Challenges to Equity and Opportunity in Higher Education: An Analysis of Recent Policy Shifts

Paper presented at the Annual Conference of the
Association for the Study of Higher Education
Sacramento, CA
November, 2002

Donald E. Heller
Associate Professor and Senior Research Associate
Center for the Study of Higher Education
The Pennsylvania State University
400 Rackley Building
University Park, PA 16802
814-865-9756
dheller@psu.edu

Deborah R. Schwartz
Graduate Research Assistant
Center for the Study of Higher and Postsecondary Education
University of Michigan School of Education
Ann Arbor, MI 48109-1259
drschwar@umich.edu

Challenges to Equity and Opportunity in Higher Education: An Analysis of Recent Policy Shifts

Donald E. Heller
Deborah R. Schwartz

Introduction

In the past decade, the higher education policy environment has been increasingly characterized by goal conflict. Recognizing both the public and private benefits of postsecondary education in the new knowledge-based economy, policymakers have espoused the goal of increasing access to equal educational opportunities and attainment levels for populations with traditionally low college participation and completion rates. Recognizing economic and political realities, many have, at the same time, advocated policies at the federal, state, and institutional levels that have either directly or indirectly decreased those very opportunities.

In the next ten to fifteen years, as the nation faces a projected 20 percent increase in enrollment demand at degree-granting institutions (U.S. Department of Education, 2001), a growing population of low-income and minority students of traditional college-going age (Carnevale & Fry, in press), and an increased demand for a college-educated workforce (Advisory Committee on Student Financial Assistance, 2001), this conflict between espoused goals and policy realties will be heightened. Understanding how recent policy shifts have served to affect barriers to equal educational opportunity is, therefore, important for researchers and policymakers alike.

In recent years, policy shifts in three domains have occurred: 1) challenges to the use of affirmative action in college admissions and financial aid; 2) attacks on remediation for underprepared students; and 3) a refocusing of financial aid away from lower-income students and more toward wealthier students. Individually, these policy shifts represent varying challenges to achieving equal opportunity. Taken together, they represent a change from and challenge to the goals espoused in the Truman Commission Report of 1947, that

> The American people should set as their ultimate goal an educational system in which at no level – high school, college, graduate school, or professional school – will a qualified individual in any part of the country encounter an insuperable economic barrier to the attainment of the kind of education suited to his aptitudes and interests (President's Commission on Higher Education, 1947, p. 36).

This paper investigates these recent policy shifts individually and then examines what their convergence at the beginning of the 21st century implies about access and equity in the future. More specifically, it addresses the following questions: 1) How are recent shifts in the use of affirmative action in admissions affecting enrollment opportunities for minority students? 2) How are changes in remedial education policies affecting access to higher education? 3) How are trends in state and institutional financial aid policies affecting educational opportunity? 4)

Taken together, what do these recent policy shifts suggest about access to higher education and educational equity in the coming years?

Challenges to Affirmative Action

Race has played a role in higher education admissions for over a century. William Bowen and Derek Bok (1998) in their study of the use of race in admissions in *The Shape of the River*, documented efforts of universities to find ways to diversity their student bodies as early as the 19th century. The Supreme Court's decision in *Brown v. Board of Education* and the passage of the Civil Rights Act of 1964 spurred many colleges and universities to take pro-active steps to ensure that their institutions more closely mirrored the racial make-up of the nation.

There have been a number of recent high-profile challenges to the use of race-based affirmative action in college admissions and financial aid. These include the Podberesky (1994) case, challenging the use of race-based scholarships at the University of Maryland; the Hopwood (1996) case, challenging the use of race in admissions at the University of Texas Law School; the decision of the Regents of the University of California to drop the use of race in admissions, followed by the passage of Proposition 209 in California mandating the same at all public institutions in the state; and Initiative 200 in Washington, which also mandated the elimination of the use of race in admissions.

The initial impacts of these challenges have been documented by a number of researchers. For example, Hurtado and Wathington Cade (2001) documented two effects of Hopwood at a public institution in Texas. They describe an initial "chill effect," where applications of minority students remained strong, but admitted students chose not to enroll, followed by a "decline effect," where the number of minority applicants to the institution began to fall. Similarly, Pusser (2001) presented the dramatic decline in the enrollment of minority students at the Berkeley campus of the University of California following the passage of the Regents' decision to drop the use of affirmative action.

The attempts by public universities to maintain the diversity of the student body in the face of the elimination of affirmative action has had mixed results. While the University of California has seen the proportion of underrepresented minority students who were admitted return to pre-Proposition 209 levels, the record at the most selective campuses (the University of California Berkeley and the University of California Los Angeles) is not as laudatory. At both campuses, the proportion of Latino, African American, and Native American students is still well below the levels in existence before the Regents banned the use of affirmative action (Fogg, 2002).

In order to examine in more detail the impact of the elimination of affirmative action on admissions, we obtained data on the freshman admissions pools for periods before and after the use of affirmative action was eliminated at two flagship, selective universities: the University of Texas at Austin and the University of Washington. The impact of Hopwood was felt on the class that enrolled in the University of Texas in the fall of 1997; at the University of Washington, the first class impacted by Initiative 200 was the 1999 class.

Figure 1 shows three measures of the proportion of underrepresented minorities in the freshman applicant pool at the University of Texas: the proportion of applicants, admitted

students, and enrollees who were minority students[1]. In the years leading up to the Hopwood decision, a decline in the proportion of minority students had already begun, but was accelerated in the first year following Hopwood (1997). While the representation of minorities in the applicant pool did decrease, there was a slightly larger decline in their representation among the pool of students who were admitted and among those who actually enrolled, thus confirming the "chill effect" noted by Hurtado and Wathington Cade (2001). The first two years after Hopwood, however, saw a steady increase in the representation of minority students, though this increase leveled off in 2000.

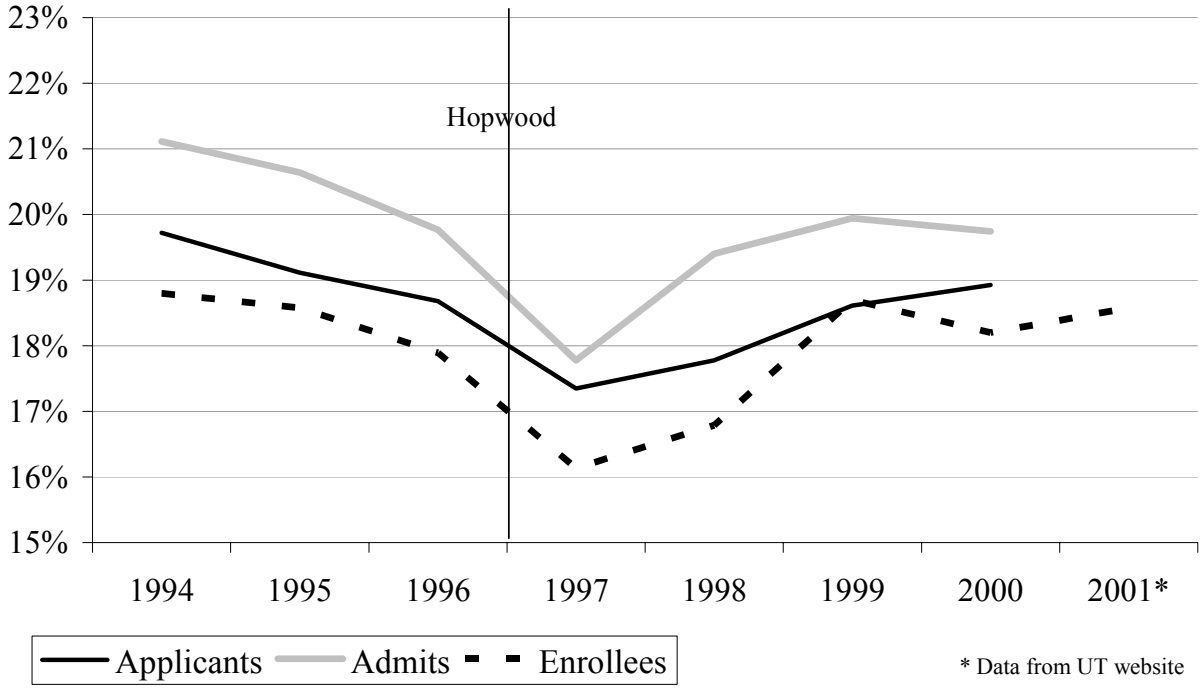

Figure 1: Underrepresented Minorities Among Freshman Applicants to the University of Texas Austin

At the University of Washington (Figure 2), the initial pattern was similar. In the first year following passage of Initiative 200, the proportion of underrepresented minority students declined precipitously.[2] While the proportion of minority applicants declined in the second year post I-200, the proportion among the admitted and enrolled pools stayed largely the same, and in the next two years, the proportion of enrolled minority students returned to a level close to that of the pre-Initiative 200 era.

[1] This includes African American, Hispanic, and Native American students.
[2] African American, Hispanic, Native American, and Hawaiian/Pacific Islander students.

