EXPANDING OPPORTUNITY IN HIGHER EDUCATION

Leveraging Promise

Edited by Patricia Gándara,
Gary Orfield, and Catherine L. Horn

EXPANDING OPPORTUNITY IN HIGHER EDUCATION

Published by
State University of New York Press, Albany

Printed in the United States of America

For information, address State University of New York Press,
194 Washington Avenue, Suite 305, Albany, NY 12210-2384

Production by Susan Geraghty
Marketing by Michael Campochiaro

Library of Congress Cataloging-in-Publication Data

Expanding opportunity in higher education : leveraging promise / edited by Patricia Gandara, Gary Orfield, Catherine L. Horn.
p. cm. — (SUNY series, frontiers in education)
Includes bibliographical references and index.
ISBN-13: 978-0-7914-6863-0 (hardcover : alk. paper)
ISBN-10: 0-7914-6863-1 (hardcover : alk. paper)
ISBN-13: 978-0-7914-6864-7 (pbk. : alk. paper)
ISBN-10: 0-7914-6864-X (pbk. : alk. paper)
1. Discrimination in higher education—California. 2. Universities and colleges—California—Admission. 3. African Americans—Education (Higher)—California. 4. Hispanic Americans—Education (Higher)—California. I. Gandara, Patricia C. II. Orfield, Gary. III. Horn, Catherine L. IV. Series.

LC212.422.C2E97 2006
379.2'6—dc22

10 9 8 7 6 5 4 3 2 1

ESTELA MARA BENSIMON
LAN HAO
LETICIA TOMAS BUSTILLOS

Chapter Six

Measuring the State of Equity in Public Higher Education

On June 4, 1965, President Lyndon B. Johnson delivered the commencement address at Howard University titled "To Fulfill These Rights."

> . . . freedom is not enough. You do not wipe away the scars of centuries by saying: Now you are free to go where you want, and do as you desire. . . . You do not take a person who, for years, has been hobbled by chains and liberate him, bring him up to the starting line of a race and then say, "you are free to compete with all the others," and still justly believe that you have been completely fair. Thus it is not enough just to open the gates of opportunity. All our citizens must have the ability to walk through those gates. This is the next and the more profound stage of the battle for civil rights. We seek not just freedom but opportunity. We seek not just legal equality but human ability. Not just equality as a right and a theory, but equality as a fact and equality as a result.

With these words, Lyndon B. Johnson rightfully pointed out that equity involves both opportunity as well as results. Yet, almost forty years later, on just about every indicator of educational outcome, from degrees earned to

grade point average, Whites and Asians are proportionally overrepresented and Blacks, Hispanics, and Native Americans are proportionally underrepresented. This is true in institutions that are highly selective and predominantly White, are open-access with a diverse student population, or are classified as Hispanic serving. But the details of this stratification remain largely invisible to the higher education community.

College enrollments for Blacks and Hispanics have increased nationwide, and generally there is a perception that major strides have been made to meet the goals of equal educational opportunity. Even though the number of underrepresented students who go to college and earn a degree is an impressive accomplishment when compared to forty years ago, the gap between Blacks and Hispanics, on the one hand, and their White, non-Hispanic counterparts persists and continues to grow (Ruppert, 2003). Students of color lag well behind Whites in completing college. In 2001, of high school completers ages 25 to 29, about 37 percent of Whites, 21 percent of Blacks, and 16 percent of Hispanics had received a bachelor's degree. For every Black and Latino student who earns a degree Whites earn two and Asians earn three (Swail, Redd, & Perna, 2003).

Simply put, the assumption that progress has been made *beyond access* into higher education for African Americans and Latinos is not supported by the evidence (Swail et al., 2003). In fact, the achievement gap among these groups is substantial nationwide and has not diminished in the last fifteen years (Bok, 2003).

Notably, inequity in educational outcomes in higher education has not been as prominent an issue as the educational gaps between minority and nonminority K-12 students. Unlike the K-12 schools, which under the No Child Left Behind legislation are required to report all of their data disaggregated by race and ethnicity, comparable requirements for higher education at the national or state levels are lacking. In general, the mainstream discourse among higher education policy makers and practitioners with regard to educational opportunity for underrepresented groups has been framed much more by the standpoints of affirmative action and diversity than by the standpoint of accountability. We attribute the absence of equity as an indicator of institutional performance in higher education accountability systems as one of the major reasons for the invisibility of growing inequality in educational outcomes. The purpose of accountability systems is to monitor the performance of tax-supported institutions on measures that are considered important by policy makers and the public in general and to identify areas where improvements are needed. As a policy tool, accountability systems can be an effective way of judging whether institutions are promoting state priorities (Shulock, 2004). In a globalized economy, a state's well-being depends greatly on an educated workforce, and in many states this implies a substantial increase in the proportion of historically underrepresented minorities going to college and attaining the baccalaureate. Treating equity in educational outcomes as a matter of institutional accountability is in the public interest. Policy makers in majority/minority states will want to know whether the higher education outcomes for specific populations (e.g., Latinos/as) can effectively meet workforce needs. Even though the need for measures of equitable educational outcomes for racial and ethnic groups with a history of underrepresentation in higher education seems so obvious, the reality is that most states' higher education systems are rarely evaluated on the metric of equity. Indeed, when several observers of higher education and policy analysts were asked to comment on accountability in higher education, none of them spoke about the need for indicators of equitable educational outcomes for racial and ethnic minorities (How Can Colleges Prove They Are Doing Their Jobs?," 2004).

In order to address the lack of equity as an indicator of accountability in higher education we introduce a framework, the Academic Equity Scorecard, that can be useful to policy makers, institutional leaders, and the public to answer questions such as: How well is the public system of higher education preparing underrepresented students to participate in the knowledge economy? What are the outcomes of public higher education for underrepresented students? Do the higher education outcomes for underrepresented students represent access to equal educational opportunities?

