## Chapter 2

# Justice, Equality of Educational Opportunity and Affirmative Action in Higher Education 

by William Trent, Dawn Owens-Nicholson, Timothy K. Eatman, Marya Burke, Jamie Daugherty, and Kathy Norman<br>University of Illinois, Champaign-Urbana

> "In order to get beyond racism, we must first take account of race. There is no other way."
> -- Justice Harry Blackmun in Bakke.

The current debate regarding the use of race in higher education admissions decisions, in selection for other campus programs designed to address underrepresentation, and/or to achieve a more diverse university community, continues in sharp contrast to Justice Blackmun's 1978 admonition. While perhaps not sufficiently explicating the way(s) to take account of race, the substance of Blackmun's 1978 statement is largely consistent with the prior thirty-five years of public policy in education dating back to $\boldsymbol{B R O W N}$. Indeed, following $\boldsymbol{B A K K E}$, taking account of race in order to achieve equitable representation in the workplace and in education persisted, slowly and deliberately, but persisted nonetheless (Mills, 1994).

The use of race as a factor to remedy past and current discrimination has continued but this use is distinct from the use of race to address 'diversity', representation, inclusivity or equity. Critics of affirmative action argue that the latter use is based on an 'equality of results orientation which is sharply different from an 'equality of opportunity' orientation. The discussion of results versus opportunity orientations continues in the policy and academic communities and it apparently turns, in part, on the distinction between a consensus about the just remedying of de jure discrimination and its vestiges as contrasted with the goal of achieving parity as remedy. In many respects, the distinction in higher
education, between those colleges and universities in the South where segregation was legally enforced and those colleges and universities outside the South, is a distinction without a difference (Ballard, 1973; Cobb, 1998). Simply put, examination of the longterm record of black participation in higher education in the US shows that the vast majority of all of higher education could be described as denying access to Blacks. In effect custom was virtually as powerful as law.

The decisions in HOPWOOD and WESSMAN, along with the Constitutional provisions of Proposition 209 in California and Iniitiative 200 in Washington, reflect the ascendancy of a policy perspective that would severely limit the role of race in public policy and especially in educational policy and practice. In higher education, the spread of this more limiting public policy perspective threatens to dismantle over a quarter century of targeted assistance to groups historically denied full participation and access largely on the basis of race. It is tragic irony that the civil rights movement that sought to help us get beyond race is now challenged by the potential of not being able to take account of race. Critics of affirmative action are even citing the fervent words of Dr. Martin Luther King's "I Have A Dream" speech that "one day men will be judged by the content of their character rather than by the color of their skin" in their efforts to limit the use of race in constructing remedy and redress. The moral appeal of this colorblind conception underestimates the pervasiveness of the cumulative effects of legal and customary discrimination, especially against blacks and threatens to dismantle substantial progress realized during the post- $\boldsymbol{B R O W N}$ era.

Much of the current debate proceeds without careful reflection on the very brief period for which we have been pursuing greater participation in higher education for minorities under any policy model. Most have been concerned to show the harmful consequences of the impact of $\boldsymbol{H O P W O O D}$ and Proposition 209, providing detailed examinations of declines in applications and enrollment; estimates of the actual difference that race makes at selective institutions either at the undergraduate level (Kane, 1998); or in admission to law school (Wightman, 1997). Most recently Bowen and Bok (1998) have provided a major analysis of the matriculation of Blacks at highly selective colleges and universities, which shows important benefits of affirmative admissions policies. In each of the above analyses the authors have focused considerable attention on the admissions process and the importance of the use of race to offset the lower test scores of African Americans and Latino/a applicants. Each study demonstrates the centrality of using race as a factor in securing the admission of these students to selective colleges and universities.

This chapter examines the patterns and trends in participation in higher education by race and sector--Carnegie Classification--for the period 1980 through 1996. We report enrollment, segregation and earned degree patterns for selected years during this period. The chapter addresses the several questions. First, what are the patterns--levels, trends, contrasts--of participation in higher education by race and sector? This question is examined first with respect to enrollment at both the undergraduate and graduate levels and subsequently with respect to earned degrees. Second, using a measure of segregation within each sector, we seek to approximate the amount of diversity that might characterize higher education.

Specifically the chapter explores enrollment, segregation and degree completion for each of four sectors, defined by Carnegie ${ }^{1}$ category, of higher education. The intent is to better understand relative participation levels and differences in and across sectors by
race. The use of race as factor in admissions obviously impacts members of each underrepresented group including African Americans, Hispanic, Native American, and Asians. While we address important differences, the principle focus is on African Americans as a consequence of the history of legalized discrimination against this group that has resulted in barriers that distinguish them in important ways.

## Setting the Context

The current higher education context is different in multiple and complex ways from the context in 1965 when the higher education act of that year was passed. In that initial authorizing legislation, major initiatives, especially those most closely identified with access to and participation in higher education were set forth. The Trio programs, Upward Bound Talent Search and Special Services and the Basic Educational Opportunity Grants (BEOG, now PELL grants), all came to fruition during the period 1965 to 1969. Each had as a core part of its origin, a fundamental understanding that race and poverty were critical factors to take account of in increasing access to higher education.

Evidence of the condition of Black participation in higher education at that time is illustrated in the 1971 Newman Report on Higher Education. The report shows that from 1964 to 1968, Black enrollment increased $85 \%$, from 234,000 to 435,000 . As a percentage of total enrollments, the change was from $5 \%$ to $6.4 \%$. In his 1971 report, Secretary of Health Education and Welfare, Elliott Richardson labeled the progress in this area "The Unfinished Experiment of Minorities in Higher Education."

It is also important to note that discussions about race in this period were discussions largely about blacks and whites. The experiment that Richardson referenced was those efforts of traditionally white colleges and universities to increase the presence of Black students at their campuses. The success of these efforts was reported by Crossland (1971) who reported that by 1970, nearly two thirds of all black students were enrolled in other than traditionally black colleges and universities where in 1964 more than half were enrolled in Traditionally Black colleges and universities.

The dominant public policy understanding of affirmative action in the mid-1960s was one of support, growing, in part, out of the leadership of then President Johnson. ${ }^{2}$ In 1967, President Johnson issued Executive Order 11375, which included sex along with race as an illegitimate basis of discrimination. Where in 1967, this was perceived as a necessary way of preventing harm to the legitimate educational aspirations of blacks and women, it has come to represent the views of critics who would dismantle the programs that emerged in response to overcoming barriers.

In some ways the precursor to the public policy opposition to an affirmative use of race today may well have been the "benign neglect" statement of the Nixon Presidency. Certainly Bakke, Weber, Podberesky, Hopwood, Wessman and the state constitutional amendments in California and Washington are the crystallization of a fundamental contrast to the prevailing views of the past forty years. Where race has traditionally been viewed as a legitimate basis for redress, even under de facto circumstances, it has now come to be painted with the brush of the "victimization hypothesis." This hypothesis argues that incumbents in racial categories use their racial status to make illegitimate claims on scare resources and opportunities.

Still another argument is that race is no longer the principal factor shaping inequality. This argument reasons that we have managed to transcend race in most ways and that poverty or class ${ }^{4}$ is the main cause of inequality. Wilson's The Declining

Significance of Race was widely cited as empirical evidence for this view by the social science and public policy communities. Fordham and Ogbu's (1989) ethnographic work in urban black schools highlighting an oppositional attitude among students who were said to associate academic excellence with 'acting white' has been received as evidence of the values based resistance.

Of course there are many more vital aspects of the context that have changed, not the least of which is the demographic transformation underway in the US. As stated earlier, the debate about race in higher education in the US has been a black-white discussion. That framing of the discussion of race is no longer reasonable. While there are critical reasons that make the situation of blacks very different from that of other communities of color, it nonetheless makes necessary a recognition of common barriers to full participation along with a recognition of differences.

The legacy and stigma of slavery and Jim crow as it impacts African Americans stands in stark contrast to the 'model minority' imagery. The plight of Native Americans is different still given the history of US management of the Bureau of Indian Affairs and Indian education. The diversity within both the Hispanic and Asian categories, along with the language issues raised for each, further complicate any discussion of an effective 'common' response to the removal of the barriers to full and equitable participation in higher education.

Lastly, analysts have pointed to the earlier era as one of heightened expectations and a sense of broad spread prosperity as forming the basis for a more generous consensus about social policies emphasizing access and opportunity. It is safe to say that some of these arguments were offered prior to the most recent upturn in the US economy (Mills, 1994). It seems clear now that not just economic prosperity is sufficient to sustain public policies that foster access and opportunity. At the same time, it also appears that a sense of heightened expectations for unlimited opportunity and growth are necessary for public support of the traditional affirmative strategies. The current press of 'global competition' for available work appears to encourage a `zero sum game’ orientation to opportunity. Under this framework, the public is less generous, fearing a reduction of choice as well as a limitation of the chances for success for their children and themselves.

It is also the case that there is far more intense competition for the public dollar. Healthcare for the elderly, healthcare for the young and indigent, increased incarceration under a get tough mentality and a broad array of infrastructure repair costs each compete with education for support. The programmatic interventions of the past thirty-five years, employing an affirmative use of race, are competing for funding with a set of issues that have very strong advocates. By contrast, education, especially higher education, continues to be viewed as a privilege and there has been a substantial shift to a public sentiment that says that the benefactor has to be willing to cover more of, if not all of, the costs. In addition, those who will be assisted will merit any assistance that is provided. Hence the growth in loan assistance as the principle form of government financial assistance to students in higher education and the growing reliance on tests scores in the admissions process to determine merit.

Merit per se is not being challenged here, but rather a narrowing definition of merit that relies too heavily or nearly entirely on test scores. For those colleges and universities where selection of a student body is the challenge ${ }^{5}$, the pressure to make admissions more objective increases the reliance on tests. Public universities feel this pressure much more intensely.

These attributes of the current context make it more important that we take stock of progress and the lack thereof, in the expansion of participation in higher education for different racial groups in the US.

## Data and Methods

This chapter addresses questions about the patterns of participation in higher education by sector and race for selected years. Our intent is to identify the racial differences in levels of participation by sector for each race category and the changes in levels of participation that have occurred for each race category? The data used for the enrollment, segregation and degree attainment examination are from the Integrated Postsecondary Education Data System (IPEDS) for the years 1982, 1988 and 1996 for enrollment and for the years 1980, 1988 and 1994 for degree attainment. The latter years are the most recent years for which the IPEDS data have been completed. ${ }^{6}$

The analysis treats each Carnegie category as a sector of higher education. It has been customary in the current debate to treat colleges and universities as sectors based on their selectivity. This strategy is used by Bowen and Bok, for example, and by Kane. Carnegie categories are based on other criteria that constitute the basis for collections of colleges and universities that share similar/common attributes. They constitute, in substantial ways, the reference categories that the colleges and universities use in setting policies in order to remain on par within their tier or segment, what we here refer to as sector.