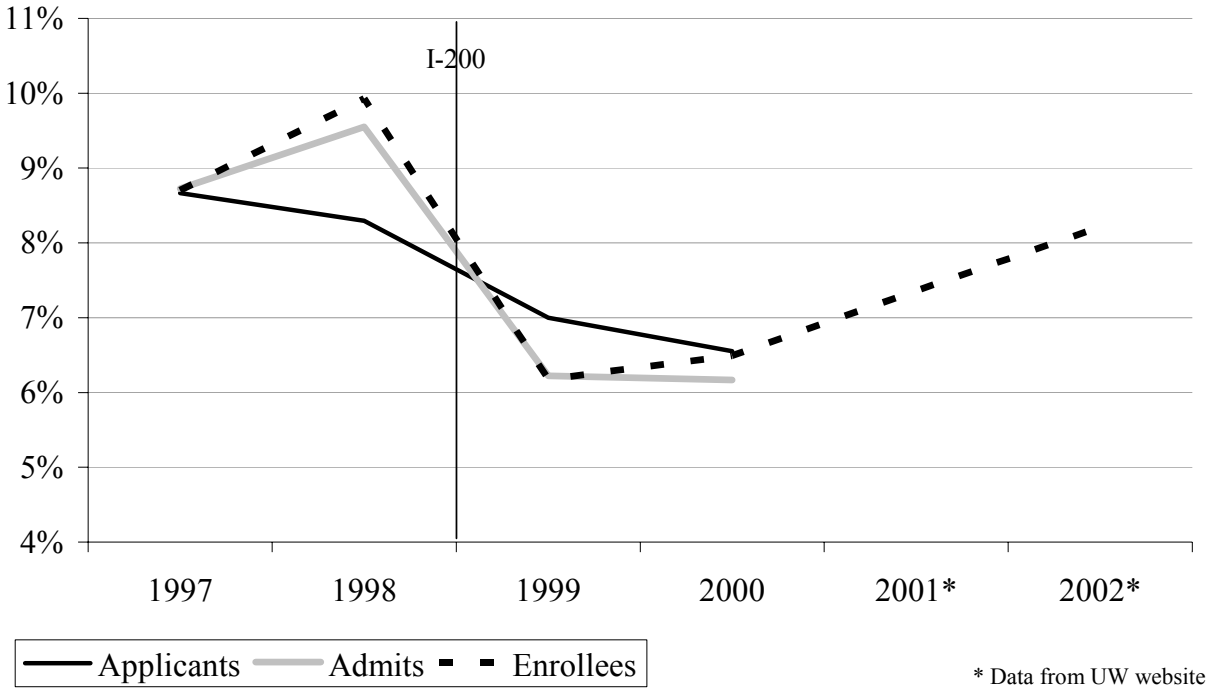

Figure 2: Underrepresented Minorities Among Freshman Applicants to the University of Washington

The predictions regarding the impact of the elimination of affirmative action in college admissions on the diversity of the undergraduate population are built largely on the assumption that higher education institutions would not change anything else in their enrollment management procedures. But this is a faulty assumption, as institutions are likely to adjust their admissions and financial aid policies in ways to try to compensate for the loss of affirmative action as a tool.

In Texas, there were three main strategies used to try to maintain the diversity of the undergraduate student body: 1) legislative establishment of a "Top 10 Percent" plan, which guaranteed admission to the university for all students who graduated in the top decile of their high school class; 2) enhanced outreach activities to high schools in poorer areas which had historically sent few graduates to UT (and which tended to have high concentrations of minority students); and 3) a scholarship program targeted at students in many of these same high schools.[3]

At the University of Washington, two main strategies were employed: 1) enhanced outreach activities; and 2) a scholarship program targeted at high achieving minority students. The university's legal interpretation of I-200 was that if the scholarship program was created with private funds, it would be in compliance with the initiative.

[3] For more about these activities and similar efforts at the University of Washington, see Affolter-Caine, Martinez, Murphy, and Heller (2002) and Murphy, Martinez, Affolter-Caine, & Heller (2002).

At least in the short run, these efforts appear to have helped both institutions overcome the loss of affirmative action in the admissions and financial aid process. These efforts were neither easy nor inexpensive to implement; both UT and UW committed significant institutional resources – human and financial – toward the goal of maintaining the diversity of the student body. Each institution had a very strong commitment from both the president and board of trustees toward finding ways to overcome the loss of affirmative action. With the fiscal crisis facing many states, which has resulted in slower growth or actual cuts in state appropriations to public institutions, these efforts may be difficult to sustain.

Remedial Education Reform Policies

Like affirmative action measures developed in the second half of the twentieth century , remedial education programs were implemented at postsecondary institutions throughout the U.S. to promote access and equity for underserved populations. More specifically, these programs were seen a way to provide underprepared, underrepresented students (e.g., war veterans, low income and minority students, returning adults) the opportunity to enroll and succeed in college (Institute for Higher Education Policy, 1998). As such, remediation rapidly became a common feature of postsecondary education. By 1982-83, approximately 82 percent of higher education institutions that enrolled freshman offered at least one remedial reading, writing, or mathematics course; in fall 1989, 74 percent did; and in fall 1995, 78 percent did (U.S. Department of Education, 1996).

Despite its longevity and apparent popularity, remedial education came under attack in the policy environment of the1990s. For many policymakers, instead of providing a path toward educational opportunity, remediation in college came to represent the failure of the K-12 system, the erosion of standards at American colleges and universities, and the inefficient use of economic resources (Mills, 1998). Although research on state legislators' opinions shows they do not agree on the relative importance of the issue (Ruppert, 1996), policymakers in sixteen states and in New York city have moved forward in implementing remediation reform initiatives. This section of the paper investigates these initiatives and their potential effects on access and achievement.

Recent literature on remediation illustrates the controversial nature of the issue and suggests that reform initiatives are shortsighted. In reviewing efforts of states and higher education systems to limit postsecondary remediation, Ignash (1997) frames the controversy in economic and logistic terms. Concerned about the growing costs of re-educating college students, many policymakers have focused on containment at community colleges. While these institutions are better situated than most four-year institutions to provide remedial instruction, they cannot be held totally responsible, and state coordinating agencies need to assess how policies affect access for underrepresented minority populations. Gumport and Bastedo (2001) position the remedial issue within the larger context of the standards versus equity debate and the shift away from remedial education at City University of New York (CUNY) as part of the trend away from principles of equity in educational opportunity and toward increased stratification in public higher education. Based on analyses of costs of remedial instruction and its benefits, Breneman and Merisotis (in press) concur that arguments against remediation and measures to

limit it are not grounded in economic or educational principles, but rather in politics and ideology.

Other researchers and analysts argue more explicitly against remedial reform initiatives. Astin (1998) argues from the societal perspective that such measures are based on elitist notions of higher education, not on the civic responsibility of institutions to educate the American public. The Institute for Higher Education Policy (1998) argues the case of the public economic and social benefits of providing remedial instruction (e.g., increased tax revenues, productivity, and consumption and decreased crime rates and reliance on government financial support) and claims that "reducing the number of people gaining the skills and knowledge associated with postsecondary education would be unwise public policy" (p. 19). Taking the perspective of developmental educators, others explain that there are numerous reasons why students need remedial education, including not taking all of the required college preparatory courses and time away from school, and argue that being underprepared does not mean students cannot succeed in college (Boylan & Saxon, 2000; Ignash, 1997). McCabe (2000), in fact, shows that those who complete remedial courses perform as well in their regular college courses as students who entered college prepared.

While the research literature presents some data demonstrating the success of remedial education programs and the need for it, the issue of educational opportunity remains largely unexamined. In general, arguments and reports end with discussions of the public good, noting that measures designed to decrease remediation efforts are not in the public interest, since they will not increase educational efficiency or equity (Institute for Higher Education Policy, 1998). Although such arguments appear logical, they lack examination of specific state policies and analysis of their effects on access and achievement.

In this part of the study, we use data from the following sources: 1) qualitative data collected by the State Higher Education Executive Officers (SHEEO); 2) news reports on state policy initiatives related to remedial education; 3) quantitative data on college enrollments from the U.S. Department of Education Integrated Postsecondary Education Data System (IPEDS) survey; and 4) institutional data from the City University of New York (CUNY) and California State University (CSU) system. State policies are analyzed and coded according to their focus in containing remedial education: limiting number of remedial students, limiting students' time to completion, limiting remedial courses to community colleges; limiting funding for remedial education, and using alternative methods for funneling underprepared students to specific institutions and/or programs. Then, the effects of these containment methods are analyzed in light of data on national enrollment and transfer patterns.

Analysis of reports from the states shows that in general, states and individual systems have adopted one or more of five approaches to containment: limiting the number of remedial students accepted for admission; limiting the time allowed for students to complete remedial courses; limiting remedial courses to community colleges; limiting funding for remedial education; and implementing stricter admissions and/or placement standards at four-year institutions. Although different in approach, these initiatives all tend to funnel underprepared students to two-year institutions.

Six states, including Colorado, Florida, Georgia, Massachusetts, South Carolina, and Virginia, as well as the City University of New York (CUNY), presently have policies in place to do this funneling directly by prohibiting students who need remediation from enrolling at four-year institutions ("Council limits," 1996; Crowe, 1998; Seebach, 1998; Trombley, 1998; Turner, Jones & Hearn, 2001). In some cases, students can take remedial courses offered by

community colleges on four-year campuses (Crowe, 1998; Hebel, 1999, 2001), matriculate but take required remedial courses at a two-year institution (Seebach, 1998), or complete special fee-based remedial programs before being allowed to enroll at a four-year institution (Trombley, 1998); however, for the most part, their options are limited.