THE RATIONALE FOR MAKING EQUITY AN INDICATOR OF ACCOUNTABILITY IN HIGHER EDUCATION

Accountability systems represent a source of feedback for policy makers as well as institutional leaders and negative feedback is particularly effective in creating a sense of public crisis and the need for action (Birnbaum, 2002). However, if policy makers were asked to quantify the progress made by underrepresented groups across the United States with respect to retention and graduation rates, they would be unable to provide answers based on empirical evidence. Although intra-institutional stratification based on race and ethnicity is a reality at most of the nation's colleges and universities, explicit indicators are rarely used to measure an institution's effectiveness in decreasing educational inequities (Bensimon, 2004; Bensimon et al., 2004). Moreover, while the concept of equity is implicitly reflected in the standards of most accrediting agencies, none of them requires institutions to report statistics about students of color beyond numbers admitted or enrolled.

There are now 44 states that publish some type of performance report for higher education (Burke & Minassians, 2002). Of the few equity indicators that are in use by some states, most typically deal with inputs (e.g., enrollments) rather than outcomes (graduation rates). Burke and Minassians's analysis of 29 state accountability reports revealed 15 different equity measures that are

specifically related to the status of minority students, faculty, and staff yet all but five consisted of input measures. While 21 states use enrollment by race and ethnicity as a performance indicator, the indicator for graduation and retention by race and ethnicity was used in only nine states. Moreover, student transfers by race from two-year community colleges (where the greatest numbers of African Americans and Latinos are concentrated) to four-year colleges or universities is a measure used by just one state. Significantly, the biennial national report card *Measuring Up* (The National Center for Public Policy in Higher Education, 2000 and 2002) that grades states on several indicators does not include a student enrollment indicator based on race and ethnicity. Commenting on this absence, Burke and Minassians say, "In an age when ethnic groups have already attained—or will soon attain—majority status in the population, an indicator comparing the racial composition of the state population and student enrollment seems desirable as a performance measure in the category of participation" (2002, p. 106). In sum, current accountability systems in higher education do not and can not provide data that are reflective of the status of African Americans and Latinos and thus prevent policy makers from considering equity as a policy goal or taking into account the potential effects of policymaking on the state of equity. To bring attention to this problem and offer a solution we created the Academic Equity Scorecard, which we describe in this chapter. We also demonstrate its usefulness by showing the results of its application to California's higher education enrollment data.

THE ACADEMIC EQUITY SCORECARD

The Academic Equity Scorecard, which is a replica of the diversity scorecard (Bensimon 2004), is modeled after Kaplan and Norton's (1992) balanced scorecard for business. Like the diversity scorecard, the Academic Equity Scorecard consists of four concurrent perspectives on institutional performance in terms of equity in educational outcomes for students: access, retention, institutional receptivity, and excellence. Each of these perspectives includes no more than five measures. For example, an access measure could be the distribution of first-time college students in the two- and four-year public sector.

We chose California as the demonstration state for the Academic Equity Scorecard because as the most populous state in the nation, with an economy that rivals most countries, California will be carefully watched by the rest of the nation as it charts a course toward the future of a new multicultural society. As one of five states with the greatest influx of minority undergraduate enrollments, California acutely exemplifies the growing educational chasm between Latinos and African Americans on the one hand and Asian Americans and Whites on the other (see table 6.1 in the appendix). Projections estimate that California will have the largest minority and immigrant populations in the United States (Vernez & Mizell, 2001). By 2015, two-thirds of all undergraduate enrollments in California will be comprised by African Americans, Asian Americans, and Latinos (Carnevale & Fry, 2000). However, data demonstrate the growing disparity between these groups. RAND projections estimate that approximately 75 percent of all high school dropouts will be Latino and African American students while 89 percent of state college and university graduates will be Asian and White students.

We were able to construct a prototype Academic Equity Scorecard from data that were downloadable from the California Postsecondary Education Commission (CPEC), the California State University system, and the California Community Colleges. The data collected for all indicators were already disaggregated by race and ethnicity, and, with a few exceptions, most were longitudinal and covered at least a ten-year time span. With the data available we developed twelve performance indicators, or fine-grained measures, under the four perspectives. We were constrained in the development of indicators by the availability of public data that was also disaggregated by race and ethnicity. For example, we had access to data on remediation for the California State University system but not for the University of California, and we had data on the racial and ethnic composition of the UC faculty but not for the CSU. Although the data available limited the number of indicators, our experience suggests that fewer indicators increase the scorecard's utility because it helps institutional actors to focus more intensely on more specific areas rather than be overwhelmed by a laundry list of indicators. Figure 6.1 demonstrates the Academic Equity Scorecard with the four perspectives and the equity indicators developed for California's higher education system.

The *access perspective* enables institutional leaders to be more fully informed about the extent to which underrepresented students have access to institutions, programs, and resources. It further informs leaders as to the extent this access improves the ability of traditionally disenfranchised students to compete for academic advancement. For California's prototype, we used four indicators that are indicative of equity in access to a four-year degree (see figure 6.1). The A-G requirements,[1] as evidenced by the first indicator, were a critical inclusion as completion of California's "college readiness" curriculum ensures that students are academically prepared for advanced coursework at the university level. We recognize that higher education has no control over student completion of the A-G curriculum; however, we decided to make it into an indicator because it is impossible to attain equitable educational outcomes in California if Latinos and African Americans fall below equity on this indicator. The rationale for the scorecard is to establish a sensor that detects inequalities and brings them to the attention of individuals and groups who have the power to mobilize resources to address them. We also view the scorecard as a powerful information tool for external community groups that advocate for the educational rights of minority groups.

