



# POLICY BRIEF

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## California's Impending College Graduate Crisis and What Needs To Be Done About It

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### Policy Brief 10-2

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California faces a major economic crisis in the next ten years: a shortage of four-year college graduates. The state stands to produce too few graduates to fuel its cutting-edge high tech and high-end service economy.<sup>1</sup> In this paper, I suggest that a main reason for the underproduction of graduates in California is the disproportionate fraction of Latinos who attend two-year rather than four-year college. I also suggest that this may have been fostered by the emphasis put by the state on community college expansion in the 1990s.

In 1993-94, 39 percent of the pupils in California's public primary schools were Latinos. Twelve years later, in 2005-2006, this cohort of Latinos only received about 14 to 15 percent of the 151,000 BA degrees awarded by all California public and private colleges in 2005-2006. In 2006, about half of the public primary school population was Latino. By 2017, if things continue as they are, only 19 to 20 percent of the BA degrees in the state will go to Latinos. Unless the ratios change, a very high fraction of the state's non-Latinos would have to complete four-year college just to keep the absolute number of degrees constant. With the rapid growth of California's Latino student population, these figures bode badly for the state's economy.

### Executive Summary

In 2005-06 almost half of the pupils in California's public schools were Latinos, but Latinos only received about 15 percent of the BA degrees awarded by public and private colleges in the state. Texas has a comparable Latino population, but does significantly better than California in getting Latino students through college. The implication of this disparity is that California stands to produce too few graduates to fuel its cutting-edge high tech and high-end service economy.

In this policy brief, Martin Carnoy explores the reasons why California's education system falls short in ensuring post-secondary access and success for Latino students, and identifies six steps that the state could take to increase the number of four-year college graduates:

- California middle and high schools should get financial incentives to identify potential college-bound Latino (and African-American) students and mentor them into college attendance.
- The state should consider expanding its current University of California guarantee to the top

### Executive Summary continued

academic four percent of seniors to Texas's norm of ten percent.

- College counseling in California high schools has to be reorganized and strengthened, so that well trained counseling staffs can encourage minority students to choose college prep courses, and match students to colleges and funding opportunities.
- California has to go beyond policies that greatly expanded access to community college education to policies that improve completion and transfer rates in CCCs.
- State universities should be rewarded for identifying and supporting potential lower income minority applicants in high school.
- Colleges should also get financial help for providing remedial courses if necessary, and help in mentoring students in need of remediation through college to degrees.

The relatively small number of Latinos finishing four-year colleges is partly due to high Latino dropout rates from high school. As important, Latinos who graduate high school are less likely than Anglos<sup>2</sup> or Asian Americans to enroll in college. And of the Latinos who do enroll, more than 70 percent enroll in two-year, not four-year, institutions. Finally, Latinos who attend two-year community colleges are much less

likely than other ethnic groups to use such two-year programs as a bridge to four-year institutions. Compare this to Anglos or Asian Americans, who are twice as likely to go to a four-year rather than a two-year college, and are much more likely to graduate with a BA degree than are Latinos.

This is not just a result of lower rates of college attendance by recent school age immigrants from Mexico and Central America. Native-born Latinos are more likely than their foreign born counterparts to have attended and completed college. But nationwide, if first-generation immigrants arrive when young (in primary school), they are as likely to attend college as native-born Latinos. And both native born and immigrant Latinos usually choose two-year rather than four-year institutions (Pew Fact Sheet, 2002).

To date, the issue of Latino demand for higher education has not been given enough attention. California's education system seems to be generally not much less effective than other states', such as Texas', in helping its large, overwhelmingly Mexican-origin population increase its access to bachelor's degree programs. Yet California may be doing worse than it could in educating Latinos for two key reasons: (1) lack of success with the education of foreign born Latinos—the foreign born, at least in some surveys, constitute a higher fraction of the Latino population in California than elsewhere; and (2) a major emphasis on community colleges rather than the state four-year universities. Data on enrollment

growth suggest that California's public system had until recently expanded all its higher education enrollment in two-year rather than four-year colleges.<sup>3</sup> Both factors may be particularly important in explaining “lower-than-other” four-year college enrollment and graduation among Latinos.

The clearest comparison is with another state: Texas. Texas has the second largest Latino population in the country, and may be doing better than California in getting Latinos to attain BA degrees, especially those who are foreign born.

The goal of this policy brief is to examine whether or not the steps that are currently being taken in California, at the state level, are likely to increase Latino college going and make a significant improvement in Latino attainment. In doing so, I discuss the problems with the expansion of California's higher education system.

### The Problem

In 2006, the vast majority of Latinos who graduated from four-year colleges in California got their degrees from one of the California state universities. The total number of BA degrees earned by Latinos from those institutions numbered about 13,000. Another 9,000 Latinos gained BA degrees from other universities, including 5,300 from the eight campuses of the University of California. This translates into about 22,000 Latino bachelor's degree graduates annually in the state, 14.5 percent of the 151,000 BA degrees awarded by all California colleges in that year.

**TABLE 1.** California: Latino Population by Ethnicity and Anglo Population, 25-34 Years Old, with Some College and Bachelor's Degree or More Education, 2003, 2005, and 2008 (percent of total population 25-34 years old in each category).

Ethnicity/Education/Nativity	2003		2005		2008	
	Males	Females	Males	Females	Males	Females
<b>Latino Native Born</b>						
Some college	35.7	41.6	34.2	40.0	37.1	39.9
BA degree or more	12.3	12.2	15.1	15.9	15.2	23.3
<b>Latino Foreign Born</b>						
Some College	12.6	13.4	11.5	12.8	12.9	13.7
BA degree or more	5.9	3.9	3.8	4.4	4.6	8.2
Percentage Latino Foreign Born	64.1	63.2	67.1	62.0	61.1	55.3
<b>Anglos</b>						
Some College	31.4	33.4	27.0	31.0	30.4	30.8
BA or more	41.0	47.0	44.6	47.5	45.8	51.6

Source: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, 2003, 2005, 2008.

