

**College Admission Policies and the Educational Pipeline:  
Implications for Medical and Health Professions**

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## ABSTRACT

Several recent state government decisions banning use of race-sensitive criteria in college admission decisions pose a challenging dilemma for higher education because ethno-racial diversity of the school-age population has increased dramatically since 1960 and persisting race and ethnic inequities in high school attainment restrict the pool of students admissible to colleges and universities. In response, several states have adopted percent plans as a strategy to maintain the ethno-racial diversity of their competitive campuses. The success of these alternative plans has important implications for the future diversity of health and medical professions because the pool of students for advanced degree programs in health and medical occupations depends on the composition of college graduates.

This paper reviews the early evidence on the success of the percent plans in Texas and California, two states that eliminated race-sensitive admissions in 1996. Although both states have implemented percent plans that guarantee admission to the Top 10 and 4 percent of all graduating seniors, respectively, the Texas plan was implemented in 1997 while California did not implement the new admission guidelines until 2000. For the short run, these two states provide a natural experiment to assess the consequences of eliminating affirmative action programs with (Texas) and without (California) an alternative strategy to maintain ethno-racial diversity. Representation of black and Latino students at the two flagship California campuses declined precipitously following the implementation of Proposition 209, whereas the Texas flagship campuses did not experience comparable declines in the enrollment of under-represented groups. Percent plans can be partially effective in maintaining ethno-racial diversity of college campuses because high levels of residential segregation ensure minority student representation among the top decile of graduating seniors. The comparison of California and Texas flagship campuses underscores the necessity of developing innovative strategies to ensure a diverse student pipeline into higher education.

To motivate the comparison of the California and Texas percent plans, I provide a short overview of changes in the demographic composition of the school-age population since 1950, followed by a thumbnail sketch of trends in minority educational attainment and differential participation in higher education. A selective overview of recent legal challenges to “affirmative action” policies reveals the nation-wide potential for restricting college access to under-represented minority groups. The conclusion discusses the long-term prospects of percent plans in the context of a highly segregated society.

## **College Admission Policies and the Educational Pipeline: Implications for Medical and Health Professions**

### **Introduction**

Higher education faces a new dilemma in its quest to achieve a diverse student body. On the one hand, rapid growth of minority college-age youth increases the base from which to draw talented students and further expand educational opportunity for historically excluded groups. On the other hand, states with large shares of black, Hispanic, Asian and Native American youth have led the charge to eliminate race-sensitive college admission policies adopted during the 1960s and upheld by the Supreme Court in the well-publicized suit against the University of California.<sup>1</sup> In reaching an opinion, Justice Powell reasoned that “The achievement of a diverse student body ... clearly is a constitutionally permissible goal for an institution of higher education.” Justice Blackman was even more forceful about the need for race-sensitive admission criteria in asserting that, “In order to get beyond racism, we must first take race into account.” Since 1978 the Bakke ruling has been used to support policies at selective colleges and universities that consider race or national origin in admission decisions until the mid-1990s. Beginning in 1996 several states either banned or dismantled their affirmative action policies, and several others are reconsidering the treatment of race and national origin in their admission criteria to public colleges and universities.<sup>2</sup>

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<sup>1</sup> Regents of the University of California v. Bakke, 438 U.S. 265 (1978).

<sup>2</sup> Although most discussions of race-sensitive admission policies use the term affirmative action, the lack of coherent definition and implementation across campuses renders it almost useless from an analytical standpoint. However, in keeping with the current discussion, my use of the term affirmative action refers to myriad policies that permit consideration of race as one of many factors used in college admission decisions.

In hindsight, the affirmative action backlash in college admissions can be traced to the confluence of two master trends beginning in the mid-1970s, namely rising wealth and income inequality and rapid ethno-racial diversification of the school-age population (Tienda, 1999; Danziger and Gottschalk, 1995; Levy, 1998). Before 1950, nonwhites comprised barely 14 percent of the college-age population and this share rose only two percentage points during the fifties and sixties (Tienda, Lloyd and Zajacova, 2000).<sup>3</sup> Owing partly to the increasing volume of immigration after 1970, partly to higher fertility of minority and especially recent immigrant women, and partly to improved methods used to enumerate minority groups, the diversification of the college-age population accelerated during the seventies. By 1980, combined, blacks, Hispanics, Asians and Native Americans comprised almost one-fourth of the college-age population. A decade later the minority share of college-age youth climbed to 30 percent and an additional 3 percentage points by the year 2000 (Tienda, Lloyd and Zajacova, 2000). During the last half-century, Hispanics and Asians accounted for the lion's share of the minority population growth, rising from less than two percent combined, to 15 and 4 percent, respectively. The black share of college-age youth rose only slightly over the same period, from approximately 12 percent in 1950 to 15 percent in 2000.

That changes in the ethno-racial composition of the college-age population disproportionately affect a few large states, notably the primary immigrant-receiving states, helps understand the origin of recent initiatives to eliminate race-sensitive college admission policies. California, Texas, and Florida have witnessed tremendous absolute and relative growth in their minority populations largely due to immigration. The 2000 census reveals that blacks, Hispanics, Asians and Native Americans combined account

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<sup>3</sup> For purposes of this discussion we define the college-age population as persons ages 19-24.

for slightly over half of California's total population, and are decisive majorities in many counties and cities throughout the state. Nearly half (45 percent) of Texans self-identified as minority in the most recent census, and approximately one in three New York, New Jersey, and Florida residents did so (Tienda, Lloyd and Zajacova, 2000). Given the profound demographic changes experienced by California and Texas since 1970, it is hardly a coincidence that the charge to end affirmative action in college admissions originated in these states.<sup>4</sup>

These demographic trends acquire profound social (and now political) content when mapped against higher income and wealth inequality that favored whites and Asians over blacks, Hispanics and Native Americans in recent decades (Levy, 1998; Danziger and Gottschalk, 1995). Moreover, since 1980, the beneficiaries of growing inequality intensified their competition for places at selective four-year colleges and universities (Reich, 2000). As social and political commitment to affirmative action in higher education wanes and alternative admission criteria are hastily put in place, it is crucial to monitor their consequences in maintaining a diverse pipeline, for this will determine the future enrollments in medical and health professions that require post-baccalaureate training.

Because the most competitive post-secondary institutions are primary gateways to the top graduate, professional and medical schools in the country, their ethno-racial make up directly influences the pool of candidates eligible for advanced study in medicine and

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<sup>4</sup> Several other states, including Florida, Georgia and Washington, have either banned affirmative action in college decisions and/or proposed new guidelines for admitting students. Officials in Pennsylvania's state university system have been discussing a 15 percent class rank admission criterion, but are not prepared to end affirmative action policies yet. Recently the University of Michigan's use of minority status in admission decisions was challenged in two separate lawsuits, with different rulings for the law school and the undergraduate school.

health sciences. According to the American Association of Medical Colleges (AAMC, 1998:25), during the 1950s and 1960s, less than half of one percent of all medical school graduates was from underrepresented minority groups. The minority share of medical school graduates rose more than five-fold during the 1970s—from a trivial .4 percent to a meager 2.2 percent. Since 1980, the minority share of medical school graduates trebled, rising to 6.8 percent by 1998 (AAMC, 2000:25). However, these increases are modest in absolute terms because they derive from a small base.

Although the minority share of medical school graduates is tiny compared to the size of the college-age population, admission to the top medical schools remains extremely competitive and is becoming increasingly so. Recent actions to disallow consideration of race or national origin in college admission decisions in those states with the largest minority populations can reverse the trend toward greater representation of blacks, Hispanics and Native Americans in medical and health professions if declining minority admissions at the key feeder colleges and universities restricts the pool of admissible applicants. In this connection, it is noteworthy that between 1950 and 1998, the undergraduate institutions of Hispanic medical school graduates included 10 public universities located in Florida, Texas and California--three states that have banned race-sensitive admission policies since 1996 (AAMC, 1998: 47).<sup>5</sup>

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<sup>5</sup> If universities in Puerto Rico are excluded from the list, seven of the top eight public schools that feed minorities into medical schools are located in these states. Similarly, of the top 12 schools where Native American medical school graduates received their undergraduate degrees, four are public institutions located in states that recently outlawed consideration of race and national origin in college admission decisions (AAMC, 1998:48).