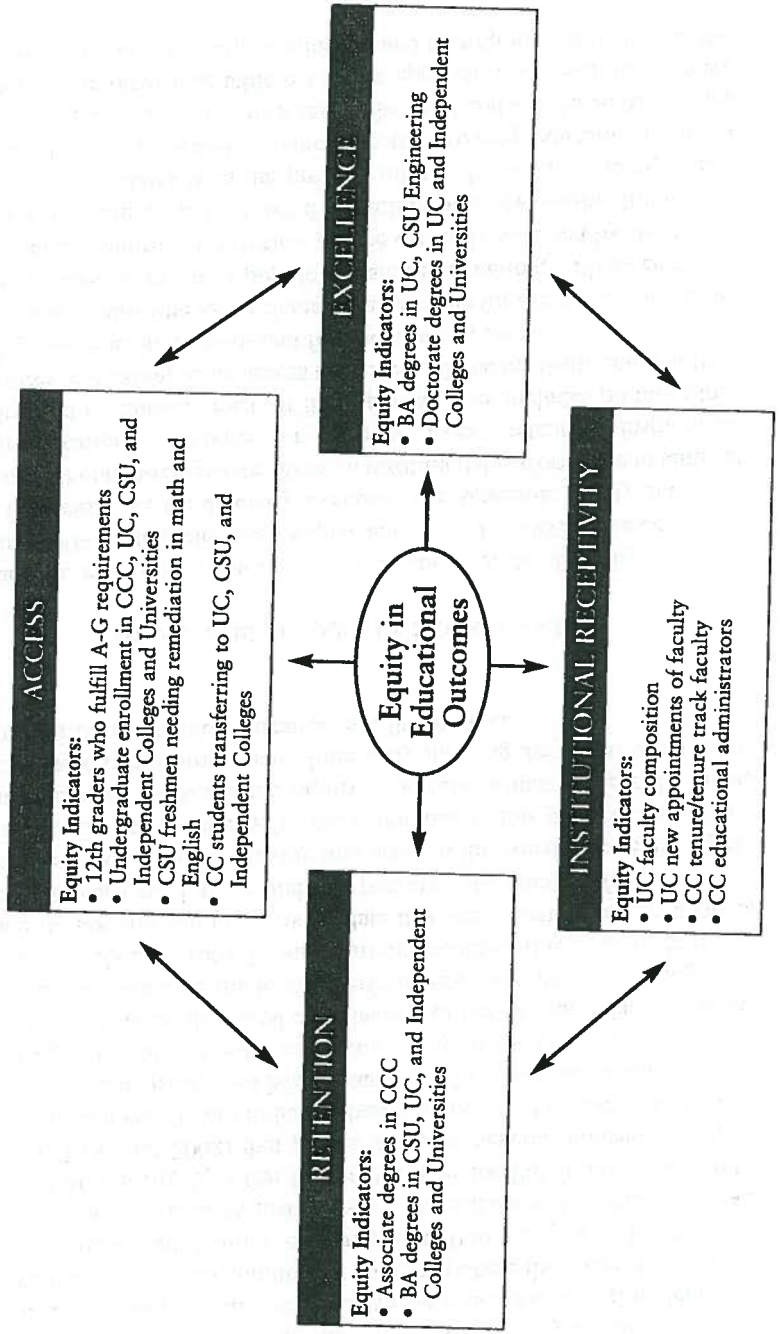

FIGURE 6.1
The Academic Equity Scorecard Framework

Equally significant, the indicator for remediation was included in the scorecard because an exceedingly large proportion of California's African American and Latino students are found to need remedial courses. Moreover, new remedial policies in California[2] severely restrict the amount of time students have to master the coursework. The CSU remediation data provide a compelling picture of the large numbers of underrepresented students who are at risk of not completing the BA degree after having been admitted into a four-year college.

The *retention perspective* includes indicators that provide leaders with more concrete data on student outcomes. However, there were few outcome measures that are disaggregated by race and ethnicity, so it was only possible to develop indicators of AA or BA degree attainment. We could have included completion of occupational certificates but decided not to because the most urgent need, particularly for Latinos, is to double their rate of BA degree attainment (Fry, 2004; Swail, Cabrera, & Lee, 2004; Vernez & Mizell, 2001). The *excellence perspective* informs leaders about student outcomes associated with high achievement, such as providing access to competitive fields and leadership positions. This perspective answers such questions as: What are the comparative retention rates for underrepresented students by program? Do underrepresented students disproportionately withdraw from "hot" programs like engineering or computer science? The best indicator for this perspective would be GPA, but these data were not available to us. The final perspective, *institutional receptivity*, encompasses indicators of institutional support that create affirming campus environments for underrepresented students, such as faculty composition. Of the four perspectives, this one is the weakest in that it requires more qualitative measures that are difficult to obtain for an entire system. The use of disaggregated data in conjunction with the four perspectives yields a clear-cut measurement of institutional performance.

THE ACADEMIC EQUITY INDEX: A FORMULA FOR EQUITY

The Academic Equity Index (AEI) is a measure of proportionality based on the population for each racial and ethnic group under analysis (Hao, 2002). The AEI is a ratio of two shares or percentages as expressed by the following formula:

$$\text{Target Group's } \textit{Equity Index} \text{ for the educational outcome of interest} = \frac{\text{Target group with the educational outcome / Total students with the educational outcome}}{\text{Target group in the reference population / Total students in the reference population}}$$

The numerator of the ratio is the share or percentage of the students from the target group (e.g., Latino students) among all students with a given academic feature, and the denominator is the corresponding reference measure. Different reference populations can be chosen as the denominator depending on the purpose of the data analysis. At its simplest level, it means that students in the K-12 system should be representative of the population demographics; college student enrollment should be representative of the K-12 students, the appropriate age cohort, or high school graduates; students who obtain postsecondary degrees should be representative of the college student body; students who successfully transfer from two-year community colleges to four-year colleges should be representative of the students in the community colleges; and the faculty composition should reflect the composition of the student body.

To illustrate how the AEI calculates equity, we will use a fictional high school's graduation numbers. The graduation class of this high school consists of 1000 students and 400, or 40 percent, are Latino students. From this graduation cohort a total of 450 students enroll in the state's flagship university, of whom 45, or 10 percent, are Latinos. These data, once placed in the formula for the AEI yield the following result:

$$\text{Latino students' } \textit{Equity Index} \text{ for attending the UC and CSU} = \frac{\dfrac{45 \text{ Latino students enrolled in college}}{450 \text{ total cohort college enrollment}}}{\dfrac{400 \text{ Latino high school graduates}}{1000 \text{ total high school graduates}}} = \frac{10\%}{40\%} = 0.25$$

INTERPRETING THE ACADEMIC EQUITY INDEX SCORE

The Equity Index scores are easy to interpret. A score of 1.0 represents equity, a score less than 1.0 indicates below equity, and a score higher than 1.0 signifies above equity. Scores that are below or above 1.0 represent an equity gap that is reflective of an under-representation or overrepresentation in the specific indicator. In the fictional example just provided, the Academic Equity Index for Latino students attending the flagship public university is 0.25. Since the achievement of equity requires that each group's AEI result in 1.0, the result reveals a major gap in equity in the college-going rates for Latinos.

