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Unequal Opportunity: Student Access to the University of California

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# Unequal Opportunity 

STUDENT ACCESS TO
THE UNIVERSITY OF CALIFORNIA

The University of California (UC) has long been among the most important avenues of upward economic mobility for Californians. UC is arguably one of the most prestigious public universities in the United States, and it is a pathway to many of the most coveted jobs in the nation's largest state. The promise that all Californians have an equal opportunity to acquire a UC education is a core part of California's social contract as set forth in the state's Master Plan for Higher Education in California (California State Department of Education 1960). In this essay we explore the current status of this promise and document the extent of inequality among California high schools in the access they provide to UC. The reality we find is cause for concern. The students admitted to UC tend to come from an exclusive subset of the state's high schools. In particular, they are disproportionately from schools whose student bodies are disproportionately children of affluent professionals and disproportionately Anglo or Asian.

Why should we be concerned with these inequalities? Since the r970s California has developed an increasingly bifurcated economy, with a top tier of highly paid, secure jobs and a growing bottom tier of poorly paid, insecure jobs (Greenwich and Niedt 2001; Milkman and Dwyer 2002; Ong and Zonta 200I). In the same period, wage inequality has grown more rapidly in California than in all but four other states (Bernstein et al. 2000). Possession of a university degree becomes more and more essential as workers compete for the jobs at the top of this employment structure. Researchers have established that there is a large and widening wage gap between college-educated and non-college-educated workers across the United States (McCall 2000; Morris and Western 1999; Paulsen 1998), and this trend appears to be magnified in California (Carroll and Ross 2003; Ong and Zonta 2001; Reed 1999; Reed et al. 1997). In fact, the growing wage gap between workers who have a college degree and those who do not is the largest single factor contributing to the increase in wage inequality in California-and to the growing gap between levels of wage inequality in California and levels of wage inequality in the rest of the United States (Reed I999; Reed et al. 1997).

UC is only one segment of the state's tripartite system of public higher education, which also includes the California State University and the California Community

Colleges, but it is the elite tier. As such, it is a particularly important gatekeeper. The opportunity to make the transition directly from high school to an elite university has important consequences for an individual's career, as measured, for example, by educational attainment or earnings. Although most students who currently attend college in the United States did not enroll directly in a four-year university immediately after secondary school (Baker and Velez 1996), studies show that the students who make this transition promptly are those students who are most likely to attend or to graduate from a relatively prestigious four-year college (Kempner and Kinnick 1990; see also Dougherty 1987; Hilmer 2000; Velez 1985). Moreover, the labor market advantage conferred on students who graduate from the most prestigious and selective four-year institutions is quite well documented. ${ }^{1}$

Inequalities in access to UC are also troubling because of their implications for racial and ethnic equality. California is by any plausible measure one of the most diverse states in the union, and it is only becoming more so. ${ }^{2}$ At the same time, ine-
I. It is difficult to get an exact dollar estimate for the financial benefit of attending a prestigious undergraduate institution. Many of the personal characteristics that allow students to gain admission to elite colleges are the same characteristics that would enable them to succeed in the labor market even if they had attended a less elite institution. Researchers have employed increasingly sophisticated statistical methods to discover what part of the earnings difference between graduates of highly selective and less selective colleges is due to the actual effect of attending the college, and what part is due to differences of personal characteristics. Most research suggests that there is a substantial career return to attending the most prestigious institutions, including institutions like UC Berkeley and UCLA (Behrman et al. 1996; Bowen and Bok 1998; Hilmer 2000; Hoxby 2000; Ishida et al. 1997; James et al. 1989; Karabel and McClelland 1987; Monks 2000). An exception is a recent study by Stacey Berg Dale and Alan Krueger (2002), who find that expensive colleges confer an earnings advantage but selective colleges do not, all else being equal.
Whatever the magnitude of the benefit, it rarely accrues to students who begin their postsecondary education at a community college. Transfer from a community college to an elite fouryear college is a rarity; for example, fewer than I\% of students who attended a California Community College in 2000-or transferred to UC the following year (California Postsecondary Education Commission 2003a, 2003b). Researchers have found that enrolling in a two-year or community college actually diminishes the likelihood that a student will graduate from a fouryear institution (Brint 2003, 19; Brint and Karabel 1989, 129-130; Dougherty 1987, 88).
2. The census indicates that California has become one of the first "majority-minority" states, along with Hawaii and New Mexico (see U.S. Bureau of the Census 20or). By comparison, Anglos are projected to become a minority in the United States as a whole only in the second half of the twenty-first century (U.S. Bureau of the Census 1999). The use of administrative data from multiple sources complicates any discussion of racial and ethnic groups, since the definitions of groups are not entirely consistent across sources. Here and throughout this paper we use the category "Anglo" to refer to persons classified by the census as "white non-hispanic," and by UC and the California Department of Education as "White." We use "African Americans" to refer to the individuals the census calls "black," and the UC and the California Department of Education call "African American." We use the category "Asian" to include persons classified by the census, the UC, and the California Department of Education variously as "Asian," "Asian American," East Indian-Pakistani," "Filipino American," and "Pacific Islander." We construe the category "Latino" to include persons classified by the census as "white Hispanic,"
quality in earnings among racial and ethnic groups is substantial and increasing in the state (Carroll and Ross 2003; Milkman and Dwyer 2002; Ong and Zonta 2001). Inequality in academic achievement among these groups has also been increasing. In 2002 the gap in scores on the Scholastic Aptitude Test (SAT) between African American and Anglo students in California was well above the national average (cf. College Board 2002a, 2002b), and a study from the mid-1990s found that this gap was growing faster in California than in the nation as a whole (Slater 1995-96; cf. Jencks and Phillips 1998).

The research we present here focuses on inequality among high schools, particularly in regard to race, ethnicity, and socioeconomic status (SES). We focus on inequality among schools-for instance, comparing Oakland Technical High School, which is primarily African American and low SES, with Piedmont High, which is primarily Anglo and affluent-rather than among groups of students within any particular school-for instance, comparing the poorest students with middle-income students at Oakland Technical High School. We also describe inequalities between public and private schools and among types of private schools, as defined by religious affiliation.

The structure of this essay is as follows: First we outline the context of California's higher education policy and UC admissions policy in particular. Next we briefly discuss some issues related to the geography of access to higher education. We then describe our data and methods and present findings from our statistical exploration of California secondary schools, both public and private. Finally we discuss the implications of our analysis in light of the rapidly changing legal environment surrounding higher education.

## AN OVERVIEW OF ADMISSIONS POLICY

There is no single document that defines UC's current admissions policy. The policy consists of an accretion of multiple criteria and procedures that have been established over several decades. The state laid the foundation for this structure in 1960, when the legislature endorsed the Master Plan for Higher Education. The impetus for the Master Plan was the rapid growth of the state's population, which was increasing by 500,000 people a year. With more people came a greater demand for higher education. The state already operated several distinct institutions of higher education that dated from the late nineteenth and early twentieth centuries, including UC, a handful of state colleges, and a vast network of "junior," or community, colleges. Administrators anticipated expansion in all three of these branches. In 1959 UC President Clark Kerr convened a committee to draft a comprehensive plan for
by the UC as "Chicano" or "Latino," and by the California Department of Education as "Hispanic or Latino." We use "Native American" to refer to persons classified as "Native American" or "American Indian."
growth that would protect the interests of UC and prevent conflicts among the three branches as they expanded by codifying the mission and functions appropriate to each (Brint and Karabel 1989, 86-89; Lemann 1999, I29-134; Schrag 1999, 37-38).

The resulting Master Plan embodied a tension between the principle of democratic inclusion and the principle of meritocracy. On the one hand, the state was to serve all its people; on the other hand, UC was to operate as an exclusive institution that served the "best" students (Master Plan Survey Team 1960, 77). The plan reconciled these principles by establishing a three-tiered system of college admissions. Admission to the community colleges would be open to all high school graduates; admission to the state colleges would be open to the top one-third of high school graduates statewide; and admission to UC would be open to the top one-eighth. This division promised to control the costs of expansion by channeling most students into the less expensive community college system. It also protected the prestige of UC by ensuring that it would remain more selective than the state and community colleges were. Perhaps its most important result, however, was to institutionalize an unprecedented guarantee: every Californian would henceforth be entitled to a higher education, free of tuition, commensurate with his or her ability (Brint and Karabel 1989, 86-89; Douglass 200ı, i22; Schrag 1999, 38). ${ }^{3}$

To admit the top one-eighth of the state's high school graduates, however, UC needed a set of criteria to identify them. The Master Plan established only loose guidelines for determining which graduates were "UC eligible." For example, it recommended the use of scores from standardized tests, and in particular the SAT, but it did not recommend a specific cutoff point. The Regents of the University of California, the university's governing board, gradually refined their criteria into three requirements: the Subject, Scholarship, and Examination Requirements. The Subject Requirement is a sequence of coursework that includes courses in history, English, math, science, and a language other than English. The Scholarship Requirement refers to a minimum grade point average (GPA) in these courses, with extra points awarded for honors courses. The Examination Requirement refers to a minimum score on a battery of standardized tests, which during the period we analyze included the SAT I "Reasoning Test" (or, alternatively, the ACT) and any three SAT II subject tests. ${ }^{4}$ Meeting these minimum requirements was enough to make a student eligible for consideration, but it was not sufficient to guarantee that he or she would be admitted to the campus of his or her choice. All but two campuses
3. Nominally, UC still does not charge tuition, but increases in student fees since the 1970s have rendered this guarantee less meaningful (Schrag 1999, 88).
4. Individual campuses have discretionary power to waive these eligibility requirements in individual cases, but they may exercise this power only within guidelines established by the university and only for a small proportion of the entering class. The process of waiving the eligibility criteria is called "admission by exception." According to the master plan, no more than 2 percent of the entering freshman class at any campus may be admitted by exception; since then, university policy has revised this figure upwards to 6 percent (Laird 1997).
(UC Riverside and UC Santa Cruz) chose among eligible applicants based on their grades, test scores, and a variety of nonacademic criteria. Under a policy first proposed in 1971 by the University of California Council of Chancellors, these selective campuses combined academic and nonacademic criteria by dividing the freshman class roughly in half: the first half of the class was to be admitted based on its academic performance alone, and the second was to be admitted on the basis of nonacademic characteristics as well as academic records.

The next watershed in the development of UC's admissions policy was the adoption of affirmative action. In the mid-196os several campuses began "soft" affirmative action programs that were designed to identify promising high school students from underrepresented racial and ethnic minorities and to encourage them to apply to UC. In 1968 selective UC campuses began to consider race and ethnicity explicitly in their admissions decisions, a practice that has come to be known as "hard" affirmative action. These campuses gave extra consideration to African American, Latino, and Native American applicants in particular. Students from these groups tended on average to have lower grades and standardized test scores than their Anglo and Asian peers did. If UC had relied only on grades and test scores to select its students, it would have excluded most African American and Latino applicants from its top campuses, and such exclusion would have conflicted visibly with the university's aspiration to serve all the state's people. In 1968 UC also began to require that students take the SAT (Joint Committee on Higher Education 1969, 78; Karabel 1999, 109-IIO; Lemann 1999, I73).