States are also channeling students to community colleges through admissions and placement standards and funding initiatives. Strict admissions requirements at four-year institutions in Maryland have, for example, tended to limit remedial education to open admissions community colleges (Reiff, 1998). Stricter standards adopted in 1995 in Mississippi have had a similar effect (Hebel, 2001), and standards going into effect in 2005 in Louisiana are expected to force many remedial students to enroll at two-year institutions (Martel, 2001). Meanwhile, a statutory cap on state funds for remediation at universities in Arkansas, prohibitions against using state funds for remedial work at doctoral institutions in New Mexico, and a 12-semester hour funding limit at public universities in Texas have also tended to shift students to two-year institutions (Ackerman, 1994; Crowe, 1998).

Other initiatives designed to limit the number of students taking remedial courses at four-year institutions will also ultimately drive students to community colleges or out of higher education altogether. The most highly publicized cases are the CSU and CUNY systems. CSU is taking a two-pronged approach, limiting both percentage of students needing remediation (not more than 10 percent of incoming freshmen by 2007) and time period in which students can complete remedial requirements (freshman year) (Antonio & Bersoia, 2001; "Cal State says," 1999). In 1999, the first year the time limit was in effect, 5 percent of the freshman class was "booted" out of the system because they had not yet completed all required remedial coursework ("Wasting," 2000). At CUNY, the Board of Trustees adopted a policy eliminating most remedial courses from four-year institutions by fall, 2001. Students who do not score at least 75 on the Regents exam in math and English or at least 480 on the math and verbal sections of the SAT or pass CUNY's own nationally-normed standardized tests of basic skills are forced to enroll at community colleges or take special programs prior to enrolling at four-year institutions (Arenson, 2002; Trombley, 1998; Healy, 1999).

While these remedial reform initiatives appear neutral in their shifting of remedial education to community colleges, their implementation has a disparate impact on minority and low-income students who are disproportionately represented in both the remedial and community college student populations. Reports from both the U.S. Department of Education (1996) and the Southern Regional Education Board (Abraham & Creech, 2000), as well as data from CSU (Weiss, 2001) and CSU (Trombley, 1998), suggest this over-representation in remedial courses. Additionally, the National Study of Community College Remediation (McCabe, 2000) clearly shows that 54 percent of community college remedial students have an annual income less than $20,000 and that African-American and Hispanic students are significantly over-represented in the "seriously deficient" population (i.e., deficient in reading, writing, and math, and needing a low-level remedial course in at least one area) (p. 37). Thus, when states or individual systems limit the number of freshmen requiring remediation at four-year institutions, limit the time to complete remedial courses, or require students to take remedial courses from community colleges, they track disproportionate numbers of low-income and African-American and Hispanic students into two-year colleges.

Data from CSU and CUNY suggest this effect on access to four-year institutions. In the CSU system in 1998, 74 percent of African-American freshmen and 65 percent of Hispanic freshmen required remedial work in math compared to 40 percent of the White students; and 64

percent of the African-Americans and 62 percent of the Hispanics required it in English, compared to 29 percent of the Whites (Selingo, 2000). The policy adopted by the system to limit the number of remedial-needy students admitted each year to 10 percent of the freshman class by 2007 will thus have a disparate exclusionary effect on African-American and Hispanic students. For example, had the 10 percent limit been in effect in 1998, the number of African-Americans admitted would have been reduced by 36.9%, and the number of Hispanics admitted would have been reduced by 41.5 percent (authors' calculations based on data from California Postsecondary Education Commission, 2000).

Enrollment data for fall 2000 and 2001 (the first year remedial course were eliminated from all 11 four-year colleges in the CUNY system), shown in Table 1, also show a slight decrease in the percentage of African-American and Hispanic students at senior colleges, while the proportion of white students and Asian/Pacific Islander is increasing. This tendency is even more apparent in data for individual campuses, such as Baruch College, where white enrollment increased by 1.3 percentage points and Asian enrollment increased by 1.4, but Black enrollment decreased by 1.8 and Hispanic enrollment decreased by .7 (authors' calculations based on data from CUNY, 2002). Between 1999 and 2001, admissions rates, which were disparate prior to the new policy, decreased for all racial/ethnic groups except Asians: from 63 percent to 59 percent for white students, from 38 percent to 36 percent for African-Americans, and from 44 percent to 40 percent for Hispanics (Arenson, 2002).

Table 1: Undergraduate Enrollment at CUNY Four-Year Colleges by Race/Ethnicity, 2000 – 2001

	White %	African-American %	Hispanic %	Asian/Pacific Islander %
2000	32.2	31.7	22.1	13.8
2001	32.4	31.2	22.0	14.2

Source: City University of New York, *Undergraduate Enrollment by Race/Ethnicity and College: Fall 2001 and Undergraduate Enrollment by Race/Ethnicity and College: Fall 2000*, retrieved October 6, 2002, from http://www.cuny.edu/abtcuny/facts/data.

This channeling of students away from four-year campuses can exacerbate a national "tracking" effect for low income and minority students evident since the late 1970s (Brint & Karabel, 1989) and heightened in the 1980s and early 1990s as tuition at public and private four-year institutions rose and federal financial aid decreased in relation to tuition prices (McPherson & Shapiro, 1998). National enrollment data suggests this trend has continued throughout the 1990s. As shown in Table 2, throughout the 1990s, the proportion of white students at two-year colleges decreased every year from a high of 75 percent in 1990 to a low of 66.3 percent in 1998,

Table 2: Total Fall Enrollment (thousands) at Degree-Granting 2-Year Institutions By Race/Ethnicity, 1990 – 1998

	1990	1991	1992	1993	1994	1995	1996	1997	1998
White	3,954.3 (75.5%)	4,198.8 (74.3%)	4,131.2 (72.2%)	3,960.6 (71.2%)	3,861.7 (69.8%)	3,794.0 (69.1%)	3,742.8 (68.1%)	3,678.2 (67.2%)	3,658.0 (66.4%)
Black	524.3 (10.0)	577.6 (10.2)	601.6 (10.5)	599.0 (10.8)	615.0 (11.1)	621.5 (11.3)	629.3 (11.4)	637.9 (11.7)	657.3 (11.9)
Hispanic	424.4 (8.1)	483.7 (8.6)	545.0 (9.5)	556.8 (10.0)	582.9 (10.5)	608.4 (11.1)	644.2 (11.7)	672.1 (12.3)	706.6 (12.8)
Asian/Pacific Islander	215.2 (4.1)	255.7 (4.5)	289.5 (5.1)	295.0 (5.3)	312.5 (5.7)	314.9 (5.7)	322.9 (5.9)	335.1 (6.1)	363.3 (6.6)
American Indian/Alaskan Native	54.9 (1.0)	62.6 (1.1)	64.4 (1.1)	63.2 (1.1)	66.2 (1.2)	65.6 (1.2)	66.7 (1.2)	67.5 (1.2)	71.9 (1.3)
Nonresident alien	67.1 (1.3)	73.5 (1.3)	90.6 (1.6)	91.2 (1.6)	91.4 (1.7)	88.1 (1.6)	91.5 (1.7)	79.9 (1.5)	55.0 (1.0)
Total	5,240.2	5,651.9	5,722.3	5,565.8	5,529.7	5,492.5	5,497.4	5,470.7	5,512.1

Note: Percentage distribution in parentheses (columns may not sum to total due to rounding).

Source: Data from U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys in *Digest of Education Statistics* (2000), and *Fall Enrollment in Title IV Degree-Granting Postsecondary Institutions: 1998* [NCES 2002-162] (2002).

while it increased every year for all minority groups (nonresident aliens are not included), especially Hispanics. While minority students together accounted for only 23.1 percent of the enrollment at two-year colleges in 1990, they accounted for 32.5 percent in 1998.

In addition to heightening this pattern of disproportionate representation of minority and low-income students at two-year institutions, policies establishing differentiated levels of postsecondary education, with community colleges being the "preferred provider" of remediation (Ignash, 1997, p.8), can create a system of educational stratification that poses structural barriers to equal attainment for those students who are funneled to the "lowest" level (Gumport & Bastedo, 2001). While community colleges are playing a different role than in the past (Brint & Karabel, 1989; Dembner, 1996; Henriksen, 1995), the U.S. Department of Education's most recent study of transfer rates still shows that the overall rate of transfer to a four-year institution is only 25%, and even for the 70 percent of community college students who aspire to earn a bachelor's degree or higher, the rate of transfer is only 36 percent (U.S. Department of Education, 2001). Whatever the causes of this relatively low transfer rate, the situation is problematic, given that remedial students are being channeled to community colleges in increasing numbers and that transfer rates vary by race/ethnicity, with those for African-Americans and Hispanics being between 8 and 12 percentage points lower than that for Whites (Center for the Study of Community Colleges, 1995).