Advantages of the Academic Equity Index and Cautions for Interpretation

Essentially, the Academic Equity Index is a standardized score that is indicator-specific, ethnic-specific, and year-specific that allows institutional leaders to make comparisons across groups based on their proportion of the population. It is also a simple, straightforward, and more accurate way of determining whether educational outcomes are improving or not.

The Academic Equity Index is a useful tool for quantifying the equity gap and can be useful for institutional researchers and policy analysts to analyze data already available to them. It also serves as a process of internal benchmarking or a point from which to judge improving performance standards. The choice of the denominator depends on whether the calculation of the index is driven by concerns for institutional improvement or external accountability of policy development. For example, if an institution wanted to calculate the AEI for Latino BA attainment to evaluate its own performance, it could choose as its reference population the group of people that represents the potential BA recipients such as Latino freshmen or the total undergraduate Latino population for the particular campus. Such an indicator would be institution-specific geared toward self-assessment and improvement. Applying the index to state-level equity analysis, there are similar considerations for the denominator. In this chapter the object of interest is the performance of California's higher education system in light of its changing demographic picture, thus the denominator for Latino BA attainment was based on California's 20–24 age group[3] from 1990 to 1999.

In absolute numbers, the condition of underrepresented students in California's postsecondary education system has been improving. More African Americans and Latinos are enrolled in college and more are transferring from the community colleges to the four-year institutions and attaining the BA degree. In California, the absolute numbers of Latino community college students who transferred to the UC system increased by a factor of 2.4 from 643 to 1,531 between 1988 and 2002. Yet increased headcounts can be deceptive because they do not reflect the gap in educational attainment with regard to trends in BA attainment in California over the past 20 years. Price and Wholford (2003) provide two reasons as to why the typical longitudinal analyses of the college participation of underrepresented students are inadequate measures. First, the statistics do not account for changes in the population growth over time, therefore overlooking the possibility that a group's larger percentage of, let's say, degrees earned could be a function of declining populations rather than increasing educational attainment. Second, a more useful measure from the perspective of equity is one that makes it possible to compare educational outcomes between different racial and ethnic groups. An important element of the Index is that it provides a natural benchmark. Given that equity is always designated as 1.0, it is fairly simple for policy makers and institutional leaders to interpret a group's status on a particular measure.

It is important to be cognizant of numerous factors that can contribute to an increase or decrease in the Equity Index number when interpreting the AEI for a particular group. Among them, an increase in the numerator that is faster than the increase in the denominator will result in an increase in the

index that is representative of real progress. An increase in the numerator that is slower than an increase in the denominator will result in a decrease in the index, thus slowing improvement. A decrease in the numerator that is faster than a decrease in the denominator will result in a decrease in the index that is indicative of a real setback. Lastly, a decrease in the numerator that is slower than the decrease in the denominator will yield an increase in the index, which is not a true reflection of progress.

Because the index is sensitive to shifts in the population, Table 6.6 in the appendix provides a longitudinal overview of high school graduates and college enrollment trends in California by institutional sector for each racial/ethnic group from 1988 to 2001. These trends take into account the interpretation of changes in a group's Academic Equity Index, especially when the denominator of the index is based on high school graduates or college enrollments. For example, from 1988 to 2001, Latino enrollment at the UC system increased 60 percent, from 11,600 to 18,600, which represents significant progress in terms of access to educational opportunity. However, the Latino UC access equity index that uses high school graduates as the reference population shows a decrease along the timeline, due to the fact that Latino high school graduates increased at a much faster rate, from 49,000 to 104,000 (112 percent) in the same time period. This reflects the merits of the equity index in that educational data should not be interpreted without applying it to a meaningful context.

CALIFORNIA'S ACADEMIC EQUITY SCORECARD

An Academic Equity Index was calculated for each indicator in the *access*, *retention*, *excellence*, and *institutional receptivity* perspectives. Data downloaded from the CPEC website are disaggregated into nine racial and ethnic categories. For this study we calculated the AEI for all of them, however, we only report the results for African Americans, Asian/Pacific Islanders,[4] Latinos,[5] and Whites. The calculation of the AEI involves turning headcount data (e.g., undergraduate enrollment, degree recipients) into percentages.

Table 6.1 provides an overview of the results on the Academic Equity Index for African Americans, Asians, Latinos, and Whites. For most of the indicators, the California Academic Equity Index (CAEI) represents a 15-year average unless indicated. We used three shades to indicate the state of equity for each group on each indicator as described as follows:

The use of shading makes two things eminently clear: African Americans and Latinos are below equity in the majority of indicators whereas Asians are above equity or at "almost-equity" in all but a few of the indicators. Whites are at or above equity in all indicators except in those few cases where they are in the "almost at equity" area. Although the column for African

Americans is primarily light gray, there are a few indicators in white suggesting that equity has been achieved in the transfer from community colleges to independent colleges and UC new faculty hires. Latinos exhibit the largest equity gap of all four groups; their column is primarily light gray with a smattering of medium gray. The most optimistic result for Latinos is having reached "almost at equity" in one indicator: community college transfers to the CSU system.

THE RETENTION PERSPECTIVE: DEGREE ATTAINMENT

The retention perspective[6] consists of two degree attainment indicators, AA and BA, but we will address only the results for BA degree attainment in the University of California and California State University systems. The equity index for degree attainment for African Americans, Asians, Latinos, and Whites was calculated as follows:

$$\frac{\text{Target group degree recipients / all degree recipients}}{\text{Target group 20–24-year-olds / 20–24-year-olds in California}}$$

Table 6.2 provides the changes in the equity index for the University of California system from 1990 to 1999.