With this combination of standardized tests and affirmative action, the UC Regents struck a compromise between the principles of democratic inclusion and meritocracy that remained more or less stable for three decades. In July 1995, however, the UC Regents voted to eliminate all consideration of race and ethnicity from UC admissions. The resulting policy, SP-I, stated that "the University of California shall not use race, religion, sex, color, ethnicity, or national origin as criteria for admission to the University or to any program of study." California's voters subsequently wrote the ban on affirmative action into the state constitution when they approved the ballot initiative called Proposition 209 in November 1996. SP-r took effect for graduate programs in 1997 and for undergraduate campuses in the fall of 1998 (Chávez 1998, 56-67; Lemann 1999, 307-336).

The ban on affirmative action ushered in a period of rapid change in UC's admissions policies that is still underway. Immediately after the new policy took effect, UC began revising its nonacademic admissions criteria. Some campuses replaced criteria that had explicitly favored African American, Latino, and Native American students with policies that explicitly favored students from low-SES backgrounds. Other campuses began offering explicit advantages to individuals who had participated in UC-sponsored high school outreach programs. UC also began to revise its eligibility guidelines. In 200I, under a new program called "Eligibility in the Local Context" (ELC), high school students could become UC-eligible without completing the

Scholarship Requirement, provided that they were in the top 4 percent of their school's graduating class. ${ }^{5}$ In 2002 UC began a new admissions program called "comprehensive review," under which all applicants would be evaluated based on both academic and nonacademic criteria, with a particular emphasis on the context of the educational opportunities available to them. In practice, the emphasis on context means that students are compared to others within their high school. If two students from different schools have equal SAT scores, for example, the one whose score stands out more from those of his or her classmates will have an edge in the competition for UC admission. ${ }^{6}$ UC administrators also began negotiating with the College Board to revise the standardized tests used in UC admissions so that they would more accurately reflect the curriculum to which students had been exposed. As a result of these negotiations, the content and design of the SAT I test was revised substantially (Atkinson 2001, 2002).

At the time of this writing, UC's undergraduate admissions policies include elements from each of these eras. From the Master Plan era comes the concept of "UC eligibility," which is still meant to distinguish the top one-eighth of California high school graduates who are deemed at least minimally qualified to receive a UC education. From the era of affirmative action comes the emphasis on targeted high school outreach programs that identify disadvantaged students and encourage them to apply. From the post-affirmative action era comes the ELC program and the policy of comprehensive review.
5. UC announced the ELC program after the University of Texas received a great deal of publicity for its "ı\% Plan," which guarantees admission to students who graduate in the top io percent of their high school classes. The ELC program is thus widely known as the " $4 \%$ Plan." The plans share no more than a family resemblance, however. The ELC program is notably less ambitious than its Texas counterpart. Unlike the latter, it does not exempt students from meeting the Subject Requirement, nor does it guarantee students admission to the campus of their choice. The difference between 4 percent and io percent is also quite substantial, particularly given that most of the students in the top 4 percent of their high school class were UC eligible anyway (see Geiser 1998).

Although policy makers discussed a " $12.5 \%$ Plan" for California, no such plan was implemented. In 200I the UC Regents approved a "Dual Admissions Program," under which UC campuses would provide provisional acceptance notices to all students between the top 4 percent and I2.5 percent of the graduating class in particular California high schools, conditional on their completion of the ordinary UC eligibility requirements and a supplemental course of study at a California community college. This program goes beyond UC eligibility as traditionally defined, mainly by providing these high school students with the name of a particular campus that they would be admitted to in the event that they completed the requirements. It would not make it any easier to get into UC or guarantee admission to one's campus of choice. It has not yet been implemented because of a funding shortage (see University of California, Office of the President 2002a).
6. This policy brings UC's admissions procedures more in line with the admissions algorithms used by Ivy League institutions. As Paul Attewell points out, the emphasis on class rank within the applicant's high school will tend to disadvantage students who test well if they attend "star high schools," in which other students also test well (Attewell 2001, 273). By the same token, of course, it will tend to advantage students who attend high schools where test scores are, on average, low.

figure 4.I. California High School Students and UC Admissions, 1995
sources: California State Department of Education 2003a, 2003b; University of California,
Office of the President 1995; U.S. Bureau of the Census 2000b.

## THE GEOGRAPHY OF UNEQUAL OPPORTUNITY

UC's eligibility guidelines and admissions criteria generally establish a sequential process of selection. For most California high school students, the pathway to UC requires them to do all of the following: take specific UC-required courses; obtain certain minimum grades in those courses; take standardized tests; obtain test scores above a set minimum; graduate; apply to one or more UC campuses; and be selected for admission in competition with the many other applicants who also meet the minimum eligibility requirements. Each stage of this process weeds out tens of thousands of young people. As Figure 4.I shows, in 1995 the process gradually whittled down a population of over 400,000 California eighteen-year-olds until there were fewer than 40,000 admitted students.

This selection process does not sort students at random. Instead, it tends to favor particular groups of students, especially those who are affluent and those who are Anglo or Asian. Researchers who study secondary education in the United States have documented the inequalities related to race, ethnicity, and SES at every stage in this process. These inequalities manifest themselves in patterns of course taking, in high school grades, in standardized test scores, in rates of high school graduation, in the
propensity to apply to college, and in rates of admission (see, e.g., Baker and Velez 1996; Bowen and Bok 1998; Cabrera and La Nasa 200i; Conley 1999; Davies and Guppy 1997; Hearn 1991; Hurtado et al. 1997; Kane 1998; Karen 1991, 2002; Lillard and Gerner 1999; Lucas 2001; Miller 1995; Perna 2000).

Such inequalities manifest themselves, in part, as inequalities of place (Jones and Kaffuman 1994). Housing, and by extension schools, tend to be segregated by race, ethnicity, and SES (Arum 2000, 403-406). Some counties, cities, school districts, and neighborhoods in the United States are rich, while some are poor. Some are primarily African American, while some are primarily Anglo. ${ }^{7}$ Unsurprisingly, then, the practice of educating people in local high schools results in a geography of unequal opportunity. Many researchers have found inequalities in college access among high school students that are related to the socioeconomic composition of the high school student body (see, e.g., Alexander and Eckland 1977; Persell et al. 1992a, 1992b). Others have found inequalities related to the racial and ethnic composition of schools (see, e.g., Perna 2000).

It is difficult to determine how much of this inequality among schools has to do with processes internal to the schools themselves, and how much results from the fact that students are not distributed randomly among schools. Two high schools may send different proportions of their graduates to college simply because their students came into school with vastly different levels of academic skill and parental resources. Schools that are successful at placing large numbers of graduates in college will tend to attract students whose chances of college admission were already quite good. Some research suggests that talented students with advantaged backgrounds may actually do less well in such schools than they would otherwise, since their parents often attempt to preserve their children's advantage in elite college admissions by pressuring schools to ration advanced placement (AP) classes and similar college-relevant credentials (Attewell 2001, 288289). The existence, direction, and magnitude of so-called school effects on the academic success of individual students is a contentious question in social science; since publication of the "Coleman Report" in 1966, researchers have debated whether the resources and the sociodemographic characteristics of schools have any independent effect on learning or chances for success (Coleman et al. 1966). ${ }^{8}$
7. Levels of racial segregation in California metropolitan areas vary by racial and ethnic group. In general, they are comparable to levels for U.S. metropolitan areas as a whole, although African Americans are somewhat less segregated from Anglos in California than in large metropolitan areas in other states (see Iceland et al. 2002).
8. The most recent rounds of the debate over "school effects" have been reviewed by Richard Arum (2000), Aage Sørensen and David Morgan (2000), and Thomas DiPrete and Jerry Forristal (1994). Most education researchers at this point would probably agree that such effects exist, although their measurement still poses a knotty technical problem because of selection bias: students are selected into particular high schools in part based on the same personal characteristics, such as parental education, that help determine their academic performance and chances for success later in life.

In the following sections we describe the inequalities among California high schools, both public and private, in the access that they provide to UC. The magnitude of the inequalities that we find is surprising, even in light of prior research. Our data will not permit us to join the debate over whether these inequalities result from school effects proper, and that is not our goal. We intend merely to raise the question of how students from different schools fare in the competition for admission to UC. The answer, we will show, is that they fare differently, and that these differences are closely associated with the racial, ethnic, and socioeconomic characteristics of the schools' student bodies. Regardless of why these inequalities arise, they are relevant for evaluating the state's success at serving all of its residents and for assessing the continued viability of the promise embodied in the State of California's Master Plan.

## DATA AND METHODS

We explore high-school-level inequalities in access to UC using institutional data on California public and private high schools from the 1998-99 school year. These data come from the California Department of Education, and they describe high school populations rather than individual students. We also obtained data from the UC Office of the President (UCOP) on all students from California high schools who applied and were admitted to any UC campus for the fall semester of 1999 . We aggregated these data at the level of the high school in order to merge them with the data from the Department of Education. Because the Department of Education collects only limited data on SES, particularly for private schools, we supplemented this information with 1990 census data that had been aggregated at the school district level by the National Center for Education Statistics (see Betts and Morell 1998). ${ }^{\text {. }}$

For the purposes of this paper we included data only for high schools reported by the California Department of Education that were successfully merged with UCOP data, meaning that they had at least one graduate who applied to UC for the fall of 1999. We excluded high schools that had fewer than ten students in grades 9 through I2. The final sample comprises 796 public schools and 273 private schools. Together, these schools represent $79.8 \%$ of all UC applicants and $86.4 \%$ of all students admitted as freshmen for the fall of 1999.

Our analyses rely mostly on simple descriptive statistics and bivariate correlation coefficients. Our main dependent variable is per capita admissions, or the percentage of graduates who were admitted to UC. We refer to this variable as the size of the "UC pipeline" from any given school. We also examine per capita applications to UC.

Because our data refer to the student bodies of entire high schools, rather than individual high school students, two methodological caveats are in order. First, the

[^0]data do not permit inferences about individual behavior. The fact that comparatively affluent high schools send a large percentage of their students to UC, for example, does not mean that it is the most affluent students within these schools who are likely to be admitted. Second, the data do not permit us to distinguish between the effect of attending a particular school on the one hand, and the effects of individual social background on the other. It may be that attending high school with affluent students increases one's probability of getting into UC, for example, by increasing one's access to educational resources such as AP classes and UC-required courses in high school. Nonetheless, it is surely true that schools that do well at placing students in elite colleges tend to attract students who would do well anyway. Thus, it might be that the association between affluence of the school population and per capita admissions arises only because affluent students are likely to win admission to UC, regardless of whether they attend high school with other affluent students. Our data are consistent with either hypothesis, and they will not allow us to determine which is true. This fact does not make our findings less important, but it does mean that readers should exercise caution in interpreting them.

## PATTERNS OF INEQUALITY IN ACCESS TO UC

We begin by presenting simple descriptive statistics. As we noted above, we have included only schools that had at least one graduate apply to UC for the fall of 1999.

