The Relationship between Race and Socioeconomic Status (SES):
Implications for Institutional Research and Admissions Policies

by Elena M. Bernal, Alberto F. Cabrera, and Patrick T. Terenzini

The search for equity in higher education has been debated in policy and research for decades (Olivas 1997). While disagreement remains as to specific intervention strategies (St. John, Simmons and Musoba 1999a, 1999b), programs on every level from the federal to the institutional seek to eliminate deterrents to equal educational opportunities for all able and willing students. One such strategy has been the use of race-based affirmative action, relying on the legal support of the 1978 Regents of the University of California v. Bakke decision, which allowed race to be used as a "plus factor" when admitting new students (Bowen and Bok 1998; Gladeux 1996; Kahlenberg 1996; Olivas 1997; Trent 1992).

To redress the effects of past discrimination and foster a diverse campus community, higher education administrators and policymakers have designed affirmative action admissions policies that feature more comprehensive admissions criteria, focused recruitment, sharing of information, assistance in the application process, and targeted financial aid (Bowen and Bok 1998; Goggin 1999; Trent 1992). These affirmative efforts to correct minority underrepresentation have long been deemed necessary. Recently, however, some have claimed that they have achieved their purpose (Connelly 2000). Race, it is argued, is no longer the relevant measure of disadvantage for students desiring to enter postsecondary education (Greve 1999; Kahlenberg 1996, Wilson 1980 [1978]).

Debates over the legal standing of Bakke (Greve 1999; Olivas 1997), in combination with eroding public and political support for using race-based affirmative action in college admissions, have sent administrators and policymakers scrambling to find race-neutral ways to continue established institutional missions of equity and diversity. Alternative methods of college admissions include class-based affirmative action, guaranteeing college admission based on high school graduation ranks ranging from 4 percent in Texas to 20 percent in Florida (Healy 1999, April 2; Healy 1999 March 5; Selingo 2000) and use of the merit-aware index (Goggin 1999; St. John, Simmons and Musoba 1999a, 1999b). Chief among alternative policies is class-based affirmative action (Kahlenberg, 1996), primarily because of its promise to continue expanding opportunities for racial/ethnic minorities:

The reason for embracing economically based affirmative action is tactical only— to preserve as many of the benefits of race-based affirmative action as it is practically possible to preserve in an adverse environment (Fallon 1996).

This study examined whether replacing race-based affirmative action admissions programs with class-based programs will continue to help minorities while providing the added benefit of helping poor and working-class Whites. Three NCES national databases were examined to assess the potential effects of such a shift in policy. The claim that a class-based affirmative action policy would maintain, if not improve, college participation rates among minorities was not supported. A statistically significant, but weak and declining, association between race and socioeconomic status was noted. Furthermore, low-SES Whites would disproportionately benefit from a class-based policy, compared with their low-SES minority peers, because they far outnumber minorities. Altogether, these findings are in clear contradiction to the best hopes of the advocates of class-based program advocates. The authors suggest that race-based and class-based programs are two different issues not likely to be resolved by a single policy.

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2 The first author wishes to thank Dr. Kent McClelland whose steadfast support enabled her to continue her research up to this point.

3 The merit-aware index adjusts a student's scores in relation to the average of his or her high school. Under this approach, college eligibility would be granted to those scoring above the high school mean. See St. John, Simmons, and Musoba (1999b) for a comprehensive assessment of this index.

4 The reason for embracing economically based affirmative action is tactical only—to preserve as many of the benefits of race-based affirmative action as it is practically possible to preserve in an adverse environment (Fallon 1996).
Class-based affirmative action is projected to continue, if not increase, benefits for minorities, who are disproportionately from lower socioeconomic backgrounds, while expanding opportunities for needy Whites. In this scenario, low socioeconomic status, as the measure of disadvantage, will broaden access to higher education. Most important, a class-based policy is considered to have the advantage of avoiding the present legal and political challenges to race-based policies while preventing the polarization of public opinion (Kahlenberg 1996).

The purpose of this study is to examine whether the expected results of class-based affirmative action policies will continue to be in accord with the goal of providing higher education for racial ethnic minorities. Specifically, we will analyze national education data to see if replacing race-based affirmative action admissions programs with class-based programs will continue to help minorities with the added benefit of helping poor and working class Whites.

