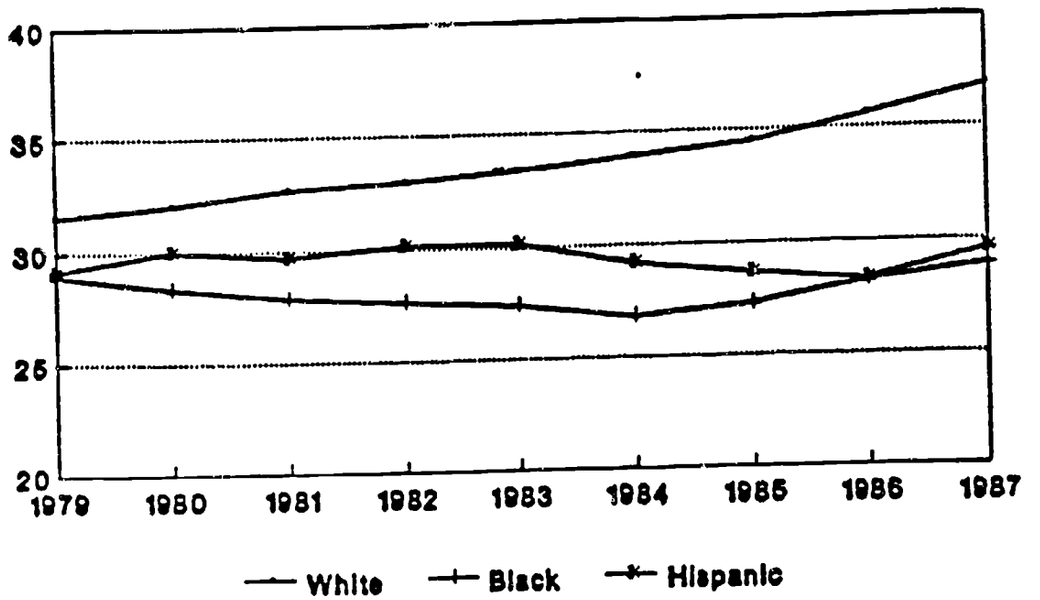
Russell, S.H., Fairweather, J.S., & Hendrickson, R.M. (1991). Profiles of Faculty in Higher Education Institutions, 1988. Manuscript being reviewed for publication. National Center for Education Statistics, U.S. Department of Education.

Schantz, N. B. and Brown, P. Q., (1991). Trends in Racial/Ethnic Enrollment in Higher Education: Fall 1978 through Fall 1988. National Center for Education Statistics, U.S. Department of Education.

Snyder, T (ed.) (1990). Digest of education statistics 1990. Office of Educational Research and Improvement, U.S. Department of Education, NCES 91-660.

State Higher Education Executive Officers Task Force on Minority Student Achievement (1987). A difference of degrees: State initiatives to improve minority student achievement. Denver, Colorado: State Higher Education Executive Officers.

Figure 1. Enrollment rates in higher education by race/ethnicity: 1979-1987



Three-year moving average
Source:

Figure 2. Share of bachelor's degrees to enrollment 4 years earlier

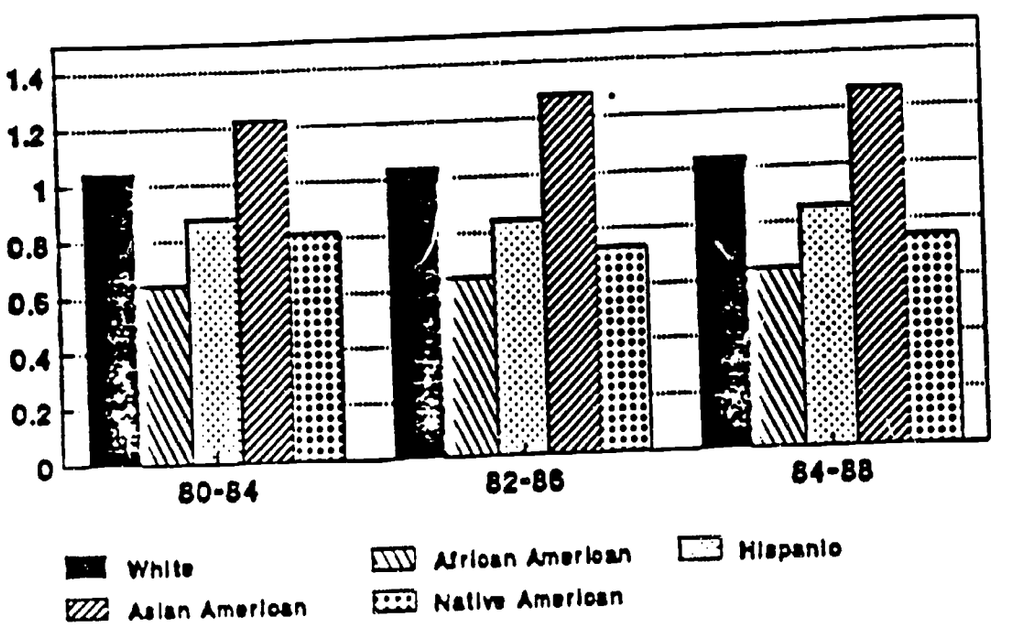


Figure 3. Share of Associate Degrees to enrollment 2 years earlier

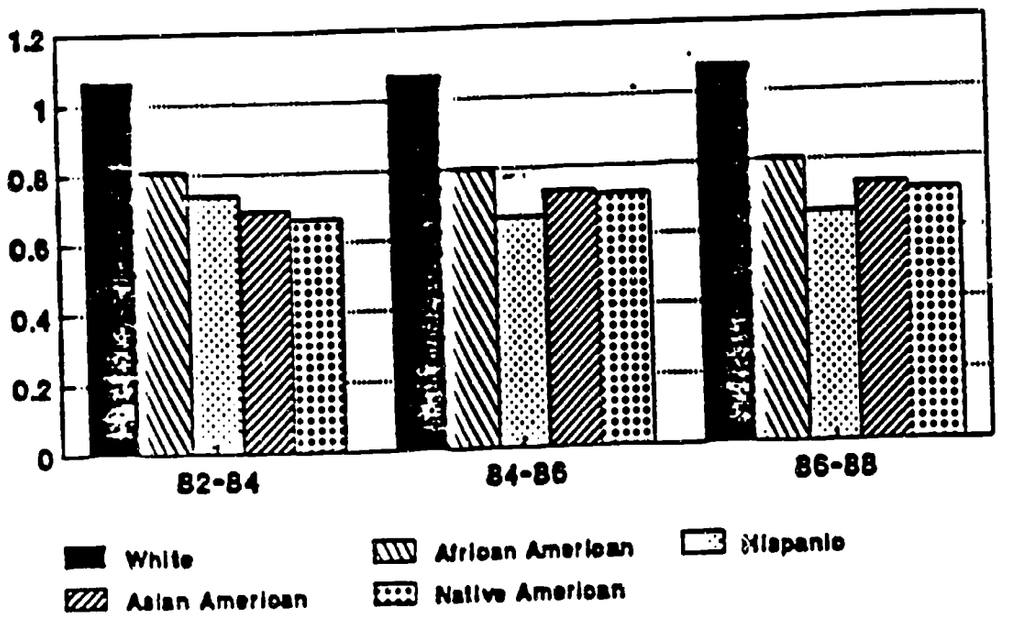


Table 1. Number and percent distribution of undergraduate enrollment by level of institution, race/ethnicity, and year.