## Public and Private High Schools

The overall level of per capita admissions appears to be higher in private schools, as may be seen in the summary statistics presented in Table 4.I. For the average public school, close to $13 \%$ of its graduates were admitted to UC; for the average private school, the figure was nearly $28 \%$, or more than double. This finding echoes the research of other scholars, who have found that private school students possess a substantial advantage in university admissions (Falsey and Heyns 1984; Persell et al. 1992a, 1992b). Per capita applications are also more than double at private high schools than public high schools, suggesting that part of the inequality in per capita admissions arises because public school students are less likely to apply to UC. ${ }^{10}$
ro. Data on per capita applications from UC-eligible graduates should be read with particular caution. These were derived by dividing all applications from a school by the total number of graduates who had met the Subject Requirement for eligibility. The numerator of this fraction includes some applicants who were not actually UC eligible. As a result, the raw figure of applications per capita can in principle exceed $100 \%$, and it did so at eleven public schools where more graduates applied to UC than had actually satisfied the Subject Requirement. These may be schools where ineligible students were encouraged to apply on the theory that some would be granted admission by exception. For all of these schools we recoded the per

Some private schools have a larger admissions advantage over both public schools and other private schools. Table 4.2 sorts private schools by their religious affiliation. Catholic schools resemble all private schools in the mean percentage of their graduates that are admitted to UC ( $28 \%$ ). Other Christian schools are much less effective channels to UC, although they are still slightly better than the public schools; on average, $16 \%$ of their graduates were admitted. A third group, nonsectarian college preparatory schools, sends a far greater percentage of their graduates to UC: an average of nearly $38 \%$.

Although the nonsectarian schools are a minority (just over $30 \%$ ) of the private schools in our database whose religious affiliation we could identify, they constitute a majority of the schools at the top end of the distribution. The top 50 private feeder schools to UC make up a small elite that outstrips the top public schools in the percentage of their graduates that are admitted to UC. A majority of them- 30 of 50 , or $60 \%$ —are nonsectarian. We present summary statistics for this top tier of schools in Table 4.3.

The first column of Table 4.3 presents summary statistics for the 50 private schools with the highest rate of per capita admissions, and the second column presents statistics for their 50 public school counterparts. Note that the average percentage of graduates admitted is nearly $63 \%$ for the top private schools and over $42 \%$ for the top public schools. This table may even underestimate the university access of students at the very top private schools, where some students may be so oriented toward elite private universities that they do not even bother applying to UC (see Cookson and Persell 1985). Note, however, that the students at the top private schools do apply to UC at a rate of $73 \%$-almost five times the percentage of publicschool graduates who apply.

The difference between sectors in per capita applications and admissions cannot be explained by average differences in SES-the district median housing value and
capita applications to equal $100 \%$, on the assumption that all eligible graduates applied. We also experimented with omitting these schools from the analysis. Neither procedure changed the substantive findings.

For six private schools, the per capita applications figure-applications as a percentage of all graduates-also exceeded $100 \%$. The fact that this figure exceeded $100 \%$ may indicate error in the reported number of graduates; the data on private schools available from the California Department of Education appear to be generally of poorer quality than are the data on public schools. It is also possible that some of these applicants were not graduates: they were either students who applied before they completed their senior year, or students who applied a year or more after graduation. For all six of these schools, we recoded per capita applications to equal $100 \%$. This recoding did not alter any of our substantive conclusions. We also experimented with excluding these schools from the analysis. This procedure very slightly strengthened the correlations between application rates and SES reported in Table 4.6, but it too did not alter the substantive conclusions.
table 4.i. Selected Characteristics of California High Schools ${ }^{2}$

| Selected Characteristics ${ }^{\text {c }}$ | public high schools |  |  | private high schools ${ }^{\text {b }}$ |  |  | all schools <br> Mean (S.D.) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean (S.D.) | Minimum | Maximum | Mean (S.D.) | Minimum | Maximum |  |
| Application and Admission to UC, Fall 1999 |  |  |  |  |  |  |  |
| Percentage of graduates admitted | 12.72\% (10.30) | 0.00\% | 82.46\% | 27.51\% (20.87) | 0.00\% | 100.00\% | 16.51\% (15.23) |
| Percentage of graduates applying | 15.50\% (11.85) | 0.00\% | 87.00\% | 36.98\% (31.94) | 0.77\% | 100.00\% | 20.99\% (14.43) |
| Percentage of graduates UC-eligible ${ }^{\text {d }}$ | 38.54\% (18.26) | 0.00\% | 100.00\% |  |  |  |  |
| Percentage of UC-eligible graduates applying | 39.98\% (19.92) | 1.15\% | 100.00\% |  |  |  |  |
| Race and Ethnicity of Students |  |  |  |  |  |  |  |
| Percentage of students African American | 7.17\% (10.93) | 0.00\% | 91.21\% |  |  |  |  |
| Percentage of students Latino | 32.53\% (24.65) | 0.00\% | 99.22\% |  |  |  |  |
| Percentage of students Asian | 12.60\% (14.04) | 0.00\% | 75.55\% |  |  |  |  |
| Socioeconomic Status |  |  |  |  |  |  |  |
| Percentage of students receiving subsidized meals | 30.92\% (22.21) | 0.00\% | 100.00\% |  |  |  |  |
| Median housing value in district (thousands of dollars) | 181.99 (90.78) | 7.50 | 475.99 | 220.75 (91.89) | 37.17 | 475.99 | 191.72 (92.55) |
| Median income for families with children in district (thousands of dollars) |  |  |  |  |  |  |  |
|  | 42.16 (13.39) | 15.75 | 114.92 | 44.17 (16.22) | 19.41 | 105.56 | 42.69 (14.21) |
| Percentage of parents ${ }^{\text {e }}$ with graduate education | 11.81\% (10.59) | 0.00\% | 65.00\% |  |  |  |  |
| Percentage of parents with four-year degree ${ }^{f}$ | 26.86\% (10.42) | 0.00\% | 54.00\% | 30.40\% (13.23) | 6.50\% | 72.60\% | 26.15\% (12.94) |
| Percentage of parents with some college, no degree | 23.24\% (7.42) | 0.00\% | 61.00\% | 30.26\% (5.10) | 16.10\% | 43.10\% | 31.29\% (5.71) |
| Percentage of parents with high school diploma only | 19.37\% (7.34) | 0.00\% | 64.00\% | 18.93\% (4.79) | 6.70\% | 34.40\% | 20.74\% (5.31) |
| School Factors |  |  |  |  |  |  |  |
| Suburban school district | 0.60 (0.49) | 0.00 | 1.00 | 0.52 (0.50) | 0.00 | 1.00 | 0.58 (0.49) |
| Urban school district | 0.28 (0.45) | 0.00 | 1.00 | 0.44 (0.50) | 0.00 | 1.00 | 0.33 (0.47) |
| Students enrolled in grades 9-12 | 1,777 (900) | 37 | 5,149 | 381 (350) | 10 | 2,101 | 1,419 (1,002) |
| Students enrolled in district | 65,630 (170,260) | 140 | 695,890 | 143,340 (256,330) | 600 | 695,890 | 85,530 (198,720) |


| Percentage of teachers with full credential | $89.99 \%(8.32)$ | $34.38 \%$ | $100.00 \%$ |
| :--- | :---: | :---: | :---: |
| Average years of teaching experience | $14.67(2.86)$ | 3.62 | 23.90 |
| Students per teacher | $22.91(3.64)$ | 5.75 | 51.55 |
| Percentage of students with limited English |  |  |  |
| $\quad$ proficiency | $14.38 \%(12.59)$ | $0.07 \%$ | $100.00 \%$ |
| Percentage of AP courses (of all courses offered) | $2.81 \%(1.98)$ | $0.18 \%$ | $15.00 \%$ |
| Percentage of UC-required courses (of all |  |  |  |
| $\quad$ courses offered) | $51.85 \%(11.95)$ | $0.62 \%$ | $90.02 \%$ |
| Score on Academic Performance Index | $623.61(106.76)$ | 378.00 | 966.00 |
| Percentage National Merit finalists | $0.44 \%(1.32)$ | $0.00 \%$ | $18.71 \%$ |
| UC outreach school ${ }^{\text {h }}$ | $.33(0.47)$ | 0 | 1 |
| $N$ | 796 |  |  |
| Total number of graduates | 263,546 |  |  |
| Total number of graduates admitted to UC | 35,643 |  |  |
| Percentage of all UC admissions ${ }^{\text {i }}$ | $71.62 \%$ |  |  |

[^1]table 4.2. Selected Characteristics of California Private High Schools, ${ }^{2}$ by Religious Affiliation

| Selected Characteristics | catholic high schools |  |  | other christian high schools |  |  | nonsectarian high schools |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean (S.D.) | Minimum | Maximum | Mean (S.D.) | Minimum | Maximum | Mean (S.D.) | Minimum | Maximum |
| Application and Admission to UC, Fall 1999 |  |  |  |  |  |  |  |  |  |
| Percentage of graduates admitted | 28.33\% (14.34) | 2.38\% | 68.60\% | 16.16\% (15.65) | 0.00\% | 60.47\% | 37.69\% (25.87) | 0.00\% | 100.00\% |
| Socioeconomic Status |  |  |  |  |  |  |  |  |  |
| Median housing value in district (thousands of dollars) |  |  |  |  |  |  |  |  |  |
|  | 219.23 (85.75) | 37.26 | 473.19 | 196.17 (86.87) | 37.17 | 473.19 | 240.81 (101.03) | 39.61 | 475.99 |
| Median income for families with children in district (thousands of dollars) |  |  |  |  |  |  |  |  |  |
|  | 42.03 (14.19) | 19.41 | 102.23 | 41.78 (10.67) | 22.38 | 64.09 | 49.73 (21.49) | 29.60 | 105.56 |
| Percentage of householders with four-year degree | 28.95\% (11.81) | 6.50\% | 65.40\% | 24.61\% (9.72) | 7.20\% | 50.30\% | 37.34\% (15.52) | 9.90\% | 72.60\% |
| Percentage of householders with some college, no degree | 29.92\% (4.89) | 16.60\% |  | 32.18\% (4.22) | 24.00\% | 40.00\% | 28.91\% (5.22) | 16.10\% |  |
| Percentage of householders with high school diploma |  |  |  |  |  |  |  |  |  |
|  | 19.00\% (3.91) | 7.50\% | 28.40\% | 21.72\% (4.90) | 12.50\% | 34.40\% | 16.64\% (5.04) | 6.70\% | 28.30\% |

School Factors
Suburban school district
Urban school district Students enrolled in
grades 9-12 Students enrolled in
district Percentage National