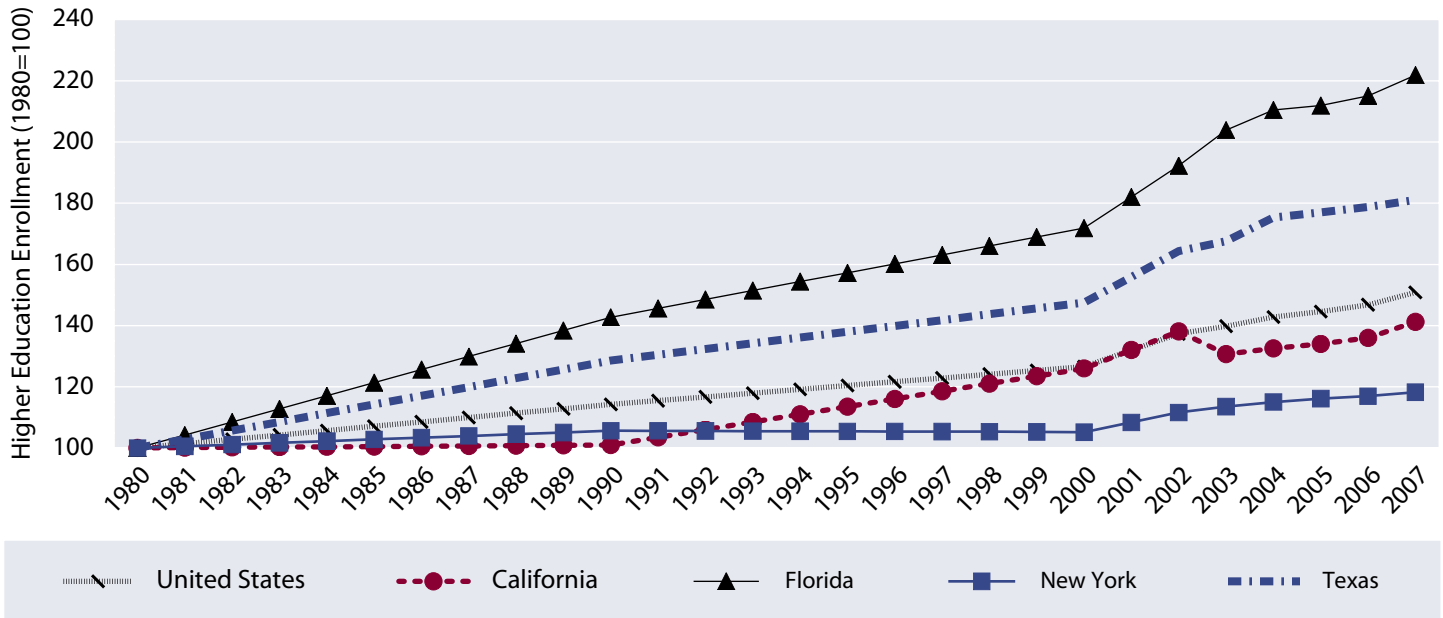
Another way to look at the problem is through the Current Population Survey, an annual census sample of the U.S. population. These data (Table 1) reveal three important issues:<sup>4</sup> (a) the large gap between native and foreign-born Latinos in both college going and four year college completion, (b) the persistence of that gap during the five years chronicled here, and (c) the persistence of the high proportion of foreign-born Latinos in the 25 to 34 year-old sample, representing about 60 to 65 percent of Latinos in this age group.

Although the percent of native-born Latinos 25 to 34 years old in the California population who graduated from college is much higher than the foreign born, it is still a low 19 percent of California's total college graduates. Furthermore, it is unlikely that the proportion of foreign born will decline substantially in the future, suggesting that their much lower rates of college

going and completion will continue to weigh heavily on Latino college attainment. As the student population of California becomes increasingly Latino, such low college completion rates could severely impact California's economy, which relies heavily on college graduates to staff its high-end service and manufacturing industries. As it is, total enrollment in California's universities and community colleges has kept up with the United States as a whole and grown more rapidly than in states such as New York, but grown slower than in other states with large Latino populations, such as Texas and Florida (see Figure 1). Until recently, a fraction of California's enrollment expansion, much higher than in other states, has been in two-year rather than four-year programs. California risks falling behind in enrollment growth unless the state government takes immediate action to encourage Latinos to attend and complete four-year institutions.

The problem will not be easy to resolve. Many Latino students start out behind in kindergarten and never catch up (Reardon and Galindo, 2008). By the time they reach middle and high school, they have spent years in classrooms where they are not viewed as high-achieving students, or given as many opportunities (Rumberger and Gandara, 2004) and thus they end up in low-level courses, not in the academic track. Worse, many bright Latino students are counseled into these non-academic tracks by poorly trained school officials. Moreover, many attend high schools not offering the honors and AP courses now needed to attend the University of California. In addition, Latino parents are often not savvy in navigating U.S. middle and high school choices and/or do not speak English, while school personnel do not speak Spanish. It is alarming but not surprising given these circumstances that most Latino students never fulfill the

**FIGURE 1.** Index of Higher Education Enrollment, United States, California, Florida, New York, and Texas (1980=1.0).



SOURCE: National Center of Educational Statistics. (2009). Digest of Educational Statistics. Washington, DC: Department of Education, Table 207.

California colleges’ minimum course requirements. (For an empirical analysis of this and other hurdles faced by lower SES students in attending college, see Cabrera, Burkham, and La Nasa, 2005.) The elimination of affirmative action has also had a negative impact on Latinos getting into the University of California system (Contreras, 2005). In 2005, Latinos were only 15 percent of undergraduate enrollment in the nine UC campuses.

Many educators have argued, with good reason, that the main obstacle to high Latino college completion is their low achievement levels in elementary, middle, and high school, and that bringing them into four-year colleges without first raising those low levels of achievement will just lead to high college dropout rates (Thernstrom and Thernstrom, 1997). Others have made a similar argument by focusing on the

high levels of remediation required for many of the minority students entering the California state university system (Callan et al, 2006). These are valid arguments. A number of empirical studies have shown that an important correlate of four-year college attendance and completion for students graduating high school are high school grades and, somewhat less, test scores (e.g., for example, Cabrera, Burkham, and La Nasa, 2005).

Without forsaking the longer term strategies to improve Latino K-12 performance (Brown et al., 2003) I propose in this paper that higher education institutions could make changes that promote Latino and African American enrollment and make greater institutional efforts to increase completion rates, including but not limited to remediation. To support this argument, I explore state strategies

that could ultimately lead to increased enrollment and completion at the higher education institutional level.

### California and Texas Compared

We can begin to understand possible policy remedies for the educational situation of Latinos in California by a set of simple comparisons of Latino, African American, and Anglo demographics, educational achievement, and educational attainment data in California and Texas. Of the 41 million Latinos in the United States in 2005, almost 20 million were in these two states. The data suggest that in both states minorities are a very high fraction of total students in K-12 schools; that Latino and African American high school graduation rates are lower than those of Anglos; that the proportion of Latinos going to four-year college is much lower

than the proportion for Anglos and lower than for African Americans; and that Latinos graduating from college as a proportion of the total of college graduates is much lower than the proportion of the same cohort in K-12.

Nevertheless, Latinos in Texas do somewhat better than Latinos in California in several of these statistics, ones that could be crucial for future trajectories in the two states. Latino (and African American) fourth and eighth grade National Assessment of Educational Progress (NAEP) test scores are higher in Texas. Although reported high school graduation rates for Latinos in California have for many years been higher than those for Latinos in Texas, the rates have equalized because of a rapid increase in Texas beginning in the mid-1990s. The proportion of high school graduates attending four-year college in Texas is higher. The proportion of Latinos in the total of BA degrees in recent years has also been higher in Texas than in California. For example, in 2005-2006, only 14.5 percent of BA degrees in California were awarded to Latinos, while in Texas Latinos earned 19.7 percent of all BA degrees.