In 1999,[7] African Americans and Latinos had the lowest UC-BA attainment equity index of all groups. The share of UC-BA degree recipients among Asians was more than double their share in the 20–24 age group in California, resulting in an equity index of 2.3. The equity index trend for African Americans and Latinos shows almost no change in BA attainment from the UC system. In contrast, during the same period the AEI for Asians increased steadily, from 1.6 in 1990 to 2.3 in 1999. In contrast to African Americans and Latinos, more Asian Americans every year are concentrating in California's most elite higher education sector.

The results for the California State University System are provided in table 6.3. The average BA attainment AEI for Latinos graduating from the UC and CSU system was the same, 0.3. However, the trend for Latinos and Blacks in the CSU system shows a small but steady increase, which may be reason for cautious optimism. The CSU results for the Asian group are especially different from their UC results. First, their CSU index was more stable over the ten-year period and their outcomes are only slightly above equity. One interpretation for the marked overrepresentation of Asians in the UC system is that they have set their eyes on access to the more elite sector, and more of them are succeeding every year. Another interpretation is that Asians in the CSU system are more like African Americans and Latinos in terms of

Color Codes for Three Levels of Equity	*Level of Equity*	*Numerical Representation*	*Shade*
	Above Equity	> 1.0	White
	Below Equity	< 1.0	Light Gray
	Almost at Equity	0.8–0.9	Medium Gray

TABLE 6.1
The California Academic Equity Scorecard

Perspectives		*Equity Indicators*	*Equity Scorecard* White	Black	Asian	Latino/a
Access	1	12th graders who fulfill **A-G requirements** vs. K-12 enrollment, 1988–2001	1.3	0.7	2.1	0.5
	2a	Undergraduate **enrollment in CCC** vs. high school graduates, 1988–2001	1.0	1.0	0.9	0.7
	2b	Undergraduate **enrollment in UC** vs. high school graduates, 1988–2001	0.9	0.5	2.4	0.4
	2c	Undergraduate **enrollment in CSU** vs. high school graduates, 1988–2001	0.9	0.8	1.2	0.6
	2d	Undergraduate **enrollment in independent colleges** vs. high school graduates, 1988–2001	1.2	0.8	1.1	0.4
	3a	Needing **remediation in math** upon entrance vs. number of freshmen in CSU, 2000–02*	0.8	1.7	0.8	1.4
	3b	Needing **remediation in English** upon entrance vs. number of freshmen in CSU, 2000–02*	0.6	1.4	1.4	1.3
	4a	CCC students **transferring to UC** vs. CCC enrollment, 1988–2002	1.0	0.4	1.9	0.6
	4b	CCC students **transferring to CSU** vs. CCC enrollment, 1988–2002	1.0	0.7	1.1	0.8
	4c	CCC students **transferring to independent colleges** vs. CCC enrollment, 1991–2000	1.2	1.1	1.0	0.7

TABLE 6.1 *(continued)*

Perspectives		*Equity Indicators*	*Equity Scorecard* White	Black	Asian	Latino/a
Retention	5a	**AA degrees in CCC** vs. 20–24 age group in CA, 1990–99	1.3	0.8	0.8	0.5
	5b	**BA degrees in UC** vs. 20–24 age group in CA, 1990–99	1.2	0.4	1.9	0.3
	5c	**BA degrees in CSU** vs. 20–24 age group in CA, 1990–99	1.3	0.5	1.0	0.3
	5d	**BA degrees in independent** vs. 20–24 age group in CA, 1990–99	1.5	0.6	1.0	0.3
Excellence	6a	**BA degrees in UC Engineering** vs. UC undergraduate enrollment, 1988–2001	0.9	0.4	1.2	0.4
	6b	**BA degrees in CSU Engineering** vs. CSU undergraduate enrollment, 1988–2001	0.9	0.4	1.8	0.5
	7a	**Doctorate degrees in UC** vs. UC undergraduate enrollment, 1988–2001	1.3	0.5	0.3	0.3
	7b	**Doctorate degrees in independent** vs. independent undergraduate enrollment, 1988–2001	1.0	0.6	0.6	0.3
Institutional Receptivity	8	**UC faculty composition** vs. student enrollment, 2002	2.1	0.8	0.4	0.4
	9	**UC new appointments of faculty** positions vs. student enrollment, 2002	2.0	1.0	0.5	0.5
	10	**CCC tenure/tenure track faculty** vs. CC student enrollment, 2002	1.8	0.9	0.6	0.4
	11	**CCC educational administrators** vs. CC student enrollment, 2002	1.6	1.4	0.4	0.5

TABLE 6.2
California Academic Equity Index Results for University of California Based on BA Degrees Awarded by Race and Ethnicity for 1990–1999

	California Academic Equity Index			
	White	*Latino/a*	*African American*	*Asian*
Year 1990	1.3	0.2	0.4	1.6
Year 1991	1.3	0.3	0.4	1.6
Year 1992	1.3	0.3	0.4	1.6
Year 1993	1.3	0.3	0.4	1.5
Year 1994	1.2	0.3	0.5	1.6
Year 1995	1.2	0.3	0.4	1.8
Year 1996	1.2	0.3	0.4	2.0
Year 1997	1.1	0.3	0.4	2.2
Year 1998	1.1	0.3	0.4	2.3
Year 1999	1.0	0.3	0.4	2.3
10-year average	1.2	0.3	0.4	1.9

TABLE 6.3
California Academic Equity Index Results for California State University System Based on BA Degrees Awarded by Race and Ethnicity for 1990–1999

	California Academic Equity Index			
	White	*Latino/a*	*African American*	*Asian*
Year 1990	1.4	0.3	0.4	1.0
Year 1991	1.4	0.3	0.4	1.9
Year 1992	1.4	0.3	0.4	1.9
Year 1993	1.3	0.3	0.5	1.9
Year 1994	1.4	0.3	0.5	1.9
Year 1995	1.3	0.4	0.5	1.9
Year 1996	1.3	0.4	0.6	1.0
Year 1997	1.2	0.4	0.6	1.1
Year 1998	1.1	0.4	0.6	1.2
Year 1999	1.1	0.5	0.6	1.2
10-year average	1.3	0.3	0.5	1.0

socioeconomic and educational background than the Asians who go to UC. It is possible that the Asians in the CSU system are recent or first-generation immigrants from less well-educated families. However, without more detailed data on the students' backgrounds we can only speculate. One thing that these results make clear is that identity labels such as Hispanic or Latino/a and Asian are inadequate for states like California where the flow of immigrants is constant. Right now we lack the information to determine whether the Asian students in the UC and CSU represent different generations, national origins, and economic background. It is possible that Asians in the UC system are middle- or upper-class Chinese, Korean, Japanese, or Indian and that Asians in the CSU system are recent arrivals from Vietnam. The same problem arises with the Latino/a category in that we have no way of knowing what background characteristics distinguish Latinos/as in the UC from those in the CSU and CCCs.