Large numbers of black medical school graduates have been trained in historically black colleges and universities, and this trend continues. However, the University of Michigan in Ann Arbor, currently the focus of two major lawsuits challenging the consideration of race and national origin in admission decisions, also is among the top ten feeder institutions to medical school for African Americans (AAMC, 1998: 47). Like Hispanics, Asian medical school graduates also hail from California's leading colleges and universities (AAMC, 1998:45). However, in contrast to Hispanics and blacks, Asians are not underrepresented in higher education or medical schools relative to their population shares.<sup>6</sup> Accordingly, I focus my discussion of changing admission guidelines on the consequences for blacks and Hispanics, and data permitting, also Native Americans.

Anticipating declines in the diversity of their student bodies, several states have considered "percent plans" based on high school rank, to maintain the diversity of their campuses. In this chapter I discuss the consequences of banning affirmative action in college admission decisions and assess the likely success of percent plans in maintaining ethno-racial diversity of undergraduate institutions. First I provide a thumbnail sketch of minority participation in higher education to illustrate how the educational pipeline progressively restricts the pool of African American and Hispanic students who enroll and graduate from post-secondary institutions. A selective overview of recent legal challenges to "affirmative action practices" serves as a backdrop for assessing the short-term consequences of changed admission guidelines in California and Texas. Both states

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<sup>6</sup> Geiser (1998) shows, moreover, that Asians are likely to be relatively unaffected, and probably stand to benefit from the alternative percent plans considered by the University of California system.

banned the use of race-sensitive college admissions in 1996. Texas implemented an alternative admission plan immediately after banning affirmative action, which permits a short-term assessment of its diversity consequences on freshmen college enrollments at the two flagship universities. Because California's plan has only been implemented this year, enrollment trends for black, Hispanics, and Native American students from 1997 to 1999 portray the scenario in the absence of any deliberate strategy to diversify college campuses.<sup>7</sup> To conclude I discuss the long-term prospects of percent plans in the context of a highly segregated society, highlighting the criticisms waged by supporters and critics of the percent plans.

### **Educational Pipelines: Trends and Prospects**

National data provide a useful point of departure for appraising educational pipelines in the context of growing population diversity. Currently two longitudinal data sets permit a national comparison of race and ethnic differences in transitions from high school to college and professional or graduate school. One is the High School and Beyond (HS&B) survey, which interviewed representative samples of sophomores and seniors in 1980. Because Hispanic dropout rates are quite high between 10<sup>th</sup> and 12<sup>th</sup> grade, I begin with the sophomore cohort so as not to bias downward estimates of transitions from high school to college. The National Education Longitudinal Survey (NELS) surveyed a cohort of 8<sup>th</sup> graders in 1988 and followed them through the transition

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<sup>7</sup> It is noteworthy that very little discussion of preferential treatment has focused on Asian populations even though proportionate to their population size they are over-represented in selective colleges and universities compared to whites. This circumstance reflects the presumption that Asians deserve their places in competitive colleges and universities because of their educational achievement and board test scores.

to college, and like HS&B, includes oversamples of black, Hispanic and Asian students. However, available interview data for the NELS cohort do not extend to college graduation and/or graduate training. Therefore, I use the HS&B survey to describe race and ethnic differences in the educational pipeline from high school through college, and to document group representation in selective and nonselective post-secondary institutions, post-graduate and professional schools.

The tree charts depicted in Figure 1 portray the 1980 sophomores as they progress (or drop) through the educational pipeline. About 8 percent of the sophomore cohort is lost in the transition out of high school. Nationally, over three in five seniors from the 1982 class enrolled in a postsecondary institution. Of these, just over one-in-three attended a four-year institution; slightly less than one-third attended only two-year institutions like community colleges or technical schools, and 22 percent of seniors who enrolled in college attended both two and four-year institutions. Less than 10 percent of seniors who pursue post-secondary schooling do so in institutions that require less than two-years of training.<sup>8</sup> However, enrollment in a postsecondary institution does not guarantee a diploma. Almost half of all seniors who enroll in a college, university, or technical school do not obtain any degree and only about one-in-three earn a bachelor's degree. Stated differently, only about one quarter of the 1980 high school sophomore cohort remain in the educational pipeline and go on to achieve a bachelor's degree or beyond.<sup>9</sup> However, these national averages conceal large disparities along race and ethnic lines.

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<sup>8</sup> For example, this would include programs for manicurists or trade schools that focus on specific skills.

<sup>9</sup> This calculation pools BA and post-graduate holders and expresses them as a share of the initial 10<sup>th</sup> grade cohort rather than as a subset of those who sought any form of post-secondary schooling.

**Figure 1 about here**

Figure 2 depicts transitions through the educational pipeline for black, white, Hispanic and Asian youth. High school graduation rates range from 94 percent for Asians compared to 90, 84 and 80 percent for whites, blacks and Hispanics, respectively. This is the first constriction of the educational pipeline that sorts demographic groups into different educational trajectories. A second constriction occurs in the transition to college, where Hispanics and blacks are sorted differently from whites and Asians. Among graduating seniors, 42 percent of Hispanics enroll in postsecondary institutions compared to 48 percent of blacks, 78 percent of Asians and 62 percent of whites.

**Figure 2 about here**

Nearly three in four Asians who matriculate in college attend a four-year institution at some point in their postsecondary education, while only 45 percent of Hispanic, 52 percent of black and 62 percent of white college matriculants do so. Educational inequality along race and ethnic lines is further exacerbated because two thirds of black post-secondary students do not obtain any degree, compared to 60 percent of Hispanic students, 41 percent of whites and only 37 percent of Asians. Consequently only a tiny share of the initial cohort of Hispanic and black sophomores both attends and graduates from college—4 and 5 percent, respectively. This is but a trickle of the initial flow into the educational pipeline. It is from this very tiny pool that the medical and professional health sciences draw their candidates. Race and ethnic educational inequality is further accentuated because large numbers of Asian students not only graduate from college, but also pursue postgraduate degrees. Race-sensitive admission policies are about enrollment, but that is only part of the challenge of maintaining

diversity in higher education. An equally formidable task is ensuring successful completion of college, and ideally, progression to graduate, medical and professional schools. This task requires unplugging the pipeline at the elementary and middle school level so that minority students arrive in high school prepared to pursue college preparatory curricula. I return to this theme after illustrating the consequences of eliminating race-sensitive admission policies.

### **The Rise and Fall of Affirmative Action: *Bakke* and Beyond**

In the 1978 Supreme Court ruling against the University of California, Judge Powell was explicit in noting that race-sensitive admission criteria are permitted to harness the educational benefits that flow from an ethnically diverse student body and to reduce the historic deficit of traditionally disfavored minorities, but *not* for countering the effects of past societal discrimination or to increase the number of educated minorities in underserved communities. However, the extent to which, and the ways in which race and ethnic origin figure into college admission decisions is largely unknown and probably highly variable across campuses. Consequently, and despite the longstanding controversy about the merits (and demerits) of considering race and national origin in college admissions, empirical evidence evaluating the costs and benefits of these practices for individuals, institutions, or the society at large is sparse.

Bowen and Bok's (1998) landmark study, *The Shape of the River* (1998), represents the first systematic effort to evaluate the advantages and disadvantages of race-sensitive policies from several vantage points based on the long-term experiences of

graduates from several of the most selective universities and colleges.<sup>10</sup> Subsequently, Holzer and Newmark (2000) have surveyed empirical studies on the economics of affirmative action and they conclude that the benefits generally outweigh the costs.