We can examine the source of these differences by tracing similarities and differences through various stages of the educational process and analyzing whether:

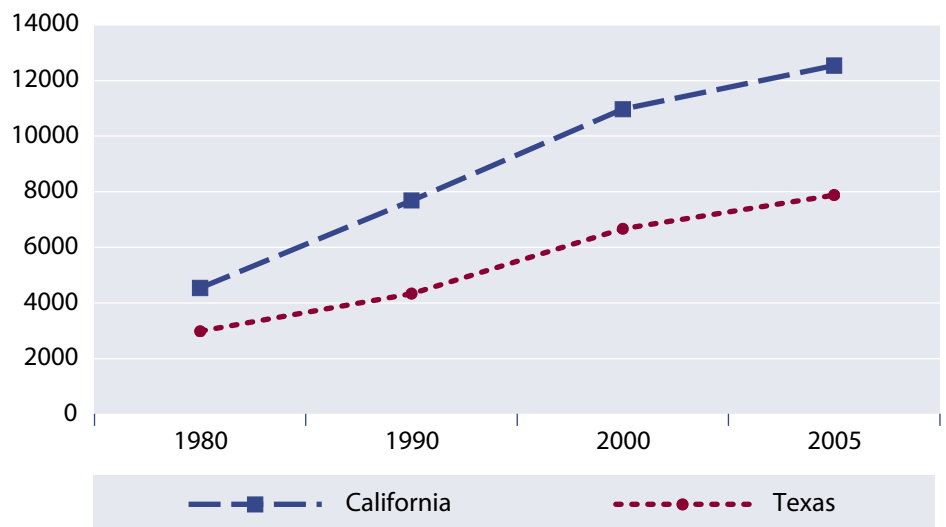
- The Latino demographic may be different in California, with lower average family income than in Texas,

lower average Latino education, and a higher percentage of foreign born. This could explain lower school achievement and attainment of recent cohorts of Latino youth.

- Texas' longer history of accountability reforms in primary and middle school may have resulted in sustained relative higher minority academic achievement and increased minority high school completion.
- Texas may have more effectively stimulated minority college attendance, possibly resulting in higher rates of Latino high school graduation.
- Texas may have done more than California to improve access to four-year colleges by guaranteeing enrollment at the University of Texas for all students who finish in the top 10 percent of their high school class, which may have increased the number of Latino college graduates.

**Latino demographics.** Both California and Texas are states with large Latino populations, and a very high fraction of these Latinos are of Mexican origin. Figure 2 shows that the Latino population has grown somewhat more rapidly in California than in Texas, by 176 percent in California versus 163 percent in Texas over the period 1980-2005. The difference developed mainly in the 1980s, when Texas' Latino population grew at a slower rate than in California. Since 1990, the two states have had almost identical proportions of Latino residents: 26 percent in 1990, 32 percent in 2000, and 36 percent in 2005. These data suggest that the numbers of new immigrants coming into California and Texas is proportionately about the same, assuming fertility rates of Latinos in the two states are more or less equal.

**FIGURE 2.** Latino Population, California and Texas, 1980-2005.



SOURCE: U.S. Census Bureau, Census 1980, Census 1990, Census 2000. Retrieved from <http://www.census.gov/population/projections/state/stpjrace.txt>.

**TABLE 2.** Texas: Latino Population by Ethnicity and Anglo Population, 25-34 Years Old, with Some College and Bachelor’s Degree or More Education, 2003, 2005, and 2008 (percent of total population 25-34 years old in each category).

Ethnicity/Education/ Nativity	2003		2005		2008	
	Males	Females	Males	Females	Males	Females
<b>Latino Native Born</b>						
Some college	37.5	29.2	34.5	30.7	28.4	33.1
BA degree or more	11.4	13.2	14.5	15.0	12.2	16.5
<b>Latino Foreign Born</b>						
Some College	4.3	10.6	13.7	7.0	7.1	14.2
BA degree or more	5.8	7.3	4.3	8.0	5.2	10.1
Percentage Latino Foreign Born	51.1	45.9	53.9	44.6	41.6	39.5
<b>Anglos</b>						
Some College	39.5	28.1	32.4	34.0	24.4	30.5
BA or more	33.1	41.8	33.3	40.3	37.2	42.3

Source: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, 2003, 2005, 2008.

Nevertheless, Current Population Survey (CPS) data suggest that the percent of younger foreign-born Latinos is considerably higher in California than in Texas (Tables 1 and 2), and the foreign born have much lower attainment levels than the native born in both states.<sup>5</sup>

The data in Tables 1 and 2 also suggest that in California, at least in 2008, a considerably higher proportion of native-born Latinos (especially Latinas) attained a BA degree than in Texas. Again, this would support the notion that California Latinos’ lower BA attainment by the school age population compared to Texas is an artifact of the higher percentage of foreign-born Latinos in California. But

it also suggests that the impact of the expansion of enrollment in four-year public universities in the early 2000s may have had a significant impact on Latinos’ four-year college attainment.

The socio-economic dynamic of the 1990s was more favorable for Latinos in Texas than in California, and this may have had a positive influence on educational achievement and attainment of young Latinos in Texas compared to California, especially for the foreign born.<sup>6</sup> Table 1 suggests that the average education of the Latino adult population (> 25 years old) is somewhat higher in Texas than in California, and Table 3 suggests that although Latino households had a somewhat higher median

income in 1999 in California than in Texas, household income in Texas rose more rapidly for all groups, including Latinos, in 1989-1999. In that decade, Latino household income in California fell as a percentage of Anglo household income, from 75 percent to 71 percent. In Texas the opposite happened with Latino household income rising as a percentage of Anglo income, from 65 to 70 percent.

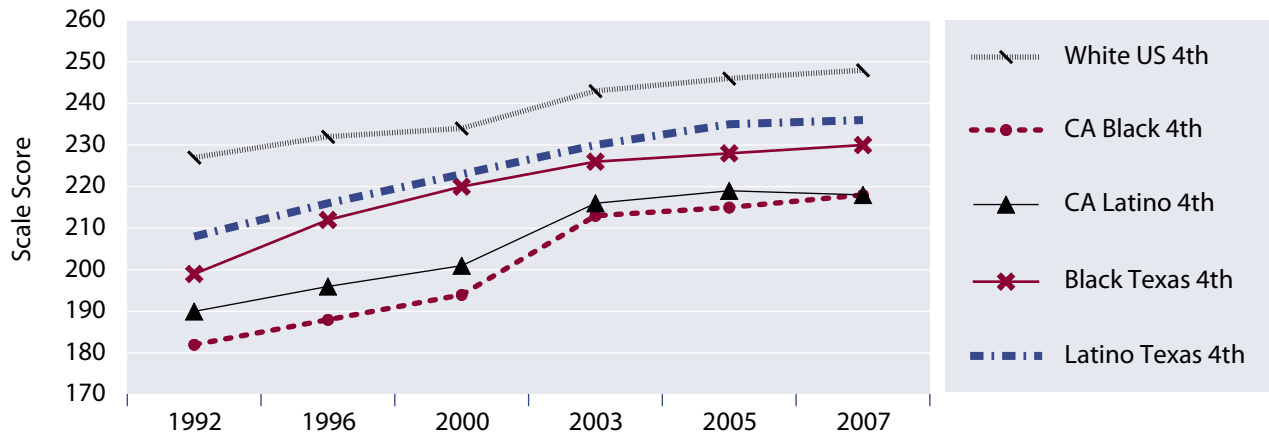
**Accountability Reform.** Twenty-five years ago, Texas made a decision to implement accountability reforms that would help turn its education system into an engine of economic development. Reforms have not been easy, but real progress has been made. California