**Literature Review**

Wilson (1980 [1978], 1987, 1996) was among the first to systematically question the necessity of race-based affirmative action programs, arguing that the significance of race was declining in terms of socioeconomic disadvantage. According to Wilson, the success of the Black middle class, however tenuous their economic status (Oliver and Shapiro 1995) or however much they were still faced with discrimination (Feagin and Sikes 1994), is a sign of the positive results of race-based policies. However, says Wilson, the very existence of middle- to upper-class Black families is proof that race-based affirmative action is no longer necessary or even beneficial to the truly disadvantaged-poor minorities. He advocates programs serving those in most economic need—those living in poverty. As support for a new approach, Wilson cites his fear that race-based affirmative action is coming under attack from a backlash to targeted programs in general.

Although controversial, Wilson’s work gained currency in political and public opinion circles, giving rise to initiatives challenging race as a measure of disadvantage. By 1996, a series of court rulings and statewide ballot initiatives had banned or severely limited the use of racial preferences in admissions and hiring decisions in Texas, Louisiana, Mississippi, California, Washington, Massachusetts, Maine, New Hampshire, Rhode Island, and Puerto Rico (Healy 1998a, 1998b, 1999b). Constraints on proponents project an increase in minority enrollments, particularly among those truly deserving of such consideration. Implicit in the expectations for a class-based approach is a high correlation between race and SES. This presumption, though yet untested, is essential to support the belief that class-based approaches address the same issues that race-based approaches do but in a more equitable and less polarizing way (Heller 1997; Kahlenberg 1996).

This study examines the effects of implementing a class-based affirmative action admissions policy on postsecondary enrollment. First, we will analyze the degree of association between race and SES among high school and postsecondary students. Second, we will project potential enrollment trends if a shift from race to socioeconomic status is implemented. Specifically, we will seek to determine whether it would maintain or increase minority and low-SES White enrollments.

**Methodology**

To examine the viability of a class-based policy in continuing or increasing minority representation in higher education, data from three National Center for Education Statistics (NCES) longitudinal databases were analyzed:

**National Longitudinal Study of 1972** (NLS-72). One group was examined: first-year college students (N=1,568,214). The weight WT28 was used to create a representative sample of college students. In addition, TRIFA, a variable based on college transcripts, was used to determine the true institution of first attendance after high school graduation. No high school graduating class group was created. Our version of the NLS-72 data did not enable identification of the true high school completion date.

**High School and Beyond, 1980** (HS&B-82, Sophomore Cohort). Two groups within the HSB data set were examined: high school seniors who grad-
uted by 1982 (weighted N= 3,113,159) and 1983 first-year college students (weighted N= 2,110,359), employing appropriate weights in accordance with Adelman’s (1998) procedures for precollege (RAWWT) and collegiate (PSEWT1) background. Postsecondary students whose college transcripts could be verified were also included.

National Educational Longitudinal Study 1998-94 (NELS:88). Two groups were examined within the NELS data set: high school students who had graduated by 1992 (weighted N= 2,356,268) and 1994 first-year college students (weighted N=1,590,865), using the panel weight F3QWT92G. This weight adjusts the NELS:88 database to reflect the number in the population who received a high school diploma between September 1, 1991, and August 31, 1992.

To operationalize class, we examined several different definitions of economic class throughout the sociological and educational literature. One common method of defining economic class relies on family income data. These data are typically self-reported, although on rare occasions financial aid records are used for verification. The incomes are then divided into intervals, often arbitrarily defined. For example, an income number that appears low may be chosen to define low-income status. Or, low-income definitions advanced by the U.S. Bureau of the Census—for example, the poverty thresholds may be used.

Another method of defining low-income status uses multiple measures to create an index of wealth, typically referred to as socioeconomic status (SES). Adelman (1999) points to the problematic nature of using income as the sole indicator of family wealth, especially when the data are self-reported. Research contrasting student’s self-reported income data against parental reported income supports this observation. Fetter, Stowe, and Owins (1984), while examining the quality of responses from high school students to questionnaire items, found low levels of agreement between students and parents regarding family income and parental occupation. However, they reported high validity coefficients when income, parental education, and parental occupation were combined into a single indicator: socioeconomic status. Likewise, Adelman (1999) found that a single SES composite variable “washes out some (but not all) of the potential distorting effects of contradictions, anomalies, and outliers in its component parts” (p. 23). Fetter and associates’ results, combined with Adelman’s analyses, support using single composites that merge measures of family educational and occupational attainment and status.

For the purposes of this study, SES was used instead of raw income data for analysis. Socioeconomic status, as defined by variables within NCES data sets, includes the following measures: parental education, parental occupation, items in the home (dishwasher, books, and the like), and family income.