The banning of affirmative action in Texas following the 1996 *Hopwood* ruling by the Fifth Circuit Court against the University of Texas Law School, and the passage of Proposition 209 by an overwhelming majority of California voters not only challenged institutions of higher education to seek alternative strategies to diversify their campuses, but also politicized stakeholders at a time that minorities came to dominate their school-aged populations. Not surprisingly, several other states with large minority populations, notably Florida, Washington and Georgia, followed suit. Prior to this time, colleges and universities exercised considerable flexibility in devising and implementing admission criteria that conformed to the guidelines of the *Bakke* decision.

The educational value of diversity that Judge Powell underscored in his opinion on the *Bakke* case rests at the core of ongoing litigation to reinstate the use of race-sensitive preferences in some form (*Gratz, et al. v. Bollinger, et al.*, 1999). Selective colleges and universities in states that have banned affirmative action run the risk of becoming dominated by majority white students, particularly those from privileged backgrounds who attend well-endowed secondary schools that offer rigorous college-preparatory programs. In response, several states are experimenting with alternative and presumably “color-blind” criteria with potential to achieve the same ends as race-sensitive criteria. For example, because minority students are more likely than whites to

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<sup>10</sup> Several lawsuits initiated to end policies that permit the use of race or national origin in college decisions have prompted additional research to assess the consequences of affirmative action in higher education and more generally, the value of diversity on college campuses (see *Gratz, et al., v. Bollinger, et al.*, 1999).

hail from lower socioeconomic origins, one proposed strategy involves targeting applicants based on social class. However, Kane (1998) and Karabel (1998) demonstrate that a class-based strategy is unlikely to succeed in maintaining ethno-racial or geographic diversity because the absolute numbers of nonminority youth in similar circumstances is larger. Therefore, in sheer probabilistic terms, poor whites are more likely than blacks, Hispanics or Native Americans to be admitted to selective institutions. Moreover, because poor whites generally are not as disadvantaged as poor minorities, their chances of being college-admissible are likely to be greater (Kane, 1998).

The criteria used to achieve diversity in a post-affirmative action period differ appreciably across states. For example, California has adopted a plan to admit the top 4 percent of graduating high school seniors to a university in the UC system. Texas admits the Top 10 percent of graduating seniors to a public university of the students' choice. Florida has agreed to preferentially admit the top 20 percent of graduating seniors to a public college or university, but has not yet specified how the criteria will be implemented among the contending institutions. However, these deceptively simple percentage plans mask a greater complexity based on the diversity among schools and the level of segregation they represent (see Seligno, 2000). Moreover, each state will treat the standardized tests differently, some de-emphasizing the test altogether (e.g., Texas) and some emphasizing particular tests (e.g., California).<sup>11</sup>

California and Texas provide interesting case studies for a comparison of changed college admission policies because both states banned the use of race-sensitive criteria in

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<sup>11</sup> In light of the mounting legal controversy about affirmative action, several states are considering eliminating the SAT. However, this has not been implemented.

the same year, yet one state implemented a percent plan shortly after the ban while the other delayed implementation until the current year. Specifically, in 1996 the Texas legislature passed House Bill 588, dubbed the Top 10% Law (or Plan), which guarantees that Texas high school graduates who rank in the Top 10 percent of their senior class be admitted to any state institution of higher learning. This eligibility applies to every public high school in the state with at least 10 seniors, and also to private institutions that implement formal ranking schemes (which not all do). In effect, this policy shifts the foundations of “merit” based on academic performance measures from standardized test scores to achieved grades. California has proposed a similar solution, except that admission is guaranteed only to the top four percent of each high school’s graduating class. Furthermore, the California plan only guarantees a slot at a public university, not necessarily the student’s top choice or admission to the flagship campuses.

That the Texas plan was implemented partially in 1997 (because the bill was passed while the admission process was already underway), and fully by 1998, permits a preliminary assessment of changes in the ethno-racial composition of the student body under the new plan. California’s plan was implemented during the current (2000-02) academic year; hence it is too early to evaluate its impact on the diversity of its college campus. Nevertheless, because several years have elapsed since the passage of Proposition 209, it is possible to assess the consequences in the composition of entering classes of having no deliberate strategy to preserve ethno-racial campus diversity. For

this comparison, I restrict my focus on the two flagship public universities in both states.<sup>12</sup>

This two state comparison serves as a quasi-natural experiment that permits a preliminary answer to the following questions: First, how successful is the Texas Top 10 percent plan in maintaining the ethno-racial diversity of the entering classes relative to a regime that permits consideration of race or national origin in college admission decisions? Second, what are the consequences of eliminating race-sensitive admissions in the absence of a substitute plan? My tentative answers to these questions are based on recent changes in the ethno-racial composition of the entering cohorts during the 1990s, with a special focus on the period before and after the *Hopwood* decision (Texas) and Proposition 209 (California).

### *Texas*

Texas was the first state to implement a percent plan based on class rankings, which essentially shifts the weight of admissibility from standardized test scores to performance based measures that are known to be much better predictors of college success.<sup>13</sup> The impact on minority and nonminority populations of the new admission guidelines depends both on demographic and educational trends that shape the student

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<sup>12</sup> How the laws prohibiting consideration of race or national origin in college admissions will affect private universities is yet unclear, but presumably will be raised as a condition of receiving state funds.

<sup>13</sup> Until 1994, class rank was used in admitting freshmen to the University of Texas at Austin, but because this fact was not publicized, it was not criticized. The controversy surrounding the current use of class rank derives not only from the publicity accorded to the change in admission criteria, but also from claims that the 10% plan is a backdoor affirmative action policy that presumably grants admission to less qualified minority students at the expense of more qualified white students who attend high performing schools.

pipelines into higher education and residential segregation patterns that underpin spatially distributed social and economic opportunities.

Two aspects of recent demographic trends in Texas are especially noteworthy. First, during the last two decades minority population growth (due both to fertility and immigration) has exceeded that of native whites. By 1996 roughly half of the Texas population under age 25 was Hispanic, black or Asian (predominantly the former). Murdock and associates (1998: Tables 10-12) estimate that if current demographic trends continue, in 30 years the state's elementary and secondary school-age population will be 70 percent minority, and the college-age population will be 57 percent minority. Second, because the Top 10 percent plan applies uniformly to high schools, the impact on minority and nonminority populations depends heavily on the contours of residential segregation. Calculations from district-level data posted by the Texas Education Agency indicate that nearly 10 percent of all school districts have student bodies that are over 75 percent Hispanic, and an additional 10 percent have student bodies that are 50 to 75 percent Hispanic (Tienda, 2000). The African American population of Texas is half the size of the Hispanic population, and apparently less segregated by school district (although not necessarily less segregated by schools). Only 3 percent of Texas school districts have student bodies that are over 50 percent African American, and an additional 8 percent of districts have student bodies that are over 25 to 50 percent African American. Many of these also have a high concentration of Hispanics.<sup>14</sup>

How these demographic trends will impact the college-bound population depends on trends in elementary and secondary school enrollment, but most especially high school

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<sup>14</sup> According to the Texas Education Agency, there are approximately 1573 public and 204 private high schools in Texas as of 1999. The exact number depends on whether alternative campuses are included.

graduation rates. Hanson and Williams (1999) estimate that the number of graduates from Texas high schools will increase steadily from about 196 thousand in 1999 to about 215 thousand by the year 2010, and level off thereafter. However, these statewide projections obscure pronounced differentials among minority and nonminority populations. Whereas the number of white high school graduates is expected to peak around 2003 and decline thereafter, the number of African American high school graduates is projected to increase at least through 2009; Asian and Hispanic high school graduates will likely continue to rise rapidly through 2012 and beyond, depending on immigration rates and, for Hispanics, reductions in the high school drop out rate (Hanson and Williams, 1999).