**TABLE 3.** California and Texas: Median Household Income, 1989 and 1999 (1999 dollars)

	California			Texas		
	Anglos	African American	Latinos	Anglos	African American	Latinos
1989	50,927	35,207	38,082	40,132	24,100	25,964
1999	51,279	34,956	36,532	50,241	34,287	34,951

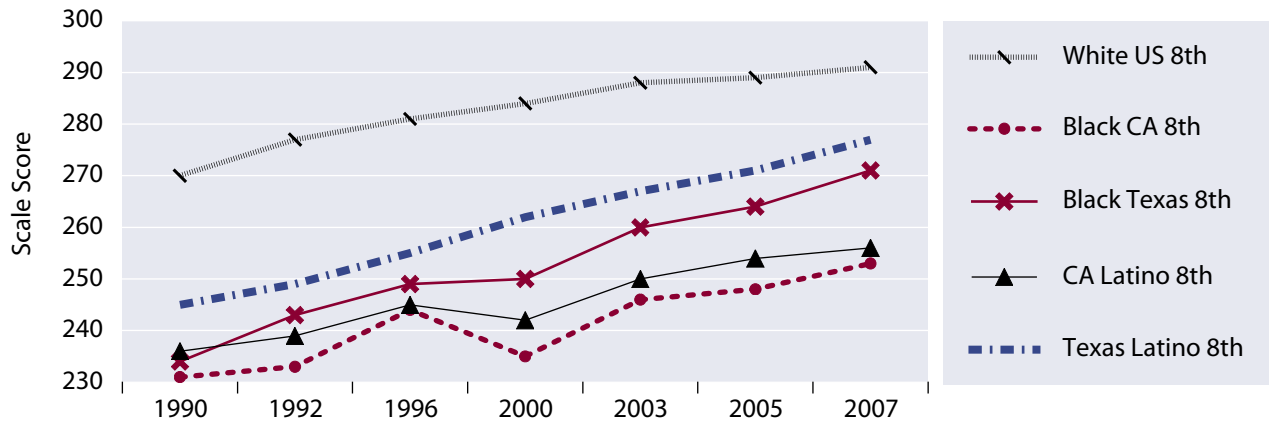
Source: U.S. Department of Commerce, Bureau of the Census.

**FIGURE 3.** California and Texas: Fourth Grade African American and Latino NAEP Mathematics Scale Scores Compared to U.S. Anglos' Scores, 1992-2007 (points).



SOURCE: Institution of Education Sciences. National Center for Education Statistics. (2009). Retrieved from <http://nces.ed.gov/nationsreportcard/naepdata/dataset.aspx>.

**FIGURE 4.** California and Texas: Eighth Grade African American and Latino NAEP Mathematics Scale Scores Compared to U.S. Anglos' Scores, 1990-2007 (points).



SOURCE: Institution of Education Sciences. National Center for Education Statistics. (2009). Retrieved from <http://nces.ed.gov/nationsreportcard/naepdata/dataset.aspx>.

has implemented a similar accountability system, but this occurred fifteen years later, in the late 1990s.

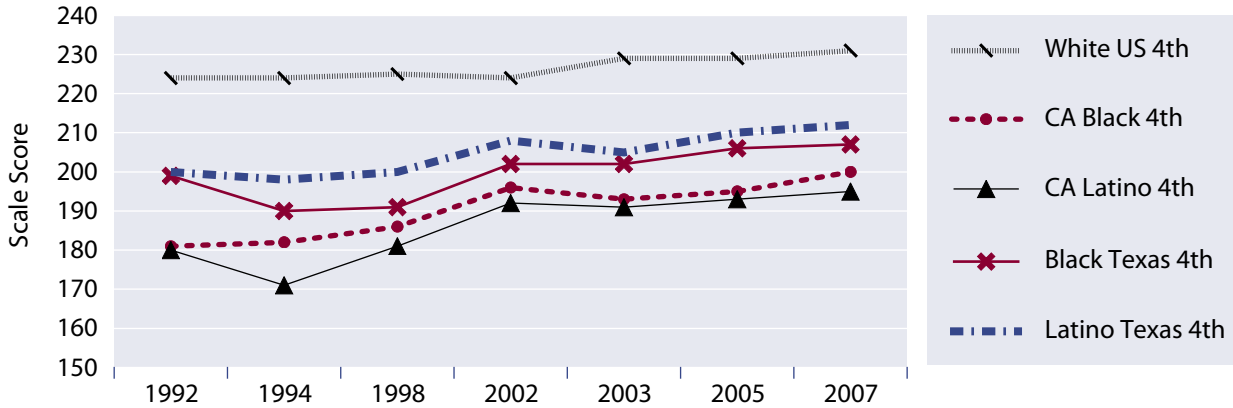
The Texas reforms were accompanied by major increases in spending per public school pupil in K-12, beginning in the early 1980s. Spending per student—particularly changes in spending per student over time—can be a measure of public educational “effort,” and so measure the degree of political commitment to public schooling. Except for the early 2000s, resources increased for

Texas schools at a much faster rate than in California. Between 1980-2005, “real” (assuming that the Consumer Price Index is the proper deflator of spending on schools) per pupil spending in Texas went up by 78 percent, and in California by only 48 percent.

We do not have national testing data at the state level before 1990. Since 1990, however, Texas has made somewhat greater progress than California for all students in raising mathematics performance in elementary and

middle schools. This may be the result of beginning accountability reform fifteen years earlier. Texas’ Latino and African-American students are among the highest scoring in the country on the (NAEP) mathematics test in 4<sup>th</sup> and 8<sup>th</sup> grades, and the *gains* in 8<sup>th</sup> grade math since 1990 for Texas’ minority students are also among the highest in the country. The gains are about the same in fourth grade as for California minority students, but greater in eighth grade as Figures 3 and 4 show. The most telling

**FIGURE 5.** California and Texas: Fourth Grade African American and Latino NAEP Reading Scale Scores Compared to U.S. Anglos' Scores, 1992-2007 (points).



SOURCE: Institution of Education Sciences. National Center for Education Statistics. (2009). Retrieved from <http://nces.ed.gov/nationsreportcard/naep-data/dataset.aspx>.

point is that 8<sup>th</sup> grade students in Texas have gained in math compared to Anglos nationally, and 8<sup>th</sup> grade Latino and African-American students have gained compared to Latinos and African-American 8<sup>th</sup> graders in California.

Gains in reading have been much lower than in math throughout the United States, and California and Texas conform to this pattern. Though African American and Latino 4<sup>th</sup> graders in California do not score as high in reading as their counterparts in Texas, students in California have made greater gains over the past fifteen years (Figure 5). The eighth grade readings scores are virtually flat in both states in 1998-2007, but again, minority students in Texas do considerably better in eighth grade reading than in California. This is especially true for Latinos.<sup>7</sup>

The bottom line is that Texas' Latino students appear to achieve at higher levels than in California in both reading and math, at least as measured by the NAEP tests, and that in eighth

grade mathematics gains over the past 15 years in Texas have been greater than in California. Whether this is the result of earlier accountability reforms and the more rapid increase in spending per public school pupil in Texas is the subject of considerable controversy, but it is a possible explanation (see Carnoy and Loeb, 2003).