It is especially useful for our purposes since within each sector we can identify public and non-public colleges and universities. In the current attack on the use of race in admissions and other selection decisions, it is the public segment of each sector of higher education that is addressed and primarily the Research I Universities: The University of Maryland; The University of Texas at Austin; UCLA and UC Berkeley; The University of Michigan. Sometimes referred to as the flagship universities within their respective states, these campuses are the beneficiaries of intentional state policies that make them especially attractive.

Research I universities are a special resource within the overall framework of higher education. They stand at the top of a hierarchically structured system of American higher education. Their faculties, physical plants, material and intellectual resources distinguish them as a group. They have at the core of their mission both research and teaching and arguably among their critics, research is the driving force of these institutions. Gumport (1994) writes that:
"While direct support of doctoral education (fellowships and traineeships) was done on a competitive basis, the talent and support ended up being concentrated at leading research universities, where the federally sponsored research was occurring. This resulted in a consolidation of resources for both research and doctoral training, giving these institutions a double competitive edge in attracting high quality students and faculty."

Gumport concludes that graduate education and research now serves as the primary purpose for those universities in the top tier and as the "noble aim for lower tiers to emulate."

In the late 1960's and early part of the 1970's, the efforts of activists targeted these campuses for increased access for minorities in some part because it was reasoned
that the undergraduate environment on these campuses would be more encouraging of aspirations for graduate study for minority students. In short, students attending these universities would be socialized in an environment where the expectation for further study was the norm.

Finally, Research I universities are also a critical resource because of the organizational network they comprise and in which they are embedded. Bowen and Bok (1998) show an aspect of this in their examination of the career results for graduates of the elite colleges and universities in their study. Their evidence is compelling and shows the importance of elite linkages.

The use of the Carnegie classification system thus provides us a vehicle for examining relative participation across sectors with special attention given to research I universities.

## Patterns, Trends and Contrasts

Perhaps one of the most enduring metaphors in all of education is that of the "educational pipeline". It seems intended to evoke an image of the passage of students from school entry to school exit as a 'flow' along what might naively be seen as a relatively straight or predictably curving pipe. The difficulty with the metaphor occurs when we try to account for the numbers of students who exit the pipeline in inappropriate places and at inappropriate times. For the most part we tended to view the pipeline as largely intact and accommodating the relatively smooth and uninterrupted flow of the majority of students from school entry to school completion. Inappropriate exits have mainly been explained as individual failure.

Several scholars have challenged this prevailing view by suggesting that we might reject the pipeline metaphor in favor of one that is more consistent with the experiences of Black, Latino, Native American and many poor children. Olivas reasons that thinking of a stream or a river would be more appropriate since there would be a greater possibility of seeing the occurrence of blockages in the rivers or streams which could slow or divert the flow and/or redirect it. For students of color, participation in higher education has been a goal, fraught with barriers, blockages, misperceptions and misconceptions, that maps well onto the alternative imagery. This chapter seeks to capture both the successes and frustrations of the pursuit of that goal by describing the participation of students of color in higher education since 1980, examining both enrollment and degree attainment patterns.

## The Early Stages

There is a broad based consensus regarding the critical roles the early years of childhood and schooling play in shaping long term educational achievements. There is at the same time, a continuing and growing chorus that points to family background and, family structure in particular, to account for poor school performance and low levels of achievement in African American and Hispanic communities. Coleman and others (1965) provided the initial empirical evidence for this latter argument when the Equality of Educational Opportunity Survey failed to confirm the conventional wisdom that school-toschool differences in quality of educational resources were the primary cause of differences in educational attainment between rich and poor, and minority and white communities. This debate regarding family background and structure versus discriminatory practices in $\mathrm{k}-12$ schooling fuels a tension over policy choices that are too often discussed in either or terms rather than "both and." The perspective employed in the discussion below centers on "opportunity to learn" and examines factors that shape such
opportunities. Clearly, family resources, including parental education and family stability are important opportunity-to-learn conditioners. In this section we briefly discuss particular features of the early stages of the educational pipeline that have been shown to influence educational attainment. This is a necessary discussion prior to the discussion of higher education patterns and trends. Specifically, we present data on early-childhood education, children at risk, the changing demographics of the schools, average reading proficiency, racial-ethnic and SES composition of school districts by district size and tracking and ability grouping.

We begin by first discussing the demographic realities of the nations public elementary and secondary schools. Hodgkinson (1986) described the demographic imperative, the forces of population growth and change that yield our school population, and its implication for education. As the nation's population was becoming increasingly minority, the rate of change in the school population was even greater. More importantly, the demographic shifts are such that the schools are getting greater numbers of students for whom school has not been a successful experience. There are greater numbers of economically disadvantaged students, greater numbers of students for whom English is a second language, and greater numbers of students from single-headed households. Table 1 presents the percentage distribution of enrollment by race in the elementary and secondary schools for selected years from 1976 through 1995. There has been an 11\% increase in minority students during this period. The percentage of Hispanic students has more than doubled, from 6.45 in 1976 to $13.5 \%$ in 1995. The percentage of Asian/Pacific Island students has tripled, increasing from 1.25 to $3.7 \%$. What these statistics do not show is the great variability within both the Hispanic and Asian categories. The variations include language, cultural and political differences that impact access and opportunity.

The discussion which follows is limited by our inability to identify the more detailed categories within which students fall. Nonetheless, the broad categories that are used are themselves very illustrative of race and ethnic differences in opportunity to learn and in performance.

## Early Intervention

Research encompassing the need for intervention as early as the age of three years (Children's Defense Fund, 1996) and the benefits of pre-school, especially for poor and minority youngsters, has alerted the policy community to the need to redouble efforts focused on the early years. School readiness and the beginning of the schooling experience is greatly influenced by the early training and exposure that families and communities can provide. Early intervention provides a mechanism for counteracting the limitations of economically disadvantaged communities and helping students have a more equal starting point. Such opportunities are not evenly distributed across race and income categories. Table 2 shows the prekindergarten participation rates of 3 to 4 year olds by family income and race and ethnicity.

The data are from the 1990 census and they show that generally, irrespective of race, participation in prekindergarten is greater for those families with higher incomes. Hispanic participation rates are lower at each income level. White and Asian participation rates are highest among the high-income groups. One of the key policy strategies for improving the number of students of all race-ethnic categories who perform better early on in school will be the ability to overcome the financial constraints that limit early participation. Research on the National Assessment of Educational Progress, NAEP, shows that the gap in minority-white scores at age 17 is about the size of the gap at age 9 .

## Table 1

## Percentage distribution of enrollment in public elementary and secondary schools by race/ethnicity: 1976-95

| Race/ethnicity | 1976 | 1984 | 1986 | 1988 | 1990 | $1992^{*}$ | $1993^{*}$ | $1994^{*}$ | $1995^{*}$$1976-95$ <br> Change in <br> Percentage |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Total |  |  |  |  |  |  |  |  |  |  |  |
| Points |  |  |  |  |  |  |  |  |  |  |  |

Data are from the Common Core of Data (CCD) Survey.
SOURCE: U.S. Department of Education, Office for Civil Rights, Elementary and Secondary School Civil Rights
Survey,
1976, 1984, 1988, and 1990;
National Center for Education Statistics, Common Core of Data Survey, 1992; and Digest of Education Statistics, 1995, 1996, and 1997.

Table 2. Prekindergarten participation rates of 3 to 4 year olds by family income and race and ethnicity: 1990:

|  | White | Black | Hispanic | Asian/Pacific <br> Islander | Ameri <br> Indian <br> an Nativ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Family Income |  |  |  |  |  |
| \$100,000 or more | 59.7 | 49.7 | 3.6 | 53.0 | 51.2 |
| \$75,000 - \$99,999 | 50.9 | 45.9 | 34.9 | 44.8 | 37.2 |
| \$50,000 - \$74,999 | 44.5 | 42.5 | 28.6 | 40.2 | 35.8 |
| \$35,000 - \$49,999 | 35.8 | 36.2 | 23.8 | 33.5 | 29.5 |
| \$25,000 - \$34,999 | 28.5 | 32.6 | 19.5 | 26.6 | 29.0 |
| \$15,000 - \$24,999 | 23.4 | 29.0 | 17.0 | 22.5 | 26.5 |
| \$10,000 - \$14,999 | 22.3 | 27.8 | 16.7 | 22.1 | 28.9 |
| \$5,000 - \$9,999 | 23.4 | 26.8 | 17.5 | 22.1 | 28.3 |
| Less than \$5,000 | 22.6 | 24.1 | 16.9 | 21.8 | 25.0 |

SOURCE: U.S. Bureau of the Census, 1990 Decennial Census School District Special
Tabulation. SDAB tabulation reference RQ2H10R

Early intervention may substantially reduce the size of the early gap and thereby preserve later school opportunity and performance.

A number of factors conspire to place students at risk of educational failure. Among these are poverty, being in a single-female-headed household, residing in an urban area and attending an urban school. As the tables below show, the likelihood of experiencing each of these differs by race. Table 3 [not available in this draft] presents the distribution of students at risk, both the count and the percentage. The statistics are for children between 0 and 19 years of age for 1990. Nearly half, $44 \%$, of the children identified as at risk are African American. By contrast, only one percent are Asian. Roughly the same percentage of children at risk are Latino, $26 \%$, and white , $27 \%$. Students at risk are more likely to drop out of school and more likely to experience poor academic performance. Each of these outcomes dramatically reduces the numbers available for graduation and college enrollment.

One indicator of low academic performance, arguably the essential component of intellectual development, is reading proficiency. Table 4 [not available in this draft] presents the average NAEP reading proficiency scores for students ages 9,13 and 17 by race and ethnicity for selected years from 1971 to 1996. Black and Hispanic average reading proficiency scores are substantially below those of whites at each age and for each year. The gap has however narrowed slightly between Blacks and Whites and Hispanics and Whites during this 25 year period.

Student performance in schools is shaped by a variety of factors. Research has shown that the concentration of poverty in schools and the concentration of African American and Hispanic students in schools are both highly correlated--they tend to occur together. The schools in which these two factors occur together are typically in large, urban districts. The schools in which these two factors typically occur are almost always more poorly resourced as measured by pupil-teacher ratios, teachers with advanced credentials, more experienced teachers, or an enriched curricula. Massey and Denton (1993), in their examination of racial segregation, describe the phenomenon of hypersegregation which has high segregation on several ascriptive factors, race, ethnicity and income in particular. The authors show the implications of intense race and poverty segregation for educational outcomes. In their simulations Massey and Denton are able to manipulate average school test scores by varying the levels of racial and poverty concentration. In general, the greater the intensity of the two the lower the average test scores.

Table 5 shows the Racial-Ethnic composition of regular school districts by district size. The data are for school years 1987-88 through 1990-91. Table 6 gives the racialethnic composition for regular school districts by poverty level. The two tables together provide clear evidence that the largest school districts and the districts with the greatest concentration of poverty are substantially minority. In Table 5 , the largest districts, 10,000 and over, were about $47 \%$ minority in 1990-91. Forty-one percent of the enrollment in districts this size was Black and Hispanic. This is in contrast to an overall average of about $32 \%$ minority students in all schools for that year. By contrast, in smaller districts, 1000 to 5000 , the percent minority was about 17.5 for $1990-91$. Only $12.5 \%$ of the enrollment in Districts tis size was African American and Hispanic.