Although these demographic trends indicate a clear growth in the number of minority and nonminority high school graduates who potentially could attend college, the projections reported by Hanson and Williams (1999) also show a worrisome decline in the minority rate of planned college attendance. Only 36 percent of black high school graduates applied to a four-year institution in 1998. The college-going rate (to four-year institutions) of Hispanic high school graduates is lower still—only 26 percent. Moreover, less than 10 percent of African American high school graduates and approximately 10 percent of Hispanic high school graduates scored at least 900 on the SAT and graduated in the top 40 percent of their class in 1998. Even lower shares—6 and 7 percent, respectively of African American and Hispanic graduates—scored at least 900 on the SAT *and* ranked in the top 20 percent of their high school class. Despite their tiny sizes, neither of these groups would qualify for automatic admission based on the Top 10

percent plan (Walker, 2000a). Instead, they would have to excel in other areas that are considered by admission officers.<sup>15</sup>

The Texas plan was implemented partially in 1997 because H.B. 588 was passed after the admission process for the 1997 academic year was underway, and fully implemented by 1998. Therefore, its impact on the ethno-racial composition should be evident after 1996, but especially beginning in 1998. In the interest of parsimony, I focus on the two flagship universities with the most competitive admission thresholds.<sup>16</sup> Table 1 presents summary data on matriculants by race and Hispanic origin from 1989 through 1999 for both University of Texas at Austin and Texas A&M University. At best, the Top 10 percent plan generates mixed results as a strategy to maintain the ethno-racial diversity of the two flagship public college campuses in Texas, but there is reason for optimism overall.

### **Table 1 About Here**

Throughout the decade, the share of white students enrolled at UT Austin declined gradually while the minority share of the total rose. African American enrollment peaked during the mid-1990s, reaching 6 percent of all freshmen around 1993-94, while the Hispanic share hovered around 15 to 16 percent through the early 1990s. After 1996, the black and Hispanic shares of the freshmen class fell slightly. By 1999, two years after full implementation, the Top 10 percent plan appears to have restored most of the declines in black and Hispanic freshmen following the *Hopwood*

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<sup>15</sup> This is important because students who are not in the Top 10 percent of their graduating class must seek admission based on other criteria, including their class rank, completion of required high school curriculum, SAT or ACT scores, two essays, and evidence of participation in school activities, awards, work experience, service activities, and other indicators of leadership or special circumstances.

<sup>16</sup> UT-Dallas also has selective admission policies and the demand for slots at public universities is likely to spillover to other campuses, conceivably raising the number of public flagships in the state. However, this speculation will require considerable time to unfold.

decision. It is noteworthy, however, that the Asian share of all freshmen admits rose steadily throughout the period, even though their relative share of the school-age population is quite small and nowhere near the proportion of Asian freshmen. Correspondingly, the white student share of the 1999 entering class declined to pre-*Hopwood* levels. Native Americans constitute a tiny share of all freshmen and their presence was unaltered by the change in admission criteria. International students slightly increased their share of the freshmen classes, but it is unclear if this represents a real trend or a temporary blip. Whether the “rebound” of black and Hispanic students is attributable to the 10 percent plan or other changes implemented in criteria used by admissions offices remains an open question, but it would seem that changed admission guidelines favored Asians as much as, if not more than, African Americans and Hispanics.

Results for Texas A&M are less encouraging, albeit promising. First, Texas A&M never reached the same level of diversity as the Austin campus. At its peak diversity—right before the *Hopwood* decision—just under one-in-four freshmen were students of color. This share dropped by almost five percentage points in 1996 and has continued to erode through 1999. Blacks and Hispanics sustained the major losses in the freshmen classes since 1996, while the Asian share climbed slightly. Specifically, Hispanics represented 15 percent of A&M freshmen in 1995, but their share dropped to about 9 percent in 1998 and 1999. Similarly, African Americans constituted close to 5 percent of the A&M entering classes during the mid-1990s, but their share fell to just under 3 percent post-*Hopwood*.

Reasons for the different results on the Austin and A&M campuses are not obvious, but may reflect differing outreach strategies and financial aid packages offered with the new guidelines. The admissions office of UT Austin conducted a rigorous outreach program to advertise the Top 10 percent plan, including distributing a letter signed by then Governor Bush to all graduating seniors throughout the state. Further, University staff made special efforts to visit schools that typically did not send students to the Austin campus, and they established the Longhorn Opportunity Fellowships for economically disadvantaged students who qualified for admission on the Top 10 percent criteria.<sup>17</sup> Although the A&M campus is now undertaking similar efforts to recruit students, their lower success in attracting students may reflect differences in the intensity of their outreach efforts and available fellowship support compared to the Austin campuses during the years immediately following *Hopwood*. More time is required to assess these different outcomes. Furthermore, assessing the success of the Top 10 percent plan based only on the ethno-racial composition of entering classes obscures an additional aspect of diversity and broadened opportunity fostered by the new admission criteria, namely the increase in the number of high schools that send students to U T-Austin.<sup>18</sup> This aspect of diversity—namely, representation from high and low performing schools—warrants further scrutiny, but it is an important aspect of educational opportunity that also bears on the pipeline to medical and health professions.

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<sup>17</sup> At a recent presentation (March, 2001) Bruce Walker, Director of Admissions at the Austin campus, reported that the increased availability of scholarships has been largely responsible for the effectiveness of the 10 percent plan to maintain the diversity of the freshmen classes.

<sup>18</sup> Bruce Walker reports that the 2001 cohort included students from 135 schools that previously had not sent any students to the University of Texas. Personal Communication, January 25, 2001.

Although similar enrollment rates do not guarantee similar graduation rates, there is no *a priori* reason to expect that graduation rates will be dramatically different between the Top 10 percent admits before and after the *Hopwood* decision. Much depends on whether the Top 10 percent students are similar in their readiness to pursue college study to those admitted before admission criteria were changed. Again, early evidence about the performance of the Top 10 admits for the Austin campus is encouraging: these students achieve higher grades than enrolled students who did not rank in the top decile of their senior class. “In fact, Top 10 percent students at every level of the SAT earn grade point averages that exceed those of non-Top 10 percent students having SAT scores that are 200 to 300 points higher” (Faulkner, 2000). This outcome reinforces the well-known fact that high school grades are far better predictors of success in college than test scores. The jury is still out as to whether the new emphasis on performance-based merit criteria will improve the diversity of the graduating classes. Given recent and projected demographic trends, achieving and maintaining the diversity of freshmen classes to the pre-*Hopwood* levels will remain a formidable challenge. However, enrollment of diverse student bodies can not guarantee narrower gaps in college completion between Hispanics and blacks relative to whites and Asians. I return to this theme in the concluding section.

There is another reason for caution in assessing the impact of the changed admission criteria. Because the demand for slots at selective institutions is greater, competition for the fixed number of slots has increased (Reich, 2000). In short, admissions have become tighter. According to President Faulkner, 42 percent of UT Austin freshmen were Top 10 percent graduates before *Hopwood*; currently the share is

47 percent. To accommodate this change, the size of the freshman class was increased so that the absolute number of spaces available for non-Top 10 percent graduates remained unchanged (Faulkner, 2000). However, expansion of the largest college campus in the United States—already in excess of 49,000—cannot continue indefinitely. Therefore, accommodating a potentially growing number of Top 10 graduates at the two flagship campuses requires innovative strategies to increase educational capacity, including the possibility that the current promise of admission to the public institution of choice may have to be revised.

The consequences of the *Hopwood* decision also manifest themselves in the minority representation among entering students at Texas medical schools. Before 1996, Hispanics constituted almost 15 percent of the entering class, but only 11 and 12.7 percent of the 1997 and 1998 cohorts, respectively. Similarly, the African American shares of medical students enrolling in Texas medical schools fell from 5.3 percent before *Hopwood* to 3-4 percent after the repeal of race-sensitive admission policies. That the Texas 10 percent plan does not affect medical and professional schools poses great uncertainty about the future diversity of Texas medical school students. A great deal of this future rests on the success of the Top 10 percent plan in providing an adequate pool of minority college graduates who are admissible to the top medical schools in the state. The jury is out.