**High school graduation rates.** Given Texas' greater increases in income per household in the 1990s, greater increases in spending per pupil in the 1980s and 1990s, and higher minority NAEP scores in the 1990s, particularly in 8<sup>th</sup> grade mathematics, we would expect that minority high school graduation rates would have increased more in Texas in the 1990s and early 2000s than in California. That is indeed the case. Texas has made real progress in the past fifteen years in raising high school graduation rates. The white and Latino graduation rate, as measured by the reported number of high school diplomas granted by Texas schools in a given year compared to the number

of white and Latino eighth graders enrolled in Texas schools four years earlier, has gone up 13 percentage points since the early 1990s; the graduation rate for African-Americans has increased even more, by 16 percentage points (Figure 6).

As Figure 6 also suggests, the high school graduation situation in California appears to differ markedly from that in Texas. For all three race/ethnic groups—Anglos, African American, and Latinos—graduation rates in California were higher in the early 1990s than in Texas. Yet, by the late 1990s in the case of African-Americans, and by 2003 for Anglos and Latinos, graduation rates in Texas caught up with California rates. This is consistent with more rapid increases in socio-economic conditions and greater increases in 8<sup>th</sup> grade mathematics test scores in Texas. The Latino graduation rate may also have been influenced by a more rapid influx of school age immigrants into California in the 1990s than into Texas. However, the Current Population Survey data for



the early 2000s suggest otherwise: in 2003 and 2005, 12 percent of Latinos 0-17 years old in California were foreign born, while in Texas, 11.5 percent in 2003 and 12 percent in 2005 were foreign born.

These figures are suggestive of a possible difference in trends in the two states. Although the current graduation rate in the two states is similar, if Texas continues its rapid increase this parity will soon disappear and California will lag Texas.

**Four-year College Enrollment Rates.**

Since high school graduation rates for Latinos are currently no higher in Texas than in California, this is not a plausible explanation for the higher proportion of Latino BA degrees in Texas. But there are other possible sources for this difference in college completion rates:

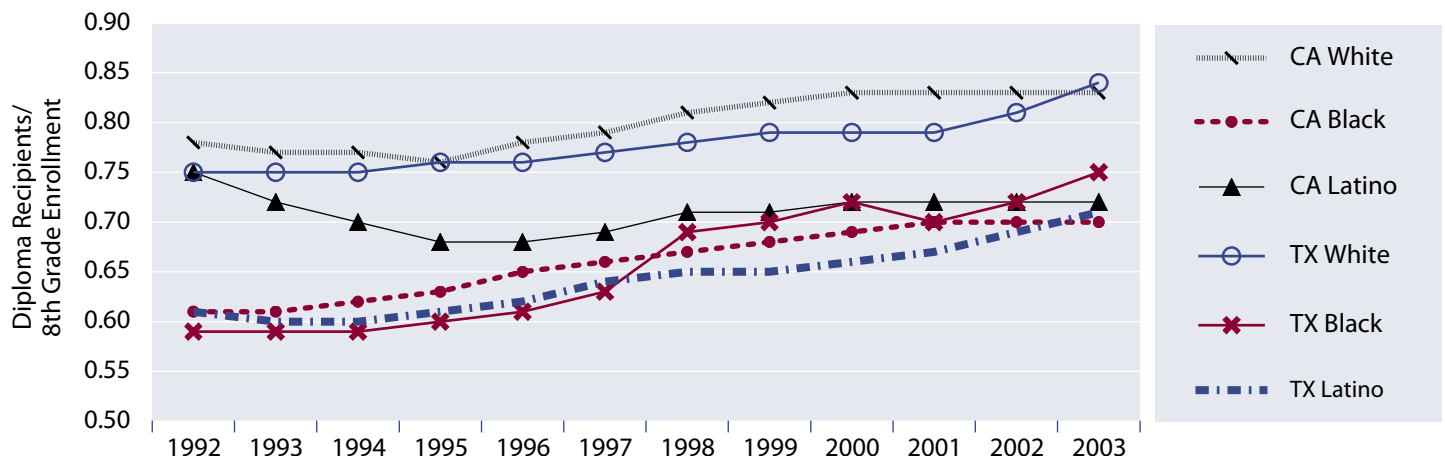
- Texas has a higher overall college enrollment rate, thus including more Latinos as part of this higher overall number.

- Even if the overall enrollment rate in higher education is the same in the two states, overall Latino enrollment rates in higher education may be higher in Texas than in California.
- Even if the overall Latino enrollment rate in higher education (in both two-year and four-year colleges) in the two states is approximately the same, the number of Latinos attending undergraduate studies in four-year college may be higher in Texas.
- The *relative* educational position of Latinos in California may be different. Latinos in California may have similar educational attainment as Latinos in Texas, but may be doing worse compared to the overall population and so have a smaller percentage of total BA degrees. Other ethnic/racial groups in California may have higher attainment than the same groups in Texas, and higher attaining groups may represent a higher fraction of the population in California.

On the first point, the overall enrollment rate in higher education institutions (as measured by the percent of high school graduates enrolling in college) appears to be a few percentage points higher in Texas than in California, based on first time freshman enrollment in higher education compared to the number of high school diploma recipients. This estimate is very approximate, since high school diploma recipient data are only available for public high schools. If we add another ten percent to approximate private high school graduates, Texas has a first time freshman enrollment rate of 76 percent in 2005, and California, 69 percent.<sup>8</sup>

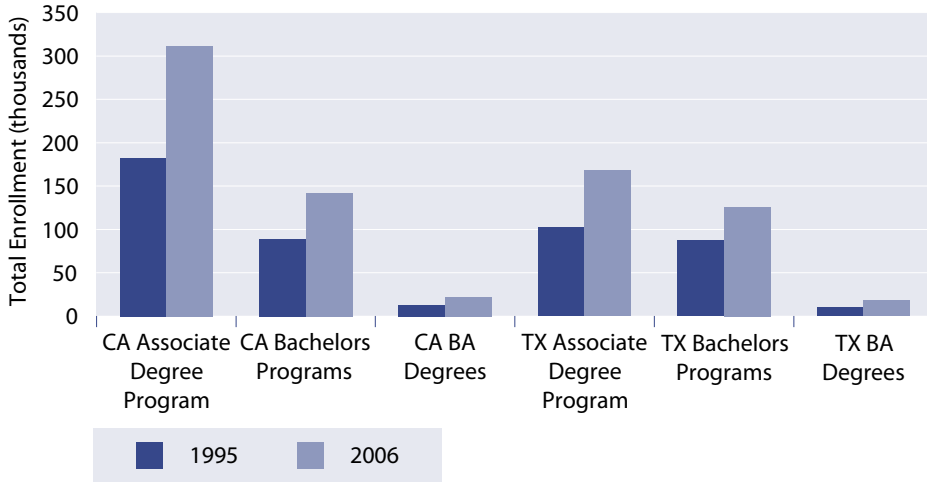
On the second point, that overall Latino enrollment rates in higher education are higher in Texas than in California, the proportion of Latinos in total higher education enrollment increased in California from 12.4 percent in 1990 to 19.7 percent in 1995 to 23.4 percent in 2000 to 26.4 percent

**FIGURE 6.** California and Texas Graduation Rates as Measured by Ratio of High School Diploma Recipients Relative to Eighth Grade Enrollment Four Years Earlier, Three-year Rolling Averages, by Race/Ethnicity, 1992-2003.