Analyses
The core of the case for class-based affirmative action admissions policies rests on two assumptions. First, minority enrollments will remain steady, if not increase, because minorities are disproportionately poor. Second, discrimination will be better addressed because socioeconomic attainment, or the lack thereof, is the by-product of that discrimination. Data reveal strong evidence for such expected outcomes when examining the proportion of people from low-SES within race. For instance, in 1995, the General Accounting Office noted that “minorities are overrepresented among low-income families.” According to the U.S. Bureau of the Census (1990), Black median family income was 58 percent that of White families.

When we examined the distribution of minorities in the lowest-SES stratum who graduated from high school and attended postsecondary school during 1982-83 and 1992-94 (see table 1), we reached similar conclusions: Minorities are indeed disproportionately from low-SES backgrounds. For example, in 1982, more than half of African American and Latino high school students were low-SES in sharp contrast with 24 percent of Whites (see table 1, FISB). In 1992, the trend continued, with 35 percent of African Americans and 44 percent of Latinos coming from low-SES compared with 13 percent of Whites. High school data, in combination with national income inequality data, appear to support the notion that “race may be a proxy for income” (Heller 1997, 643).

When we examined the association between race and SES, both in high school and in postsecondary education, we found it to be statistically significant but weak (see 2). Across the three national databases encompassing three decades of students, the positive, significant association never surpasses 8 percent of shared variance between SES and race/ethnicity. In high school, the highest correlation was found in the 1982 high school cohort (4 percent shared variance) and the lowest in the 1992 high school cohort (3 percent shared variance). At the postsecondary level, the highest correlation was found in the 1972 cohort (7 percent shared variance) and lowest in the 1992 cohort (4 percent shared variance). In sum, at least 93 percent of variance in either SES or race is left unexplained. This small association, which has declined steadily over time, signifies that race is, at best, a weak predictor of socioeconomic status and vice versa.

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1 Malamud (1996) fears that class-based affirmative action policies will fail to address economic inequality if they rely on current measures of SES. In her opinion, current operationalizations of class are oversimplified, especially because they do not index major wealth components, namely ownership of assets and intergenerational transmission of class.
Table 1

Distribution of Low-SES Students within Race/Ethnicity

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<tr>
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<tr>
<td></td>
<td>Post</td>
<td>High</td>
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<tr>
<td></td>
<td>Secondary</td>
<td>School</td>
<td>Secondary</td>
</tr>
<tr>
<td>Native Americans</td>
<td>30.7%</td>
<td>46.6%</td>
<td>45.9%</td>
</tr>
<tr>
<td>Asian Americans</td>
<td>17.3%</td>
<td>35.7%</td>
<td>33.0%</td>
</tr>
<tr>
<td>Latino/Hispanics</td>
<td>50.5%</td>
<td>54.7%</td>
<td>43.5%</td>
</tr>
<tr>
<td>African Americans</td>
<td>45.9%</td>
<td>54.7%</td>
<td>43.9%</td>
</tr>
<tr>
<td>Whites</td>
<td>8.4%</td>
<td>23.9%</td>
<td>16.2%</td>
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Table 2

Distribution of Race/Ethnicity within Low-SES

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<tbody>
<tr>
<td></td>
<td>Post</td>
<td>High</td>
<td>Post</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>School</td>
<td>Secondary</td>
</tr>
<tr>
<td>Low-SES Students Within Cohort</td>
<td>13.0%</td>
<td>30.3%</td>
<td>21.6%</td>
</tr>
<tr>
<td>Native Americans</td>
<td>1.4%</td>
<td>1.8%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Asian Americans</td>
<td>1.6%</td>
<td>1.7%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Latino/Hispanics</td>
<td>11.7%</td>
<td>12.5%</td>
<td>11.6%</td>
</tr>
<tr>
<td>African Americans</td>
<td>28.9%</td>
<td>22.5%</td>
<td>23.6%</td>
</tr>
<tr>
<td>Whites</td>
<td>56.3%</td>
<td>61.4%</td>
<td>59.8%</td>
</tr>
</tbody>
</table>

Correlation .268* .206* .222* .179* .194*

Shared Variance 7.2% 4.2% 4.9% 3.2% 3.8%

*p<.001

Once college qualifications are taken into account, the likelihood that a class-based affirmative action policy would disproportionately benefit ethnic minorities all but disappears.

Table 3

Percentage of College-Qualified Lowest-SES 1992 High School Graduates

<table>
<thead>
<tr>
<th>RACE/ETHNICITY</th>
<th>College-Qualified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Americans</td>
<td>0.8%</td>
</tr>
<tr>
<td>Asian Americans</td>
<td>4.0%</td>
</tr>
<tr>
<td>Latino/Hispanics</td>
<td>23.0%</td>
</tr>
<tr>
<td>African Americans</td>
<td>16.1%</td>
</tr>
<tr>
<td>Whites</td>
<td>56.1%</td>
</tr>
</tbody>
</table>

The 1990s high school to postsecondary education data (see table 2, columns 5 and 6) show that low-SES Whites have not fared well—dropping approximately 8 percentage points between high school and college participation. Hence, concern that low-SES Whites are having difficulties making the transition to college is founded. Low-SES minorities are close to parity, or slightly overrepresented in high school to postsecondary participation rates.