Finally, as postsecondary enrollment demand increases in the next decade, the remedial reform policies can ultimately affect access to postsecondary education altogether. Appropriations for community colleges did not keep pace with enrollment increases throughout the 1990s (Schmidt, 1999), forcing institutions in some states to cancel classes, increase class size, and limit enrollment (Tollefson, 1997). In California, for example, the community colleges, which enrolled 66 percent of the state's total college students (including over 80 percent of the state's lower income students and over 70 percent of the state's African-American and Hispanic students) were funded throughout the 1990s at 28-41 percent of the rate for the four-year systems and received only one-third of the funds raised through bonds for capital improvement (Leovy, 2000). The executive director of the state's postsecondary coordinating commission has projected that the community colleges will be turning away up to 500,000 students by 2005 (Fox, 2000b). In other states, such as Louisiana, which do not have a widespread community college system, geography alone will impose limits on access for students channeled away from four-year institutions (Sapp, 1996). Without eliminating or reducing the need for remediation, the shifting of most or all remedial education responsibilities to two-year institutions could then not only directly stratify the flow of students entering higher education by race, ethnicity, and income, but also drive some entirely out of the system.

Refocusing of Financial Aid

State Merit Aid Programs[4]

Both the federal and state governments have historically used financial aid to help achieve the goal of the Truman Commission that were described earlier in this report. That goal of eliminating financial barriers to college entry was reiterated in the Higher Education of 1965, which established the nation's first broad-based financial aid programs. These programs, including grants and loans, awarded the aid based on the financial need of the student and her family. The 1972 reauthorization of the Higher Education Act created the State Student Incentive Grant (SSIG) program, which provided federal matching funds to states that created their own need-based scholarship programs. This act "proved to be a critical catalyst to the development and expansion of the state programs" (Heller, p. 230).

Researchers have documented the effectiveness of need-based financial aid in promoting college access for lower-income students (see for example Heller, 1997; Jackson and Weathersby, 1975; and Leslie and Brinkman, 1987). Trends in state spending on financial aid, however, point toward an increasing use of merit-based financial aid that eliminates financial need as a criterion for scholarship awards. Between 1991 and 2001 spending by the states on need-based scholarships for undergraduates increased 7.7 percent annually, while spending on merit programs increased at an 18.3 percent annual rate (authors' calculations from National Association of State Scholarship and Grant Programs, various years). During this same period, the proportion of state aid awarded to undergraduates without consideration of financial need has grown from 11 percent of the total to 24 percent.

The first and most well known broad-based state merit scholarship program is the Helping Outstanding Pupils Educationally (HOPE) program in Georgia. Begun in 1993, it is now the largest state-run merit scholarship program in the country, awarding approximately $300 million in 2000-2001 (National Association of State Student Grant & Aid Programs, 2002). Funded by the Georgia Lottery, the criterion used for the awarding of HOPE scholarships is the attainment of a B average (3.0 on a 4.0 scale) in a selection of high school core curriculum subjects (Mumper, 1999). Students have to maintain a 3.0 average while enrolled in college in order to retain the scholarship. The scholarship provides for full tuition (plus a $150 per semester book allowance) at any public institution in the state, or $3,000 annually for students attending a private institution in the state. While the program originally included a family income cap of $66,000 per year, by its third year the cap had been removed.

The popularity of Georgia HOPE helped spur the development of similar programs in other states. As of 2002, 12 states had implemented broad-based merit scholarship programs that do not use financial need in determining eligibility. These states awarded a combined $863 million in merit awards during the 2000-2001 academic year, almost three times the $308 million provided in need-based aid (National Association of State Student Grant & Aid Programs, 2002). Table 3 summarizes these programs. As shown there, most states use grade point average and/or

[4] Parts of this section have been adapted from Heller and Rasmussen (2002).

Table 3: State Merit Scholarship Programs

Program (year implemented)	Funding Source	Award Criteria	Award Amount
Alaska Scholars Award (1999)	Land leases and sales	Class rank	$2,750 per year at the University of Alaska
Florida Bright Futures Scholarship (1997)	Lottery	GPA and SAT/ACT	Up to full tuition and fees each year at a FL public institution plus $300, or a comparable amount at a FL private institution
Georgia Helping Outstanding Pupils Educationally (HOPE) Scholarship (1993)	Lottery	GPA	Full tuition and fees each year at a GA public institution, or up to $3,000 at a GA private institution
Kentucky Educational Excellence (1999)	Lottery	GPA	Up to $1,000 per year at a KY institution
Louisiana Tuition Opportunity Program for Students (TOPS) (1998)	General revenues	GPA and ACT	Full tuition and fees each year at a LA public institution, or a comparable amount at a LA private institution
Michigan Merit Award Scholarship (2000)	Tobacco settlement	State curricular framework test	One-time award up to $2,500 at a MI institution; $1,000 out of state
Mississippi Eminent Scholars (1996)	General revenues	GPA and SAT/ACT	$2,500 per year at a MS institution
Missouri Academic Scholarship Program (1997)	General revenues	SAT/ACT	$2,000 per year at a MO institution
Nevada Millennium Scholarship (2000)	Tobacco settlement	GPA	$80 per credit hour at a NV 4-year institution or $40 per credit hour at a NV community college (each year)
New Mexico Lottery Success Scholarship (1997)	Lottery	GPA	Full tuition and fees at a NM public institution starting in the second semester
South Carolina Legislative for Future Excellence (LIFE) Scholarship (1998)	General revenues	GPA, SAT/ACT, and class rank	Full tuition plus $300 per year at a public SC institution; comparable amount at a SC private institution
West Virginia Providing Real Opportunities for Maximizing In-state Student Excellence (PROMISE) Scholarship (2002)	Lottery and taxes on amusement devices	GPA and SAT/ACT	Full tuition each year at a WV public institution or comparable amount at a WV private institution

Source: Krueger (2001), Selingo (2001), and state program websites.

standardized tests as the criteria for the awarding of the scholarships. Lottery revenues, general funds, and funds from the national tobacco settlement are the three primary sources of funding for the programs.

States have articulated three primary motivations for the creation of these programs: 1) to promote college access and attainment; 2) to encourage and/or reward students who work hard and perform well academically; and 3) to stanch the "brain drain" of the best and brightest students and encourage them to attend college in the state. Examples taken directly from the states include:

- "The UA Scholars Program is designed to help reduce the number of Alaska's high school graduates who leave the state for education and jobs elsewhere" (University of Alaska website, http://www.alaska.edu/scholars/booklet.html)

- "Increase access to postsecondary education and reward Michigan high school graduates who have demonstrated academic achievement" (Michigan enabling legislation, Act 94 of 1999)

- "Several other states have found that the quickest and most effective way to motivate students to study harder and to achieve in school is to offer good students the opportunity to attend college tuition free" (West Virginia PROMISE website, http://www.promisescholarships.org/facts.htm)

- "Georgia's unique scholarship program [HOPE] that rewards students' hard work with financial assistance in degree, diploma, and certificate programs" (Georgia Student Finance Commission website, http://www.gsfc.org/HOPE/ dsp_hopepage.cfm)

- "The purpose of the LIFE Scholarship program is to increase access to higher education; improve employability of South Carolina's students; provide incentives for students to be better prepared for college; and to encourage students to graduate from college on time" (South Carolina LIFE Scholarship website, http://www.che400.state.sc.us/web/Student/ LIFE/LIFE%20Overview.html)

- "This scholarship rewards students for their academic achievements during high school by providing funding for them to pursue further educational and career goals" (Florida Bright Futures website, http://www.firn.edu/doe/brfutures/)

To measure the impact of state merit scholarships programs on college access, we conducted an analysis of two of the nation's largest programs – the Florida Bright Futures and Michigan Merit Award Scholarship programs. Like the Georgia HOPE Scholarship program, Florida's Bright Futures program is funded from state lottery revenues, has no income eligibility cap, and awards scholarships for up to four years of undergraduate education. Since its creation, it has become the nation's second largest state-run merit program. The program has three types of awards, two for use at one of the state's degree-granting institutions (public and private), and

one for students attending vocational/technical postsecondary education. A summary of the awards and eligibility requirements is shown in Table 4.

Table 4: Florida Bright Futures Scholarship Award Amounts and Eligibility Criteria

	Academic Scholars	Merit Scholars	Gold Seal Vocational
Award amount (public institutions)	100% of tuition and fees plus $600	75% of tuition and fees	75% of tuition and fees
Award amount (private institutions)	100% of tuition at comparable public institution	75% of tuition at comparable public institution	75% of tuition at comparable public institution
High school GPA	3.5 for college curriculum (15 courses)	3.0 for college curriculum (15 courses)	3.0 in college courses and 3.5 in vocational courses
Minimum test score	1270 SAT/28 ACT	970 SAT/20 ACT	Varies, depending on the test taken
Other requirements	75 hours of community service in high school	–	–
Postsecondary GPA (for renewal)	3.0	2.75	2.75

Note: Alternative eligibility criteria exist for home-schooled students and GED recipients. All awards can be renewed for up to seven years or until a degree is earned, or a certain number of credit hours is attained. Awards can be used only at postsecondary institutions in the state of Florida.

Source: Postsecondary Education Planning Commission (1999)

In its initial year of operation in 1997-1998, the Bright Futures program awarded $69.6 million to 43,244 students, or an average award of $1,609 per student (Postsecondary Education Planning Commission, 1999). In its second year, the program expanded to award $93.3 million to 56,281 students, with approximately 57 percent of the dollars going to existing postsecondary students renewing their scholarships, and the remainder awarded to incoming students (Sue Jones, Florida Department of Education, personal communication, January 12, 2000). In 1999-2000, $131.5 million was distributed to over 70,000 students (Bureau of Student Financial Assistance, 2000).