SOURCE: U.S. Department of Education, National Center of Educational Statistics, Common Core of Data. Author's estimates of graduation rates based on number graduated in year X relative to enrollment in 8th grade in year X-4.

**FIGURE 7.** California and Texas: Total Latino Enrollment in Associate and Bachelor’s Degree Granting Institutions, and BA Degree Recipients, 1995 and 2006 (thousands).



Source: U.S. Department of Education, National Center of Educational Statistics, Integrated Post-Secondary Education Data System. Author’s estimates of total and Latino graduates from individual college reports.

in 2005; and in Texas enrollment increased from 16.4 percent in 1990 to 20.5 percent in 1995 to 23.6 percent in 2000 to 26.2 percent in 2005. Thus, in terms of the level of relative Latino college enrollment, Texas led California in the early 1990s, but California’s pace of increase brought relative enrollment to parity in the mid 1990s, and it has been similar since. Thus, if the enrollment rate of Latinos in college is higher in Texas than in California, it is because the overall college enrollment rate is higher, not because the proportion of Texas Latinos who enroll in college is higher than in California.

On the third point, in order to estimate the number of Latino undergraduates in associate and bachelor’s degree-granting institutions in the two states in the period 1995-2006, we used the Integrated Post-Secondary Education Data System (IPEDS) (Figure 7). The increase in Latino enrollment in two and four-year degree-granting

institutions in those eleven years was greater in California, but Texas has had almost as many enrolled Latino undergraduates in BA programs as California because a much greater proportion of California’s Latinos enroll in two-year schools.

Figure 7 suggests that a higher fraction of Texas Latinos than California Latinos are enrolled in bachelor’s degree programs. The proportion of Latinos in California enrolling in four-year college jumped sharply from 14.4 percent of total four-year college enrollment in 1995 to 18.3 percent in 2000, then rose more slowly in the 2000s, to 20.3 percent in 2005. In Texas, Latinos’ share of total enrollment started out much higher in 1995 but increased slowly from 20.3 percent in 1995 to 20.8 percent in 2000. It rose more rapidly in the 2000s, to 23.8 percent in 2005.

A clear difference between college enrollment in Texas and California is

therefore the much larger fraction of college students in California enrolled in two-year community college programs. This is not surprising, given the major effort that California has placed in expanding community colleges. (For a history of community college expansion, see Brint and Karabel, 1989.) A serious structural problem in community colleges is that—whether by intention or not—of the 520,000 students who entered California Community Colleges (CCCs) in 1999-2000, only 312,000 or 60 percent sought degrees, of those, only 75 thousand, or 24 percent (14 percent of the total who entered) completed associate degrees or transferred to four-year colleges within 6 years (Shulock and Moore, 2007).

Completion rates for California Latino students are much lower than this average. Latino degree seekers only completed at an 18 percent rate, which was somewhat higher than the 15 percent rate for African Americans, but much lower than the 27 percent rate for Anglos and the 33 percent rate for Asian-origin students. Of the 18 percent of Latino “completers,” about two-thirds were transfers to four-year institutions (Shulock and Moore, 2007). This suggests that less than 8 percent of Latinos who enter CCCs transfer to four-year colleges. Of course, not all of these students obtain a degree after transferring. One major imperative for California in promoting Latinos to get BA degrees is to increase enrollment in four-year colleges, either by increasing enrollment directly in four-year degree programs, or by increasing the

likelihood of transfer from CCCs to four-year universities.

Texas may be more successful at getting Latinos to enroll in four-year programs because of the structure of the University of Texas. 50,000 of the 126,000 Latinos enrolled in Texas BA programs in 2006 were enrolled at four campuses of the University of Texas—Brownsville, El Paso, Pan American, and San Antonio. The first three are almost entirely Latino campuses. Furthermore, more than 20 percent of the undergraduates attending the flagship of the University of Texas at Austin are Latinos. The end of affirmative action in university admissions had a somewhat negative impact on minority admissions in both states, but Texas quickly implemented a “ten percent rule,” which guarantees all those students who finished in the top 10 percent of their high school class admission into the University of Texas. Since Texas (and California) high schools are relatively ethnically segregated because of geographic segregation, the top ten percent of students in many Texas high schools are all Latinos. California has a similar four percent rule, but that rule allows far fewer Latinos access to four-year colleges.

On the fourth point, one reason the Latino proportion of BA degrees awarded in recent years may be higher in Texas is that Anglos and African-Americans in Texas are somewhat less likely to complete college than Anglos and blacks in California (NCES, 2008, Table 12), and that high attaining Asians are a smaller percentage of the

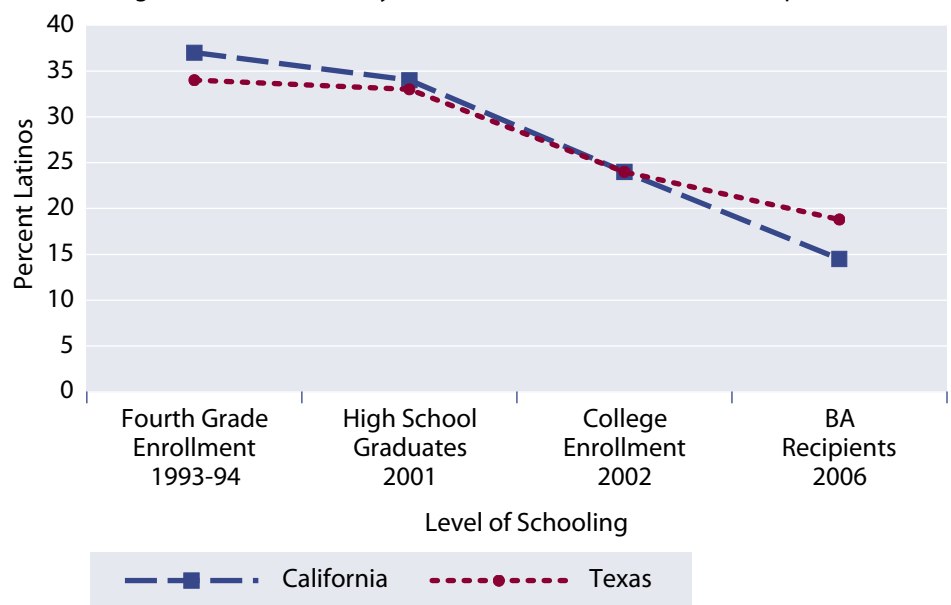
population in Texas. Thus, it is likely that Texas Latinos receive a higher *proportion* of total BA degrees because the rest of the Texas population is, on average, lower attaining than the non-Latino population in California. Since the growth of enrollment and completion in California universities is not increasing more rapidly than enrollment in Texas, the “composition argument” does not explain the somewhat more rapidly increasing fraction of Latino BA degrees in Texas than in California.