Merit finalists | $N$ |
| :--- |
| Total number of graduates |
| Total number of graduates |
| admitted to UC |

admitted to UC 4,657
so urces: California State Department of Education; National Merit Scholarship Corporation; University of California, Office of the President; U.S. Bureau of the Census
(see the Appendix for details).
$=$ district level variable
note: $\quad=$ district level variable.
${ }^{\text {a }}$ Includes private high schools with te
Includes private high schools with ten or more graded secondary students and from which at least one graduate applied to UC for fall 1999 . Thirteen of the private schools were Jewish, Muslim,
or belonged to another religious denomination, and is private schools had no religious affiliation data available from the California Department of Education. These schools were not included
in this table.
table 4.3. Selected Characteristics of UC Feeder Schools

| Selected Characteristics ${ }^{\text {a }}$ | $\begin{gathered} \text { Top } 50 \\ \text { Private Schools } \end{gathered}$ | Top 50 <br> Public Schools | Midrange Public Schools ${ }^{\text {c }}$ | Bottom 50 Public Schools |
| :---: | :---: | :---: | :---: | :---: |
| Application and Admission to UC, Fall 1999 |  |  |  |  |
| Percentage of graduates admitted | 62.60\% | 42.12\% | 11.39\% | 1.79\% |
| Percentage of graduates applying | 73.20\% | 49.80\% | 13.92\% | 3.28\% |
| Percentage of graduates UC-eligible ${ }^{\text {d }}$ |  | 70.34\% | 37.29\% | 24.04\% |
| Percentage of UC-eligible graduates applying |  | 71.57\% | 39.21\% | 19.02\% |
| Race and Ethnicity of Students |  |  |  |  |
| Percentage of students African American |  | 6.50\% | 7.06\% | 9.26\% |
| Percentage of students Latino |  | 9.96\% | 33.93\% | 35.69\% |
| Percentage of students Asian |  | 29.48\% | 11.83\% | 6.42\% |
| Socioeconomic Status |  |  |  |  |
| Percentage of students receiving subsidized meals |  | 7.94\% | 31.51\% | 45.74\% |
| Median housing value in district (thousands of dollars) | 256.39 | 312.65 | 179.23\% | 107.11\% |
| Median family income for families with children in district (thousands of dollars) | 46.03 | 62.81 | 41.17 | 32.26 |
| Percentage of parents ${ }^{\text {e }}$ with graduate education |  | 37.84\% | 10.38\% | 4.96\% |
| Percentage of parents with four-year degree ${ }^{f}$ | 35.22\% | 36.80\% | 26.62\% | 20.14\% |
| Percentage of parents with some college, no degree | 27.69\% | 12.88\% | 23.92\% | 24.45\% |
| Percentage of parents with high school diploma only | 16.85\% | 7.38\% | 19.85\% | 25.02\% |
| School Factors |  |  |  |  |
| Suburban school district | 0.45 | 0.82 | 0.58 | 0.56 |
| Urban school district | 0.55 |  | 0.30 | 0.24 |
| Students enrolled in grades 9-12 | 364 | 1,641 | 1,834 | 1,117 |
| Students enrolled in district | 2,210 | 45,050 | 69,780 | 28,490 |
| Percentage of teachers with full credential |  | 91.72\% | 90.03\% | 87.71\% |

sources: California State Department of Education; National Merit Scholarship Corporation; University of California, Office of the President; U.S. Bureau of the Census
(see the Appendix for details).
nOTE: = district level variable.
${ }^{\text {a }}$ Percentages for students are proportions of all students.
${ }^{\mathrm{b}}$ Some data were not available for private schools.
${ }^{\mathrm{c}}$ Mid-range schools include all public schools that
cMid-range schools include all public schools that were not in the top 50 or the bottom 50 . This category therefore includes the vast majority of public schools.
d "UC-eligible graduates" for the purposes of this table refers to all graduates who fulfilled the Subject Requirement for eligibility.
"UC-eligible graduates" for the purposes of this table refers to all graduates who fulfilled the Subject Requirement for eligibility.
e Figures reported for public schools refer to parents of children enrolled in the school; figures reported for private schools refer to
${ }^{\mathrm{f}}$ Figures for public schools are for a four-year degree only; figures for private schools are for a four-year degree or higher.
${ }^{g}$ The Academic Performance Index (API) is computed annually by the state for all public schools. API scores for 1999 were based on student scores on the Stanford Achievement Test, Ninth Edition (SAT9)
district median income are both higher on average for the top public schools. Since we only have district-level averages for these variables, of course, we cannot exclude the possibility that individual private school graduates who are admitted to UC have more parental wealth and income than do private school graduates as a group or their public school counterparts.

## Race, Ethnicity, and SES

What about inequalities among schools within the public sector? The last three columns of Table 4.3 show evidence of inequalities related to social background, including race, ethnicity, and SES, among public schools. Regardless of the measure, the SES of the school population varies with per capita admissions as we read across the table. The most striking association is between per capita admissions and the percentage of parents who have some graduate education. The latter variable is more than seven times greater for the top fifty feeder schools than for the fifty at the bottom. The percentage of Asians also correlates with per capita admissions, whereas the percentages of African Americans and Latinos vary inversely with per capita admissions.

The data in Table 4.3 also suggest that educational opportunities vary across schools. The availability of a college preparatory curriculum varies directly with per capita admissions. AP classes, for example, are more than twice as available in the top fifty public feeder schools, where they comprise almost $6 \%$ of all classes, than in the bottom fifty, where they make up just over $2 \%$ of all classes. AP classes are not necessary for UC eligibility, of course, but they do help in the competition for admission. The availability of UC-required classes also varies somewhat across schools. In the top public feeder schools, roughly two-thirds of all classes count toward UC's Subject Requirement for eligibility. In the schools at the bottom of the range, less than half of all classes count toward UC requirements. Such curricular inequalities may have serious consequences for students' educational advancement. In contrast, the mean levels of other school resources-such as the number of students per teacher, or the percentage of teachers with full credentials-do not differ substantially across groups of schools.

The relationship between the socioeconomic characteristics of schools and the schools' per capita admissions rates is not linear. Instead, the top feeder schools have a distinctively privileged profile, while those at the bottom are relatively similar to the majority of schools that are in the middle of the pack. Figures 4.2 through 4.4 show per capita admissions for selected independent variables, illustrating the degree to which access is concentrated in a few privileged schools.

Figure 4.2 shows the inequality in per capita admissions associated with the racial and ethnic composition of the high school student body for public schools. As the percentage of African American and Latino students increases, the percentage of graduates admitted to UC tends to decrease. The relationship appears more or less


Median Percentage of African American and Latino Students, by School Decile
figure 4.2. UC Admissions, by Racial or Ethnic Composition of School, 1999 sources: California State Department of Education; University of California, Office of the President; U.S. Bureau of the Census (see the Appendix for details).
nоте: For the purposes of this figure, schools are grouped into deciles by their racial composition, from the lowest percentage of underrepresented minority students to the highest. Each decile is represented by the value for the median school within that decile.

figure 4.3. UC Admissions, by School District Housing Values, 1999
sources: California State Department of Education; University of California, Office of the President; U.S. Bureau of the Census (see the Appendix for details).
nоте: For the purposes of this figure, schools are grouped into deciles by the median 1990 housing value of the school district, from the lowest to the highest. Each decile is represented by the median housing value for the district of the median school within that decile.

figure 4.4. UC Admissions, by Parental Education, 1999
sources: California State Department of Education; University of California, Office of the President; U.S. Bureau of the Census (see the Appendix for details).
linear, except for the schools in the middle of the distribution. The overall pattern of inequality reflects UC's ban on affirmative action, which decreased the admissions chances of African American and Latino students. Our data come from 1999, the second year after implementation of the ban in undergraduate admissions.

Although some readers may suppose that eliminating consideration of race and ethnicity from the admissions process would increase opportunities for low-SES students to attend UC, our data show the continued existence of dramatic socioeconomic inequalities in access. When schools are arranged by SES decile, the top ıо\% have a much higher per capita admissions rate than do the rest, regardless of the SES measure employed. Figure 4.3, which shows the relationship between admission rates and the median housing value of the district in which a school is located, illustrates the common pattern. The jump in per capita admissions for the schools at the top is quite dramatic, but, even so, the figure probably understates the true association between wealth and per capita admissions for two reasons. First, our measure of housing value captures affluence at the level of school districts; it therefore provides no information about inequalities among schools within any given district, and such inequalities may also be associated with different rates of admission to UC. Second, the figure is based on 1990 housing values, which do not reflect California's housing
table 4.4. Parental Education of Students Admitted to UC, Fall 1999

|  | All 45-to <br> 64-Year-Olds <br> in California, <br> March 1999 | Parents of Students <br> Admitted to UC <br> as Freshmen | Overrepresentation <br> Among UC Parents |
| :--- | :---: | :---: | :---: |
| Percentage with <br> High-School Diploma <br> Percentage with Four-Year <br> College Degree | $82.9 \%$ | $89.4 \%$ | $107.8 \%$ |

sources: University of California, Office of the President (1999); U.S. Bureau of the Census (2000a).
market in 1999, the year our per capita admissions data were collected. Since 1990 housing prices have risen meteorically in California, especially in urban areas (see Greenwich and Niedt 2001, 37-39). Although housing prices rose across the board, the increase was especially dramatic in areas that were already expensive. For this reason our use of 1990 data probably provides a conservative estimate of the true level of socioeconomic inequality in 1999 .

Socioeconomic inequalities appear most extreme in the case of parental education, as Figure 4.4 shows. ${ }^{11}$ Indeed, for the few schools that reported that at least $50 \%$ of their students' parents had graduate degrees, the per capita admissions were close to $50 \%$. Students from schools where the parents are well educated tend to do well in the competition for university admissions. This association suggests that individual students whose parents are highly educated are strongly advantaged, independent of the school context. Table 4.4 illustrates this point by comparing the parental education levels of all students admitted to UC for the fall of 1999 to the educational attainment of all Californians aged forty-five to sixty-four in March 1999. The freshman class admitted to UC appears more unrepresentative of the state at the higher level of educational attainment.

Which of these inequalities in access are greatest? One way to compare these different dimensions of unequal access is to summarize them with standardized correlation coefficients. We have done this separately for public and private schools. The results for public schools are presented in the first column of Table 4.5 .