The state of Michigan chose to use a portion of its tobacco lawsuit settlement funds for the Michigan Merit Award Scholarship Program. The stated goal of the legislation creating the program was "to increase access to postsecondary education and reward Michigan high school graduates who have demonstrated academic achievement" (Michigan merit award scholarship act, 1999, p. 2). The program provides one-time grants of $2,500 to students attending in-state public institutions, and $1,000 to those attending private or out-of-state institutions, with no income eligibility requirements. In its first year in operation in the 2000-2001 academic year, approximately 37,000, or 30 percent of all graduating seniors, qualified for a scholarship (Michigan Department of Treasury, 2000).

The Michigan program awards scholarships to students who score at Level 1 (exceeds Michigan standards) or Level 2 (meets Michigan standards) on all four portions of the Michigan Educational Assessment Program High School Tests (MEAP HST). The MEAP tests are a

criterion-referenced test designed to measure knowledge of the state's designated curricular frameworks. The tests are given in four subject areas: mathematics, reading, science, and writing. Although the vast majority of scholarship recipients qualify through the MEAP test, the legislation also provides an alternative path for qualifying for the scholarships. To qualify under this alternative path, students must: 1) take all four subject area tests; 2) receive a score of Level 1 or 2 on at least two of the tests, and 3) score in the top 25 percent nationally on the SAT 1, ACT, or ACT WorkKeys tests.[5] All students in Michigan, regardless of family income or other characteristics, are eligible for the awards.[6]

The Michigan student-level data were obtained from the Michigan Merit Award Board (National Computer Systems, 1999). Additional data were acquired from the Michigan School Report (MSR), which includes data on enrollments, graduates, and college participation rates of public high schools in the state (Michigan Department of Education, 1999). The Florida scholarship data were provided to the researchers by the Florida Postsecondary Education Planning Commission. Both the Michigan and Florida Departments of Education report data on the number of graduates of public high schools each year and, among those graduates, how many enroll in postsecondary education the subsequent fall (Florida Department of Education, 2001; Michigan Department of Education, 1999). Additional high school-level data from both states were obtained from the Common Core of Data files from the National Center for Education Statistics (National Center for Education Statistics, 2001).

This section of the paper addresses three primary questions: 1) How does awarding of the Michigan Merit and Florida Bright Futures scholarships differ for individuals with varying socioeconomic characteristics?; 2) What relationship exists between the different criteria used to determine eligibility for the scholarships in the two states, and the racial and socioeconomic distribution of awards?; and 3) What relationship exists between the distribution of awards and the college attendance patterns of students from individual high schools in the two states?

To answer these questions, we compared the distribution of students who qualified for the scholarship from each demographic category with the overall distribution of students in each state. The distribution of students with different background characteristics among scholarship qualifiers indicates which students in the state are benefiting most from the scholarship program. Over- or under-representation of scholarship qualifiers relative to those attempting to qualify indicates an imbalance in the awarding of scholarships.

Table 5 presents the scholarship data for students from each racial group in Florida.[7] While the overall scholarship rate was 26 percent, the rates for each group ranged from a low of

---

[5] For the first cohort of students, the qualifying SAT combined score was 1170 and the ACT composite score was 24. The WorkKeys test assesses individuals' knowledge of workplace skills, and is often taken by students enrolled in vocational programs in secondary school. It tests skills in the areas of applied mathematics, applied technology, listening, locating information, observation, reading for information, teamwork, and writing. Students who qualify for a scholarship via the WorkKeys test can use the funds for postsecondary vocational or technical training only.

[6] The full $2,500 scholarship is awarded for students attending college or some other form of postsecondary training in Michigan. Students attending out-of-state institutions are eligible for a $1,000 award. In addition to these awards, students achieving certain scores on the 7th and 8th grade MEAP tests are eligible for up to an additional $500 in scholarship funding.

[7] The Florida data represent students who were first-year college students and used their scholarship in the 1998-1999 school year. Because the scholarships provide such a large percentage of tuition costs, and the students are clearly academically talented, we believe that these data are a good proxy of the overall rates at which students from different groups and in different high schools qualified for the scholarships. Because the Bright

under 9 percent of all African American high school graduates to a high of 43 percent of Asian/Pacific Islander graduates. While White students represented 61 percent of all high school graduates in the state, they were 77 percent of the scholarship recipients. Differences were also seen in the type of Bright Futures scholarship for which students qualified (see Table 3). While 31 percent of White and 38 percent of Asian Americans qualified for the Florida Academic Scholar award, the highest award level, only 12 percent and 23 percent of African Americans and Hispanics, respectively, qualified for that same award.

Table 5: Scholarship Rates for Florida 1998 Public High School Graduates

Race	High School Graduates	% of Total Graduates	# of Award Recipients	Scholarship Rate	% of All Recipients
Native American	196	0.2%	55	28.1%	0.2%
Asian/Pacific Islander	2,695	2.8	1,145	42.5	4.5
African American	21,195	21.7	1,893	8.9	7.5
Hispanic	13,818	14.2	2,527	18.3	10.0
White	59,637	61.1	19,331	32.4	76.8
Multiracial*	–	–	67	–	0.3
Other*	–	–	157	–	0.6
Total	97,541	100.0	25,175	25.8	100.0

* While the Postsecondary Education Planning Commission allows students to indicate their race as "other" or "multiracial," the state Department of Education does not use these categories. Students with missing race data are excluded from the calculations.

Table 6 presents similar information for the Michigan students.[8] The scholarship qualification rates ranged from a low of 8 percent of African Americans to a high of 52 percent of Asian/Pacific Islander students. Of those Michigan students eligible to receive the awards, over 93 percent qualified for the scholarships by scoring at the required levels on all four MEAP tests. Approximately 6.5 percent qualified by passing two of the MEAP tests and scoring in the top 25 percent nationally on the ACT, and 0.15 percent qualified via the MEAP and SAT. No students qualified via the MEAP and WorkKeys test.

Futures program awards scholarships only to students attending college in Florida (public or private institutions), the data include only those students. Thus, there may be some bias in the measures presented here if there are differentials in the rate at which students from different racial groups or high schools migrate out of state to attend college.

[8] Because the MEAP tests are given in 11th grade, the 11th grade enrollment in the 1998-99 school year is used as the basis for calculating the qualification rates for the Michigan students.

Table 6: Scholarship Qualification Rates for Michigan 1999 11th Graders in Public Schools

Race	Grade 11 Enrollment	% of Total	# of Award Recipients	Qualification Rate	% of All Recipients
Native American	1,191	1.1%	219	18.4%	0.6%
Asian/Pacific Islander	1,855	1.6	964	52.0	2.7
African American	15,360	13.6	1,217	7.9	3.5
Hispanic	2,445	2.2	601	24.6	1.7
White	90,980	80.4	30,729	33.8	87.6
Multiracial	1,294	1.1	599	46.3	1.7
Other*		0.0	745	–	2.1
Total	113,125	100.0	35,074	31.0	100.0

* While the MEAP tests allow students to indicate their race as "other," the state Department of Education does not use this category for enrollment reports. Students with missing race data are excluded from the calculations.

Figure 3 compares the scholarship rates of racial groups in the two states, showing the large disparities in the rates for White and Asian American students on the one hand, and African American and Hispanic students on the other.

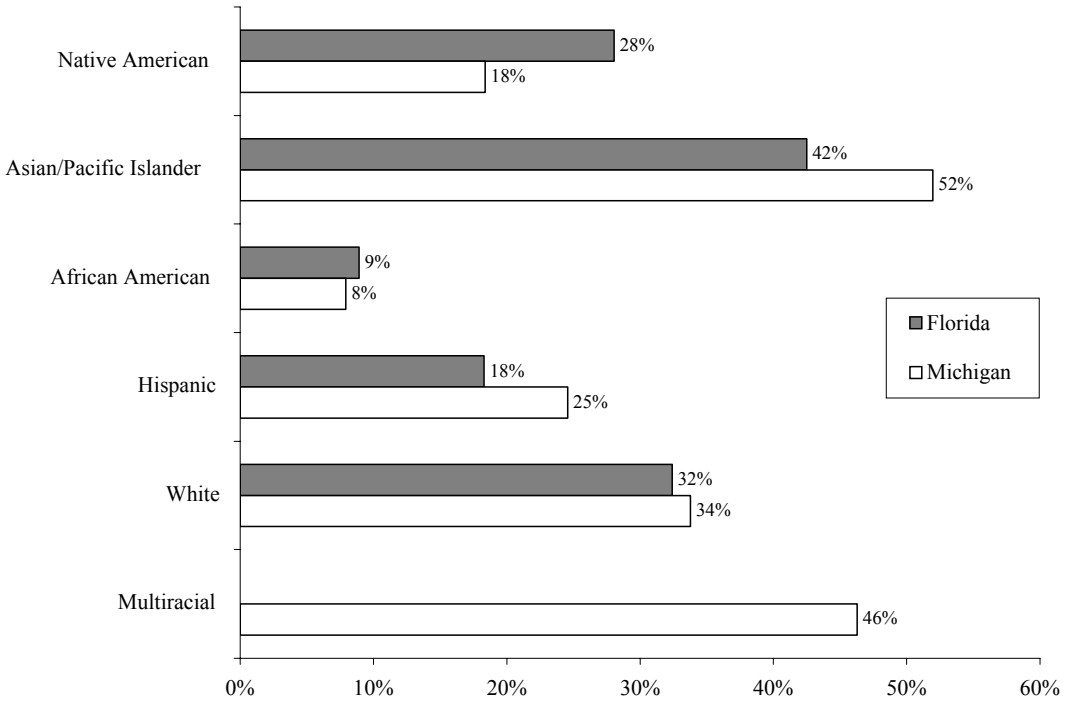

Figure 3: Scholarship Rates by Race

To examine the relationship between the students' socioeconomic characteristics and scholarship awards, we used data on the percentage of students in each school who qualified for free or reduced-price lunch under the National School Lunch Program (herein designated as "free lunch"). Since eligibility for free lunch is determined by a federal formula of family size and income, this percentage is an indicator of the income levels of families in the school's district. We divided the public high schools in each state into quintiles based on the percentage of students in each school who qualified for free lunch. The scholarship rates of each group are shown in Table 7.[9]