Table 6 shows an even more dramatic difference across school districts differing by levels of poverty concentration. In districts where the percentage of school children in poverty was $25 \%$ or more, the percent of minority students was 61 percent in 1990-91. Black and Hispanic enrollment averaged just over 56 percent. By contrast, in low poverty

Table 5.

Racial-ethnic composition of regular districts, by district size: 1987-88 to 1990-91

|  | Number of Students | Percent Native American | Percent Asian | Percent Hispanic | Percent <br> Black | Percent White |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall |  |  |  |  |  |  |
| 1987-88 | 39,963,281 | 1.0 | 3.0 | 10.2 | 16.5 | 69.3 |
| 1988-89 | 40,120,672 | 1.0 | 3.1 | 10.7 | 16.4 | 68.8 |
| 1989-90 | 40,408,326 | 1.0 | 3.2 | 11.2 | 16.3 | 68.4 |
| 1990-91 | 40,911,261 | 1.0 | 3.3 | 11.6 | 16.2 | 67.9 |
| Size |  |  |  |  |  |  |
| $0-999$ |  |  |  |  |  |  |
| 1987-88 | 2,975,906 | 2.9 | 0.9 | 5.4 | 3.7 | 87.2 |
| 1988-89 | 2,974,605 | 2.9 | 0.8 | 5.4 | 3.8 | 87.0 |
| 1989-90 | 2,927,104 | 2.9 | 0.8 | 5.5 | 3.5 | 87.3 |
| 1990-91 | 2,917,080 | 3.0 | 0.8 | 5.5 | 3.3 | 87.5 |
| 1,000-4,999 |  |  |  |  |  |  |
| 1987-88 | 12,539,341 | 1.1 | 1.4 | 5.2 | 9.3 | 82.9 |
| 1988-89 | 12,513,543 | 1.1 | 1.5 | 5.5 | 9.4 | 82.6 |
| 1989-90 | 12,544,546 | 1.1 | 1.5 | 5.7 | 9.3 | 82.4 |
| 1990-91 | 12,523,715 | 1.1 | 1.5 | 5.8 | 9.1 | 82.4 |
| 5,000-9,999 |  |  |  |  |  |  |
| 1987-88 | 6,533,712 | 0.7 | 2.6 | 7.9 | 12.8 | 75.9 |
| 1988-89 | 6,433,060 | 0.7 | 2.7 | 8.2 | 12.9 | 75.6 |
| 1989-90 | 6,422,276 | 0.7 | 2.8 | 8.8 | 12.7 | 75.0 |
| 1990-91 | 6,477,862 | 0.8 | 3.0 | 9.2 | 12.8 | 74.3 |
| 10,000 and over |  |  |  |  |  |  |
| 1987-88 | 17,914,312 | 0.6 | 4.7 | 15.4 | 25.0 | 54.3 |
| 1988-89 | 18,199,464 | 0.6 | 4.8 | 16.0 | 24.6 | 54.0 |
| 1989-90 | 18,514,400 | 0.7 | 4.9 | 16.6 | 24.3 | 53.5 |
| 1990-91 | 18,992,604 | 0.7 | 5.0 | 17.2 | 24.0 | 53.2 |

NOTE: Percentages may not add to 100 percent due to rounding
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data Surveys
1986-87 to 1990-91.

## Table 6.

Racial-ethnic composition of regular districts, by SES (percentage of population in poverty): 1987-88 to 1990-91

|  | Number of Students <br> in AnalysisNative | Percent <br> American | Percent <br> Asian | Percent <br> Hispanic | Percent <br> Black | Percent <br> White |
| :---: | :---: | :---: | ---: | ---: | ---: | ---: |
| Overall |  |  |  |  |  |  |
| $1987-88$ | $39,963,281$ | 1.0 | 3.0 | 10.2 | 16.5 | 69.3 |
| $1988-89$ | $40,120,672$ | 1.0 | 3.1 | 10.7 | 16.4 | 68.8 |
| $1989-90$ | $40,408,326$ | 1.0 | 12 | 11.2 | 16.3 | 68.4 |
| $1990-91$ | $40,911,261$ | 1.0 | 3.3 | 11.6 | 16.2 | 67.9 |

Percentage of school-age children in poverty: 1990

| $<5 \%$ |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1987-88$ | $4,243,231$ | 0.3 | 3.6 | 4.2 | 3.7 | 88.2 |
| $1988-89$ | $4,300,465$ | 0.3 | 3.8 | 4.4 | 3.8 | 87.8 |
| $1989-90$ | $4,349,079$ | 0.3 | 4.0 | 4.7 | 3.9 | 87.1 |
| $1990-91$ | $4,427,781$ | 0.3 | 4.2 | 4.9 | 3.8 | 86.8 |
| $5 \%-<15 \%$ |  |  |  |  |  |  |
| $1987-88$ | $13,645,900$ | 0.7 | 2.6 | 5.4 | 7.4 | 83.9 |
| $1988-89$ | $13,797,186$ | 0.7 | 2.7 | 5.7 | 7.5 | 83.4 |
| $1989-90$ | $13,998,850$ | 0.7 | 2.8 | 6.1 | 7.5 | 82.8 |
| $1990-91$ | $14,269,556$ | 0.7 | 3.0 | 6.5 | 7.6 | 82.2 |
| $15 \%-<25 \%$ |  |  |  |  |  |  |
| $1987-88$ | $10,932,698$ | 1.0 | 3.5 | 8.8 | 14.2 | 72.4 |
| $1988-89$ | $11,025,089$ | 1.0 | 3.6 | 9.4 | 14.4 | 71.7 |
| $1989-90$ | $11,144,517$ | 1.0 | 3.6 | 10.0 | 14.3 | 71.1 |
| $1990-91$ | $11,322,823$ | 1.0 | 3.7 | 10.5 | 14.4 | 70.4 |
| $25 \%$ and over |  |  |  |  |  |  |
| $1987-88$ | $10,984,196$ | 1.5 | 2.9 | 20.0 | 35.2 | 40.4 |
| $1988-89$ | $10,954,566$ | 1.5 | 2.9 | 20.6 | 34.7 | 40.2 |
| $1989-90$ | $10,915,880$ | 1.6 | 3.0 | 21.5 | 34.5 | 39.5 |
| $1990-91$ | $10,878,202$ | 1.6 | 3.0 | 22.1 | 34.4 | 38.9 |

Only districts for which SES data were available are included in these analyses.
NOTE: Percentages may not add to 100 percent due to rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data Surveys
1986-87 to 1990-91
U.S. Department of Education, National Center for Education Statistics, School District Data Book Version 1.0, June

## Racial-ethnic composition of schools in regular districts, by type: 1987-88 to 1990-91

|  | Number of Students | Percent Native <br> American | Percent <br> Asian | Percent Hispanic | Percent <br> Black | Percent White |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall |  |  |  |  |  |  |
| 1987-88 | 39,963,281 | 1.0 | 3.0 | 10.2 | 16.5 | 69.3 |
| 1988-89 | 40,120,672 | 1.0 | 3.1 | 10.7 | 16.4 | 68.8 |
| 1989-90 | 40,408,326 | 1.0 | 3.2 | 11.2 | 16.3 | 68.4 |
| 1990-91 | 40,911,261 | 1.0 | 3.3 | 11.6 | 16.2 | 67.9 |
| Type |  |  |  |  |  |  |
| Regular School |  |  |  |  |  |  |
| 1987-88 | 39,580,239 | 1.0 | 3.0 | 10.2 | 16.4 | 69.4 |
| 1988-89 | 39,764,178 | 1.0 | 3.1 | 10.6 | 16.3 | 69.0 |
| 1989-90 | 39,973,930 | 1.0 | 3.2 | 11.1 | 16.1 | 68.5 |
| 1990-91 | 40,516,673 | 1.0 | 3.3 | 11.6 | 16.1 | 68.1 |

Special Education School

| $1987-88$ | 155,987 | 0.5 | 2.7 | 17.2 | 28.1 | 51.5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1988-89$ | 158,960 | 0.7 | 2.7 | 17.2 | 27.5 | 51.9 |
| $1989-90$ | 153,918 | 0.8 | 2.6 | 17.3 | 27.4 | 51.9 |
| $1990-91$ | 165,165 | 0.8 | 2.6 | 16.7 | 28.9 | 50.9 |
|  |  |  |  |  |  |  |
| Vocational Education School |  |  |  |  |  |  |
| $1987-88$ | 128,341 | 0.3 | 1.8 | 14.7 | 40.0 | 43.2 |
| $1988-89$ | 123,620 | 0.4 | 1.6 | 13.2 | 32.3 | 52.5 |
| $1989-90$ | 138,654 | 0.5 | 2.4 | 13.6 | 37.7 | 45.7 |
| $1990-91$ | 114,779 | 0.6 | 2.1 | 14.9 | 33.7 | 48.8 |

Alternative Education School

| $1987-88$ | 98,714 | 2.3 | 2.7 | 9.2 | 21.9 | 63.8 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $1988-89$ | 73,914 | 2.8 | 1.8 | 9.1 | 18.3 | 67.9 |
| $1989-90$ | 141,824 | 2.9 | 2.6 | 11.5 | 25.2 | 58.7 |
| $1990-91$ | 114,644 | 2.3 | 2.0 | 9.2 | 24.4 | 62.0 |

NOTE: Percentages may not add to 100 percent due to rounding
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data Surveys
1986-87 to 1990-91.

## Racial-ethnic composition of regular districts, by district size: 1987-88 to 1990-91

|  | Percent Native |  | Percent | Percent | Percent | Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Students | American | Asian | Hispanic | Black | White |
| Overall |  |  |  |  |  |  |
| 1987-88 | 39,963,281 | 1.0 | 3.0 | 10.2 | 16.5 | 69.3 |
| 1988-89 | 40,120,672 | 1.0 | 3.1 | 10.7 | 16.4 | 68.8 |
| 1989-90 | 40,408,326 | 1.0 | 3.2 | 11.2 | 16.3 | 68.4 |
| 1990-91 | 40,911,261 | 1.0 | 3.3 | 11.6 | 16.2 | 67.9 |
| Size |  |  |  |  |  |  |
| 0-999 |  |  |  |  |  |  |
| 1987-88 | 2,975,906 | 2.9 | 0.9 | 5.4 | 3.7 | 87.2 |
| 1988-89 | 2,974,605 | 2.9 | 0.8 | 5.4 | 3.8 | 87.0 |
| 1989-90 | 2,927,104 | 2.9 | 0.8 | 5.5 | 3.5 | 87.3 |
| 1990-91 | 2,917,080 | 3.0 | 0.8 | 5.5 | 3.3 | 87.5 |
| 1,000-4,999 |  |  |  |  |  |  |
| 1987-88 | 12,539,341 | 1.1 | 1.4 | 5.2 | 9.3 | 82.9 |
| 1988-89 | 12,513,543 | 1.1 | 1.5 | 5.5 | 9.4 | 82.6 |
| 1989-90 | 12,544,546 | 1.1 | 1.5 | 5.7 | 9.3 | 82.4 |
| 1990-91 | 12,523,715 | 1.1 | 1.5 | 5.8 | 9.1 | 82.4 |
| 5,000-9,999 |  |  |  |  |  |  |
| 1987-88 | 6,533,712 | 0.7 | 2.6 | 7.9 | 12.8 | 75.9 |
| 1988-89 | 6,433,060 | 0.7 | 2.7 | 8.2 | 12.9 | 75.6 |
| 1989-90 | 6,422,276 | 0.7 | 2.8 | 8.8 | 12.7 | 75.0 |
| 1990-91 | 6,477,862 | 0.8 | 3.0 | 9.2 | 12.8 | 74.3 |
| 10,000 and over |  |  |  |  |  |  |
| 1987-88 | 17,914,312 | 0.6 | 4.7 | 15.4 | 25.0 | 54.3 |
| 1988-89 | 18,199,464 | 0.6 | 4.8 | 16.0 | 24.6 | 54.0 |
| 1989-90 | 18,514,400 | 0.7 | 4.9 | 16.6 | 24.3 | 53.5 |
| 1990-91 | 18,992,604 | 0.7 | 5.0 | 17.2 | 24.0 | 53.2 |
| NOTE: Percentages may not add to 100 percent due to rounding |  |  |  |  |  |  |
| SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data Surveys |  |  |  |  |  |  |

districts, the minority percentage was $13.5 \%$ and Blacks and Hispanics together averaged just 8.9\%.