An alternative way of looking at the baccalaureate equity index for the UC and CSU systems is by comparing whether the gap between groups is growing or shrinking. In tables 6.4 and 6.5, we provide an analysis of the gaps between Whites, Asians, and Latinos/as and the gaps between Whites, Asians, and African Americans.

Briefly, the White-Latino/a and White-Black gaps in BA attainment are getting smaller in both the UC and CSU systems. However, in the UC system the narrowing of the White-Latino/a/Black gap appears to be more of a function of declining White enrollments and a very large increase in Asian enrollments. As can be seen in table 6.4 the gap between Asians and Latinos/as and Asians and Blacks has been growing rapidly since 1997. In 1990 the Asian-Latino/a gap was 1.4 and in 1999 it had increased to 2.0. In the CSU system, as shown in table 6.5, the trends in the White-Latino/a and White-African American gaps are also shrinking, making the ten-year average the same for the UC and CSU systems. The Asian-Latino/a and Asian-African American gaps in the CSU are notably smaller than in the UC system.

CONCLUSIONS AND IMPLICATIONS

Nationally, there is an absence of baseline data and benchmarks that would make it possible to engage in a systematic and continuous self-appraisal at the state and institutional levels of the educational outcomes for underrepresented students. The reason for the absence of equity indicators is not lack of data, but that much of the available data are not disaggregated by race and ethnicity. Where the data are available, they are not reported in a manner that permits policy makers to make a quick assessment of the state of equity in higher education. The disaggregation of data by race and ethnicity, particularly in relation to outcomes, is not a routine practice with the exception of data on

TABLE 6.4
California Academic Equity Index Gaps for University of California BA Degrees Awarded by Race and Ethnicity for 1990–1999

	California Academic Equity Index Gaps			
	White-Latino/a	*White-African American*	*Asian-Latino/a*	*Asian-African American*
Year 1990	1.1	0.9	1.4	1.2
Year 1991	1.1	0.9	1.3	1.2
Year 1992	1.0	0.8	1.3	1.2
Year 1993	1.0	0.8	1.2	1.1
Year 1994	0.9	0.8	1.3	1.2
Year 1995	0.9	0.8	1.5	1.4
Year 1996	0.9	0.8	1.7	1.6
Year 1997	0.8	0.7	1.9	1.8
Year 1998	0.7	0.7	2.0	1.9
Year 1999	0.7	0.7	2.0	1.9
10-year average	0.9	0.8	1.6	1.5

TABLE 6.5
California Academic Equity Index Gaps for California State University BA Degrees Awarded by Race and Ethnicity for 1990–1999

	California Academic Equity Index Gaps			
	White-Latino/a	*White-African American*	*Asian-Latino/a*	*Asian-African American*
Year 1990	1.2	1.0	0.7	0.6
Year 1991	1.1	0.9	0.6	0.5
Year 1992	1.1	1.0	0.6	0.5
Year 1993	1.1	0.9	0.6	0.4
Year 1994	1.0	0.9	0.6	0.4
Year 1995	1.0	0.8	0.6	0.4
Year 1996	0.9	0.7	0.6	0.5
Year 1997	0.8	0.6	0.7	0.5
Year 1998	0.7	0.6	0.7	0.6
Year 1999	0.7	0.5	0.7	0.6
10-year average	0.9	0.8	0.7	0.5

college access. Thus, even though the values of diversity and equity are espoused in the mission statements of higher education institutions and in state level documents, progress toward their attainment is not something that is monitored because neither the institutions nor the states' higher education systems have adopted equity as a performance standard to judge their effectiveness in improving the educational outcomes of underrepresented students, including those from low-income backgrounds.

Without equity standards the performance of institutions or the states' higher education systems cannot be evaluated. Without performance measures, neither institutional leaders nor policy makers can learn about their systems' actual educational outcomes. Most importantly, if leaders and policy makers are not learning, changes in policies and practices are less likely.

Monitoring a state's progress toward the achievement of equity in postsecondary education outcomes is important for several reasons, among them:

1. In a global economy, employability is contingent on educational level. By 2006, one-third of all new job openings nationally will require at least some college education (Carnevale, 1999). The nation's economy will depend on the effectiveness of the higher education system to educate individuals from underrepresented groups, such as African Americans and Latinos/as, for the jobs of the future (Vernez & Mizell, 2001).

2. By 2015, 48 percent of Latinos and 18 percent of African Americans will enter a labor sector where job growth will primarily be concentrated among managerial, professional, technical, healthcare, and educational professions, all of which require postsecondary training (Carnevale, 1999). Indicators of educational status and attainment suggest that unless dramatic improvements take place, African Americans and Latinos/as will continue to be overrepresented in low-paying and service jobs and underrepresented in the higher paying jobs associated with the attainment of middle-class status (Myers, Parks, & Hacegaba, 2000).

3. Across the country, institutions of higher education suffer extraordinary periodic budget reductions that are resulting in the elimination of college classes and programs with a simultaneous increase in tuition costs. A consequence of these cuts and cost hikes is the turning away of thousands of students, many of whom are African Americans and Latinos/as, from four-year public institutions. In the community colleges, these students are being closed out of basic skills courses and denied special services because support centers have begun to fold as a result of lean budgets. While the impact of these cuts on historically underrepresented populations is not yet known, it is safe to say that marginalized students will be disproportionately disadvantaged by them. Budgetary cuts that result in reduced admissions for underrepresented students increases the imperative to monitor the educational outcomes for these students.