Table 7: Scholarship Rates by High School Free Lunch Quintile

Quintile	Florida	Michigan
1st quintile (schools with fewest students receiving free lunch)	28.4%	45.6%
2nd quintile	24.1	43.7
3rd quintile	20.3	38.9
4th quintile	19.1	30.2
5th quintile (schools with most students receiving free lunch)	11.1	16.4
Correlation of school free lunch percentage and school scholarship rate	–0.58 (p<.001)	–0.54 (p<.001)

Note: The analyses were weighted by the number of graduating seniors in each high school.

Data on the number of students who continued on to postsecondary education after graduating from high school were used to estimate the postsecondary attendance rate in each public high school for the academic year before implementation of the merit scholarship program (1995-96 in Florida, averages of the 1996-97 through 1998-99 rates in Michigan).

To further explore this relationship, we divided the high schools into quintiles, based on their college attendance rates before implementation of the merit scholarship programs. We then compared the scholarship rates of the schools in each group. Table 8 presents the scholarship rates for the high schools in each state, arranged by the high school's college participation quintile.[10] Schools with the highest proportion of students attending college (before

[9] In another study conducted with a colleague (Heller & Shapiro, 2000), we performed a multivariate analysis of the Michigan data to determine the joint effects of gender, race, and the wealth of the students' school (as measured by the proportion of students on free lunch) on the probability of scholarship qualification. We found that all three factors were significant predictors, indicating neither race nor poverty alone were solely responsible for the gap in qualification rates. Even in wealthier schools, minority students were less likely to qualify for a scholarship than their White and Asian American counterparts.

[10] The Florida data are based on student-level enrollment records in public and private universities in Florida, and thus exclude students attending college outside of the state. The Michigan data are based on high schools' reports of the status of their graduates in the fall following graduation from high school. Because the high schools do not report the data every year, we took the average rate from a three-year period. The Michigan data were also hampered by missing data from two of the states largest school districts, Detroit and Grand Rapids, which enroll a large percentage of minority students. We conducted a simulation of the Michigan data by

implementation of the state's merit scholarship program) had the highest percentage of students receiving a scholarship.

Table 8: Scholarship Rates by High School College Participation Rate Quintile

Quintile	Florida	Michigan
1st quintile (highest college participation rate)	26.1%	44.0%
2nd quintile	20.4	37.5
3rd quintile	17.4	39.1
4th quintile	9.6	34.7
5th quintile (lowest college participation rate)	5.2	25.4
Correlation of school college participation rate and school scholarship rate	0.58 (p<.001)	0.34 (p<.001)

Note: The analyses were weighted by the number of graduating seniors in each high school.

The analyses presented here demonstrate that a very strong relationship exists between socioeconomic characteristics and the rate at which students qualify for merit scholarships in Florida and Michigan. In both states, African Americans and Hispanics qualify for the scholarships at rates well below those of White and Asian American students. There is also a strong relationship between the income levels in the communities in which students attend school, as measured by the proportion of students who qualify for free lunch, and the probability that a student would earn a scholarship.

The groups of students least likely to be awarded these scholarships are the populations who have traditionally been underrepresented in higher education. Data on college participation rates by race indicate a large disparity between White and Asian American students, who have higher college-going rates, and African Americans and Hispanics, who attend college at lower rates (Heller, 1999; Koretz, 1990). Other studies have demonstrated the gap in college participation by income level (Advisory Committee on Student Financial Assistance, 2001; Ellwood & Kane, 1999; Mortenson, 2000).

The distinctions in the criteria used for awarding the scholarships in the two states do not appear to lead to large differences in the resulting distribution of the awards. Overall, a higher percentage of students in Michigan than in Florida were awarded scholarships, but the distributional effects within the two states were very similar. The distributional differences between the use of a statewide criterion-referenced test (in Michigan) and the use of high school grades and national standardized tests (in Florida) were negligible.

The final question asked about the relationship between the distribution of scholarship awards and the college attendance patterns of high schools in the state. This question addresses the core issue of whether these programs are likely to have much impact on college access in each state. Because the greater proportion of the awards have been distributed to students in

interpolating college participation data in these two districts based on other variables; the simulation would increase the statewide correlation of school college participation rate and scholarship rate to approximately 0.50.

high schools with higher college-participation rates (before implementation of the merit scholarship programs), it is evident that the impact is likely to be much less than those scholarship programs that target their awards to students based on financial need.

A few sample high schools can help to illustrate this conclusion. Table 9 shows the college participation rates for Michigan high schools (before implementation of the Michigan Merit Award Scholarship Program), and the scholarship award rates for those schools. For example, Grosse Ile High School, located in a wealthy suburb of Detroit, sent 94 percent of its students on to some form of postsecondary education before the scholarship program was implemented. Thus, the scholarship program could have induced *at most* the remaining 6 percent of the graduates in that school to attend college.[11] However, 64 percent of the students in this school qualified for scholarships, indicating that *at least* 58 percent of the scholarships went to students who would likely have been college-bound anyway.[12]

Table 9: College Participation and Scholarship Rates in Michigan Public High Schools

High School	College Participation Rate	Scholarship Rate
Statewide average	73%	37%
Grosse Ile HS	94	64
Farmington HS	93	69
Community HS (Ann Arbor)	93	60
Calumet HS	95	80
River Rouge HS	37	8
Hamtramck HS	30	14
Roseville HS	35	20
Madison HS	44	14

Note: The statewide averages were weighted by the number of graduating seniors in each high school. Each high school shown had a graduating class of at least 90 students.

In contrast, Hamtramck and River Rouge high schools are located in poor communities near Detroit. Less than 40 percent of the students in these schools attended college before the implementation of the scholarship program. Yet less than 15 percent in each qualified for the scholarships.

Similar patterns can be seen among Florida high schools in Table 10. Unlike the Michigan program, the Florida Bright Futures program does not have as one of its legislated goals increasing college access; rewarding academic achievement is the sole goal (Florida Bright Futures Scholarship Program, 1999). Yet like the Michigan program, it is quite apparent that many of the scholarships are likely being awarded to students attending college anyway.

---

[11] This assumes, of course, no large behavioral changes in the college-going patterns of the students in this school due to other factors in the first year the program was implemented.

[12] It should be noted here the possibility that the scholarships could have had some impact on college choice among these students. For example, the $2,500 award may have induced a student who otherwise would have enrolled in a community college to enroll instead in a 4-year institution. But increasing college *choice* was not a legislated goal of the program; increasing college *access* was.

Table 10: College Participation and Scholarship Rates in Florida Public High Schools

High School	College Participation Rate	Scholarship Rate
Statewide average	50%	21%
Stanton Prep (Jacksonville)	74	58
Mast Academy (Key Biscayne)	73	42
Lincoln Park Academy (Ft. Pierce)	70	43
Seminole HS	70	41
Hollins HS (St. Petersburg)	39	9
Edison HS (Miami)	39	1
Shanks HS (Quincy)	36	7
Andrew Jackson HS (Jacksonville)	34	7

Note: The statewide averages were weighted by the number of graduating seniors in each high school. Each high school shown had a graduating class of at least 100 students.

Institutional Financial Aid

Similar to the change in the awarding of financial aid by the states, there has also been a shift in the way that colleges and universities have used there own financial aid funds. In previous work, Heller and associates (Heller, 2001a; Heller & Nelson Laird, 1999) described how between 1989 and 1995 institutions began to use merit financial aid for more strategic, enrollment-management purposes. While the *number* of merit grants awarded by four-year institutions declined between these two years, the average *amount* of the grants more than doubled. In contrast, both the number and size of institutional need-based grants grew at similar rates.

Data from the National Postsecondary Student Aid Study (National Center for Education Statistics, 2002a, 2002b) allow for a comparison of changes in institutional aid awards for more recent cohorts of students in the 1992-1993 and 1999-2000 academic years. Table 11 presents this comparison for students from different income and racial groups. Students from the highest income quartile saw the biggest increase in both the proportion receiving institutional grants, as well as the average size of those grants (panel 1 of Table 11). When examining students from different racial groups (panel 2), white students saw larger increases in both the proportion receiving grants and the average grant amount than did African American and Latino students.