One more example shows the extent to which different race-ethnic groups experience very different school contexts. As part of an expert report on the consequences of school desegregation, data from two national surveys were examined in order to test the consistency of findings regarding the benefits of desegregation. The surveys were the National Longitudinal Labor force Study-Youth Cohort (ne Parnes) and High School and Beyond (HS\&B). Students in Parnes were high school seniors in 1978 while the high schools in the HS\&B were surveyed in 1980. Table 7 [not available in this draft] is taken from that report. The table presents the school averages for five school attributes; percent of students classified as disadvantaged; school percent Latino/a; school percent African American; school dropouts, and; college attendance rate. These data make clear the high concentrations of disadvantaged students, the high concentrations of other minority students and the somewhat higher likelihood of dropping out in schools attended by minority students.

We also see in these data that there are real differences within the Hispanic category. Except for having a higher concentration of other Latinos in their schools, Cubans attended schools very much like the schools attended by whites in these data. By contrast, Blacks and Puerto Ricans have a higher likelihood of being in schools where the concentration of other minorities and the concentration of disadvantaged students are higher. Cubans were also shown to be attending high schools where the reported college going rate, $67 \%$, was significantly higher than is the rate for any other race/ethnic group. Conversely, Blacks and Mexican Americans were attending schools with the lowest rate, $45.3 \%$ compared to all other groups.

The preceding discussion focuses primarily on examples emphasizing the educational disadvantages that result from poverty and high levels of racial segregation. These contextual factors have been shown to impact opportunity to learn by limiting the educational resources in these environments. In addition to these contextual factors, a variety of school related practices have been shown to negatively impact opportunity to learn. Chief among these has been the use of ability grouping and tracking in schools.

A substantial body of research has shown how grouping practices have been used in ways that reassembles students along social class and race lines with the disproportionate higher concentrations of poor and minority youngsters in the lower ability groups (Slavin, 1989; Oakes, 1985). These studies report that the quality of instruction in the lower groups works to disadvantage students in these groups in a cumulative way. In other words, students in these groups learn less as a consequence of group membership and that this deficit is cumulative as the placement continues. In this manner, poor and minority students become increasingly less competitive in the classroom.

Tracking, the process of assigning students to academic tracks or streams as early as the middle school years, based on prior academic performance and measured ability, magnifies and compounds the effects of ability grouping in classrooms and grades in the earlier grades. First, decisions about track placement are based on a combination of test scores, grades and recommendations. Students who have been receiving lesser quality instruction cannot compete well on these criteria and are seldom selected into the more challenging academic tracks, thereby magnifying the effects of earlier ability grouping. This is then compounded when, in the lower tracks, students receive a further comparative disadvantage by being placed--locked--in a less rigorous curriculum. Heyns (1974) research, employing a status attainment approach, showed how tracking actually

Table 7.
From High School and Beyond Base Year School Data File

| High <br> School <br> \% Black | Average \% 1979 <br> Grads Attending <br> "Regular" | Unweigh <br> ted N |  | Weighte <br> d N | High <br> Cchool \% <br> Minority | Average \% 1979 <br> Grads Attending <br> "Regular" <br> College in 1980 | Unweigh <br> ted N |
| :---: | :---: | :---: | :---: | ---: | ---: | ---: | ---: |
| $0-9 \%$ | 46.2736 |  |  | Weighte <br> d N |  |  |  |
| $10-24 \%$ | 43.0249 | 130 | 14,595 | $0-9 \%$ | 46.5026 | 425 | 12,067 |
| $25-49 \%$ | 44.0342 | 110 | 1,716 | $10-24 \%$ | 41.5993 | 151 | 2,867 |
| $50-74 \%$ | 34.2926 | 41 | 521 | $25-49 \%$ | 47.9709 | 151 | 2,199 |
| $75-100 \%$ | 35.1982 | 52 | 755 | $75-74 \%$ | 39.1008 | 84 | 657 |

From National Education Longitudinal Study of 1988 First Follow-up School Questionnaire

| $10^{\text {th }}$ Grade $\%$ Black | Average \% 1989 Grads Attending a 4-Year College in 1990 | Unweigh ted N | Weighte d N | $\begin{aligned} & \mathbf{1 0}^{\text {th }} \text { Grade } \\ & \% \text { Minority } \end{aligned}$ | Average \% 1989 Grads Attending a 4-Year College in 1990 | Unweig hted $\mathbf{N}$ | $\begin{gathered} \text { Weighte } \\ \mathbf{d} N \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-9\% |  |  |  | 0-9\% | 49.6187 | 396 |  |
| 10-24\% |  |  |  | 10-24\% | 57.6398 | 211 |  |
| 25-49\% |  |  |  | 25-49\% | 46.1620 | 179 |  |
| 50-74\% |  |  |  | 50-74\% | 39.8208 | 106 |  |
| 75-100\% |  |  |  | 75-100\% | 38.7857 | 140 |  |

The HSB work was straightforward. There was a separate School data file which contained the necessary variables: HS \% Black, \% of Grads attending regular college ("Regular" did not specify 2 yr or 4 yr ). HS \% Minority was constructed by adding together \%American Indian, \%Asian, \%Hispanic, and \%Black. There was a school weight in this file, and the percentages are based upon that weight. The weighted and unweighted n's are in the table. I chose the percentage categories based upon what was available for the NELS88 (see below).

The NELS work was tricky. First, I had to use the $1^{\text {st }}$ follow-up (when the students were $10^{\text {th }}$ graders) because the base year did not have a College Attendance variable. Second, there is a separate "School" file, but the unit of analysis is still the student, so I had to extract only the first occurrence of each unique school id. Then, although \%Black, \%Asian, \%Hispanic, and \%Native American are listed in the codebook, in reality all those fields have missing data. Only the \%White, Non-Hispanic field has any data. So I could only construct a \%Minority variable, not a \%Black variable. (I also checked the CD and it does not have information on separate races either. I also looked at the $2^{\text {nd }}$ followup-same deal.) Thirdly, the HS\% Minority represents only $10^{\text {th }}$ graders-the high school total is not in the data. Lastly, the \%Minority variable is not continuous (as the HSB's was)—it was in 5 categories-so I used it as is. Oh, also the college attendance rate represents $4-\mathrm{yr}$ colleges. And there is no school weight variable-since I extracted the data from a student file.
was associated with contributing to inequality between students over and above their existing student stratification. Subsequent research by Gamoran (199x), Sorenson (199z), Braddock (199y) shows that tracking, as a feature of school organization, is a principal way in which students are organized for instruction and that, depending on where in the organizational structure of the school curriculum one falls, determines the quality of the learning experience. Student race is deeply implicated in track assignment. School desegregation research and research on tracking show that African American students have a much greater likelihood of being in the lower tracks of their schools.

The culmination of the harmful effects of tracking on poor and minority students' academic careers is in testing. Because tracking organizes students for instruction, it shapes course access. Taking the right courses--exposure to content and opportunity to learn--is a necessary, if not sufficient, prerequisite to performing well on achievement tests. Jencks and Philips (1999) have provided compelling evidence on this point. They report that Black students who take the AP courses score about as well as their white counterpart on the SAT. The problem is that very few African American students take these courses.

We can now assemble the list of accumulating disadvantages for African American and Latino/a students:

- a high proportion of Black and Latino students are at risk for reasons associated with poverty;
- household and community poverty translates into poor school funding and a lower concentration of quality educational resources in those schools;
- Black and Latino students and their families are more likely to live in racially segregated communities and attend schools with high concentrations of other minority students;
- schools characterized as high minority have been shown to score lower on most educational quality indicators including measures of teacher credentials and teacher experience;
- communities characterized as high minority and high poverty are more often in large urban areas, having to support large school districts with a weaker tax base;
- ability grouping and tracking, as educational practices, work disproportionately to the detriment of African American and Latino students; and
- standardized testing reveals the extent of limitations on opportunity learn for African American and Latino students and reduces educational choices and options.

The results of this set of accumulated experiences suggest persistent limitations on educational opportunity associated with race. The strong association of these early pipeline experiences with race and ethnicity, as well as socioeconomic status, makes it difficult to entertain the idea that the playing field has been made level, thereby eliminating the need for race sensitive policies and practices. If race is a gating factor early on in the education pipeline, then we should expect to see the effects of that gating in a restricted flow at later stages of the pipeline. That restricted flow should be observable both in overall levels of access and completion and in differentiated participation across the sectors of higher education. We turn next to the evidence on overall participation and participation by sector in higher education.

## Enrollment and Segregation in Higher Education

Despite the claims of critics regarding goals as quotas, there is an inherent difficulty in assessing progress without some baseline measure as a standard. The tradition in higher education has been to rely on a measure of parity. Researchers and policymakers have looked to see the extent to which representation for a group is occurring at a rate commensurate with that groups' availability in a specified population category, usually referred to as an availability pool ${ }^{7}$. Tollet (198x) and others have recognized both an availability pool and an eligibility pool. The latter is composed of those members of the category who have satisfied the basic criteria required to participate. High school completion, for example, would be a basic prerequisite for college or university enrollment. Having earned a bachelor's degree would be an expected prerequisite for graduate/professional school enrollment. This chapter follows that custom.