### ***California***

Like Texas, California's population has grown rapidly during the 1990s, owing both to high rates of natural increase (especially for Hispanics) and immigration. Hispanics and Asians accounted for 60 and 28 percent, respectively, of California's

demographic growth between 1990 to 1998, while blacks, whites and Native Americans combined contributed 12 percent of the 3.5 million absolute increase over the decade. Differential fertility, mortality and migration rates for the major race and ethnic groups have altered the State's race and ethnic composition such that the white share of the total has been decreasing gradually while the Hispanic and Asian/Pacific Islander share has grown rapidly. Between 1990 and 1998, the Hispanic population share alone increased from 26 to 30 percent of the total, while the comparable Asian shares rose from 9 to 11 percent (California State Department of Finance, 2000). However, black and Native American shares remained constant during the 1990s, at seven and one percent, respectively.

High rates of minority demographic growth in California produced school-age population that is over half minority. Hispanics currently comprise about 40 percent of California's public school enrollment, and are expected to represent a majority of students by 2006. The California State Department of Finance (2000) projects that the school-age population will grow from its current level of 5.8 million to approximately 6.2 million during the 2007-08 academic year. Of these, 70 percent are projected to be students of color and for about one-in-four, English will not be a first language. Recent demographic estimates indicate that the Native American, black and white pre-college student population will decline between 1999 and 2009, while the Asian and Hispanic groups will increase by 11 and 27 percent, respectively (del Pinal, 1996). On the brighter side, the number of Hispanic high school graduates is projected to increase by 74 percent between 1999 and 2010 (California Department of Finance, 2000). Whether the improved high school graduation rates of Hispanic students will translate to higher

college enrollment rates depends in large measure on the consequences of changed admission guidelines. In the aftermath of Proposition 209, the prospects are not encouraging.

These demographic changes are not well mirrored in the evolving composition of California's flagship universities during the 1990s inasmuch as the Asian share of total enrollment approaches 40 percent at both flagship institutions even though their population share is only one-fourth as large (see Table 2). Moreover, while the Hispanic population share rose sharply, their representation at the Berkeley and UCLA campuses did not grow. Part of this decline is due to the increased numbers of foreign students and those who do not report their race and ethnic origin, but the latter category likely includes many white and Asian students as well.

Thus, by contrast to Texas, the trends in diversity of college freshmen at California's two flagship institutions are discouraging. Although Proposition 209 was passed in 1996, the admission season for the 1997 cohort was essentially completed under guidelines that allow consideration of race and national origin. Therefore, the consequences of the affirmative action ban should manifest themselves after 1997. Although the share of black and Hispanic freshmen enrolled at the two flagship institutions was declining gradually throughout the 1990s, the drop was more dramatic following after 1997.

### **Table 2 About Here**

Specifically, the Hispanic share of the Berkeley campus peaked at 19 percent of the 1991 entering class, and remained in the double digits through 1997, the last year that the race-sensitive guidelines were permitted. Between 1998 and 2000, the Hispanic share

of the freshman class fell to between 7 and 9 percent. Although the share of Native Americans never exceeded 2 percent of all freshmen, after Proposition 209 went into effect they constituted less than one percent. Concurrently, the Asian share of the entering class, which exceeded one in three of all new matriculants throughout the 1990s and hovered around 40 percent at the time of Proposition 209, rose to nearly 45 percent of Berkeley freshmen after 1998. Interestingly, the white share of college freshmen was not greatly affected by the banning of race-sensitive admission practices, hovering between 29 to 30 percent throughout the period.

Compared to the Berkeley campus, the impact of Proposition 209 at UCLA was less dramatic, yet it is clear that minority representation declined. The Hispanic share of the freshman class dropped by about one-third, from 18.3 percent in 1996 to between 11 and 12 percent after 1998. Native American representation, which lowered between one and one and a half percent, fell to less than one-half of one percent. Representation of black students in the freshman classes also registered declines, falling from between 6-7 percent annually before Proposition 209 to less than 4 percent after the legislation went into effect.<sup>19</sup> Thus, it appears that Asian students are the great beneficiaries of the ban on affirmative action, while blacks and Hispanics are the big losers. In fact, the Asian share of UCLA and Berkeley freshmen is about four times higher than their population shares, while the Hispanic freshman cohort is only half their population share.

These dramatic changes in the composition of college freshmen at California's most selective public institutions will reverberate on the pipeline into medical and

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<sup>19</sup> That the share of Asian and white students remained fairly steady even as the share of under represented minority groups fell partly reflects the growing numbers who refuse to indicate their race or national origin. At both flagship campuses, the share of students who refused to report their race or national origin rose by approximately 9-10 percentage points.

professional schools. Karabel (1999:Table 7) reports that before Proposition 209 was passed, the share of black and Hispanic medical students throughout the California system ranged between 16 and 18 percent, and after the legislation went into effect this share declined to 12 percent. Although larger shares were admitted than attended, the drop in admissions is even more precipitous than the decline in the shares enrolled. Karabel (1999:Table 8) shows that in 1993-94, blacks and Mexican Americans represented between 21 to 24 percent of students admitted to medical schools in the UC system. In 1996, their combined share dropped to 15 percent, and once the law went into effect the share of black and Hispanic students admitted to California medical schools fell to between 12 and 13 percent. Based on the shrinkage in the size of the minority cohorts entering the UC system medical schools, Karabel estimates that the “social clock” has been set back 25 years; even worse, the representation of black and Mexican American students in the freshmen classes of Berkeley and UCLA represent a 31-year setback.

California has implemented a percent plan that became effective in the current (2000-01) academic year. It is unlikely that the Top 4 percent plan will recover any of the ground lost in the diversity of the Berkeley and UCLA campuses because California’s percent plan only guarantees a slot in the UC system, not necessarily at the flagship institutions. Moreover, the success of California’s Top 4 percent plan depends crucially on the contours of residential segregation. By implementing the percent plan on a school-by-school basis, Geiser (1998) estimates that the eligible pool of black and Hispanic students is approximately 12 percent, which she estimates would produce a 10 percent increase in the pool of under-represented minorities in the eligibility pool, for a

possible yield of 300 to 700 students.<sup>20</sup> Of course, eligibility assures neither application nor enrollment, especially among students whose financial means limit their options for post-secondary schooling. Because these new guidelines have just gone into effect, it is not possible to assess their impact, but the different experiences of the Austin and A&M campuses indicate that availability of financial aid probably is an essential complement to maintain campus diversity once a percent plan is implemented. California faces the additional challenge of allocating top 4 percent graduating seniors among public institutions of varying selectivity. This jury has a long wait before reaching a verdict.

***Lessons from the Case Studies:***

Texas and California provide critical vantage points from which to gauge the consequences of changes in admission criteria on minority representation in higher education. Over half of all Hispanics reside in Texas and California, including an even larger share of the school-age population. When mapped against the rising Hispanic-white gaps in college enrollment and graduation rates, even the seemingly stable enrollment trends at UT-Austin are worrisome. In part, this is because the Hispanic population is growing much faster than the rest of the Texas population, and their youthful age structure coupled with high fertility rates portends even larger cohorts of college-age youth well into the future. The erosion of Hispanic representation in California's flagship institutions is even more troubling, and it is unclear whether the Top 4 percent plan will be effective in reversing post-2009 trends. If swelling numbers of Hispanic college-age youth are not accompanied by commensurate increases in college

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<sup>20</sup> In addition to ethno-racial diversity, California's percent plan will also broaden geographic diversity, as seems to be occurring in Texas.

attendance and graduation rates, educational inequality will rise dramatically in the near future.

Although only 19.8 percent of all African Americans reside in Texas and California, recent court decisions in Georgia prohibiting consideration of race in college decisions will surely impact the pipeline of African Americans into college and subsequently, medical and professional schools. Nevertheless, the lower representation of blacks in both Texas and California flagship institutions signals a reduction in educational opportunity and a regression in time to pre-Civil Rights levels. It is discouraging to witness decades of effort to broaden educational opportunity vanish in such a short time; preventing further erosion in minority representation at selective universities warrants swift and decisive measures to prevent further constriction of the educational pipeline for minority youth.