Table 11: Change in Institutional Grant Awards for Full-time, Dependent Students in 4-year Colleges and Universities

	Average Grant Amount*			Percentage Receiving Grant		
	1992-1993	1999-2000	% Change	1992-1993	1999-2000	% Change
*Income quartiles***						
Lowest quartile	$3,447	$4,577	32.8%	32.5%	38.9%	19.7%
Middle two quartiles	4,136	5,661	36.9	28.2%	37.6%	33.3%
Highest quartile	3,708	5,493	48.1	18.7%	29.5%	57.8%
Race						
White	3,825	5,437	42.1	25.2	35.8	42.4
African American	4,067	5,626	38.3	27.1	36.1	32.8
Latino	3,201	4,192	31.0	30.9	32.1	3.6

* For students who received a grant

** The income quartiles are:
1992-1993: Low, less than $24,000; middle, $24,000 - $70,000; high, greater than $70,000
1999-2000: Low, less than $30,000; middle, $30,000 - $82,000; high, greater than $92,000

Source: Authors' calculations from National Center for Education Statistics (2002a, 2002b).

According to data from The College Board, (2002), during this period average tuition prices increased from 44 to 49 percent in the three major sectors of higher education – private four-year, public four-year, and community colleges. The increase in institutional grants protected only the wealthiest students and white students from the overall effect of tuition increases during this period.

The distribution of institutional grants also differs from that of federal aid. In contrast to institutional grants, where the proportion of students from each income group in 2000 was relatively close, federal grants are much more targeted at lower-income students. In both 1992 and 1999, approximately 70 percent of full-time, dependent undergraduates in the lowest income quartile received federal grant aid, while 13 percent of students in the middle quartiles and less than 2 percent of students in the highest quartile received federal grants.

Conclusions

The three policy shifts described in this paper, while still relatively new, are likely to have an important impact on postsecondary educational opportunity in the country. The gaps in college participation – between rich and poor, and between racial minority and majority students – that were the targets of the Truman Commission and Higher Education Act still persist even after almost four decades of federal, state, and institutional policies designed to address them (Heller, 1999; 2001b).

We believe that it is fair to conclude that these policy shifts – diminishing support for remediation, particularly at four year institutions; attacks on affirmative action; and a shift from

financial need to merit in the awarding of financial aid – are being driven primarily by political, rather than educational, motives. In the last two decades the federal and state governments have deemphasized policies designed to address social inequalities. The changes documented here are part of that broader change in the political landscape.

The evidence presented here is based on preliminary data that are just becoming available for analysis. Our conclusion, however, is that the likely impact of at least two of these policy changes on access to postsecondary education for historically underrepresented students is likely to be profound. The policies that have eliminated remedial programs and courses, or have mandated their shift away from 4-year institutions and into community colleges, are likely to be an important barrier faced by low-income and minority students that Terenzini, Cabrera, and Bernal (2001) describe as already in a "struggle against the tides militating against their attending college, completing degrees, and enjoying the substantial benefits of a college education at rates equal to those of their more affluent counterparts" (p. 5).

The change in how financial aid is being awarded is likely to compound the attacks on remedial education. The emphasis on academic merit, however defined, in the awarding of grants has the impact of shifting resources away from lower-income students who historically have been served by publicly-funded financial aid programs (and are disproportionately African American and Latino).

The early evidence on the effects of the attacks on affirmative action is more mixed. While it is evident that the elimination of the use of race in admissions results in an initial disadvantage to minority students, from the two institutions studied here it appears that public universities are finding new ways of recruiting and admitting these students. Time will tell whether these efforts will maintain their usefulness over the long run and in the face of constrained fiscal resources.

While some in the policy community debate whether poor academic preparation or the lack of financial aid is what is stopping low-income and minority students from enrolling in college (Burd, 2002), the reality is that both are critical factors and are ones that are often interrelated. Being from a low-income family in the United States means that in most cases, students have access to a lower quality of K-12 schooling, fewer college-preparatory classes (Advanced Placement, SAT-prep, and the like), and less information about what it takes both academically and financially to attend college. Any policies that shift resources and focus away from these students, such as those described here, is likely to result in less opportunity to attend college and to be successful once enrolled.

References

Abraham, A.A., & Creech, J. D. (2000). Reducing remedial education: What progress are states making? Retrieved January 23, 2002, from http://www.sreb.org

Ackerman, T. (1994, November 20). Lowering high ed: Colleges doing more remedial coursework. *The Houston Chronicle,* p. 1. Retrieved September 26, 2001, from Lexi-Nexis Academic Universe database.

Advisory Committee on Student Financial Assistance. (2001). *Access denied: Restoring the nation's commitment to equal educational opportunity*. Washington, DC: U.S. Department of Education.

Affolter-Caine, B., Martinez, M., Murphy, L. P., & Heller, D. E. (2002, November). *The role of institutional financial aid in increasing minority student enrollment in a post-Hopwood environment*. Paper presented at the annual conference of the Association for the Study of Higher Education, Sacramento, CA.

Antonio, A. L., & Bersoia, S. H. (2001). Understanding K-16 policy: A review of high school assessment, postsecondary admission, and postsecondary placement policy in California (Report issued by the Bridge Project at Stanford University). Retrieved October 6, 2001, from http://www.stanford.edu/group/bridgeproject/CA.phase1.pdf

Arenson, K. W. (2002, 20 August). New CUNY policy neutral for minorities, data show. *The New York Times,* Late Edition, B2.

Astin, A. W. (1998, Summer). Remedial education and civic responsibility. *National Crosstalk, 6*, 12-13.

Bowen W. G., & Bok, D. (1998). *The shape of the river: Long-term consequences of considering race in college and university admissions.* Princeton, NJ: Princeton University Press.

Boylan, H. R. & Saxon, D. P. (2000). What works in remediation: Lessons from 30 years of research. Unpublished report. Retrieved February 7, 2002, from http://www.ced.appstate.edu/centers/ncde/reserve

Breneman, D. W., & Merisotis, J. P. (in press, 2002). Beyond money: Support strategies for disadvantaged students. In D. E. Heller (Ed.), *Condition of access: Higher education for lower income students*. Westport, CT: Praeger Publishers (ACE/Praeger Series on Higher Education).

Brint, S. & Karabel, J. (1989). *The diverted dream: Community colleges and the promise of educational opportunity in America, 1990-1985.* New York: Oxford University Press.

Burd, S. (2002, January 25). Rift grows over what keeps low-income students out of college. *The Chronicle of Higher Education*, p. A18.

Bureau of Student Financial Assistance. (2000). *Bright Futures facts* [http://www.firn.edu/doe/bin00072/bffacts.htm]. Tallahassee: Florida Department of Education.

Cal State says student-remediation needs are coming under control. (1999, November 26). *The Chronicle of Higher Education*, p. A32.

California Postsecondary Education Commission. (2000). Public first-time freshmen by ethnicity-statewide totals. Retrieved October 2, 2000, from http://www.cpec.ca.gov/OnlineData/GenReport.Asp

Carnevale, A. P., & Fry, R. A. (2000). *Crossing the great divide: Can we achieve equity when generation Y goes to college?* Princeton, NJ: Educational Testing Service.

Carnevale, A. P., & Fry, R. A. (in press, 2002). The demographic window of opportunity: College access and diversity in the new century. In D. E. Heller (Ed.), *Condition of access: Higher education for lower income students*. Westport, CT: Praeger Publishers (American Council on Education/Praeger Series on Higher Education).

Center for the Study of Community Colleges. *Transfer assembly study.* Los Angeles: Center for the Study of Community College, 1995.

City University of New York. (2002). *Undergraduate Enrollment by Race/Ethnicity and College.* Retrieved October 5, 2002, from http://cuny.edu/abtcuny/facts/data

The College Board. (2002). *Trends in college pricing, 2002*. Washington, DC: Author.

Council limits remedial students. (1996, March 19). *The Patriot Ledger* [Quincy, MA], p. 26. Retrieved September 25, 2001, from Lexis-Nexis Academic Universe.

Crowe, E. (1998, September). *Statewide remedial education policies.* Denver, CO: State Higher Education Executive Officers. Retrieved October 31, 2001: http://www.sheeo.org

Dembner, A. (1996, March 18). States sifting strategies for remedial education: The learning gap (second of two parts). *The Boston Globe,* p. 1. Retrieved September 26, 2001, from Lexis-Nexis Academic Universe.

Ellwood, D. T., & Kane, T. J. (1999). *Who is getting a college education? Family background and the growing gaps in enrollment*. Cambridge, MA: Harvard University, Kennedy School of Government.

Florida Bright Futures Scholarship Program, 240.40201 (1999).

Florida Department of Education. (2001). *Florida Education & Training Placement Information Program 1995-96 high school graduates by district* [http://www.firn.edu/doe/cgi-bin/instruct.pl?url=../weois/fetpip/pdf/hg9596d.pdf]. Tallahassee: Author.

Fogg, P. (2002, April 19). U. of California admits more minority students. *The Chronicle of Higher Education*, pp. A26.