Table 9 provides the framing data for the discussion of overall accomplishments for participation in higher education for the years included in this study. The percentage data in Table 9 also provides the relevant data for a discussion of parity. For starters, these data show that the level of fulltime undergraduate participation in higher education increased by about 1.3 million students from 1982 to 1996 . The share of fulltime enrollment by each race category changed during this period also. The share of full time enrollment held by whites decreased from $79.4 \%$ in 1982 to $69.9 \%$ in 1996. The share of full time enrollment held by Blacks, Hispanics, Native Americans and Asians each increased. The increase for Blacks was $1.5 \%$; for Latino/a $2 \%$; for Native American, $.4 \%$; and for Asians, $3.1 \%$. The Asian share of full time undergraduate enrollment actually more than doubled, increasing from $2.6 \%$ in 1982 to $5.7 \%$ in 1996. The answer to the general question about overall enrollment patterns is clear: actual increases in full time enrollment occurred for each race category and the increases for African American, Latino, Native American and Asian resulted in a percentage decrease for whites even though their actual number increased.

Even with these increases, by 1996 only Asian students and White students were enrolled full time in higher education at a level on a par with their population share or eligibility levels. Both enrolled at a rate exceeding their population and eligible share proportions. By 1996 Native Americans had achieved parity also according to these data. For Black and Latino/a students, achieving parity with respect to their population share or eligibility was still a distant goal. Charts 1 through 3 [not available for this draft] below show the parity accomplishments with regard to enrollment for each of the three enrollment periods reported here.

In 1982, Blacks were $13.1 \%$ of the college age population and $11.8 \%$ of the eligible pool, but held just a $9.7 \%$ ( $9.5 \%$ when all non-resident aliens are included) share of full time enrollment. By 1995 Blacks were $14.3 \%$ of the college age population and $13.3 \%$ of the eligible pool but held an $11.5 \%$ ( $10.9 \%$ when all non-resident aliens are included) share of the full time college enrollment. The change from 1982 to 1996 shows that Black full time undergraduate participation in higher education increased by about $1.5 \%$. Blacks as a percentage of the eligibility pool also increased by $1.5 \%$, from $11.8 \%$ to $13.3 \%$, yielding virtually no change in progress toward parity based on eligibility during this 14 year period. Even if we use the parity bases that exclude non-resident aliens, the change in participation for blacks, $1.8 \%$, from $9.7 \%$ in 1982 to $11.5 \%$ in 1996, is a very slow rate of progress toward parity for the 14 year period.

Table 9. Total Full Time Undergraduate Enrollment By Race and Year

|  | 1982 | 1988 |  |  |  | 1996 |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
|  | N | $\%$ | N | $\%$ | N | $\%$ |  |  |  |  |
| Black | 567,388 | 9.5 | 630,318 | 9.2 | 800,450 | 10.9 |  |  |  |  |
| Latino | 314,987 | 5.2 | 442,560 | 6.5 | 528,157 | 7.2 |  |  |  |  |
| N. Amer. | 36,700 | .6 | 47,465 | .7 | 70,066 | 1.0 |  |  |  |  |
| Asian | 157,054 | 2.6 | 264,655 | 3.9 | 422,212 | 5.7 |  |  |  |  |
| White | $4,770,129$ | 79.4 | $5,318,505$ | 77.5 | $5,137,470$ | 69.9 |  |  |  |  |
| Total | $6,004,445^{*}$ |  | $6,859,547 *$ |  | $7,351,972^{*}$ |  |  |  |  |  |

*Non-Resident Aliens are included in the totals.

CHART 1
Comparison of Enrolled Full-time Undergraduates
to Proportions of College Age and Available Pool by Race and Gender, 1996

|  |  |  |  | Eligible Pool (HS grads 18-24) in 1000s March 1996 |  |  | Enrolled Full-time Undergraduates <br> Fall 1996 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race | M | F | Total | M | F | Total | M | $F$ | Total |
| Black | $\begin{array}{r} 13.4 \% \\ 1,637 \end{array}$ | $\begin{array}{r} 15.3 \% \\ 1,900 \end{array}$ | $\begin{array}{r} 14.3 \% \\ 3,538 \end{array}$ | $\begin{array}{r} 12.3 \% \\ 1,127 \end{array}$ | $\begin{array}{r} 14.1 \% \\ 1,375 \end{array}$ | $\begin{array}{r} 13.3 \% \\ 2,503 \end{array}$ | $\begin{array}{r} 9.9 \% \\ 311,134 \end{array}$ | $\begin{array}{r} 12.9 \% \\ 489,316 \end{array}$ | $\begin{gathered} 11.5 \% \\ 800,450 \end{gathered}$ |
| Hispanic | $\begin{array}{r} 14.9 \% \\ 1,822 \end{array}$ | $\begin{array}{r} 13.7 \% \\ 1,704 \end{array}$ | $\begin{array}{r} 14.3 \% \\ 3,525 \end{array}$ | $\begin{array}{r} 11.1 \% \\ 1,017 \end{array}$ | $\begin{array}{r} 9.9 \% \\ 963 \end{array}$ | $\begin{array}{r} 10.5 \% \\ 1,980 \end{array}$ | $\begin{array}{r} 7.3 \% \\ 229,454 \end{array}$ | $\begin{array}{r} 7.9 \% \\ 298,703 \end{array}$ | $\begin{array}{r} 7.6 \% \\ 528,157 \end{array}$ |
| Native American | $\begin{aligned} & .9 \% \\ & 110 \end{aligned}$ | $\begin{array}{r} 1.0 \% \\ 119 \end{array}$ | $\begin{aligned} & .9 \% \\ & 229 \end{aligned}$ | $\begin{array}{r} .9 \% \\ 80 \end{array}$ | $\begin{array}{r} .8 \% \\ 81 \end{array}$ | $\begin{aligned} & .9 \% \\ & 162 \end{aligned}$ | $\begin{array}{r} .9 \% \\ 29,872 \end{array}$ | $\begin{array}{r} 1.1 \% \\ 40,194 \end{array}$ | $\begin{array}{r} 1.0 \% \\ 70,066 \end{array}$ |
| Asian/Pacific Islander | $\begin{array}{r} 4.1 \% \\ 498 \end{array}$ | $\begin{array}{r} 4.2 \% \\ 518 \end{array}$ | $\begin{aligned} & 4.1 \% \\ & 1,016 \end{aligned}$ | $\begin{array}{r} 4.6 \% \\ 416 \end{array}$ | $\begin{array}{r} 4.5 \% \\ 440 \end{array}$ | $\begin{array}{r} 4.5 \% \\ 856 \end{array}$ | $\begin{array}{r} 6.6 \% \\ 208,071 \end{array}$ | $\begin{array}{r} 5.6 \% \\ 214,141 \end{array}$ | $\begin{array}{r} 6.1 \% \\ 422,212 \end{array}$ |
| White | $\begin{array}{r} 66.8 \% \\ 8,173 \end{array}$ | $\begin{array}{r} 65.9 \% \\ 8,198 \end{array}$ | $\begin{aligned} & 66.3 \% \\ & 16,370 \end{aligned}$ | $\begin{array}{r} 71.1 \% \\ 6,489 \end{array}$ | $\begin{array}{r} 70.6 \% \\ 6,871 \end{array}$ | $\begin{aligned} & 70.8 \% \\ & 13,360 \end{aligned}$ | $\begin{array}{r} 75.3 \% \\ 2,375,940 \end{array}$ | $\begin{array}{r} 72.6 \% \\ 2,761,530 \end{array}$ | $\begin{array}{r} 73.8 \% \\ 5,137,470 \end{array}$ |
| Total | $\begin{array}{r} 100.1 \% \\ 12,239 \end{array}$ | $\begin{array}{r} 100.1 \% \\ 12,439 \end{array}$ | $\begin{aligned} & 99.9 \% \\ & 24,678 \end{aligned}$ | $\begin{array}{r} 100.0 \% \\ 9,130 \end{array}$ | $\begin{array}{r} 99.9 \% \\ 9,730 \end{array}$ | $\begin{array}{r} 100.0 \% \\ 18,860 \end{array}$ | $\begin{array}{r} 100.0 \% \\ 3,154,471 \end{array}$ | $\begin{array}{r} 100.1 \% \\ 3,803,884 \end{array}$ | $\begin{array}{r} 100.0 \% \\ 6,958,355 \end{array}$ |

Chart 2
Comparison of Enrolled Full-time Undergraduates to Proportions of College Age and Available Pool by Race and Gender, 1988

|  |  | lege Age <br> ) in 100 ch 1988 |  | Eligible Pool (HS grads 18-24) in 1000s March 1988 |  |  | Enrolled Full-time Undergraduates <br> Fall 1988 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race | M | $F$ | Total | M | F | Total | M | F | Total |
| Black | $\begin{array}{r} 12.9 \% \\ 1,627 \end{array}$ | $\begin{array}{r} 14.3 \% \\ 1,895 \end{array}$ | $\begin{array}{r} 13.7 \% \\ 3,522 \end{array}$ | $\begin{array}{r} 11.6 \% \\ 1,103 \end{array}$ | $\begin{array}{r} 12.9 \% \\ 1,379 \end{array}$ | $\begin{array}{r} 12.3 \% \\ 2,482 \end{array}$ | $\begin{array}{r} 8.1 \% \\ 260,756 \end{array}$ | $\begin{array}{r} 10.6 \% \\ 369,562 \end{array}$ | $\begin{array}{r} 9.4 \% \\ 630,318 \end{array}$ |
| Hispanic | $\begin{gathered} 10.8 \% \\ 1,360 \end{gathered}$ | $\begin{aligned} & 9.7 \% \\ & 1,276 \end{aligned}$ | $\begin{array}{r} 10.2 \% \\ 2,636 \end{array}$ | $\begin{array}{r} 7.9 \% \\ 749 \end{array}$ | $\begin{array}{r} 7.4 \% \\ 791 \end{array}$ | $\begin{aligned} & 7.6 \% \\ & 1,540 \end{aligned}$ | $\begin{array}{r} 6.2 \% \\ 196,986 \end{array}$ | $\begin{array}{r} 7.0 \% \\ 245,574 \end{array}$ | $\begin{array}{r} 6.6 \% \\ 442,560 \end{array}$ |
| Native American | $\begin{array}{r} .5 \% \\ 62 \end{array}$ | $\begin{array}{r} .5 \% \\ 71 \end{array}$ | $\begin{aligned} & .5 \% \\ & 133 \end{aligned}$ | $\begin{array}{r} .5 \% \\ 46 \end{array}$ | $\begin{array}{r} .4 \% \\ 44 \end{array}$ | $\begin{array}{r} .4 \% \\ 90 \end{array}$ | $\begin{array}{r} .7 \% \\ 21,298 \end{array}$ | $\begin{array}{r} .7 \% \\ 26,167 \end{array}$ | $\begin{array}{r} .7 \% \\ 47,465 \end{array}$ |
| Asian/Pacific Islander | $\begin{array}{r} 2.8 \% \\ 350 \end{array}$ | $\begin{array}{r} 2.6 \% \\ 345 \end{array}$ | $\begin{array}{r} 2.7 \% \\ 695 \end{array}$ | $\begin{array}{r} 3.1 \% \\ 292 \end{array}$ | $\begin{array}{r} 2.6 \% \\ 282 \end{array}$ | $\begin{array}{r} 2.8 \% \\ 574 \end{array}$ | $\begin{array}{r} 4.4 \% \\ 139,781 \end{array}$ | $\begin{array}{r} 3.6 \% \\ 124,874 \end{array}$ | $\begin{array}{r} 3.9 \% \\ 264,655 \end{array}$ |
| White | $\begin{array}{r} 72.9 \% \\ 9,165 \end{array}$ | $\begin{array}{r} 72.9 \% \\ 9,636 \end{array}$ | $\begin{aligned} & 72.9 \% \\ & 18,801 \end{aligned}$ | $\begin{array}{r} 77.0 \% \\ 7,345 \end{array}$ | $\begin{array}{r} 76.6 \% \\ 8,181 \end{array}$ | $\begin{aligned} & 76.8 \% \\ & 15,526 \end{aligned}$ | $\begin{array}{r} 80.7 \% \\ 2,583,961 \end{array}$ | $\begin{array}{r} 78.1 \% \\ 2,734,544 \end{array}$ | $\begin{array}{r} 79.3 \% \\ 5,318,505 \end{array}$ |
| Total | $\begin{aligned} & 99.9 \% \\ & 12,564 \end{aligned}$ | $\begin{array}{r} 100.0 \% \\ 13,223 \end{array}$ | $\begin{array}{r} 100.0 \% \\ 25,786 \end{array}$ | $\begin{array}{r} 100.1 \% \\ 9,535 \end{array}$ | $\begin{aligned} & 99.9 \% \\ & 10,677 \end{aligned}$ | $\begin{aligned} & 99.9 \% \\ & 20,212 \end{aligned}$ | $\begin{array}{r} 100.1 \% \\ 3,202,782 \end{array}$ | $\begin{array}{r} 100.0 \% \\ 3,500,721 \end{array}$ | $\begin{array}{r} 99.9 \% \\ 6,703,503 \end{array}$ |