	1978	1980	1982	1984	1986	1988	1978	1980	1982	1984	1986	1988
	Number (in thousands)						Percent					
Total	10,338	11,152	11,486	11,232	11,458	12,031	100	100	100	100	100	100
White	8,995	8,355	8,558	8,319	8,411	8,838	81.90	81.40	80.70	80.20	79.30	78.80
Total minority	1,843	1,797	1,908	1,913	2,047	2,193	16.90	16.10	16.80	17.00	17.90	18.40
African Ameri	976	1,027	1,027	996	996	1,039	9.40	9.20	8.90	8.80	8.70	8.70
Hispanic	388	438	486	485	563	632	3.70	3.90	4.20	4.40	4.90	5.20
Asian America	206	252	313	344	404	436	2.10	2.40	2.80	3.20	3.60	3.80
Native Americ	73	78	82	78	85	85	0.70	0.70	0.70	0.70	0.70	0.70
4-year	6,361	6,695	6,787	6,757	6,831	7,222	100	100	100	100	100	100
White	5,528	5,797	5,866	5,805	5,827	6,136	84.83	84.61	84.30	83.90	82.77	82.30
Total minority	833	898	921	952	1,004	1,086	15.07	15.49	15.70	16.40	17.23	17.70
African Ameri	533	555	538	537	529	566	8.84	8.57	8.17	8.25	8.08	8.23
Hispanic	161	183	195	208	223	248	2.81	3.18	3.32	3.55	3.83	4.04
Asian America	109	128	155	177	218	237	1.87	2.21	2.84	3.05	3.74	3.88
Native Americ	30	32	33	32	34	35	0.54	0.55	0.56	0.55	0.58	0.57
2-year	3,977	4,457	4,679	4,475	4,627	4,809	100	100	100	100	100	100
White	3,167	3,558	3,692	3,514	3,584	3,702	79.65	79.83	78.91	78.54	77.48	77.00
Total minority	810	899	987	961	1,043	1,107	20.37	20.17	21.09	21.48	22.54	23.02
African Ameri	443	472	489	459	467	473	11.14	10.59	10.45	10.26	10.09	9.84
Hispanic	227	255	291	289	340	384	5.71	5.72	6.22	6.46	7.35	7.99
Asian America	97	124	158	167	186	199	2.44	2.78	3.38	3.73	4.02	4.14
Native Americ	43	47	49	46	51	50	1.08	1.05	1.05	1.03	1.10	1.04

SOURCE Trends in Racial/Ethnic Enrollment in Higher Education: Fall 1978 through Fall 1988, U.S. Department of Education, 1990.

Table 2. Number and percent distribution of degrees by level of degree, race/ethnicity of degree recipient, and year.

	80-81	84-85	86-87	88-89	80-81	84-85	86-87	88-89
		Number				Percent		
Total	912,211	1,362,502	1,392,565	1,411,845	100	100	100	100
White	807,319	1,181,449	1,203,639	1,211,308	88.50	86.71	86.43	85.80
African American	60,673	93,264	92,012	92,427	6.65	6.85	6.61	6.55
Hispanic	21,832	45,281	45,335	50,094	2.39	3.32	3.26	3.55
Asian American	18,794	35,309	44,412	50,652	2.06	2.59	3.19	3.59
Native American	3,593	7,199	7,167	7,364	0.39	0.53	0.51	0.52
4-year	912,211	939,094	961,954	988,267	100	100	100	100
White	807,319	826,106	841,820	858,186	88.50	87.97	87.51	86.84
African American	60,673	57,473	56,555	58,016	6.65	6.12	5.88	5.87
Hispanic	21,832	25,874	26,990	29,800	2.39	2.76	2.81	3.02
Asian American	18,794	25,395	32,618	38,219	2.06	2.70	3.39	3.87
Native American	3,593	4,246	3,971	4,046	0.39	0.45	0.41	0.41
2-year	•	423,408	430,611	423,578	•	100	100	100
White	•	355,343	361,819	353,122	•	83.92	83.83	83.37
African American	•	35,791	35,457	34,411	•	8.45	8.22	8.12
Hispanic	•	19,407	18,345	20,294	•	4.58	4.25	4.79
Asian American	•	9,914	11,794	12,433	•	2.34	2.73	2.94
Native American	•	2,953	3,196	3,318	•	0.70	0.74	0.78

SOURCE: Race/Ethnicity Trends in Degrees Conferred by Institutions of Higher Education 1976-79 through 1988-89, U.S. Department of Education, 1991.

Table 3. Transition, persistence and attainment rates of high school graduates by race/ethnicity and year of graduation.