Gumport, P. J. & Bastedo, M. N. (2001, Summer). Academic stratifcation and endemic conflict: Remedial education policy at CUNY. *The Review of Higher Educaiton, 24,* 333-349.

Healy, P. (2000, July 7). Can City College restore its luster by ending open admissions? *The Chronicle of Higher Education,* p. A24.

Healy, P. (1999, October 8). CUNY will use standardized tests to determine readiness of remedial students. *The Chronicle of Higher Education,* p. A42.

Hebel, S. (1999, December 10). In CUNY remediation debate, the numbers—and the strategy—are in dispute. *The Chronicle of Higher Education,* p. A36.

Hebel, S. (2001, February 23). Miss. Desegregation plan would set racial enrollment goals. *The Chronicle of Higher Education,* p. A. 32.

Heller, D. E. (1997). Student price response in higher education: An update to Leslie and Brinkman. *Journal of Higher Education, 68*(6), 624-659.

Heller, D. E. (1999). Racial equity in college participation: African American students in the United States. *Review of African American Education, 1*(1), 5-29.

Heller, D. E. (2001a). Race, gender, and institutional financial aid awards. *Journal of Student Financial Aid, 31*(1), 7-24.

Heller, D. E. (2001b). Trends in the affordability of public colleges and universities: The contradiction of increasing prices and increasing enrollment. In D. E. Heller (Ed.), *The states and public higher education policy: Affordability, access, and accountability* (pp. 11-38). Baltimore, MD: The Johns Hopkins University Press.

Heller, D. E. (2002). The policy shift in state financial aid programs. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. 17, pp. 221-261). New York: Agathon Press.

Heller, D. E., & Nelson Laird, T. F. (1999). Institutional need-based and non-need grants: Trends and differences among college and university sectors. *Journal of Student Financial Aid, 29*(3), 7-24.

Heller, D. E., & Rasmussen, C. J. (2002). Merit scholarships and college access: Evidence from Florida and Michigan. In D. E. Heller & P. Marin (Eds.), *Who should we help? The negative social consequences of merit scholarships* (pp. 25-40). Cambridge, MA: Harvard Civil Rights Project.

Heller, D. E., & Shapiro, D. T. (2000, November). *High-stakes testing and state financial aid: Evidence from Michigan*. Paper presented at the annual conference of the Association for the Study of Higher Education, Sacramento, CA.

Henriksen, J. A. S. (1995). The influence of race and ethnicity on access to postsecondary education and the college experience. *ERIC Digest* (Report No. EDO-JC-95-05). Retrieved October 23, 2001, ERIC Document Reproduction Service No. ED386242.

Hopwood v. State of Texas, 78 F.3d 932 (5th Cir. 1996).

Hurtado, S., & Wathington Cade, H. (2001). Time for retreat or renewal? Perspectives on the effects of Hopwood on campus. In D. E. Heller (Ed.), *The states and public higher education policy: Affordability, access, and accountability* (pp. 100-120). Baltimore, MD: The Johns Hopkins University Press.

Ignash, J. (1997). Who should provide postsecondary remedial/developmental education? In J. Ignash (Ed), *Implementing effective policies for remedial and developmental education.* San Francisco: Jossey-Bass.

The Institute for Higher Education Policy. (1998, December). *College remediation: What it is, what it costs, what's at stake.* Washington, DC: Author.

Jackson, G. A., & Weathersby, G. B. (1975). Individual demand for higher education. *Journal of Higher Education, 46*(6), 623-652.

Koretz, D. (1990). *Trends in the postsecondary enrollment of minorities*. Santa Monica, CA: The RAND Corporation.

Krueger, C. (2001). *Merit scholarships*. Denver, CO: Education Commission of the States.

Leslie, L. L., & Brinkman, P. T. (1987). Student price response in higher education. *Journal of Higher Education, 58*(2), 181-204.

Martel, B. (2001, August 12). More La. Residents enrolling in college, but struggling to stay. *The Associated Press State & Local Wire* (New Orleans). Retrieved September 26, 2001, from Lexis-Nexis Academic Universe.

McCabe, R. H. (2000). *No one to waste: A report to public decision-makers and community college leaders.* Washington, D.C.: American Association of Community Colleges.

McPherson, M. S., & Schapiro, M. O. (1998). *The student aid game: Meeting need and rewarding talent in American higher education.* Princeton: Princeton University Press.

Michigan Department of Education. (1999). *1999 Michigan school report* [http://www.mde.state.mi.us/reports/msr/]. Lansing: Author.

Michigan Department of Treasury. (2000). *Class of 2000 begins receiving $2,500 awards*. Lansing: Author.

Michigan merit award scholarship act, 390.1451 (1999).

Mills, M. (1998, Nov/Dec). From coordinating board to campus: Implementation of a policy mandate on remedial education. *The Journal of Higher Education, 69(6),* 672-697.

Mortenson, T. G. (2000). Higher educational opportunity by family income 1998. *Postsecondary Education OPPORTUNITY, 94*, 1-10.

Mumper, M. (1999, November). *HOPE and its critics: Sorting out the competing claims about Georgia's HOPE scholarship*. Paper presented at the annual meeting of the Association for the Study of Higher Education, San Antonio, TX.

Murphy, L., Martinez, M., Affolter-Caine, B., & Heller, D. E. (2002, November). *Money talks when students walk: Financial aid as a strategy for increasing minority student enrollment*. Paper presented at the European Higher Education Society 24th Annual Forum, Prague, Czech Republic.

National Association of State Student Grant & Aid Programs. (2002). *NASSGAP 32nd annual survey report 2000-2001 academic year*. Albany: New York State Higher Education Services Corporation.

National Center for Education Statistics. (2001). *Common Core of Data* [http://nces.ed.gov/ccd/]. Washington, DC: U.S. Department of Education.

National Center for Education Statistics. (2002a). *National Postsecondary Student Aid Study 1992-1993 data analysis system* [http://nces.ed.gov/das/]. Washington, DC: U.S. Department of Education.

National Center for Education Statistics. (2002b). *National Postsecondary Student Aid Study 1999-2000 data analysis system* [http://nces.ed.gov/das/]. U.S. Department of Education.

National Computer Systems. (1999). *MEAP – HST, spring 1999 anonymous pupil file*. Lansing: Michigan Department of Education [distributor].

Podberesky v. Kirwan, 38 F.3d 147 (4th Cir. 1994).

Postsecondary Education Planning Commission. (1999). *Florida's Bright Futures Scholarship Program: A baseline evaluation*. Tallahassee, FL: Author.

President's Commission on Higher Education. (1947). *Higher education for American democracy*. New York: Harper & Brothers.

Pusser, B. (2001). The contemporary politics of access policy: California after Proposition 209. In D. E. Heller (Ed.), *The states and public higher education policy: Affordability, access, and accountability* (pp. 121-152). Baltimore, MD: The Johns Hopkins University Press.

Reiff, H. B. (1998, June 7). Courses serve useful purpose; Maryland follows national norm with catch-up instruction; Debating remedial education: Two views on the value of providing basics for underprepared college students. *The Sun* [Baltimore], p. 1D. Retrieved September 26, 2001, from Lexis-Nexis Academic Universe.

Ruppert, S. S. (1996). *The politics of remedy: State legislative views on higher education.* Washington, DC: National Education Association.

Seebach, L. (1998, August 16). Too many college students need high-school courses. *The Denver Rocky Mountain News,* p. 2B. Retrieved September 26, 2001, from Lexis-Nexis Academic Universe.

Selingo, J. (2000, August 4). Cal State puts remediation on an ‘or else’ basis. *The Chronicle of Higher Education,* p. A27.

Selingo, J. (2001, January 19). Questioning the merit of merit scholarships. *The Chronicle of Higher Education*, pp. A20-A22.

Terenzini, P. T., Cabrera, A. F., & Bernal, E. M. (2001). *Swimming against the tide: The poor in American higher education*. New York: College Board.

Trombley, W. (1998, Summer). Remedial education under attack: Controversial plans for the City Univesity of New York. *National Crosstalk, 6*, 1-2, 10, 15.

Turner, C. S., Jones, L. M., & Hearn, J. C. (2001, June). *Strengthening P-16 transitions: The Georgia case: Admissions and placement policies phase I report* (Draft of Bridge Project Report). Retrieved October 6, 2001, from http://www.stranford.edu/group/ Bridgeproject/GA_phase1.pdf

U.S. Department of Educaiton. National Center for Education Statistics. (2001b). *Projections of education statistics to 2011.* NCES 2001-083. Washington, DC: author.

U.S. Department of Education. (1996, October). *Remedial education at higher education institutions in Fall 1995.* Washington, D.C.: author.

U.S. Department of Education. National Center for Education Statistics. (2001a). *Community college transfer rates to 4-year institutions using alternative definitions of transfer.* NCES 2001-197. Washington, DC: author.

Wasting a top asset: Unless the State can find ways to accommodate surging college enrollment, a generation of Californians will be at risk [Editorial]. (2000, June 24). *Los Angeles Times*. Retrieved November 26, 2000, from Lexis-Nexis Academic Universe

Weiss, K. R. (2001, January 24). California and the west: Cal State expels 2009 students for lack of skills. *Los Angeles Times, Part A, p. 3.* Retrieved September 26, 2001, from Lexis-Nexis Academic Universe.