Chart 3
Comparison of Enrolled Full-time Undergraduates
to Proportions of College Age and Available Pool by Race and Gender, 1982

|  |  | $\begin{aligned} & \text { ege } \\ & \text { ) in } \\ & \text { ch } 1 \end{aligned}$ |  | Eligible Pool (HS grads 18-24) in 1000s March 1982 |  |  | Enrolled Full-time Undergraduates <br> Fall 1982 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race | M | F | Total | M | F | Total | M | F | Total |
| Black |  |  |  |  |  |  | $\begin{array}{r} 8.3 \% \\ 240,787 \end{array}$ | $\begin{array}{r} 11.1 \% \\ 326,601 \end{array}$ | $\begin{array}{r} 9.7 \% \\ 567,388 \end{array}$ |
| Hispanic |  |  |  |  |  |  | $\begin{array}{r} 5.0 \% \\ 145,206 \end{array}$ | $\begin{array}{r} 5.8 \% \\ 169,781 \end{array}$ | $\begin{array}{r} 5.4 \% \\ 314,987 \end{array}$ |
| Native American |  |  |  |  |  |  | $\begin{array}{r} .6 \% \\ 17,863 \end{array}$ | $\begin{array}{r} .6 \% \\ 18,837 \end{array}$ | $\begin{array}{r} .6 \% \\ 36,700 \end{array}$ |
| Asian/Pacific Islander |  |  |  |  |  |  | $\begin{array}{r} 2.9 \% \\ 84,883 \end{array}$ | $\begin{array}{r} 2.5 \% \\ 72,171 \end{array}$ | $\begin{array}{r} 2.7 \% \\ 157,054 \end{array}$ |
| White |  |  |  |  |  |  | $\begin{array}{r} 83.2 \% \\ 2,423,094 \end{array}$ | $\begin{array}{r} 80.0 \% \\ 2,347,035 \end{array}$ | $\begin{array}{r} 81.6 \% \\ 4,770,129 \end{array}$ |
| Total |  |  |  |  |  |  | $\begin{array}{r} 100.0 \% \\ 2,911,833 \end{array}$ | $\begin{array}{r} 100.0 \% \\ 2,934,425 \end{array}$ | $\begin{array}{r} 100.0 \% \\ 5,846,258 \end{array}$ |

The disparity for Latino/a students is still more different as they are actually losing progress toward parity based on either measure. Latino students were $6.9 \%$ of the population pool and $4.8 \%$ of the eligible pool in 1982. By 1996, the comparable figures are 14.35 and 10.55 respectively. This shows that the Latino college age population has grown substantially, more than doubling over the 14 year period. Morover, relative to that growth, there has been an a comparable doubling of the Latino eligibility pool, from 4.8\% in 1982 to $10.5 \%$ in 1996. Full time enrollment however has increased from $5.4 \%$ (5.2\%) in 1982 to $7.6 \%$ (7.2\%) in 1996, a $2 \%$ change. Clearly, Latino students, despite substantial growth in enrollment and in both their population share and eligibility share, have lost ground toward parity. On the one hand, the progress that has been made in participation in higher education for Blacks and Latino/a is substantial and growth in Latino participation approaches that for Asians. On the other hand, parity remains a distant goal for both African Americans and Latino/a. The current challenges to admissions practices that use race as a factor in admissions threaten what progress toward parity we find here. At the same time, it is not likely that the progress in participation that has been made is equally distributed across all sectors of higher education. Because each sector differs, it is important to examine the rates of enrollment in selected sectors.

Below we examine the distribution of this participation across four sectors of higher education: Research I Universities, Research II Universities, Doctoral Universities and Masters and Bachelor's Colleges and Universities ${ }^{8}$. We focus especially on the public segment of each sector. To begin the discussion of full time enrollment in higher education by sector, we start with the overall distribution of student enrollment across the sectors as defined above ${ }^{9}$. Table 10 gives the distribution for full time undergraduate enrollment by sector and year. The overall distribution across the sectors establishes the contribution that each sector makes to overall full-time undergraduate enrollment and provides a benchmark against which each of the racial category enrollment percentages can be compared for each year.

As might be expected, the large number of Masters and Bachelors colleges have the largest share of enrollment for each of the three years reported here. The next largest share of enrollment is in two-year colleges, followed in order of magnitude by Research I, Doctoral and Research II institutions. Fully one-third of all full time students were in the Masters and Bachelors sector for 1996 and this was actually a smaller percentage than was true for 1982 or 1988. The actual share increased by one-quarter million in this sector from 1982 to 1996. The second highest enrollment level in four-year college and university sectors is found for Research I universities. The net change in this category from 1982 to 1996 is 154,170 . The greater part of this change in undergraduate enrollment in the Research I sector occurred between 1982 and 1988. Growth in this sector was only about 8,000 from 1988 to 1996. As Table 10 shows, changes in the number of students enrolled as Non-Categorized from 1982 to 1996 are large. For this reason, the following discussion has to be considered a cautious one given that in 1996, fully nine percent of the students are non-categorized compared to just one-half of one percent in 1982.

Figures 1 and 2 present full time undergraduate enrollment participation levels by sector and race for 1982,1988 and 1996. Figure 1 covers all reporting institutions while Figure 2 is for public institutions only. Several general points about the four graphs in Figures 1 and 2. First, each graph shows the percentage of each race group, for each year within that sector. The actual count also appears on the graph. This percentages

Figure 1: Undergraduate Enrollment By Race and Carnegie Classifications All Institutions


Figure 2: Undergraduate Enrollment By Race and Carnegie Classifications
Public Institutions

Research I Universities


Doctoral Universities


Resaearch II Universities


Masters \& Bachelors, Colleges \& Universities


Table 10. Overall Full Time Undergraduate Enrollment by Carnegie Category and Year

| Carnegie Category | 1982 | 1988 |  |  | 1996 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | Enrollment \% | \% increase | N | Enrollment \% | \% increase |
| Res. I | 1,047,330 | 17.4 | 1,193,375 | 17.4 | 13.9 | 1,201,500 | 15.5 | 1.0 |
| Res. II | 379,569 | 6.3 | 395,658 | 5.8 | 4.2 | 396,710 | 5.1 | . 3 |
| Doctoral | 629,046 | 10.5 | 687,382 | 10.0 | 9.3 | 685,657 | 8.8 | -. 3 |
| MA/BA | 2,234,931 | 37.2 | 2,450,997 | 35.7 | 9.7 | 2,587,284 | 33.3 | 5.6 |
| Assoc. | 1,517,683 | 25.3 | 1,741,810 | 25.4 | 14.8 | 1,990,171 | 25.6 | 14.3 |
| Tribal | 1,723 | . 03 | 3,973 | . 1 | 231.0 | 7,714 | . 1 | 194.2 |
| Other | 165,887 | 2.8 | 206,365 | 3.0 | 124.4 | 192,626 | 2.5 | -6.7 |
| Non-catg. | 28,276 | . 5 | 179,987 | 2.6 |  | 706,732 | 9.1 |  |
| Total | 6,004,445 |  | 6,859,547 |  | 12.5 | 7,351,972 |  | 13.3 |

enable the within sector concentration comparisons while the counts allow contrasts in growth over the three time points.

Generally, the pattern for each race group's distribution across the four sectors parallels that of the overall pattern shown in Table 10. The exception is for Asian students who have their highest full time undergraduate enrollment in the Research 1 sector. Indeed, the key findings from the Figure 1 graphs are the patterns of substantial full time enrollment growth for Asian and Latino/a students in each of the four sectors. Actual student counts increased nearly by a factor of three for Asian and Latino/a students in Research I and Research II Universities. Increases in the two other sectors shown doubled for these two groups between 1982 and 1996. Asian enrollment also nearly tripled in Doctoral universities also.

For Native American students and African American students, there were enrollment increases in all sectors also but not as dramatic. Native American's enrollment counts in the Research I and Research II sectors was twice as large in 1996 compared to 1982. African Americans experienced the lowest rate of change of any minority group in any sector. The increase in their share of enrollment in the Research 1 sector from 1982 to 1996 was just $28 \%$ ( $78373-61287 / 61287=.28$ ). By contrast, their percentage change in the Doctoral sector was $44 \%$ and in the Masters and Bachelor's sector the increase was 35\%. In short, the increases for African American enrollment shares are larger in the somewhat less selective sectors.

We had also anticipated that African Americans would have a greater share of their enrollment in the public segment of each sector except the Masters and Bachelor's sector where there are a number of private Historically Black Colleges and Universities. Figure 2 shows this to be the case. In each sector except the Masters and Bachelors sector the percentage of African American enrollment in the public segment of each sector is greater than is the corresponding percentage for all institutions (Figure 1).

These results demonstrate the diversity of enrollment patterns and especially the different levels of representation found for each race group in each sector. It is clear in these data that the fourteen year period from 1982 to 1996 provided dramatic enrollment increases for students of color. These changes were experienced quite differently for African Americans compared to the other groups. For African Americans, the rate of increased access has been lower and this lower rate of change underscores the challenge of achieving parity either with respect to the population pool or the eligibility pool.

## Graduate Enrollment

Graduate enrollment and especially enrollment in topflight professional schools and programs have been at the center of the current debate over the affirmative use of race in admissions. In Hopwood, it was admission to the law school, and it is also now at Michigan, along with the undergraduate admissions process. Here again, our focus is on the Research I sector and primarily focused on the enrollment patterns of African Americans as theirs have been the primary admissions decisions that have been challenged. Moreover, particular attention is given to the public segment of the different sectors.