These bivariate correlations for public high schools show that the percentage of graduates admitted to UC is substantially negatively correlated with the percentage of African Americans ( -.06 ) and Latinos ( -.40 ) in the student body, and positively correlated with the percentage of Asians (.44) and Anglos (.16). This
II. The pattern is similar for other SES variables in our database, including the median income of families with children in the school district and the percentage of students receiving free or reduced-price lunches.
table 4.5. Bivariate Correlations between Selected Characteristics of Public High Schools and Admissions to UC in Fall 1999 ${ }^{\text {a }}$

| Selected Characteristics | application and admissions |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Graduates Admitted ${ }^{\text {b }}$ | UC-Eligible Graduates | Graduates Applying | Applicants Admitted |
| Race and Ethnicity of Students |  |  |  |  |
| African American students (as percentage of all students) | -0.06 | -0.05 | -0.02 | -0.21 |
| Latino students (as percentage of all students) | -0.40 | -0.36 | -0.39 | -0.15 |
| Asian students (as percentage of all students) | 0.44 | 0.26 | 0.45 | 0.04 |
| Anglo students (as percentage of all students) | 0.16 | 0.22 | 0.14 | 0.20 |
| Socioeconomic Status |  |  |  |  |
| Students receiving subsidized meals (as percentage of all students) | -0.42 | -0.37 | -0.41 | -0.19 |
| District median housing value | 0.55 | 0.40 | 0.57 | 0.02 |
| Median income for families with children in district | 0.59 | 0.43 | 0.58 | 0.11 |
| Parents with graduate education (as percentage of all parents) | 0.82 | 0.58 | 0.82 | 0.16 |
| Parents with four-year degree only (as percentage of all parents) | 0.50 | 0.45 | 0.49 | 0.18 |
| Parents with some college, no degree (as percentage of all parents) | -0.38 | -0.18 | -0.39 | 0.06 |
| Parents with high school diploma only (as percentage of all parents) | -0.65 | -0.51 | -0.65 | -0.19 |
| School Factor |  |  |  |  |
| Suburban school district | 0.14 | 0.06 | 0.13 | 0.05 |
| Urban school district | -0.05 | -0.04 | -0.03 | -0.05 |
| Students enrolled in grades 9-12 | 0.02 | -0.07 | 0.03 | -0.04 |
| Students enrolled in district | 0.00 | 0.05 | 0.03 | -0.12 |
| Teachers with full credential (as percentage of all teachers) | 0.17 | 0.09 | 0.14 | 0.14 |

pattern is broadly characteristic of average differences across groups in academic performance, although we were surprised to find that the negative correlation for African Americans is closer to zero than is the correlation for Latinos. As we discuss below, this finding probably reflects at least in part the countervailing influence of UC outreach programs. Many of these programs, which encourage students to take UC-required courses and apply for admission, target low-performing schools, in which African Americans happen to be concentrated (Le-Nguyen 1999).

The correlation coefficients of per capita admissions with various measures of SES for public schools are generally larger than are the correlations with race and ethnicity. They range from -.42 for the percentage of students receiving reduced-price

| Selected Characteristics | application and admissions |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Graduates Admitted ${ }^{\text {b }}$ | UC-Eligible Graduates ${ }^{\text {c }}$ | Graduates Applying | Applicants Admitted |
| School Factor (continued) |  |  |  |  |
| Average years of teaching experience | 0.16 | 0.05 | 0.15 | 0.07 |
| Students per teacher | 0.00 | -0.11 | -0.01 | 0.03 |
| Students with limited English proficiency (as percentage of all students) | -0.22 | -0.27 | -0.21 | -0.10 |
| AP courses (as percentage of all courses offered) | 0.51 | 0.34 | 0.51 | 0.05 |
| UC-required courses (as percentage of all courses offered) | 0.43 | 0.36 | 0.43 | 0.12 |
| Score on Academic Performance Index ${ }^{\text {d }}$ | 0.68 | 0.56 | 0.67 | 0.24 |
| National Merit finalists | 0.63 | 0.35 | 0.60 | 0.12 |
| UC outreach school | -0.14 | -0.16 | -0.13 | -0.08 |
| Application and Admissions |  |  |  |  |
| Applicants admitted | 0.20 | 0.04 | 0.10 |  |
| Graduates applying | 0.99 | 0.64 |  |  |

sources: California State Department of Education; National Merit Scholarship Corporation; University of California, Office of the President; University of California Outreach Advisory Board; U.S. Bureau of the Census (see the Appendix for details).
${ }^{\text {a }}$ Correlations calculated for all four-year public high schools and K-12 schools in our database, except for alternative and opportunity schools, with at least ten graded secondary students $(\mathrm{N}=796)$.
${ }^{\mathrm{b}}$ The figures in this column refer to the correlations between selected characteristics of public high schools and their percentage of all graduates admitted to UC. Not all graduates apply to UC. The proportion of graduates admitted equals the proportion of graduates who apply times the proportion of those applicants who are admitted: thus, these correlations are affected by inequalities in rates of application, as well as by inequalities in the rates at which applications are admitted. Columns three and four of this table correlate school characteristics with, respectively, the rates at which graduates apply and the rates at which applicants are admitted.
${ }^{c}$ For the purposes of this table, "UC-eligible graduates" refers to the percentage of all graduates who fulfilled the Subject Requirement for eligibility.
${ }^{\text {d }}$ The Academic Performance Index (API) is computed annually by the state for all public schools. API scores for 1999 were based on student scores on the Stanford Achievement Test, Ninth Edition (SAT9).
meals, to .55 for the school district's median housing value, to .59 for the median income of families with children in the district, and finally to .82 for the percentage of students in the school whose parents have some graduate education. The last of these coefficients is even greater than the correlation of per capita admissions with average academic performance (as measured by the state's Academic Performance Index or the number of National Merit finalists). ${ }^{12}$ Indeed, a correlation of .82 implies that we can predict almost $70 \%$ of the variance in the percentage of graduates from
12. The Academic Index is computed annually by the state for all public schools based on student scores on a standardized test.

California public high schools who are admitted to UC using only the distribution of parents' educational attainment.

The correlation of per capita admissions with curricular variables is also relatively strong. The availability of AP courses correlates at .5I with per capita admissions. The availability of UC-required courses correlates at .43 with per capita admissions. Unsurprisingly, schools where the curriculum is tailored to college preparation tend to be among the best pathways to UC.

Finally, the correlations of per capita admissions with administrative variablessuch as the percentage of teachers who are fully credentialed or the average number of students per teacher-are generally lower than the correlations with race, ethnicity, and SES characteristics of the school population. These low correlations are consistent with the findings of the Coleman Report-and a great deal of subsequent educational research-that students' family background is more important to their future success than are the resources provided by the schools they attend (Sørensen and Morgan 2000). This does not imply, of course, that school resources are unimportant. ${ }^{13}$

How do these inequalities arise? The data shown in the second, third, and fourth columns of Table 4.5 allow us to draw some conclusions about the processes that produce these correlations. These columns break the college selection process into stages: first, graduates must take the classes required for UC eligibility; then, they must apply; and finally, applicants must be selected by the university admissions officers. Thus, by examining the association between sociodemographic characteristics of the student body on the one hand, and rates of course taking and application on the other, we can discover which of these stages give rise to the greatest inequalities.

The correlation coefficients reported in these columns suggest important conclusions about the impact of race and ethnicity. For Latinos, Asians, and Anglos, this impact is greatest in the earlier stages of the admissions process. That is, the racial and ethnic composition of the student body is associated with the percentage of graduates who are eligible for UC and with the percentage of graduates who apply to UC, but once students have taken the required classes and have applied, the racial and ethnic composition of the school has relatively little impact on admissions. Thus, the crucial process producing the association between race and ethnicity and per capita admissions is not the decision of admissions officers. The processes involved are, at the institutional level, the articulation of UC's eligibility guidelines with the courses offered by particular schools and, at the individual level, decisions about patterns of course taking and application to UC.

Schools that are predominantly African American are the exception to this pattern. These schools tend to have rates of course taking and UC application that are similar to the average, but rates of admission that are substantially lower. A likely interpreta-
13. As Richard Arum notes, the general consensus among educational researchers has recently shifted to the view that school resources do matter for individual academic outcomes (2000, 404). A recent study of California's schools by Julian Betts and co-authors concludes that the unequal resources of schools affect individual academic achievement (Betts et al. 2000).
tion of this finding is that UC's public high school outreach programs are successfully changing the course taking and application behavior of students in these schools. Although UC's outreach programs are not explicitly designed for specific racial and ethnic groups, they do target underperforming schools in areas of concentrated socioeconomic disadvantage (Le-Nguyen 1999). These are precisely the schools in which African American students tend to be most concentrated (Betts et al. 2000, 86-87).

The association between SES and the size of the UC pipeline is also driven by patterns of course taking and application. Relatively little SES inequality is added by the selection of applicants. Nevertheless, it appears that SES inequalities are cumulative. Students from low SES schools are on average less likely to take required classes, less likely to apply, and less likely to be admitted once they apply. Our data do not show whether this is actually true of the low-SES students within these schools, but other research has demonstrated that it is true of low-SES students in general (see, e.g., Cabrera and La Nasa 200I).

We find a similar pattern of correlations for private schools, as may be seen in Table 4.6. Here the correlations are considerably weaker, probably because the data, taken from the 1990 census and aggregated to the district level, are of poorer quality. We still find that parental education is the measure of SES that has the strongest correlation with per capita admissions. These "parental education" data do not actually refer to parents, but to all adult householders in the district over twenty-five years of age, and they lump together adults who have some graduate education with all other college graduates. Still, the percentage of graduates admitted to UC has a correlation of 30 with the percentage of householders in the top education category. The correlations are weaker for other SES measures: . 25 for the median housing value in the district and .17 for the median income of families with children.

In summary, we find that high schools with high SES rankings have higher rates of admission to UC. Our findings also show that schools with heavily African American and Latino student populations channel fewer students into UC. Moreover, these inequalities are cumulative: with a multiple regression analysis of the 674 public high schools that have no missing data, we can predict $80 \%$ of the variance in per capita admissions by including only variables that describe the racial and ethnic composition of the student body, dummy variables for urban and suburban location, total enrollment in the school and the district, and the SES measures we have described. ${ }^{14}$

What this means is that UC is disproportionately accessible to students from affluent schools in highly educated communities with largely Anglo and Asian student bodies. Tables 4.7 and 4.8 illustrate this point more intuitively for readers who have some familiarity with the social geography of Los Angeles or the San Francisco Bay Area. These tables list the top twenty-five public and private feeder schools in
14. We do not report the detailed results of this regression analysis here. Because the SES variables are so highly intercorrelated with one another and with race and ethnicity, and because the data are so highly aggregated, individual regression coefficients are uninformative about the relative magnitudes and causal dynamics of these inequalities.
table 4.6. Bivariate Correlations between Selected Characteristics of Private High Schools and Admissions to UC in Fall 1999 ${ }^{\text {a }}$

|  | Application And admissions |  |
| :--- | :--- | ---: | ---: |
| Selected Characteristics |  |  |

sources: California State Department of Education; National Merit Scholarship Corporation; University of California, Office of the President; U.S. Bureau of the Census (see the Appendix for details).
${ }^{\text {a }}$ Correlations calculated for all private schools in our database with at least ten graded secondary students ( $\mathrm{N}=273$ ).
${ }^{\mathrm{b}}$ All school characteristics in this table except "Students enrolled in grades 9-12," "National Merit finalists," "Applicants admitted," and "Graduates applying," refer to district-level measures.
${ }^{\text {c }}$ The figures in this column represent the correlations of the selected school characteristics with the percentage of graduates admitted to UC. Not all graduates apply to UC. A negative correlation coefficient may therefore mean that the school characteristic in question is negatively associated with the percentage of graduates who apply, or with the percentage of such applicants who are admitted, or with both. Columns two and three correlate school characteristics with, respectively, the percentage of graduates applying and the percentage of applicants admitted.

California, as measured by the percentage of their graduates who were admitted to UC as undergraduates for the fall of 1999 . We have excluded schools with fewer than thirty applicants. From Piedmont, to Palo Alto, to Palos Verdes Estates, the list reads like a roster of affluent and relatively Anglo communities.