### **Recent Developments: Tidal Wave or False Alarm?**

Whether the Texas and California examples have set a national precedent is unclear because the *Bakke* decision remains the law of the land until the Supreme Court decides to revisit the constitutionality of race-sensitive admission criteria. In recent years, a spate of court decisions and referenda has steadily eroded the use of affirmative action in college admissions in various states. The 1996 *Hopwood* decision remains in litigation and could be the basis on which the Supreme Court reconsiders the *Bakke* decision, but litigation in other states, notably Michigan, may very well provide the grist for the reassessment of race-sensitive admissions. Following the lead of Texas and California, Florida, Washington, and Georgia also have challenged the constitutionality of *Bakke*.

Michigan was the first to follow, when in 1997 the Center for Individual Rights sued the University of Michigan on behalf of two white students denied admission to the University's liberal arts college and, in a separate lawsuit, on behalf of a white woman denied admission to the law school. Rather than cave in, the University of Michigan opted to defend its policies on grounds that clear educational benefits flow from a racially diverse student body (*Gratz v. Bollinger*, et al, 1999). In December 1998 and January, 1999, respectively, U.S. District Judges certified the lawsuit targeting the University's undergraduate school (Judge Patrick Duggan) and the law school (Judge Bernard A. Friedman) a class action. In June 1999, minorities seeking admission into the University requested permission of the 6<sup>th</sup> U.S. Circuit Court of Appeals in Cincinnati to intervene in the lawsuits. Two months later, the 6<sup>th</sup> Circuit Court of Appeals allowed 58 individuals—mostly minority students at Michigan—and four pro-affirmative action groups to join the lawsuits as defendants. Since that time, General Motors, Microsoft, Intel and 18 other Fortune 500 companies filed briefs supporting the University of Michigan, arguing that eliminating race-sensitive admissions will deprive businesses of well-trained minority candidates. A December 2000 decision upheld the University's admissions policy on the merits of evidence about the educational benefits of a diverse student body. However, the cases are far from over, and the case against the University of Michigan law school resulted in an unfavorable ruling.<sup>21</sup>

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<sup>21</sup> Typically, the nation's highest court considers cases in which appellate courts have differed on the same issue. In this instance, the 9<sup>th</sup> U.S. Circuit court of Appeals in San Francisco sided with the University of Washington, but previously, the 5<sup>th</sup> U.S. Circuit Court of Appeals ruled unconstitutional the former admissions policy at the University of Texas law school, which had considered minority applicants differently than whites. The suit against the University of Washington law school was brought by the Washington, D.C.-based Center for Individual Rights (the same group that sued U of M) on behalf of Katuria Smith.

On November 3, 1998, voters in the state of Washington passed Initiative 200 (58 to 42 percent) which is modeled after California's Proposition 209. This law prohibits preferential treatment based on race, sex, color, ethnicity or national origin in public employment, education and contracting. Although Microsoft, the Association of Washington businesses, and the Seattle Times publicly opposed Initiative 200, and although most polls showed that Washington voters believed discrimination against minorities and women exists, the majority of voters were critical of affirmative action policies on grounds that they presumably benefit unqualified minorities and discriminate against white men. Wierzbicki and Hirschman (2000) record a slight increase in the white and Asian shares of the freshman class following Initiative 200, while the black and Hispanic shares declined slightly.

Noting significant declines in minority enrollment at the University of Washington, in May 1999, President Richard L. McCormick appointed a broad-based Committee on Diversity charged with developing a 30-year vision for enhancing access to the university and using creative approaches to develop a multicultural learning environment, with its attendant benefits. As a first step, President McCormick announced a \$65.6 million scholarship proposal to restore representation of minority students to pre-Initiative 200 levels. However, the jury is still out because the suit against the University of Washington Law School has resulted in a split opinion about the legality of using race as a criterion in making such decisions.

How much the California and Texas decisions currently drive the anti-affirmative action campaigns in other states remains an open question, but it is noteworthy that Ward Connerly, a black businessman and Regent of the University of California vehemently

opposed to affirmative action, organized the petition campaign in Florida and obtained 43,000 signatures in July, 1999.<sup>22</sup> To head off Connerly's campaign to put an anti-affirmative action referendum on the ballot, in November of that year, Governor Jeb Bush signed an order, dubbed the "One Florida Plan," eliminating race, ethnicity and sex as criteria for making admissions decisions. Ironically, this decision has proven extremely divisive along racial grounds, especially following criticism that minority votes in Florida were discarded unfairly in the 2000 presidential election. However, the governor's plan includes a measure, called the Talented 20, which guarantees admission to a state university to all seniors who graduate in the top 20 percent of their class.

Despite its seeming generosity, this proposal was bitterly resisted by black leaders who staged a sit-in at his office and a massive protest in March, 2000. In addition to criticism by the U.S. Department of Education, the NAACP is challenging the Talented 20 program on the grounds that the Board of Regents had no authority to make sweeping university admissions decisions required by the One Florida Plan. The case is currently in court, with a decision due in July. The Regents have suspended the One Florida Plan until the challenge is settled.

Similar legal challenges and difficulties characterize college admissions in Georgia, which has been sued for allegedly using racial "quotas" to achieve minority representation at its flagship institutions. Ironically, the University of Georgia's history of discrimination against blacks and 20 years of federally mandated affirmative action are relevant to the development of race-sensitive admission criteria that are currently being challenged in court. The plaintiffs argue that Georgia uses race quotas to enroll about 10 percent minority students in each freshman class. In opposition to the *Bakke* decision,

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<sup>22</sup> Ward Connerly was also instrumental in orchestrating Initiative 200 in the state of Washington.

U.S. District Judge B. Avant Edenfield ruled that race conscious admission is unconstitutional. The University of Georgia temporarily dropped its race preference in August, 2000, but President Michael F. Adams has appealed the ruling, invoking *Bakke v. Board of Regents*, and noting that race is only one of 12 factors that gives borderline applicants a slight edge. However, legal battles continue as the University faces additional challenges in law school admission and in accommodating the growing Hispanic population's eligibility's for affirmative admission.

Obviously, the legal and political climate over the use of affirmative action in college admissions is both highly fluid and politicized. Although many of the legal challenges are directed at law and professional schools, the percent plans are designed to govern admission to undergraduate institutions. The link between minority representation in undergraduate institutions and in post-graduate academic professional and medical schools has not been explicitly considered, although parallel analyses of minority enrollments have been conducted. This issue, which bears directly on the future representation of minorities in health and medical professions, warrants further scrutiny and immediate corrective action to prevent further setbacks in the gains since the Civil Rights Movement.

## **Conclusions**

The changing demand for highly educated workers in the burgeoning health professions requires a multi-pronged strategy consisting of early intervention; strong drop-out prevention programs; and outreach initiatives between high schools with high minority concentration and selective public and private universities. What is clear from

the preliminary evidence presented here is that trends in minority representation in higher education generally, and health and medical professions specifically, will decline precipitously in the absence of compensatory strategies to maintain the ethno-racial diversity of college campuses.

Admission guidelines that identify arbitrary class rank thresholds, such as the 10 percent plan, may serve as temporary solutions until the political fall-out settles, but they are potentially harmful in the long term because they rely on segregation to be minimally effective and because they can be easily undermined by disingenuous redistricting or alteration of ranking systems. The US Commission on Civil Rights condemned the practice of replacing race-sensitive admission policies with statistical “percent” policies guaranteeing admission to public colleges, arguing that these experimental responses are regressive because they exploit segregated schools.