Graduate enrollment patterns are shaped by the college and university size and number, as was the case for Undergraduate enrollment. For graduate enrollment, Research I Universities enroll the greatest numbers of fulltime graduate students followed by Masters and bachelors colleges and Universities, Doctoral Universities and Research

II Universities. This pattern of enrollment holds for the distribution of each race group, for each year included in the study. Table 11 provides the overall distribution for graduate enrollment for each year.

The 1996 total graduate enrollment 1016397 is an increase of $196 \%$ for the 14 year period between 1982 and 1996. The major increase appears to have come between 1982 and 1988 when full time graduate enrollment nearly doubled. The overall change in the Research I sector shows a $91 \%$ increase from 1982 to 1996. The Masters and Bachelor college sector experienced the most dramatic growth. Full time graduate enrollment more than doubled in this sector from 1982 to 1988 and increased by nearly half again from 1988 to 1996. Figure 3 and Figure 4 present the results for graduate enrollment by race, sector and year.

Although all groups have their highest concentrations of full time graduate enrollment in the Research I sector, there are important group differences. For 1996 among domestic students, Asian students have the highest concentration of fulltime graduate enrollment in the Research I sector followed by Latino/a, White, Native American and African American students. African Americans have the lowest concentration in the Research I sector for both 1982 and 1996. African American students have the highest concentration of full time graduate student enrollment in the Masters and Bachelors sector followed by Latino/a, Native American, White and Asian students.

African American student enrollment in the Research I sector increased by $228 \%$ from 1982 to 1996 growing from 6,503 to 21,321 . Their share of enrolment in this sector increased from $3 \%$ to $5.2 \%$. Growth in the Masters and Bachelor's sector was greater, increasing by $269 \%$.

It appears from these data that the private segment (compare Figure 3 for all Institutions with Figure 4 for Public institutions)of the sectors played an important role in increasing African American participation in graduate education. For example, in comparing the 1996 and 1982 public shares for the Research I sector, the 1996 total is $61 \%$ of graduate enrollment while the 1982 count for the Research I sector was $65 \%$ of African American's full time graduate enrollment. Perhaps most striking here is that while the Research I sector accounts for $52 \%$ of overall enrollment in 1982, the share for African Americans was 39\%. By 1996 the Research I
Sector accounts for $33 \%$ of Black graduate enrollment compared to $41 \%$ overall. The result is that the share of African American graduate enrolment in the Research I sector appears to be getting closer to the overall level of participation in this sector for all groups, giving the appearance of greater equity. But, it may well be because the overall share of total graduate enrollment outside the Research I sector is increasing at a greater rate.

Finally, it is important to note that the overall increase in African American full time graduate enrollment ( $228 \%$ ) is greater than the increase for total graduate enrollment (196\%). This is a significant accomplishment and it is worthwhile to note that it has occurred largely during a period of relative support for the affirmative use of race in admissions decisions. Even with these increases however, African American students continue to remain well below parity in graduate degree attainment.

The pattern for Latino students differs from that for African Americans. Note that Latino students participation overall increased by about $280 \%$, much greater than the overall rate of increase for this period. Latino participation in the Research I sector was close to the overall average in 1996, $39.3 \%$ compared to $41 \%$, indicating their participation increasingly on a par with the overall pattern. In 1982, the public segment of graduate

Table 11. Overall Full Time Graduate Enrollment by Carnegie Category and Year

| Carnegie <br> Category | 1982 | 1988 |  |  | 1996 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | Enrollment \% | \% increase | N | Enrollment \% | \% increase |
| Res. I | 214,076 | 52.3 | 363,075 | 45.2 | 69.6 | 408,661 | 40.21 | 12.6 |
| Res. II | 42,218 | 10.3 | 64,055 | 7.8 | 51.7 | 78,556 | 7.7 | 22.6 |
| Doctoral | 61,192 | 14.9 | 117,053 | 14.6 | 91.3 | 146,337 | 14.4 | 25.0 |
| MA/BA | 67,358 | 16.5 | 134,628 | 16.7 | 99.9 | 200,121 | 19.7 | 44.7 |
| Total* | 409,568 |  | 804,002 |  | 96.3 | 1,016,397 |  | 26.4 |

*The totals include the categories 'Other' and 'Non-Categorized' and is larger than the sum of the four categories listed.

Figure 3: Full Time Graduate Enrollment By Race and Carnegie Classifications
All Institutions

Research I Universities


Doctoral Universities



Figure 4: Full Time Graduate Enrollment By Race and Carnegie Classifications
Public Institutions

Research I Universities


Doctoral Universities



Masters \& Bachelors, Colleges \& Universities


Figure 5: First Time Full Time Freshmen Enrollment By Race \& Carnegie Classifications

Research I Universities


Doctoral Universities



Masters \& Bachelors Colleges \& Universities


Figure 6: First Time Full Time Freshmen Enrollment By Race \& Carnegie Classifications
Public Institutions

Research I Universitie



Research II Universities


education was especially important for Latino students. For example, in the Research I sector in 1982, the public segment (Figure4) accounted for $75 \%$ of enrollment in this sector. In 1996, the public segment accounted for $68 \%$ of Latino/a enrollment in this sector. It is notable that the public segment is substantial for both African American and Latino/a participation in this sector.

## Segregation by Sector

The calculated segregation index, Figure 7 and Figure 8, shows different levels of segregation in each sector for undergraduate enrollment. The Research I sector is the least segregated while the Masters and Bachelors sector has the highest levels of segregation. This is due in part to the national and international recruitment patterns of the Research I sector, and the more regional character of the Masters and Bachelors sector, including the latter's Historically Black Colleges and Universities, Tribal Colleges and Hispanic impact colleges and Universities. Still, the relative stability of the levels of segregation while enrollment increases is significant and requires further investigation.

More importantly, it is clear that the largest numbers of students enrolled full time at the undergraduate and graduate levels are enrolled in the more segregated sectors-Doctoral and Masters and Bachelors. This is especially the case for African American and Latino/a students. Significantly, segregation is substantially different and lower in the public segment of each sector for all groups except Asians in the Research I sector and African Americans in the Masters and Bachelors sector.

The segregation level for each race category is different and it is different in each sector. It is notable that in the Research I sector, Asian students have the highest segregation score at each time point and the highest in the Research II sector for 1996. African American and Latino/a students have their highest levels of segregation in the Masters and Bachelors and Doctoral sectors. Latino/a students in the Doctoral sector experienced a reduction in segregation from about $50 \%$ to less than $20 \%$ and from $59 \%$ to $30 \%$ in the Masters and Bachelors sector. African American students' segregation levels remained remarkably stable in both sectors about $20 \%$ in the Doctoral sector and about $48 \%$ in the Masters and Bachelors sector. Given the variability in segregation by sector and by race within sector, it is likely that very different factors are operating to shape these outcomes. Whatever the set of factors, it also seems that they are persistent over time and irrespective of the relative number of students involved.

## Degree Attainment

Overall patterns of earned degrees awarded, not surprisingly, follow the patterns of enrollment. The Masters and Bachelor sector accounts for the largest share of BA degrees followed by the Research I Sector. Unlike the enrollment distribution by race, the patterns for earned degrees for each group is consistent with the overall pattern. Like the pattern of enrollment however, there are substantial within sector differences for the BA degree.
[Figures 9, 10, 11, 12, 13, 14 about here]

- African Americans earned the smallest share (14.9\%) of their degrees from the Research I sector in 1996. In 1982, it was Latino/a students who earned their lowest share in this sector. African American students in 1980 were second only to Whites in the number of BA degrees earned in the Research I sector. By 1994 the African

Figure 7: Undergraduate Racial Segregation By Race and Carnegie Classifications

Research I Universities




Figure 8: Undergraduate Racial Segregation By Race and Carnegie Classification
Public Institutions
ResearchlUniversities





Figure 9: BA Degrees Awarded by Race and Carnegie Classifications
All Institutions





Figure 10: BA Degrees Awarded by Race and Carnegie Classifications


Figure 11: Ph.D. Degrees Awarded by Race and Carnegie Classifications All Institutions


Figure 12: Ph.D. Degrees Awarded by Race and Carnegie Classifications

Research I Institutions
Public Institutions



Figure 13: First Professional Degrees Awarded by Race and Carnegie Classifications
All Institutions


Figure 14: First Professional Degrees Awarded by Race and Carnegie Classifications
Public Institutions
Research I Universities





American degree count in the Research I sector ranked them fourth, just ahead of Native Americans, among domestic BA recipients in this sector.

- Asian students earned nearly half ( $44.4 \%$ ) of their BA's in the Research I sector. The number of BA's earned by Asians in this sector more than tripled from 1980 to 1994.
- Latino students more than doubled their earned degree total in the Research I sector and increased their sector share from 15\% in 1980 to just over 25\% in 1994.
- Whites earned a slightly smaller share of their Bas in the Research I sector in 1994 compared to 1980 despite an actual increase of more than 13000 earned degrees.
- The public segment of each sector, in general, makes a greater contribution to earned degrees. The most notable exception is for African American BA recipients in the Masters and Bachelors sector.
- Mainly the Research I and Doctoral sectors confer Ph.D degrees and this holds for all race groups.
- African Americans were second only to Whites among domestic students earning the Ph.D in the Research I sector in 1980 and were third behind Asian recipients by 1994. African American students earned a greater share of their Ph.D's in the Public segment of the Research I sector. In 1994, for example, African Americans held a $47 \%$ share in the Research I sector overall but a $73.8 \%$ share in the public segment.
- Like the Ph.D, mainly the Research I and Doctoral sectors award the First Professional degree.
- African American recipients of the First Professional degree again lost ground relative to other groups from 1980- to 1994 in terms of the relative increase in the number of First Professional degrees earned in the Research I sector.
- Latino/a students more than doubled the number of First Professional degrees earned in the Research I sector.
- African American and Latino/a students in 1994 remain just over $50 \%$ of parity based on their eligibility status for the BA degree while White and Asian students exceed parity. Native Americans appear to be at even parity based on these data. See Chart 4.
- For the Ph.D degree, both African American students and Latino/a students are right at $50 \%$ of parity for 1994 based on their eligibility. See Table 12.

These findings confirm the following patterns:

- Despite more than a decade of progress in enrollment and degree attainment, the results show a very uneven pattern of participation and success by higher education sector for different race groups. It appears that African American students have not enjoyed the progress made by Asian, Latino/a, and Native American students to the same degree. The result is that African American students are participating at an increasingly lower rate in the most preferred sector, mainly Research I, in higher education.
- Progress toward parity with respect to either their population share or eligibility share is at a snails pace, if at all, for African American students. This is particularly the case for degree attainment at both the BA and Ph.D levels.