Table 4.9 presents the other end of the distribution: the twenty-five lowest feeder schools among California's biggest public high schools. We have excluded schools with fewer than ioo seniors from this table in order to draw attention to the large schools that had no or almost no graduates admitted to UC for 1999. Washington High in Fresno and Centennial High in Compton top the list, with zero and one admission, respectively.
table 4.7. Top Twenty-five Public UC Feeder Schools, Fall $1999^{\text {a }}$

| All Graduates | Number Graduates Admitted to $U C$ | Percentage <br> Graduates Admitted to $U C$ | School | District | City |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 171 | 141 | 82.5\% | Whitney (Gretchen) High | ABC Unified | Cerritos |
| 118 | 81 | 68.6 | California Academy of Math \& Science | Long Beach Unified | Carson |
| 198 | 126 | 63.6 | Piedmont High | Piedmont City Unified | Piedmont |
| 295 | 171 | 58.0 | San Marino High | San Marino Unified | San Marino |
| 451 | 252 | 55.9 | Davis Senior High | Davis Joint Unified | Davis |
| 391 | 202 | 51.7 | Lynbrook High | Fremont Union High | San Jose |
| 627 | 322 | 51.4 | Lowell High | San Francisco Unified | San Francisco |
| 199 | 101 | 50.8 | Campolindo High | Acalanes Union High | Moraga |
| 303 | 152 | 50.2 | Palo Alto High | Palo Alto Unified | Palo Alto |
| 460 | 222 | 48.3 | Monta Vista High | Fremont Union High | Cupertino |
| 230 | 110 | 47.8 | Saratoga High | Los Gatos-Saratoga Joint Union High | Saratoga |
| 504 | 240 | 47.6 | University High | Irvine Unified | Irvine |
| 386 | 181 | 46.9 | La Jolla Senior High | San Diego City Unified | La Jolla |
| 799 | 370 | 46.3 | Arcadia High | Arcadia Unified | Arcadia |
| 341 | 157 | 46.0 | Gunn (Henry M.) High | Palo Alto Unified | Palo Alto |
| 280 | 127 | 45.4 | Miramonte High | Acalanes Union High | Orinda |
| 290 | 129 | 44.5 | Acalanes High | Acalanes Union High | Lafayette |
| 524 | 233 | 44.5 | Mission San Jose High | Fremont Unified | Fremont |
| 478 | 210 | 43.9 | Sunny Hills High | Fullerton Joint Union High | Fullerton |
| 513 | 225 | 43.9 | Torrey Pines High | San Dieguito Union High | San Diego |
| 684 | 292 | 42.7 | Palos Verdes Peninsula High | Palos Verdes Peninsula Unified | Rolling Hills Estates |
| 180 | 73 | 40.6 | Albany High | Albany City Unified | Albany |
| 306 | 123 | 40.2 | La Canada High | La Canada Unified | La Canada |
| 181 | 71 | 39.2 | Tamalpais High | Tamalpais Union High | Mill Valley |
| 166 | 65 | 39.2 | Los Angeles Ctr. for Enriched Studies | Los Angeles Unified | Los Angeles |

sources: University of California, Office of the President (1995, 1999).
${ }^{\text {a }}$ Table excludes schools with fewer than thirty applicants to UC for the fall 1999 semester.

## A FUTURE OF UNEQUAL ACCESS?

We have documented that there are substantial inequalities among high schools in the access they provide to UC, and that these inequalities are related to race, ethnicity, and SES. The existence of such inequalities is not surprising, but their magnitude-
table 4.8. Top Twenty-five Private UC Feeder Schools, Fall $1999^{\text {a }}$

| All <br> Graduates | Number Graduates Admitted to UC | Percentage Graduates Admitted to UC | School | District | City |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 92 | 79 | 85.9\% | Lick-Wilmerding High | San Francisco Unified | San Francisco |
| 75 | 63 | 84.0 | College Preparatory | Oakland Unified | Oakland |
| 80 | 67 | 83.8 | Head-Royce | Oakland Unified | Oakland |
| 96 | 78 | 81.3 | San Francisco University High | San Francisco Unified | San Francisco |
| 57 | 42 | 73.7 | Urban School Of San Francisco | San Francisco Unified | San Francisco |
| 262 | 190 | 72.5 | Harvard-Westlake | Los Angeles Unified | North Hollywood |
| 50 | 36 | 72.0 | Windward | Los Angeles Unified | Los Angeles |
| 82 | 59 | 72.0 | Marin Academy | San Rafael City High | San Rafael |
| 54 | 38 | 70.4 | Westridge | Pasadena Unified | Pasadena |
| 86 | 59 | 68.6 | Marymount High ${ }^{\text {b }}$ | Los Angeles Unified | Los Angeles |
| 76 | 52 | 68.4 | Marlborough | Los Angeles Unified | Los Angeles |
| 91 | 62 | 68.1 | Flintridge Preparatory | La Canada Unified | La Canada |
| 34 | 23 | 67.6 | Viewpoint | Las Virgenes Unified | Calabasas |
| 58 | 39 | 67.2 | Chadwick | Palos Verdes Peninsula Unified | Palos Verdes Estates |
| 78 | 52 | 66.7 | The Branson School | Tamalpais Union High | Ross |
| 369 | 240 | 65.0 | St. Ignatius College Preparatory ${ }^{\text {b }}$ | San Francisco Unified | San Francisco |
| 127 | 82 | 64.6 | Menlo | Sequoia Union High | Atherton |
| 271 | 174 | 64.2 | Loyola High School of L.A. ${ }^{\text {b }}$ | Los Angeles Unified | Los Angeles |
| 64 | 41 | 64.1 | Crystal Springs Uplands | San Mateo Union High | Hillsborough |
| 89 | 56 | 62.9 | Polytechnic | Pasadena Unified | Pasadena |
| 73 | 45 | 61.6 | Oakwood Secondary | Los Angeles Unified | North Hollywood |
| 77 | 47 | 61.0 | La Jolla Country Day | San Diego City Unified | La Jolla |
| 60 | 34 | 56.7 | Cate | Carpinteria Unified | Carpinteria |
| 53 | 30 | 56.6 | Castilleja | Palo Alto Unified | Palo Alto |
| 255 | 144 | 56.5 | Bishop O'Dowd High ${ }^{\text {b }}$ | Oakland Unified | Oakland |

sources: University of California, Office of the President (1995, 1999).
${ }^{a}$ Table excludes schools with fewer than 30 applicants to UC for the fall 1999 semester.
${ }^{\mathrm{b}}$ Catholic school.
table 4.9. Bottom Twenty-five Public UC Feeder Schools, Fall $1999^{a}$

| All Graduates | Number Graduates Admitted to UC | Percentage Graduates Admitted to $U C$ | School | District | City |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 255 | 0 | 0.0\% | Washington High | Washington Union High | Fresno |
| 227 | 1 | 0.4 | Centennial High | Compton Unified | Compton |
| 196 | 1 | 0.5 | Mesa Verde High | San Juan Unified | Citrus Heights |
| 186 | 1 | 0.5 | Escondido Charter High | Escondido Union High | Escondido |
| 140 | 1 | 0.7 | Rosamond High | Southern Kern Unified | Rosamond |
| 209 | 2 | 1.0 | West Valley High | Anderson Union High | Cottonwood |
| 201 | 2 | 1.0 | Lindhurst High | Marysville Joint Unified | Olivehurst |
| 311 | 4 | 1.3 | Silverado High | Victor Valley Union High | Victorville |
| 296 | 4 | 1.4 | Alisal High | Salinas Union High | Salinas |
| 388 | 6 | 1.5 | Arvin High | Kern Union High | Arvin |
| 249 | 4 | 1.6 | Sierra High | Manteca Unified | Manteca |
| 184 | 3 | 1.6 | Duncan (Erma) Polytechnical High | Fresno Unified | Fresno |
| 235 | 4 | 1.7 | Compton High | Compton Unified | Compton |
| 397 | 7 | 1.8 | Ridgeview High | Kern Union High | Bakersfield |
| 111 | 2 | 1.8 | School of the Arts (High) | San Francisco Unified | San Francisco |
| 109 | 2 | 1.8 | Willows High | Willows Unified | Willows |
| 327 | 6 | 1.8 | Dominguez High | Compton Unified | Compton |
| 103 | 2 | 1.9 | Mojave Senior High | Mojave Unified | Mojave |
| 100 | 2 | 2.0 | Lower Lake High | Konocti Unified | Lower Lake |
| 250 | 5 | 2.0 | Anderson High | Anderson Union High | Anderson |
| 139 | 3 | 2.2 | Kern Valley High | Kern Union High | Lake Isabella |
| 366 | 8 | 2.2 | North High | Kern Union High | Bakersfield |
| 133 | 3 | 2.3 | Imperial High | Imperial Unified | Imperial |
| 388 | 9 | 2.3 | Foothill High | Kern Union High | Bakersfield |
| 215 | 5 | 2.3 | Azusa High | Azusa Unified | Azusa |

sources: University of California, Office of the President (1995, 1999).
${ }^{\text {a }}$ Table excludes schools with fewer than ioo seniors.
including rates of admission that are over five times greater in high-SES schools than in low-SES schools-is a cause for serious concern.

The administrators and the Regents of UC are aware that such inequalities exist. UC's admissions policies have changed since our data were collected, and some of these changes are probably best understood as attempts to counteract the very inequalities we describe. One such innovation is the ELC program, which grants UC eligibility to any California high school student in the top 4 percent of his or her
class. The program is designed specifically to reduce inequalities across high schools in the percentage of students who are UC eligible. It has received a great deal of attention since the Bush administration, in a brief before the U.S. Supreme Court, described a similar plan operated by the University of Texas as an alternative to affirmative action (Olson et al. 2003, 17). In practice, however, the new eligibility standard alone does little to reduce inequalities of race, ethnicity, or SES in rates of UC eligibility or admission, for two reasons. First, the vast majority of students who are eligible for UC under the ELC program would have been eligible in any case (Geiser 1998; University of California, Office of the President 2002b, 4). Second, although the ELC program may slightly increase the size of the UC pipeline for some schools that are at the low end of the distribution, it will do little to reduce the vast inequalities between schools at the middle and the top. Moreover, as we have shown, the greatest inequalities arise between a small group of elite schools and the rest. Thus, the ELC program will do little to remedy the total inequality among the state's secondary schools in the access that they provide to UC. ${ }^{15}$

Another recent innovation that may have some effect is UC's policy of comprehensive review. This policy was designed in part to allow UC's undergraduate campuses to evaluate applicants in comparison to their peers in the same high school, which helps equalize rates of admission across schools (Board of Admissions 2002, 4). Comprehensive review has apparently had some success in increasing rates of admission from poorly performing schools (Board of Admissions 2002, 17). The weight UC gives such contextual evaluation, however, is still too little to greatly reduce the effect of racial, ethnic, and socioeconomic inequalities on admission.