	Whites			African Americans			Hispanics		
	1972	1980	1982	1972	1980	1982	1972	1980	1982
Enrolled immediately after high school	49.37	53.66	52.75	37.87	46.73	38.49	29.49	42.26	40.89
Cumulative percent enrolled each year after high school									
year 1	55.11	57.96	56.70	42.49	52.52	44.96	33.84	46.86	46.45
year 2	57.61	64.10	63.71	49.19	60.35	54.53	35.47	54.49	52.16
year 3	59.24	66.31	65.81	52.58	63.09	57.24	38.56	56.81	55.08
year 4	61.00	68.76	67.85	55.27	65.73	58.41	41.37	59.70	56.60
year 5	62.24	70.17	•	55.96	66.38	•	43.39	60.62	•
year 6	63.35	71.38	•	57.11	68.28	•	44.77	61.40	•
Percent of immediate entrants persisting each year after high school									
year 1	89.45	90.00	89.87	82.86	89.68	86.41	89.47	87.91	86.96
year 2	72.32	66.92	53.28	63.49	59.53	40.83	61.85	59.05	40.69
year 3	56.90	55.41	39.26	51.65	50.27	24.82	43.67	47.16	28.34
year 4	48.15	29.89	28.67	41.49	21.02	15.45	33.42	21.02	20.15
Percent of high school graduates attaining one- or 2-year degrees									
4 years after high school	6.94	9.03	7.93	2.14	6.37	7.14	3.29	9.16	9.49
6 years after high school	8.52	12.54	•	3.48	10.42	•	4.01	14.71	•
Percent of high school graduates attaining 4-year degrees									
6 years after high school	15.61	20.79	•	7.75	10.14	•	3.09	6.75	•

SOURCE: Postsecondary Enrollment, Persistence and Attainment for 1972, 1980, and 1982 High School Graduates, U.S. Department of Education, 1988.

Table 4. Percentage of undergraduates enrolled by percent minority enrolled in institution, level of institution, and race/ethnicity of student: Fall, 1988.

Percent Minority	White	African American	Hispanic	Asian American	Native American
4-year institutions					
Total	100	100	100	100	100
90-100	0.04	15.09	0.84	0.10	2.48
80-89	0.16	13.55	5.32	0.73	0.61
70-79	0.04	1.49	0.89	0.02	1.30
60-69	0.37	3.31	6.40	8.01	2.18
50-59	0.57	3.31	7.79	2.49	0.91
40-49	1.05	2.82	5.86	7.50	2.38
30-39	2.86	4.94	11.37	16.57	8.58
20-29	8.22	11.12	20.51	18.64	16.52
10-19	32.67	27.83	27.68	29.21	30.85
0-9	54.02	16.54	13.34	16.72	34.18
Minority dominant	1.18	36.76	21.23	11.35	7.49
Majority dominant	98.82	63.24	78.77	88.65	92.51
2-year institutions					
Total	100	100	100	100	100
90-100	0.10	10.18	6.52	1.64	4.68
80-89	0.18	2.19	6.52	4.24	5.25
70-79	0.58	5.31	6.86	6.99	3.13
60-69	1.06	6.59	11.51	5.82	3.24
50-59	1.96	5.91	10.69	9.63	4.20
40-49	3.57	9.51	10.63	13.36	5.84
30-39	6.55	11.12	11.42	15.29	12.56
20-29	15.68	17.22	16.29	17.67	16.62
10-19	33.24	23.87	15.02	18.32	26.23
0-9	37.06	8.11	4.56	7.05	18.26
Minority dominant	3.89	30.18	42.09	28.32	20.49
Majority dominant	96.11	69.82	57.91	71.68	79.51

SOURCE: Integrated Postsecondary Education Data System, 1988 Fall Enrollment Survey, National Center for Education Statistics, unpublished tabulations.

Table 5. Number of years since high school graduation to receipt of degree of 1985-86 baccalaureate degree recipients.

	White	African Americans	Hispanic	Asian Americans	Native Americans
Years from High School Graduation					
4 or less	27.95	16.41	18.46	18.97	26.95
5-6	30.24	28.72	33.31	25.52	23.32
7-8	9.5	9.07	15.19	16.88	10.92
Over 8	32.31	45.8	33.04	38.63	38.81

SOURCE: 1987 Recent College Graduate Survey, Unpublished Tabulations.