## Table 12

Comparison of BA and Ph.D. Degrees
on Proportions of Collage Age and Available Pool by Race and Gender

|  | $\begin{gathered} \text { College Age } \\ (18-24) \text { in 1000s } \\ 1993 \end{gathered}$ |  |  | Available Pool (HS grads 18-24) in 1000s 1991 |  |  | BA. Degrees Awarded |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 994-95 |  |
| Race | M | F | Total |  |  |  | M | F | Total | M | F | Total |
| Black | 13.6\% | 14.9\% | 14.3\% | 12.0\% | 13.6\% | 12.8\% | 5.8\% | 8.4\% | 7.3\% |
|  | 1,621 | 1,828 | 3,449 | 1,109 | 1,364 | 2,473 | 31,251 | 54,605 | 85,856 |
| Hispanic | 11.6\% | 11.0\% | 11.3\% | 8.2\% | 7.6\% | 7.9\% | 5.2\% | 6.0\% | 5.7\% |
|  | 1,380 | 1,346 | 2,726 | 759 | 762 | 1,521 | 28,078 | 38,971 | 67,049 |
| Native American | . $9 \%$ | .7\% | .8\% | .5\% | .6\% | . $5 \%$ | .5\% | .6\% | . $5 \%$ |
|  | 107 | 84 | 190 | 45 | 59 | 104 | 2,681 | 3,793 | 6,474 |
| Asian/Pacific Islander | 3.0\% | 2.9\% | 2.9\% | 3.2\% | 2.9\% | 3.0\% | 5.3\% | 4.8\% | 5.0\% |
|  | 360 | 351 | 711 | 291 | 290 | 581 | 28,555 | 31,101 | 59,656 |
| White | 70.7\% | 70.4\% | 70.6\% | 76.0\% | 75.3\% | 75.6\% | 76.5\% | 75.4\% | 75.9\% |
|  | 8,413 | 8,618 | 17,031 | 7,013 | 7,555 | 14,568 | 409,458 | 488,328 | 897,786 |
| Total | 99.9\% | 99.9\% | 99.9\% | 99.9\% | 99.9\% | 99.9\% | 93.3\% | 95.2\% | 94.4\% |
|  | 11,880 | 12,227 | 24,107 | 9,217 | 10,030 | 19,247 | 500,023 | 616,798 | 1,116,821 |


|  | $\begin{gathered} \text { College Age } \\ (20-34) \text { in } 1000 \mathrm{~s} \\ 1989 \end{gathered}$ |  |  | Available Pool (Compl 4 yrs. Coll, 20-34) in 1000s 1989 |  |  | Ph.D. Degrees Awarded 1994-95 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race | M | F | Total | M | F | Total | M | F | Total |
| Black | 11.6\% | 13.4\% | 12.5\% | 6.0\% | 8.0\% | 7.0\% | 2.6\% | 5.1\% | 3.6\% |
|  | 3,473 | 4,161 | 7,634 | 368 | 497 | 865 | 715 | 910 | 1,625 |
| Hispanic | 9.9\% | 9.0\% | 9.5\% | 4.1\% | 4.2\% | 4.1\% | 1.8\% | 2.9\% | 2.2\% |
|  | 2,963 | 2,807 | 5,769 | 253 | 259 | 512 | 489 | 525 | 1,014 |
| Native American | .6\% | .6\% | .6\% | . $3 \%$ | .2\% | . $2 \%$ | . $2 \%$ | .4\% | . $3 \%$ |
|  | 167 | 181 | 348 | 20 | 11 | 31 | 58 | 71 | 129 |
| Asian/Pacific Islander | 2.7\% | 2.7\% | 2.7\% | 5.1\% | 4.7\% | 4.9\% | 6.2\% | 5.0\% | 5.8\% |
|  | 8,148 | 8,468 | 16,616 | 317 | 291 | 608 | 1,712 | 899 | 2,611 |
| White | 75.0\% | 74.1\% | 74.6\% | 84.2\% | 82.8\% | 83.5\% | 53.8\% | 67.8\% | 59.3\% |
|  | 22,406 | 23,029 | 45,435 | 5,192 | 5,133 | 10,325 | 14,801 | 12,095 | 26,896 |
| Total | 99.9\% | 99.9\% | 99.9\% | 99.7\% | 99.9\% | 99.8\% | 64.6\% | 81.2\% | 71.2\% |

- Enrollment and degree attainment in American Higher education is highest in those sectors that have the highest segregation rates for all students of color. Moreover, levels of segregation are remarkably stable despite substantial changes--lowering--in the ratio of white students to students of color in each sector. Conversely, segregation appears lowest in those sectors that are more selective, research I and Research II universities. Policies that would further move more students of color into the Doctoral and Masters and Bachelors sectors will have the effect of increasing segregation in higher education and thereby substantially reducing the potential for diversity and its commensurate educational benefits.


## Discussion And Conclusion

This chapter sought to establish a basis for a clearer dialogue about the state of equity and opportunity in higher education. To do so we have provided an examination of enrollment, segregation and earned degrees for each race category and for selected sectors of higher education. We began with a brief discussion of critical restricting conditions early in the education pipeline. We turn now to the implications of our findings for the continuing debate.

First, there is considerable and mounting evidence that opportunity to learn is a central condition shaping the early short term, and subsequent long term educational experiences of today's youth, especially African American and Latino/a youth. Moreover, there continues to be a broad based public consensus that opportunity to learn ought to be fairly and equitably distributed. There is, at the same time, substantial evidence that opportunity to learn is inequitably distributed, and is shaped, in part, by student race and economic circumstance. The available research further shows that often the confluence of these two factors, occurring together, are especially limiting.

Our review of that research and the tabular data presented here on race, poverty, risk-status and schooling, underscore the need for continued an intensified attention to the role of these factors early in the educational careers of students. This will be essential if we are going to improve the rate at which we increase access to and participation in higher education for African American students. In order to increase their participation in the Research I sector, early and consistent intervention is a necessity. As one example, we show above the effect school racial composition on college going and we show the very different race and poverty composition of schools attended by students differing by race and ethnicity. As still another example, we cite the research on ability grouping and tracking and retention in grade as further widespread schooling practices that are known to disproportionately negatively impact the educational careers of African American and Latino/a students. We must continue the development and implementation of schooling practices that de-track, including the increased use of instructional practices that appropriate.

The results of our analysis of enrollment and earned degree data shows continued disparity negatively impacting African Americans and Latino/a students. While there has been continuing progress in increasing participation for African American students, our results show very little, if any, progress toward achieving parity in enrollment commensurate with their eligibility. Despite have increased their rate of graduation from high school, African American students are actually falling behind relatively. This is especially the case in the Research I sector. Even with what has been shown to be the
affirmative use of race in this sector (Kane, 1998), it is clear that the benefit has not accrued to African American students at a rate that would place their increased participation anywhere close to the rates experienced by Asians and Latino/a students in this sector. In short, the reality is that for African Americans, much remains to be accomplished in order to make real progress.

The examples from the degree data are consistent with the enrollment data: African American students made progress during the 14 year period from 1980 to 1994 but the percentage increases do not compare with the comparable rates for other students of color who saw their levels of earned degrees at the BA and Ph.D. level double and triple in some cases depending on the sector. Equally important, the sector in which substantial increases occurred is a less selective sector where there are higher rates of segregation for all students. Unlike popular beliefs, special attention to race for the purpose of admission is not ubiquitous but instead is rather limited and typically conservatively applied. The enrollment patterns of the different race groups in the Masters and Bachelors sector provides limited indirect evidence of this. In each of the more selective sectors--Research I and Research II--the highest levels of segregation appear to be less than half that for the remaining sectors. Policies that would further limit the use of race will inevitably have the effect of increasing segregation in higher education. The converse is not necessarily the case however. Increasing enrollment in the Research I sector will not necessarily reduce the overall level of segregation nor the level of segregation in this sector which has remained fairly stable for the time points covered here, even when the white-to-other ratios have reduced considerably. Just as Bowen and Bok's findings raise the policy suggestion that, since the retention rates for African American and Latino/a students in the elite/selective schools is so high, it makes sense to make greater investments for minority students attendance in those schools, applying that logic here suggests that we will enhance the potential for diversity more by increasing minority student participation in the Research I sector.

Both the enrollment data and the degree data presented here provide evidence suggesting that the "Unfinished Experiment", to which the 1971 Newman Report referred in describing the participation of minorities in higher education, is still very much a work in progress. The nearly 35 year old effort to increase African American and other minority and poor students participation in higher education that is enshrined in the 1965 Higher Education Act has produced meaningful change but the job is not complete. Both African American and Latino students continue to face large challenges in securing admission to the Research I sector. At the same time, there are models of practices that work--the now altered Banneker Scholarship program; University of Michigan Rackam Scholars program--and are needed.

Failure to pursue these and similar initiatives will seriously restrict access and success for African Americans in the Research I sector. As we have already begun to see, the elimination of the use of race will dramatically alter the overall level of participation of African American and Latino/a students, as in Texas, and/or dramatically reshape the distribution of African American and Latino/a students across the different sectors. Failure to pursue these and similar initiatives is to "turn back" and to turn away from the unfinished effort to correct the known injustices of the past. Efforts to substitute other factors that are less objectionable have been demonstrated to be inadequate to sustain the rates of increase in minority participation across sectors needed to assure the achievement of parity. It is, as the late justice Blackmun stated: "In order to get beyond race, we must first take account of race. There is no other way." It is because we have
been able to take account of race in fashioning education policies since $\underline{B R O W N}$ that we have been able to achieve the results reported here.

## Footnotes

${ }^{1}$ Carnegie Categories. 1994-95 recoded carnegie categories are used for this research. These most recent categories are used for each year of enrollment and degree data used in this study. Below are the category frequencies for the recoded classifications used in our analyses.

${ }^{2}$ Johnson's 1965 speech at Howard University is the source of the often cited metaphor about affirmative action focusing on what must be done in the name of fairness to "level the playing field' for a previously shackled runner, who upon being freed, is participating in a 100 yard dash. Johnson argued that this was not fair, that "something more" needed to be done.
${ }^{3}$ Daniel Patrick Moynihan, in a note to then President Richard Nixon, suggested that, because black enrollment in higher education in the US was as great as the total of citizens' enrolled in Great Britain, "wasn't it time for a little benign neglect."
${ }^{4}$ I make a distinction between poverty and class because it appears that the operationalization of the two is different in the thinking of those who use the terms. On the one hand, there are the deserving poor who, with a helping hand, can be rescued from most of the disadvantages of the absence of economic means. On the other hand, there is an 'underclass' which, in the strict sociological sense, is a class unto itself with a unique set of 'oppositional' values that reinforce their separation from full participation. Children from this latter category are apparently more difficult to rescue because of entrenched class values. See "Black students school failure: Acting white"
${ }^{5}$ Not all colleges and universities are faced with heavy competition for limited spaces. Nettles reports that just about 320 of the four year colleges and universities are faced with this challenge.
${ }^{6}$ The IPEDS data are available electronically for more recent years at the US Education Department on-line site but these data have not completed the data cleaning process.
${ }^{7}$ Crossland (1972) used this measure as did the Newman Report (1971)
${ }^{8}$ The tables presenting the complete distributions for full time enrolment by race and Carnegie category for each year reported here are available in Appendix 1.
${ }^{9}$ See note 1 above.