The future of both policies is uncertain. Prior to the U.S. Supreme Court's June 2003 rulings on affirmative action at the University of Michigan, it appeared that conservative groups were preparing to challenge both the ELC program and comprehensive review in court. ${ }^{16}$ The Center for Individual Rights, the law firm that represented the plaintiffs in the Michigan case, has asserted that programs like the ELC are unconstitutional because they are designed to achieve racially diverse freshman classes (Levey 2002). Another law firm, the Pacific Legal Foundation, has suggested that comprehensive review may also be unconstitutional, and it has begun actively soliciting plaintiffs to sue UC (see Stirling 2002). At this writing, the implications of the Court's rulings for these potential legal challenges are still unclear.
15. One qualification to this conclusion is in order. We have pointed out that the new eligibility standard itself has had and will have little effect. By advertising the ELC program in high schools throughout California, however, the UC may have encouraged some students to apply who otherwise would not have done so. In particular, the results of a simulation conducted by UC staff suggest that applications from Latinos, and to a lesser degree African Americans, might have increased more slowly from 2000 to 2001 if the university had not undertaken this marketing effort (University of California, Office of the President 2002b, I4). This effort nevertheless had relatively little impact on the overall level of inequality among schools. Many of the new applications came from schools with historically high rates of admission to UC (2002b, 3). 16. Gratz v. Bollinger 123 S. Ct. 241 II (2003); and Grutter v. Bollinger 123 S. Ct. 2325 (2003).

The threat to even such modest egalitarian measures is troubling. At present, relatively few students from schools with a low SES and schools where underrepresented racial and ethnic groups predominate find their way into UC. For those students who are admitted, a UC education is among the most reliable pathways to a good job. Preserving and expanding this pathway is crucial to the public mission of the university. If even this limited pathway is closed, increasing numbers of Californians may find themselves trapped at the bottom of the state's two-tier economy.

## REFERENCES

Alexander, Karl L., and Bruce K. Eckland. 1977. "High School Context and College Selectivity: Institutional Constraints in Educational Stratification." Social Forces 56 ( I ): 166-188.
Arum, Richard. 2000. "Schools and Communities: Ecological and Institutional Dimensions." Annual Review of Sociology 26: 395-418.
Atkinson, Richard. 2001. "Achievement versus Aptitude Tests in College Admissions." Issues in Science and Technology 18 (2): 31-36.
. 2002. Statement of UC President Richard C. Atkinson on Vote by College Board Trustees to Revise the SAT I. Unpaged electronic document. Retrieved 22 April 2003 from http:// www.ucop.edu/news/sat/Atkinson/june27.htm.
Attewell, Paul. 200I. "The Winner-Take-All High School: Organizational Adaptations to Educational Stratification." Sociology of Education 74 (4): 267-295.
Baker, Therese L., and William Velez. 1996. "Access to and Opportunity in Postsecondary Education in the United States: A Review." Sociology of Education 69 (supplemental issue): 82-1or.
Behrman, Jere R., Mark R. Rosenzweig, and Paul Taubman. 1996. "College Choice and Wages: Estimates Using Data on Female Twins." Review of Economics and Statistics 78 (4): 672-685.
Bernstein, Jared, Elizabeth C. McNichol, Lawrence Mishel, and Robert Zahradnik. 2000. Pulling Apart: A State-by-State Analysis of Income Trends. Washington, D.C.: Center on Budget and Policy Priorities and the Economic Policy Institute.
Betts, Julian, and Darlene Morell. 1998. "The Determinants of Undergraduate Grade Point Average: The Relative Importance of Family Background, High School Resources, and Peer Group Effects." Unpublished paper, University of California at San Diego.
Betts, Julian, Kim S. Rueben, and Anne Dannenberg. 2000. Equal Resources, Equal Outcomes? The Distribution of School Resources and Student Achievement in California. San Francisco: Public Policy Institute of California.
Board of Admissions and Relations with Schools. 2002. First-Year Implementation of Comprehensive Review in Freshman Admissions: A Progress Report from the Board of Admissions and Relations with Schools. Oakland: University of California Office of the President.
Bowen, William G., and Derek Bok. 1998. The Shape of the River: Long-Term Consequences of Considering Race in College and University Admissions. Princeton: Princeton University Press.
Brint, Steven. 2003. "Few Remaining Dreams: Community Colleges since 1985." Annals of the American Academy of Political and Social Sciences 586: 16-37.
Brint, Steven, and Jerome Karabel. 1989. The Diverted Dream: Community Colleges and the Promise of Educational Opportunity in America, 1900-1985. New York: Oxford University Press.
Cabrera, Alberto F., and Steven M. La Nasa. 200I. "On the Path to College: Three Critical Tasks Facing America's Disadvantaged." Research in Higher Education 42 (2): 119-I49.

California Postsecondary Education Commission. 2003a. Total Enrollment by Segment: California Community Colleges. Unpaged electronic document. Retrieved 29 April 2003 from http://www.cpec.ca.gov/OnLineData/GenReport.ASP.

2003b. Transfer Pathways: Full-Year Transfers-1989/90 to 2001/02. Unpaged electronic document. Retrieved 29 April 2003 from http://www.cpec.ca.gov/OnLineData/ TransferTotals.asp?A.
California State Department of Education. 1960. A Master Plan for Higher Education in California: 1960-1975. Sacramento: California State Department of Education. Retrieved 29 April 2003 from www.ucop.edu/acadinit/mastplan/MasterPlanı960.pdf.
——. 2003a. Numbers of I2th Grade Graduates in California Public Schools Completing All Courses Required for U.C. andlor C.S.U. Entrance by Gender and by Ethnic Group for the Year 1994-95. Unpaged electronic document. Retrieved 23 June 2003 from http://datar. cde.ca.gov/dataquest/stgradnum.asp?cChoice $=$ StGrdEth\&cYear $=1994-95 \& c L e v e l=$ State\&ctopic $=$ Graduates\&myTimeFrame $=$ S\&submitı $=$ Submit.
——. 2003b. Statewide Enrollment in California Public Schools by Grade, 1994-95. Unpaged electronic document. Retrieved 24 June 2003 from http://datar.cde.ca.gov/dataquest/ StateEnr.asp?cChoice $=$ StEnrGrd\&cYear $=1994-95 \& c L e v e l=$ State\&ctopic $=$ Enrollment $\&$ myTimeFrame $=$ S\&submitı $=$ Submit.
Carroll, David, and Jean Ross. 2003. Boom, Bust, and Beyond: The State of Working California. Sacramento: California Budget Project.
Chávez, Lydia. 1998. The Color Bind: California's Battle to End Affirmative Action. Berkeley: University of California Press.
Coleman, James S., Ernest Q. Campbell, Carol J. Hobson, James McPartland, Alexander M. Mood, Frederic D. Weinfeld, and Robert L. York. 1966. Equality of Educational Opportunity. Washington, D.C.: U.S. Government Printing Office.
College Board. 2002a. 2002 College-Bound Seniors: A Profile of SAT Test Takers. Paged electronic document. Retrieved 29 April 2003 from http://www.collegeboard.com/prod_downloads/ about/news_info/cbsenior/yr2002/pdf/2002_TOTAL_GROUP_ REPORT.pdf.
——. 2002b. 2002 College Bound Seniors: California Report. Paged electronic document. Retrieved 29 April 2003 from http://www.collegeboard.com/prod_downloads/about/ news_info/cbsenior/yr2002/pdf/2002_CALIFORNIA.pdf.
Conley, Dalton. 1999. Being Black, Living in the Red: Race, Wealth, and Social Policy in America. Berkeley: University of California Press.
Cookson, Peter W., and Caroline H. Persell. 1985. Preparing for Power: America's Elite Boarding Schools. New York: Basic Books.
Dale, Stacey Berg, and Alan B. Krueger. 2000. "Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables." Quarterly Journal of Economics II7 (4): 1491-1528.
Davies, Scott, and Neil Guppy. 1997. "Fields of Study, College Selectivity, and Student Inequalities in Higher Education." Social Forces 75 (4): 1417-I438.
DiPrete, Thomas A., and Jerry D. Forristal. 1994. "Multilevel Models: Methods and Substance." Annual Review of Sociology 20: 331-357.
Dougherty, Kevin. 1987. "The Effects of Community Colleges: Aid or Hindrance to Socioeconomic Attainment?" Sociology of Education 60 (2): 86-103.
Douglass, John Aubrey. 2001. "Anatomy of Conflict: The Making and Unmaking of Affirmative Action at the University of California." In Color Lines: Affirnative Action, Immigration, and Civil Rights Options for America, edited by John David Skrentny. Chicago: University of Chicago Press.

Falsey, Barbara, and Barbara Heyns. 1984. "The College Channel: Private and Public Schools Reconsidered." Sociology of Education 57 (2): III-I22.
Geiser, Saul. 1998. Redefining UC's Eligibility Pool to Include a Percentage of Students from Each High School: Summary of Simulation Results. Oakland: University of California Office of the President.
Greenwich, Howard, and Christopher Niedt. 200ı. Decade of Divide: Working, Wages, and Inequality in the East Bay. Oakland: East Bay Alliance for a Sustainable Economy.
Hearn, James C. 1991. "Academic and Nonacademic Influences on the College Destinations of 198o High School Graduates." Sociology of Education 64 (3): 158-171.
Hilmer, Michael J. 2000. "Does the Return to University Quality Differ for Transfer Students and Direct Attendees?" Economics of Education Review 19: 47-61.
Hoxby, Caroline M. 2000. "The Return to Attending a More Selective College: 1960 to the Present." Unpublished paper. Department of Economics, Harvard University.
Hurtado, Sylvia, Karen Kurotsuchi Inkelas, Charlotte Briggs, and Byung-Shik Rhee. 1997. "Differences in College Access and Choice among Racial/Ethnic Groups: Identifying Continuing Barriers." Research in Higher Education 38 (I): 43-75.
Iceland, John, Daniel H. Weinberg, and Erika Steinmetz. 2002. Racial and Ethnic Residential Segregation in the United States: 1980-2000. Washington, D.C.: U.S. Bureau of the Census.
Ishida, Hiroshi, Seymour Spilerman, and Kuo-Hsien Su. 1997. "Educational Credentials and Promotion Chances in Japanese and American Organizations." American Sociological Review 62 (6): 866-882.
James, Estelle, Nabeel Alsalam, Joseph C. Conaty, and Duc-Le To. 1989. "College Quality and Future Earnings: Where Should You Send Your Child to College?" American Economic Review 79: 247-252
Jencks, Christopher, and Meredith Phillips. 1998. "The Black-White Test Score Gap: An Introduction." In The Black-White Test Score Gap, edited by Christopher Jencks and Meredith Phillips. Washington, D.C.: Brookings Institution Press.
Joint Committee on Higher Education. 1969. The Challenge of Achievement: A Report on Public and Private Higher Education in California. Sacramento: California State Legislature.
Jones, Richard C., and Albert Kauffman. 1994. "Accessibility to Comprehensive Higher Education in Texas." Social Science Journal 3I (3): 263-283.
Kane, Thomas J. 1998. "Racial and Ethnic Preferences in College Admissions." In The BlackWhite Test Score Gap, edited by Christopher Jencks and Meredith Phillipson. Washington, D.C.: Brookings Institution Press.