Equally problematic is that percent plans do not deal with the root causes of minority under-representation in higher education, which begins early in childhood careers. With growing educational gaps and strong demographic momentum, both early intervention and prevention programs are required to unplug the minority educational pipelines. My depiction of the national educational pipeline clearly demonstrates the need for deliberate strategies to improve elementary, middle and high school graduation rates of blacks and Hispanics, *and* to promote their admission, matriculation and graduation rates from selective colleges and universities. Failing this, the pool of black and Hispanic students eligible to enter medical school and health professions that require post-secondary schooling will shrink if for no other reason than the momentum of demographic growth. Also needed are vigorous and creative out-reach programs that

forge academic ties between minority-dominant schools and the top-tier public and private universities, as well as those with two-year colleges. It is surprising, on reflection, that the elite private universities have not united and mobilized a collective response on behalf of the public institutions that have come under attack. Certainly their admission guidelines will be affected if the Supreme Court, upon reconsidering the merits of race-sensitive admission criteria, decides to reverse the *Bakke* decision.

Objections to race-sensitive admission policies were justified on the grounds that giving preferential advantage to underrepresented groups based on ascribed criteria denies admission to putatively more qualified students (Kane, 1998; Bowen and Bok, 1998). Although Bowen and Bok (1998) demonstrate that the alleged “adverse” impacts are tiny, the movement to eliminate all forms of affirmative action admission policies is gaining momentum as more and more states are challenging their use of race in college decisions. Ironically, similar criticisms are now being waged about the 10 percent plan, which presumably excludes admissible students from high performing schools in favor of high performing students from low performing schools.

Definitive proof of the impact of the “percent plans” requires comparisons of the performance and qualifications of pools of students admitted under these criteria with those who would have been admitted using the race-sensitive criteria. At the individual level, there are transaction costs associated with changes in admission plans, and mass confusion and misunderstanding in the short run. Students that would have been admitted under the race-sensitive regime may opt to attend college elsewhere under the current guidelines. From a societal standpoint, these costs probably average themselves out over

large numbers of people, and based on calculations from Bowen and Bok (1998), are tiny in any event.<sup>23</sup>

In order to maintain and increase diversity in post-baccalaureate programs, it is essential that the key undergraduate feeder institutions reflect the changed population composition in their entering and graduating classes. Broadening the educational pipeline at the lower school levels is crucial to ensure that the shares successfully graduating from institutions that feed the medical schools and health professions continues to grow in ways that parallel the national and state contours of diversity.

Because the absolute number of applicants to selective institutions is rising and will likely continue to do so as outreach efforts succeed in attracting students from schools that traditionally have not sent students to flagship institutions, admissions will become increasingly competitive. Population projections indicate that demographic pressures will continue well into the 21<sup>st</sup> century, and as more high schools achieve the excellence they strive for, demands on the higher education system will grow apace. One possible long-term outcome is improved scholastic outcomes of low performing high schools, particularly if outreach efforts are successful in re-directing curricula toward college preparation. This, in turn, can increase the number of flagship schools in all states where demographic pressures increase the demand for quality post-secondary education and beyond. Until these goals are achieved, however, the higher education is well advised to take race into account in order to resolve racism.

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<sup>23</sup> That *perceptions* of such costs do not square with empirical evidence is partly responsible for the rising anti-affirmative sentiment. Specifically, individual perceptions that *they* would have been admitted had a preference regime not been in place gives rise to a great deal of hostility about artificially imposed barriers to “deserving” students.

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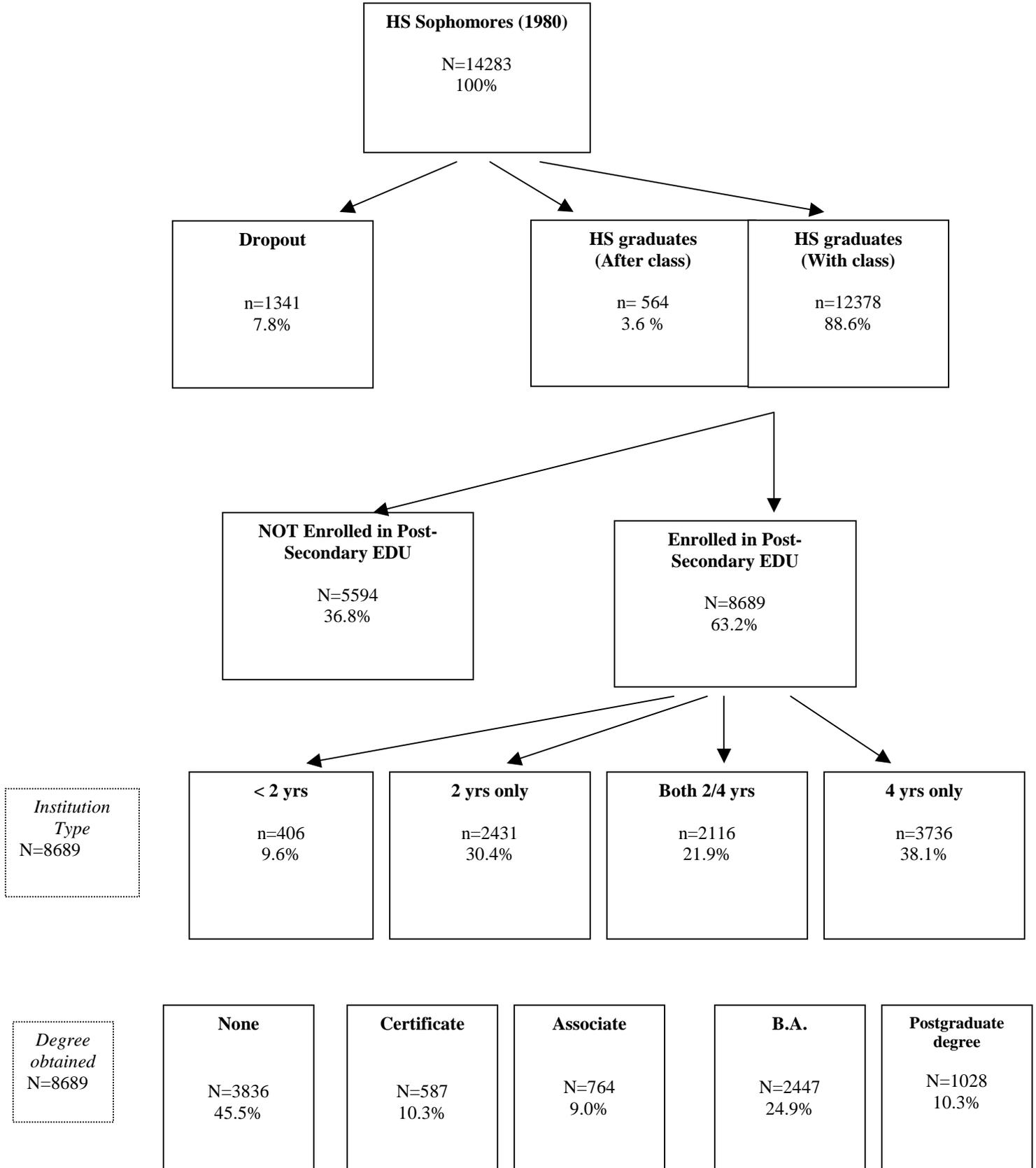
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**Figure 1: The Higher Education Pipeline**