4. Performance indicators are particularly effective in service organizations like postsecondary education. Such organizations often exhibit information

asymmetries, that is, structures where campus-level staff possess much more information about outcomes than those to whom they are accountable. This unbalanced information structure can constrain or impede the development of policies to achieve desirable values (Gormley Jr. & Weimer, 1999).

It is said that what gets measured gets noticed. We are well aware that accountability systems in and of themselves will not solve the problem of inequality, but we believe that it is important to make visible the inequitable outcomes that are not currently addressed in accountability reports for the following reasons:

First, equity indicators call attention to differences in educational outcomes. Studies on the growing achievement gap for minority group students are published fairly regularly in journals and as special reports released by government agencies and education policy think tanks (see for example, Carnevale & Fry, 2000; Fry, 2002; Vernez & Mizell, 2001). These types of studies and reports, even though very important, are not useful for continuous monitoring of educational outcomes because they provide too many measures and they usually lack targets. In contrast, the Academic Equity Index provides a straightforward method of establishing the current condition of educational outcomes and the target for improvement (O'Day, 2004). Having a target for improvement enables policy makers, the public, advocacy groups, and institutional leaders to be cognizant of and continuously monitor progress toward equity, a practice that currently is not employed at the state or institutional level. Institutional leaders react to demands in their external environments (Birnbaum, 1996) thus the expectations of federal, state, and accrediting bodies, whether expressed in the form of accountability indicators, performance-based funding measures, or professional standards are likely to influence what gets attended to.

Second, concrete indicators can help mobilize action within the higher education community and they provide a better focus for applied policy than do more general directives (Ewell, 1994). Having indicators of equity increases the likelihood of continuous monitoring and feedback, which is important because "if interest in minority enrollments and degree achievement is uncoordinated and sporadic, administrative interest will likely follow suit" (Birnbaum, 2002, p. 457).

Third, if the feedback provided by equity indicators raises the specter of a crisis situation, it is also more likely to motivate the investment of resources. The initiatives that have had the greatest impact on higher education came about in response to events perceived to be national threats. The launching of Sputnik resulted in unprecedented amounts of federal aid to higher education; the racial disturbances that erupted in Watts, Newark, Detroit, and Washington DC in the 1960s led to the creation of special programs of financial aid and support services specifically targeted to increase access to higher education to low-income and minority students. Today demographers and others warn that if current patterns of educational outcomes continue there will be negative economic and social consequences for California (Lopez, Ramirez, & Rochin, 1999; Myers, Park, & Hacegaba, 2000). In several state and national reports policy analysts have emphasized the need to move more of the Latino/a population from the bottom of the economic and educational levels into the middle and upper levels (Myers, Park, & Hacegaba, 2000). The results of the California Academic Equity Index suggest that this is not happening and that educational outcomes for Blacks and Latinos/as have in fact worsened. Yet none of the current state-level reporting systems call attention to the growing inequity.

Fourth, indicators are useful in that they make intended outcomes more visible and concrete, and policy makers as well as institutional leaders can become more aware of what needs to be accomplished (Ewell, 1994). As Ewell points out, "Explicitly tracking degree-completion rates for minority students, for instance, sends a far more concrete signal about what needs to happen than does the more general goal of increasing access" (p. 8).

Equity represents an ideal state. In a situation that is marked by great inequalities, as is the case in California's higher education system, it is critically important to have a means of making these inequalities transparent in order to raise awareness of their existence. Without evidence, there is less urgency to act on the problem. Accordingly, we recommend:

1. Postsecondary education commissions across the United States, in consultation with representatives from the public and independent sectors, should incorporate equity performance indicators measured in terms of percentages shares, rate, and absolute numbers and report on them annually.
2. Institutions of higher education should incorporate equity performance indicators into their institutional studies, report on them annually to their boards of trustees, and post them on their websites for greater public dissemination.
3. Individual campuses should create their own equity performance measures and use them for decision making, resource allocation, strategic planning, program review, and the development of new initiatives.

In effect, if we do not become more intentional about the achievement of equity in educational outcomes, the combination of minority-majority states and their growing demand for a better-educated workforce portends a nation that will be polarized into two segments separated by a shrinking middle. As Myers, Parks, and Hacegaba suggest, an end result of this situation will be "an elite group of college educated workers [that] flourishes in the growing knowledge-based sector of the economy, while at the low end an even larger group of poorly educated workers—composed largely of immigrants and minorities—holds low-paying service and manual-labor jobs"

(2000, p. 2). Higher education plays a critical role in preparing individuals for participation in a knowledge-based economy. In view of the demographic changes in the student population, particularly among Latinos/as, to not be conscious of differences in educational outcomes is shortsighted; to not muster the political will to address the problem is irresponsible.

NOTES

1. California's A-G curriculum consists of the minimum course requirements for admission into the California State University and University of California systems.

2. The new remedial policy for the California State University system (Executive Order 665, amended Title V of the California Code of Regulations) mandates that all incoming freshman complete any remedial coursework in English and mathematics within two semesters and the summer if they expect to enroll in the Fall semester of the second year. Those students who do not complete this requirement are given "stop-out" notices and are disenrolled from the university. These students are then required to complete coursework at the community colleges if they wish to re-enroll at CSU. The CSU website does not include data on the number of students who successfully complete the remedial coursework within the one-year time limit.

3. The California population data were downloaded from the RAND California's Population and Demographic Statistics (http://ca.rand.org/stats/popdemo/popdemo.html). This database consists of the U.S. Census data organized into five-year interval age groups, e.g., 15–19, 20–24, and 25–29. This chapter uses the 20–24 age group as the reference population.

4. Pacific Islanders do not include Filipinos because in the CPEC data they were reported as a separate category.

5. The Latino/a category includes everyone that was classified as Hispanic, as well as Mexican Americans.

6. Due to space limitations we only discuss in greater detail the results under the retention perspective; however, a detailed discussion of the results for all the indicators is available in a longer version of this chapter, which can be downloaded from http://www.usc.edu/dept/education/CUE/research.html.

7. For this indicator we downloaded the 20–24 age group for California from RAND's California Statistics website (http://ca.rand.org/stats/statistics.html), and 1999 was the most recent year for which data were available.