Conclusions and Implications

The moral, ethical, and philosophical issues behind equal opportunity, the value of affirmative action for any group, and the importance of a racially diversified student body will continue to be distorted. These debates are older than the nation itself (Zinn 1995). However, the argument that a class-based affirmative action policy will achieve racial diversity is empirically debatable.

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4 Developed by Berkner and Chavez (1997), the college-qualification index approximates college admissions criteria by collapsing cumulative academic course GPA, senior class rank, aptitude test scores, and the SAT and ACTS scores. Becker and Chavez found that just meeting minimal college qualifications significantly predicts college enrollment.
A vicious cycle of misconceptions has led to the acceptance of an untested paradigm—that race and SES are highly correlated, even interchangeable at times (General Accounting Office 1995; Kahlenberg 1996; Stampen and Cabrera 1988). Results show that using SES will neither maintain nor increase racial/ethnic diversity. The problem with a class-based policy as a viable substitute for a race-based affirmative action policy lies in the numbers. Bowen and Bok (1998) said it best:

While Blacks and other minorities are much more likely than Whites to come from poor families, they still make up a minority of all college-age Americans with low incomes (p. 47).

These results do not question the validity of eliminating inability to pay as a barrier to college attendance. Higher education has been operating with a class-based policy: financial aid. Over the past 30 years, federal and state governments have invested considerable human and financial resources to achieve equality of access to and persistence in college. The federally funded Talent Search Program, for example, seeks to facilitate college choice among low-income high school students by identifying talented youths and providing them and their families with various forms of support and information. Since the passage of the Higher Education Act of 1965, a variety of federal, state, and institutional student aid programs have emerged to eliminate inability to pay as a barrier to postsecondary enrollment and the benefits associated with college attendance and degree completion (Olivas 1985; St. John 1994; Stampen and Cabrera 1988).

In the early 1980s, the cost of these programs reached nearly $20 billion per year (Lewis 1989). By 1999, the cost for federally supported student aid programs had reached $46 billion, a jump of over 100 percent (College Board, 1999). The level of funding for such programs reflects the hopes they embody—of removing inability to pay as a barrier and increasing opportunities for low-income students (Hannah 1996; Heller 1997).

Our results also indicate a substantial decline in the high school graduation and college participation rates among the lowest-SES students. In 1982, 30 percent of high school graduates were low-SES compared with 18 percent in 1992, a drop of 12 percent in ten years. College participation rates also dropped from 22 percent in 1983 to 12 percent in 1994, a decline of 10 percent in 11 years. These drops correlate with increasing college costs coupled with TRIO and Head Start program cutbacks and the shift in financial aid emphasis from grants to loans experienced since the early 1980s (Lewis 1989). These drops are also consistent with research showing that low-SES students’ decisions to attend college are highly sensitive to increases in tuition and/or changes in student aid packages from grants to loans (Heller 1996; Olivas 1985, 1986; St. John 1994; Windham 1984).

Widening educational attainment gaps may have spurred the concern to create more opportunities for low-SES students, particularly for disenfranchised Whites, by rejecting race-based affirmative action programs in favor of class-based programs. Focusing on affirmative action to help low-SES students distracts policymakers from the most obvious intervention arena—financial aid policies and programs. Further research analyzing the effects of financial aid policy changes may improve our understanding of how to increase low-SES students’ access to higher education without confusing inability to pay with issues of race and discrimination.

Race and SES are not interchangeable. The low association between SES and race/ethnicity makes SES an impractical basis for methods of achieving racial diversity in postsecondary education. Compared with a race proxy, no more narrowly tailored criterion, no statistical treatment that can replace race (p. 1095).

Race-based affirmative action and class-based financial aid address two different issues. One is concerned with removing inability to pay as a barrier to equal educational opportunities; the other seeks to achieve representation and equal opportunities previously denied specifically because of race/ethnicity (Olivas 1997). Both are essential to maintaining a vibrant campus life and affording all students new learning experiences (Alger 1998a, 1998b; Bowen and Bok 1998; Chang 1999; Smith, et al. 1997).

Eliminating one, race-based programs, in favor of the other, class-based programs, will not solve the problem. When race-based and class-based programs exist in tandem, representation among low-SES students of all races is achieved.
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