Table 6. Percent of students aspiring to each level of postsecondary education, by race/ethnicity

Race/ ethnicity	Trade school	Some college	College graduate and above	Total Postsecondary
		Eighth graders*		
White	9.30	11.90	67.10	88.30
African American	10.00	16.40	63.80	90.50
Hispanic	10.70	17.10	54.70	82.50
Asian American	5.00	11.90	76.30	93.10
Native American	14.70	16.20	50.70	81.60
		Tenth graders**		
White	19.70	17.60	41.80	79.10
African American	25.60	20.70	34.90	81.20
Hispanic	24.40	16.80	24.60	65.80
Asian American	10.50	20.40	63.40	94.30
Native American	17.20	21.10	28.30	66.60

*National Education Longitudinal Study of the 1988 eighth graders, National Center for Education Statistics, unpublished tabulations.

**High School and Beyond, 1980 Sophomore Cohort, National Center for Education Statistics, unpublished tabulations.

Table 7. Percent of 1982 high school graduates who entered a postsecondary institution immediately after high school graduation by race/ethnicity.

	Observed total	Balanced total*	SES quartile 1 (low)	2	3	4 (high)
White	57.6	49.7	21.9	37.0	57.5	82.3
African American	44.1	55.6	31.0	44.4	64.5	82.6
Hispanic	38.0	48.4	21.6	39.6	54.9	77.3
Asian American	77.5	74.0	55.4	74.3	74.4	92.0
Native American	34.8	37.5	23.9	39.5	40.1	46.4

*This is the expected percent of high school graduates who would enter a postsecondary institution students if the distribution of each specified minority group were equal with respect to socio-economic status (SES).

SOURCE: High School and Beyond, the second follow-up survey of the sophomore cohort, the National Center for Education Statistics, U.S. Department of Education.

Table 8. Cumulative percentage of 1972 and 1980 high school graduates completing college, by level of degree and high school grades.

	Grades					
	A	A to B	B	B to C	C	D
1972 High School Seniors						
1 to 2-year degree						
1976	7.89	7.40	7.07	6.69	2.58	3.22
1978	8.72	9.45	8.12	8.58	3.99	3.51
1980	9.72	10.91	9.88	10.21	5.22	5.04
1982	13.52	12.95	11.74	12.83	7.74	6.97
1984	15.95	14.93	14.91	15.63	9.27	8.00
1986	19.02	16.95	16.79	18.15	12.77	9.74
Bachelor's degree						
1976	41.94	23.48	12.31	6.00	2.37	1.08
1978	57.21	38.04	22.75	13.10	5.40	2.81
1980	59.27	39.31	24.92	14.29	6.09	3.61
1982	59.82	40.94	26.16	16.08	6.82	4.26
1984	60.20	41.50	27.02	17.04	7.20	4.51
1986	60.65	42.37	28.02	17.46	7.74	4.51
1980 High School Seniors						
1 to 2-year degree						
1984	8.17	12.61	9.72	9.65	5.41	2.96
1986	11.29	15.92	14.00	12.47	9.97	7.63
Bachelor's degree						
1986	48.95	28.54	18.49	8.95	2.50	1.26

SOURCE: Digest of Education Statistics, 1990. National Center for Education Statistics, U.S. Department of Education.

Table 9. Percentage of postsecondary participants with specified high school course patterns: 1980 high school seniors by subject area and race/ethnicity

	White	African Americans	Hispanic	Asian Americans	Bachelor's degree aspirants
Math Concentration	72.50	44.20	49.50	82.60	77.00
Science Concentration	59.90	37.90	35.00	73.90	64.20
Humanities Concentration	70.10	57.10	60.50	72.00	65.50
Vocational Concentration	33.60	52.60	42.60	21.40	29.60

SOURCE: The Relationship between Postsecondary and High School Course-taking Patterns: the Prepartion of 1980 High School Sophomores who Entered Postsecondary Institutions by 1984, National Center for Education Statistics, U.S. Department of Education, 1990.