REFERENCES

Bensimon, E. M. (2004). The diversity scorecard: A learning approach to institutional change. *Change, 36*(1), 45–52.

Bensimon, E. M., Polkinghorne, D. E., Bauman, G. L., & Vallejo, E. (2004). Doing research that makes a difference. *The Journal of Higher Education, 75*(1), 104–126.

Birnbaum, R. (1996). Administrative commitments and minority enrollments: College presidents' goals for quality and access. In C. Turner, M. Garcia, A. Nora, & L. I. Rendon (Eds.). *Racial and Ethnic Diversity in Higher Education* (ASHE Reader Series) (pp. 446–459). Needham Heights, MA: Simon & Schuster Custom Publishing.

Bok, D. (2003, October 14). Closing the nagging achievement gap in minority achievement. *Chronicle of Higher Education.*

Burke, J. C., & Minassians, H. P. (2002). Reporting higher education results: Missing links in the performance chain. *New Directions for Institutional Research* (p. 116). San Francisco: Jossey-Bass.

California State University. (1997). Executive Order 665: Determination of Competence in English and Mathematics. California State University: Office of the Chancellor, 1–4.

Carnevale, A. P. (1999). *Education = success: Empowering Hispanic youth and adults.* Washington, DC: ETS.

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

Ewell, P. (1994). Developing statewide performance indicators for higher education: Policy themes and variations. In S. Ruppert (Ed.), *Charting Higher Education Accountability: A Source Book on State-level Performance Indicators* (pp. 147–166). Denver, CO: Education Commission of the States.

Fry, R. (2002). *Latinos in higher education: Many enroll, too few graduate.* Washington, DC: Pew Hispanic Center.

Gormley, W. T., & Weimer, D. L. (1999). *Organizational report cards.* Cambridge: Harvard University Press.

Hao, L. (2002). *The equity index: A method to measure equity in educational outcomes for minority students.* Poster session presented at the annual meeting of the Association for the Study of Higher Education in Sacramento, CA.

How can colleges prove they're doing their jobs? (2004, September 3). *The Chronicle of Higher Education, 51*(2), B6–B10.

Johnson, L. B. (1965, June 14). To fulfill these rights. Commencement address at Howard University.

Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard: Measures that drive performance. *Harvard Business Review, 70*(1), 71–79.

Lopez, E., Ramirez, E., & Rochin, R. I. (1999). *Latinos and economic development in California.* Sacramento: California Research Bureau.

Myers, D., Park, J., & Hacegaba, N. (2000). *Reversing the shrinking middle and polarization in California's labor force: Report of a pilot investigation.* Los Angeles: USC Center for Urban Education and Population Research Laboratory.

O'Day, J. A. (2004). Complexity, accountability, and school improvement. In S. H. Fuhrman & R. F. Elmore (Eds.), *Redesigning Accountability Systems for Education* (pp. 15–43). New York: Teachers College Press.

Price, D. V. & Wholford, J. K. (2003). *Race, ethnic and gender inequality in educational attainment: A fifty state analysis, 1960–2000.* Paper presented at The Harvard Color Lines Conference, The Civil Rights Project, Harvard University.

Ruppert, S. S. (2003). *Closing the college participation gap: A national summary.* Boulder, CO: Education Commission of the States.

Shulock, N. (2004, September 3). No less than a cultural shift. *The Chronicle of Higher Education, 51*(2), B6–B10.

Swail, W. S., Cabrera, A. F., & Lee, C. (2004). *Latino youth and the pathway to college.* Washington DC: Pew Hispanic Center.

Swail, W. S., Redd, K. E., & Perna, L. W. (2003). Retaining minority students in higher education: A framework for success. *ASHE-ERIC Higher Education Report, 30*(2).

The National Center for Public Policy and Higher Education. (2000). *Measuring up 2000: The state-by-state report card for higher education.* San Jose, CA: Author.

The National Center for Public Policy and Higher Education. (2002). *Measuring up 2002: The state-by-state report card for higher education.* San Jose, CA: Author.

Vernez, G., & Mizell, L. (2001). *Goal: To double the rate of Hispanics earning a bachelor's degree.* Prepared for The Hispanic Scholarship Fund. Santa Monica: RAND Education Center for Research on Immigration Policy.

APPENDIX

TABLE 6.6
High School Graduates and College Enrollment Trends in California by Institutional Sector, from 1988 to 2001

Among public high school graduates, between the years 1988 and 2001:

- African Americans increased by 16%, from 19,000 to 22,000.
- Latinos increased by 112%, from 49,000 to 104,000.
- Asians increased by 61%, from 23,000 to 37,000.
- Whites decreased by 7%, from 150,000 to 139,000.

Among UC enrolled students, between the years 1988 and 2001:

- Black undergraduate enrollment decreased from 5,500 to 4,400.
- Latino undergraduate enrollment went up slightly from 11,600 to 18,600.
- Asian/Pacific Islander undergraduate enrollment doubled from 21,000 to 45,000.
- White undergraduate enrollment decreased from 70,000 to 55,000.

Among CSU's undergraduate students enrolled between the years 1988 and 2001:

- Black undergraduate enrollment increased slightly, from 15,000 to 18,000.
- Latino undergraduate enrollment has more than doubled from 30,000 to 64,000.
- Asian/Pacific Islander undergraduate enrollment increased from 33,000 to 45,500.
- White undergraduate enrollment has declined from 169,000 to 114,000.

Among independent institutions undergraduate students enrolled between the years 1988 and 2001:

- Black undergraduate enrollment increased from 5400 to 7200, which represents a growth of 33%.
- Latino undergraduate enrollment increased from 7,500 to 16,500, which represents a growth of 120%.
- Asian undergraduate enrollment increased from 10,000 to 16,000, which represents a growth of 60%.
- White undergraduate enrollment had a slight decrease, from 68,000 to 65,000, which represents a decrease of 4%.

Among community colleges:

- Black undergraduate enrollment had a slight increase from 85,000 to 114,000.
- Latino undergraduate enrollment has more than doubled from 178,000 to 415,000.
- Asian/Pacific Islander undergraduate enrollment almost doubled from 99,000 to 188,000.
- White undergraduate enrollment decreased from 735,000 to 647,000.