**The End Result: Latino BA Degrees.** In 2005-2006, Texas colleges awarded about 18,000 BA degrees to Latinos out of a total of 92,000 BA degrees awarded that year. In Texas, the proportion of Latinos among BA recipients was 19.7 percent, up from 14.1 percent in 1995. This contrasts with California, whose

colleges awarded 21,900 BA degrees to Latinos in 2006. This represented 14.5 percent of the 151 thousand BA degrees awarded that year, up from 11.4 percent in 1995 (IPEDS, 2008, author’s calculations). This difference is quite remarkable: not only did Texas have a higher proportion of Latino BA recipients in 1995, but the rate of increase in the absolute number of Latino BA recipients was higher in Texas in 1995-2006. This difference appears to stem directly from the higher proportion of Latino undergraduates enrolled in Texas’ four-year colleges as compared to California (see Figure 7 and Figure 8).

Figure 8 estimates the proportion of Latino students in a cohort of 1993 fourth graders and “follows” the proportion of that cohort in the total student population as the cohort moves

**FIGURE 8.** California and Texas: Proportion Latino Students of Total Students at Various Stages of the Education System, 1993-4 Fourth Grade Cohort (percent).



SOURCE: U.S. Department of Education, National Center for Educational Statistics (1997; 2007; 2009). Digest of Educational Statistics, various tables and author’s calculations.

to high school graduation eight years later and then to completing college. There is one feature of Figure 8 that stands out: the slope of the California curve from K-12 enrollment to college graduation is somewhat steeper than the Texas curve. As noted above, this greater steepness appears to be the result of the post-high school decline in the percentage of California Latinos getting BA degrees relative to the less steep decline in Texas.

Although the main element driving the Latino proportion of BA degrees is the level of Latino enrollment in four-year colleges, graduation rates from college are also a factor and these appear to be lower in California than in Texas. An important feature of the rapid increase in the proportion of Latinos enrolled in California's four-year colleges in 1995-2000 is that the graduation rate fell in the period 2000-2005, when these Latino students should have been graduating college. In 1995, the proportion of Latinos in the total of those enrolled in California four-year college was 14.7 percent. Five years later, the Latino proportion among the total of graduates was 13.5 percent. In 2000, the proportion of Latinos in the total of those enrolled in California four-year college was 18.3 percent. Five years later, the Latino proportion among total graduates was 14.7 percent. Thus, the proportion of Latinos getting BA degrees in California did not keep up with the expansion of enrollment five years earlier. In Texas, in contrast, the relationship between the percent of Latinos in the total enrollment in four-year college and the proportion among

BA recipients stayed rather constant, perhaps because of the slower rate of expansion in 1995-2000. Although part of the decline in graduation in California could stem from an increased percentage of foreign-born Latinos in the younger population, the data from the 2003 and 2005 CPS on 0-17 year olds suggest that this is not the case.

### Conclusion of the Analysis

The analysis comparing California and Texas clarifies the "location" of the problem of California's low college graduation rates among Latino students. The key factor appears to be the low rate of four-year college attendance by Latino students who graduate high school. The analysis also provides some clues as to why a higher fraction of Texas Latinos attend four-year as opposed to two-year colleges.

- Although Latino household income is now essentially equal in the two states, Texas Latinos lagged California Latinos until more rapid income growth in the 1990s. A much higher fraction of California Latinos is foreign born, but it appears that much of this difference is explained by greater adult migration into California in the 1980s and 1990s. Thus, Texas Latino adults have somewhat higher levels of education than in California. More rapid income growth in Texas, the greater percentage of native born Latinos, and somewhat higher levels of adult education may have had a positive effect on the more rapid increase of graduation rates in Texas in the

1990s and early 2000s, and may even explain why Texas Latinos had a higher rate of going to four-year college.

- Texas Latinos achieve higher test scores in both reading and mathematics than their counterparts in California, and the achievement differences seem to have existed since the early 1990s. These scores may have been a factor in promoting more Latino high school graduates to attend four-year college in Texas in the 1990s until now.

Although higher achievement may play a role in Texas Latinos' higher relative enrollment in four-year college, a more likely explanation is that institutional factors at the state policy level have produced the current pattern of enrollment. California's total four-year undergraduate enrollment expanded rather slowly in 1995-2005, and much more slowly than in Texas. California increased its total undergraduate enrollment by less than 80,000 in this period, whereas Texas undergraduate enrollment in four-year colleges increased by 135,000, starting out at a much lower base. California's undergraduate four-year college enrollment remained essentially constant in the late 1990s, but the state was able to expand enrollment in two-year institutions by more than 800,000 students. Latino enrollment was an important driver of that increase, but only a small percentage of Latinos enrolling in CCCs ever transferred to four-year colleges. Texas' two-year college enrollment increased by only 230,000 in 1995-2000, and by only another 80,000 in 2000-2005.

The proportion of Latinos enrolled in four-year college undergraduate education in California increased rapidly in the late 1990s, but the state could have done more to expand access to four-year programs for Latinos (and others) by expanding the four-year system of undergraduate education. The state could also have done more to get more Latinos to succeed in community colleges and to transfer from CCCs to four-year colleges. And the state could have done more to improve the completion rate of Latinos enrolled in four-year institutions. These points remain the keys—in the short and medium run—of increasing Latino BA degree completion.

California seems to have done well in recent years to increase college completion among native-born, but may be doing much worse with the foreign born. It is difficult to tell how great a role this plays in the comparison between California and Texas because it is difficult to find data on net movements of native—born Latino college graduates from other states to California and Texas.

The state has recently taken steps to improve the academic situation of Latinos in California. The question is whether policy makers are taking the right steps. Superintendent Jack O’Connell’s P-16 Commission has made a number of recommendations that could help Latinos (and African-Americans) do better in school, but almost all will take a long time to produce results. For example, greatly expanding free, high quality early

childhood education could jump-start Latino students in elementary school and, in fifteen years, could produce more college goers. Similarly, supporting primary and secondary schools to do better could continue to raise student achievement, and eventually should produce better prepared Latino students to enter college. This, too, will take quite a while.

Much more emphasis has to be put on policies that would increase Latinos’ college going and success over the next 5-10 years. As we have noted, this means increasing the proportion of Latino high school students heading to four-year undergraduate study. For example, California middle and high schools should get financial incentives to identify potential college-bound Latino (and African-American) students and mentor them into college attendance. College counseling in California high schools has to be reorganized and strengthened, so that well trained counseling staffs with skills to work with Latino students and their family members can encourage minority students to choose college prep courses, and match them to colleges and funding opportunities. As many private schools have known for years, good counseling and college placement produces much greater results per dollar spent than just trying to raise test scores.

There are also private, non-profit models for achieving success with young minority, first generation college goers. One of these, First Graduate, is a San Francisco based program that identifies

### Policy Recommendations.

- California middle and high schools should get financial incentives to identify potential college-bound Latino (and African-American) students and mentor them into college attendance.
- The state should consider expanding its current University of California guarantee to the top academic four percent of seniors to Texas’s norm of ten percent.
- College counseling in California high schools has to be reorganized and strengthened, so that well trained counseling staffs can encourage minority students to choose college prep courses matching students to colleges and funding opportunities.
- California has to go beyond the policies that greatly expanded access to community college education to policies that improve completion and transfer rates in CCCs.
- State universities should be rewarded for identifying and supporting potential lower income minority applicants in high school.
- Colleges should also get financial help for providing remedial courses if necessary, and help in mentoring students in need of remediation through college to degrees.

students in middle school and mentors them through high school into college, helping them find financing besides. Another is San Jose's National Hispanic University, which has its own pre-university program to help guide young Latinos into college. These programs are small. They are good models but cannot do the job on a large scale.