Karabel, Jerome. 1999. "The Rise and Fall of Affirmative Action at the University of California." Journal of Blacks in Higher Education 25: 109-112.
Karabel, Jerome, and Katherine McClelland. 1987. "Occupational Advantage and the Impact of College Rank on Labor Market Outcomes." Sociological Inquiry 57 (4): 323-347.
Karen, David. 1991. "The Politics of Class, Race and Gender: Access to Higher Education in the United States, 1960-1986." American Journal of Education 99: 208-237 - 2002. "Changes in Access to Higher Education in the United States: 1980-1992." Sociology of Education 75 (3): 190-210.
Kempner, Ken, and Mary Kinnick. 1990. "Catching the Window of Opportunity: Being on Time for Higher Education." Journal of Higher Education 6I (5): 535-547.
Laird, Bob. 1997. Interview by Jerome Karabel. Berkeley, Calif., 4 November.
Lemann, Nicholas. 1999. The Big Test: The Secret History of the American Meritocracy. New York: Farrar, Straus and Giroux.

Le-Nguyen, Thi. 1999. "Excellence and Diversity at the University of California: Outreach and Recruitment in a Post-affirmative Action Era." Unpublished MA thesis. Goldman School of Public Policy, University of California, Berkeley.
Levey, Curt A. 2002. "Texas's io Percent Solution Isn't One." The Washington Post, i2 November, p. A24
Lillard, Dean, and Jennifer Gerner. 1999. "Getting to the Ivy League: How Family Composition Affects College Choice." Journal of Higher Education 70 (6): 706-730.
Lucas, Samuel R. 200I. "Effectively Maintained Inequality: Education Transitions, Track Mobility, and Social Background Effects." American Journal of Sociology 106 (6): 1642-1690.
McCall, Leslie. 2000. "Gender and the New Inequality: Explaining the College/Non-college Wage Gap." American Sociological Review 65 (2): 234-255.
Milkman, Ruth, and Rachel E. Dwyer. 2002. "Growing Apart: The 'New Economy' and Job Polarization in California, 1992-2000." The State of California Labor 1: 3-31.
Miller, L. Scott. 1995. An American Imperative: Accelerating Minority Educational Advancement. New Haven: Yale University Press.
Monks, James. 2000. "The Returns to Individual and College Characteristics: Evidence from the National Longitudinal Survey of Youth." Economics of Education Review 19: 279-289.
Morris, Martina, and Bruce Western. 1999. "Inequality in Earnings at the Close of the Twentieth Century." Annual Review of Sociology 25: 623-657.
National Merit Scholarship Corporation. 1999. Annual Report. Evanston, Ill.: National Merit Scholarship Corporation.
Olson, Theodore, Brian W. Jones, Ralph F. Boyd Jr., Paul D. Clement, and David B. Salmons. 2003. Jennifer Gratz and Patrick Hamacher, Petitioners, v. Lee Bollinger, et al.: Brief for the United States as Amicus curiae Supporting Petitioner. Washington, D.C.: Office of the Solicitor General.
Ong, Paul M., and Michela Zonta. 2001. "Trends in Earnings Inequality." The State of California Labor I: 39-60.
Paulsen, Michael B. 1998. "Recent Research on the Economics of Attending College: Returns on Investment and Responsiveness to Price." Research in Higher Education 39 (4): 471-487
Perna, Laura. 2000. "Differences in the Decision to Attend College among African Americans, Hispanics, and Whites." Journal of Higher Education 71 (2): 117-141.
Persell, Caroline H., Sophia Catsambis, and Peter W. Cookson Jr. 1992a. "Differential Asset Conversion: Class and Gendered Pathways to Selective Colleges." Sociology of Education 65 (3): 208-225.
_- 1992b. "Family Background, School Type, and College Attendance: A Conjoint System of Cultural Capital Transmission." Journal of Research on Adolescence 2 (I): I-23.
Reed, Deborah. 1999. California's Rising Income Inequality: Causes and Concerns. San Francisco: Public Policy Institute of California.
Reed, Deborah, Melissa Glenn Haber, and Laura Mameesh. 1997. The Distribution of Income in California. San Francisco: Public Policy Institute of California.
Schrag, Peter. 1999. Paradise Lost: California's Experience, America's Future. Berkeley: University of California Press.
Slater, Robert Bruce. 1995-96. "Ranking the States by Black-White SAT Scoring Gaps." Journal of Blacks in Higher Education 10: 71-74.
Sørensen, Aage, and David Morgan. 2000. "School Effects: Theoretical and Methodological Issues." In Handbook of the Sociology of Education, edited by Maureen T. Hallinan. New York: Kluwer Academic/Plenum Publishers.

Stirling, M. David. 2002. UC Must Strip Veil of Mystery from Its New Admissions Process. Unpaged electronic document. Retrieved i February 2003 from http:www.pacificlegal. org/view_OpEdDetail.asp?iID $=35$.
University of California, Office of the President. 1995. Applicant data file. Unpublished electronic data set provided to authors by special arrangement.
. 1999. Applicant data file. Unpublished electronic data set provided to authors by special arrangement.
_. 2002a. Community College Transfers Increase at UC for Fourth Straight Year. Unpaged electronic document. Retrieved 29 April 2003 from http://www.universityof california.edu/admissions/transferpress.html.

2002b. Eligibility in the Local Context Program Evaluation Report: Prepared for May 2002 Regents Meeting. Oakland: University of California Office of the President.
University of California, Outreach Advisory Board. 1999. California High Schools Served by Systemwide Outreach Programs. Unpaged electronic document. Retrieved is June 2000 from http://www.ucop.edu/outreach/OR_oab_mıifig3.html.
U.S. Bureau of the Census. 1999. Projections of the Resident Population by Race, Hispanic Origin, and Nativity: Middle Series, 2050 to 2070. Population Projections, Series NP-T5-G. Washington DC: U.S. Bureau of the Census.
——. 200I. "Table 5: Percent of Population by Race and Hispanic or Latino Origin, for States, Puerto Rico, and Places of ioo,000 or More Population." In Census 2000 PHC-T-6: Population by Race and Hispanic or Latino Origin for the United States, Regions, Divisions, States, Puerto Rico, and Places of 100,000 or More Population. Unpaged electronic document. Retrieved 29 April 2003 from http://www.census.gov/population/cen2000/phc-t6/ tabos.txt.
. 2000a. Educational Attainment in the United States: March 1999. Series P20-528. Washington, D.C.: U.S. Bureau of the Census.
——. 2000b. Population Estimates for States by Race and Hispanic Origin. Series ST-99-28. Unpaged electronic document. Retrieved 23 June 2003 from http//eire.census.gov/popest/ archives/state/srh/srh95.txt.
Velez, William. 1985. "Finishing College: The Effects of College Type." Sociology of Education 58: 191-200.

## APPENDIX

Our data come primarily from UCOP and the California Department of Education; they are supplemented with 1990 census data from the National Center for Education Statistics (NCES) that are aggregated at the district level. UCOP provided data on all individuals who applied to UC for the fall 1999 semester. This information includes the five-digit Admissions Testing Program (ATP) code for the high school and another code indicating whether the applicant was from a California public or private high school, a community college, or an out-of-state institution. We aggregated these data by ATP code. The Department of Education provided aggregate data on four-year high schools and K-I2 schools from the 1998-99 school year. These data are indexed by a fourteen-digit CDS code identifying the county, district, and school. Five digits of the CDS code identify the district. This portion of the code is also used to identify districts in the NCES data.

We matched CDS codes to ATP codes using a file provided by UCOP. Where UCOP data
provided insufficient information to make a match, CDS codes were assigned to records on the basis of a name and city-level location match for public schools, and a name and countylevel location match for private schools. Following this operation, and after correcting some errors in the identification of schools as public or private in the UCOP data, we were able to match the state and federal government data to $96.0 \%$ of California public high schools and $79.0 \%$ of California private high schools listed in the UCOP data. Some proportion of the unmatched schools presumably reflects irregular reporting to the Department of Education by some private schools.

For the purposes of this paper, we excluded all schools with fewer than ten students enrolled in grades 9 through I . We also excluded all schools listed by the California Department of Education that we were unable to match to UCOP data. This exclusion may bias the overall per capita admissions upward, since excluded schools are likely to be those from which no one has applied to UC recently enough to be included in UCOP's ATP-CDS code matching file. The excluded schools include 83 public schools and 628 private schools.

The excluded public schools are relatively small (the median enrollment in grades 9 through I 2 is 247 for the excluded public schools, compared to 1,796 for the included public schools) and rural ( $63 \%$ were located in rural areas, compared to $12 \%$ of the included public schools). Their SES is comparatively low, and they have slightly fewer African American and Latino students on average. Thus, we suspect that their exclusion may bias our findings about the association between admissions and high-SES schools downward (toward zero) and may bias our findings about the association between admissions and race slightly upward.

Most of the private schools that were excluded are very small religious schools (the median enrollment in grades 9 through 12 is 25 ). We suspect that many of the excluded private schools are not currently operating. Of the others, some are cooperatives formed by homeschooling parents, and some are analogous to the "alternative" and "opportunity" schools in the public sector, which offer alternatives to standard academic curricula in traditional settings. We supplemented the combined database with data on high school participation in UC's Early Academic Outreach Program that we obtained from the University of California Outreach Advisory Board (1999) and data on the number of National Merit finalists obtained from the National Merit Scholarship Corporation (1999).

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[^0]:    9. For a detailed description of the data set, see the appendix to this essay.
[^1]:    sources: California State Department of Education; National Merit Scholarship Corporation; University of California, Office of the President; University of California Outreach Advisory
    Board; U.S. Bureau of the Census (see the Appendix for details).
    ${ }^{\text {a }}$ Public high schools include four-year public high schools and K-I2 schools, except for alternative and opportunity schools. Private high schools include all private schools with graded secondary students. Public and private schools with fewer than ten graded secondary students are excluded from the analysis, as are schools from which no graduates applied to UC for the fall of 1999.
    ${ }^{\mathrm{b}}$ Some data were not available for private schools.
    ${ }^{\text {c }}$ Percentages for students are proportions of all students.
    d"UC-eligible graduates" for the purposes of this table refers to all graduates who fulfilled the Subject Requirement for eligibility.
    Figures reported for public schools refer to parents of children enrolled in the school; figures reported for private schools and all schools combined refer to 1990 census data on the percentage
    of householders twenty-five years of age or older in the school district.
    $\mathrm{I}=$ school participates in Early Academic Outreach Program; $\mathrm{O}=$ school does not participate. 2. The total number of students admitted to UC as freshmen for the fall 1999 semester was 49,764 . of-state schools; 164 (about $0.3 \%$ ) were from California schools excluded from our database because of their size or institutional type; and 986 (about $2 \%$ ) were from schools that are apparently in California but that we were unable to match to institutional data from the California Department of Education.