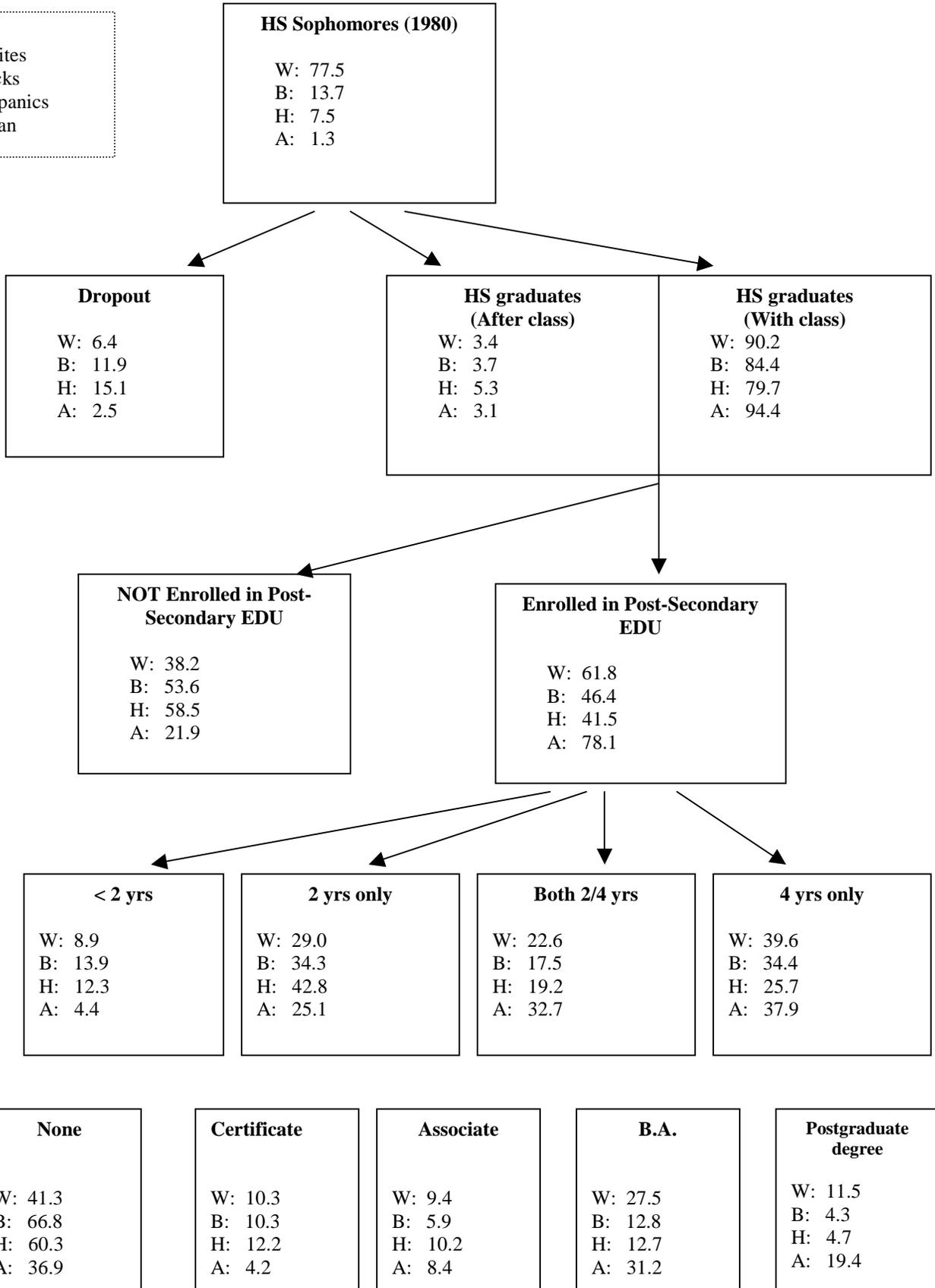
Source: HS&B

Unweighted counts and weighted percents



**Figure 2: The Higher Education Pipeline, by Race**  
 Source: HS&B  
 Unweighted counts (n=14,283) and weighted percents

**Legend:**  
 W: % among whites  
 B: % among blacks  
 H: % among Hispanics  
 A: % among Asian



*Institution Type*

*Degree obtained*

**Table 1. Freshmen Enrollment in Texas Flagship Public Universities by Race and Hispanic Origin: 1989-99 (in percent)**

<b>Year</b>	<b>White</b>	<b>Black</b>	<b>Hispanic</b>	<b>Asian</b>	<b>Native American</b>	<b>International/ Unknown</b>	<b>Total (n)</b>
<b>UNIVERSITY OF TEXAS AT AUSTIN</b>							
1989	70.4	5.7	13.0	8.4	0.25	2.2	8,959
1990	67.1	5.5	15.3	9.2	0.36	2.5	7,778
1991	66.1	5.4	15.2	10.2	0.36	2.8	7,551
1992	65.4	5.4	15.6	11.1	0.27	2.2	7,100
1993	64.0	6.0	16.0	11.8	0.40	2.0	7,217
1994	63.7	5.9	15.0	13.4	0.34	1.6	7,371
1995	64.3	5.8	14.7	12.9	0.43	1.9	7,701
1996	63.9	4.8	14.9	13.2	0.51	2.7	7,859
1997	67.0	3.3	13.0	14.2	0.57	2.0	8,258
1998	65.2	3.2	12.6	15.0	0.53	3.6	8,473
1999	62.9	4.2	13.6	15.4	0.44	3.4	8,488
<b>TEXAS A&amp;M UNIVERSITY</b>							
1989	81.3	4.2	9.9	2.9	0.39	1.4	8,222
1990	80.4	4.2	9.8	3.7	0.41	1.5	7,482
1991	81.3	3.0	10.2	4.2	0.33	1.0	6,087
1992	79.4	4.2	10.7	4.2	0.42	1.1	6,006
1993	78.4	3.7	12.7	3.7	0.28	1.2	6,392
1994	76.3	4.8	13.9	3.5	0.25	1.2	6,047
1995	76.7	4.7	14.7	2.8	0.41	0.7	6,072
1996	80.4	3.6	11.2	2.8	0.38	1.6	6,387
1997	80.5	2.9	9.7	3.6	0.47	2.9	6,233
1998	82.0	2.7	9.1	3.5	0.52	2.1	7,354
1999	83.0	2.7	8.5	3.5	0.49	1.9	6,695

Source: Texas Higher Education Coordinating Board

Notes: Enrollment data for Texas A&M University is different from those reported here. The Coordinating Board uses different criteria from that of the University. Accuracy of data subject to verification by the Office of Institutional Studies & Planning, Texas A&M University, College Station, TX.

**Table 2. Freshmen Enrollment in California Flagship Public Universities by Race and Hispanic Origin: 1991-2000 (in percent)**

<b>Year</b>	<b>White</b>	<b>Black</b>	<b>Hispanic</b>	<b>Asian</b>	<b>Native American</b>	<b>International/ Unknown/</b>	<b>Total (n)</b>	
<b>UNIVERSITY OF CALIFORNIA AT BERKELEY</b>								
1991	29	7.5	18.9	33.5	1.5	9.6	3221	
1992	30.0	6.1	13.6	39.5	1.1	9.8	3420	
1993	29.3	5.8	16.7	39.1	1.2	7.8	3215	
1994	28.9	6.2	14.9	40.5	1.1	8.3	3344	
1995	30.0	6.5	15.6	37.2	1.9	8.9	3435	
1996	29.4	6.3	14.8	38.6	1.4	9.5	3708	
1997	28.5	7.2	13.2	41.1	0.6	9.5	3573	
1998	29.2	3.4	7.3	41.9	0.4	17.9	3735	
1999	30.7	3.5	9.1	43.8	0.6	12.3	3618	
2000	30.1	4.0	9.0	44.6	0.5	11.8	3735	
<b>UNIVERSITY OF CALIFORNIA LOS ANGELES</b>								
1991		31.9	5.7	15.9	39.5	1.4	5.5	3983
1992		30.6	7.0	17.8	36.5	1.3	6.9	3460
1993		28.4	7.1	16.4	41.3	0.6	6.2	3391
1994		27.3	6.8	18.0	41.5	1.0	5.3	4129
1995		27.6	7.3	21.6	37.8	1.3	4.4	3701
1996		32.0	6.3	18.3	36.0	0.9	6.6	3821
1997		32.6	5.8	15.0	38.5	1.0	7.0	3810
1998		30.3	3.4	10.5	39.2	0.3	16.3	4200
1999		33.6	3.7	11.8	39.3	0.3	11.3	4131
2000		32.4	3.7	12.5	39.8	0.4	11.2	4203

Source: Statistics for University of California at Berkeley and Los Angeles are from the Office of Student Research, Division of Undergraduate Affairs.