In addition to trying to counsel more Latino high school students to think about four-year college, the state should consider expanding its current University of California guarantee to the top academic four percent of seniors to Texas's norm of ten percent. In the Texas case, ten percent has matched affirmative action in promoting minority college attendance. Expanding to ten percent in California would provide a major incentive to students in high proportion Latino high schools to get into that top ten and head to the University of California.

Secondly, California has to go beyond policies that greatly expanded access to community college education to policies that improve completion and transfer rates in CCCs. This would disproportionately impact Latino four-year college attendance rates. Shulock and Moore (2007) make a series of recommendations to promote higher completion rates at CCCs, including a shift from enrollment based funding to completion-based funding and a greater emphasis on helping students succeed in their programs, including better information for students on "what it will take to succeed." There is a real problem of resource shortages in

pursuing such strategies, but Shulock and Moore argue that CCCs should be given greater spending and hiring flexibility to realize these new goals.

The new Congress and national administration has moved ahead with plans to pass tax credits for college tuition, increase the Pell grant program aimed at low-income students, and make the Pell grant application process much simpler and more accessible. This could help Latino families offset some of the rising costs of higher education. But the state can do more here too. State universities should be rewarded for identifying potential lower income minority applicants in high school. Colleges should also get financial help in providing remedial courses if necessary, and help in mentoring students who need remedial work through college to degrees. If colleges can do this for athletes, they should be able to do the same for students with academic potential. As the data suggest, when California admits many more Latino students into crowded, under-funded state universities, as the state did in the late 1990s, graduation rates decline.

This is a tough time financially to be talking about strengthening high school counseling programs, improving completion and transfer rates in community colleges, and increasing access and support for minority students in California's four-year colleges. Yet without such investments, California's economy could suffer down the road, making the state government's future financial problems even worse.

## Endnotes

- <sup>1</sup> About 31 percent of the 15 million jobs in California in 2008 were in occupations such as management, financial work, computers, science, engineering, education, and health (Bureau of Labor Statistics, May, 2008. State and Employment and Wage Estimates. See <http://www.bls.gov/oes/current/oesrcst.htm>).
- <sup>2</sup> The term Anglo is used in this paper to refer to the census category non-Hispanic whites.
- <sup>3</sup> In the years 1991-2000, enrollment in California's public four-year institutions increased by only 10,000 students, from 432,000 to 442,000, whereas enrollment in two-year institutions more than doubled, from 646,000 to 1.4 million. In 2000-2006, enrollment in public two-year institutions remained constant, whereas enrollment in public four-year institutions increased from 442,000 to 626,000 (see NCES, 1995, Table 191; NCES, 2000, Table 202; NCES, 2008, Table 215).
- <sup>4</sup> Table 1 shows that for 25-34 year-olds in the California sub-sample (the youngest group for which college going is largely completed) Latinos are much less likely to have completed four-year college than Anglos. The average proportion of all Latinos in the 25-34 year age group that obtained a BA degree was only 11.6 percent in 2008. This is up from 7.6 percent in 2003, and 8.1 percent in 2005. In contrast, in 2008, 49 percent of Anglos in the same age group had attained BA degrees. Much of the gain for Latino BA attainment in 2003-2008 came from the greater increase in Latina women's college attainment relative to men.
- <sup>5</sup> In 2008, the percentage of total Latinos ages 25 to 34 who were foreign born was 40 percent in Texas and 58 percent in California. Since the proportions have fluctuated in CPS samples over the period 2003-2005, it is likely the difference in percentage foreign born in this age group in the early 2000s was about 16 to 18 percent. However, the difference in foreign born is much smaller among 18 to 24 year olds. In 2005, the percentage of total Latinos ages 18 to 24 who were foreign born was 42 percent in Texas and 32 percent in California; in 2008, it was 36 percent in Texas and 30 percent in California. Among 0 to 17 year olds, the age group in K-12 schooling, the proportions of foreign born are much lower still (7 percent in Texas and 9 percent in California) and the differences are very small.
- <sup>6</sup> In the period 1980-1990, Texas increased its spending per public school student 43 percent (adjusted for inflation as measured by the consumer price

index), from \$4,315 (in 2006-07 \$) per pupil to \$6,172 (in 2006-07 \$), whereas California only increased its spending by 22 percent from \$5,744 to \$7,005. In 1990-2000, spending increases in the two states were more comparable, thanks to several years of big increases in spending per pupil in California in the late 1990s linked to the dot-com boom. Texas increased its spending per pupil 26% in inflation-adjusted dollars in those ten years, and California, 16%. By 2000-01, California spent about \$8,150 (in 2006-07 \$) per average daily attendance in public schools, and Texas, about \$7,750 (in 2006-07 \$). In the early 2000s, the trend reversed: real spending per pupil declined in Texas to \$7,700, but continued to rise in California to \$8,500 (NCES, 2000, Table 169; NCES, 2008, Table 184)

<sup>7</sup> One major issue in comparing NAEP test scores in the two states is the exclusion of special needs (SD) and limited English proficiency (LEP) students from the NAEP test. If this percentage changes over time and the changes differ between California and Texas, this would bias comparisons of the gains realized by students. There is evidence that California included a higher percentage of SD and LEP students in the NAEP 2000, whereas Texas did not (Carnoy and Loeb, 2003). This would account for the slower rise in the California mathematics scores in that year (the 8<sup>th</sup> grade scores fell in California). The other issue is the absolute percentage excluded and tested in each state. That influences the level of the curve. We reported the 8<sup>th</sup> grade figures for the mathematics test in 1996 and 2000 (Carnoy and Loeb, 2003, Appendix A). These show that Texas excluded 13-14 percent of Latinos in these years, whereas California excluded 15 percent in 1996 and 11 percent in 2000. This difference should not have altered the relative levels of the curves greatly. After 2000, the NAEP test allowed accommodation (more time to take the test) for SD and LEP students, so the rules changed and more of these students took the test but were likely to do better on it because of the accommodation (Abedi et al, 2004).

<sup>8</sup> The enrollment rate estimated this way appears to have increased in Texas in 1995-2005 and decreased in California. The total number of students in higher education (all levels and type of higher education institutions) increased at about the same rate in California (33 percent increase) and Texas (38 percent increase) in 1990-2005, as shown in Figure 1. However, the number of public high school diploma recipients increased slightly more rapidly in 1995-2005 in Texas than in California (41 percent versus 39 percent) (NCES, 1997; 2007). Combined with the more rapid increase of

absolute college enrollment in Texas, this supports the premise that the enrollment rate in college increased more rapidly in Texas than in California. Thus, the enrollment rate appears to be higher and have increased somewhat more in Texas than in California since the mid-1990s.

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