EdSource
Clarifying Complex Education Issues
REPORT
MARCH 2005

Quality. Access. Low Cost.
Can California's Community Colleges Do It All?

California's community colleges are expected to provide a broad range of affordable educational opportunities to everyone who wants access. For decades Californians have been able to take for granted that anyone who is interested in further education can simply enroll at their local community college.

When students do not succeed in high school, the K–12 community largely assumes they will get a second chance at the community colleges. When students are seeking a four-year college degree, they have the option of taking their first two years of coursework at community college. That saves them and the state money, and also eases enrollment pressure on the University of California (UC) and California State University (CSU) systems. When new skills are called for in the workforce, business leaders look to the community colleges to develop appropriate career/technical training programs. When adults want to take classes to improve their quality of life or gain new skills—whether that is learning English, improving in basic math, or taking a college-level course—they expect the community colleges to provide those courses at very little cost.

For more than 40 years, this breadth of access and services has defined the mission of the community colleges. These expectations are also part of official state policy as first articulated in the 1960 Master Plan for Higher Education and later expanded. The multitude of programs available within the California Community College (CCC) system and the variations among campuses reflect these state policies.

Offering almost universal access has attracted students with a broad range of backgrounds, abilities, and interests. About half of the 1.7 million individuals who attend classes each semester are between 18 and 24 years of age; and only a quarter of all students attend full time.

The CCC system has attempted—with mixed results—to provide quality programs to serve its far-reaching mission. It has struggled to do so despite funding that is well below what most states provide to their community colleges. In 2003 the system faced both dramatic growth in the state's young adult population and a state budget that reduced expected funding. In response, community colleges cut course offerings and student services. The situation shed a harsh light on the conflicts inherent in raising expectations for the state's community colleges with only limited regard for the costs or tradeoffs involved. This has become particularly apparent as the enrollment demand grows along with the population.

Some experts warn that if the capacity of the system is not increased through additional funding and better use of the resources now provided, the community colleges will not be able to fulfill their promise of meaningful educational opportunity for all Californians. Already the quality of programs and services is being compromised. And the situation in 2003 made it clear that access could be next. If that occurs, it will engender conflicts between advocates for the three major constituents the CCC system

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serves: students hoping to transfer to four-year universities, students looking for career/technical education, and students seeking their second chance for an education that will bring them economic security in today's society. Further exacerbating the situation is the push for K–12 schools to improve academic performance and college preparedness, potentially increasing even further the demand for space at the community colleges. This possible mismatch between expectations and opportunity should prompt all who care about education to pay attention. The situation at the state's often-ignored community colleges could soon affect the young people that both the K–12 system and the other segments of higher education seek to serve.

This publication begins by describing the community college system's mission, programs, and students, including information about the challenges all 110 campuses share and some of the ways in which they differ. It explores the dynamic tension between enrollment demand and funding, as well as summarizing recent research addressing issues such as remediation rates.

In many ways, the fates of the community colleges and K–12 education are inextricably linked. Both systems depend on the state as their primary source of funding, and both have the goal of universal access to education at the very core of their missions. It is not surprising that they face many similar challenges in a state that continues to struggle with how to reconcile its expectations for public education with its financial commitment.

Key dates in the history of community colleges in California

1907	The California Legislature authorizes high schools to offer lower-level college courses.
1917	The state Legislature expands the CCC mission to include "mechanical and industrial arts, household economy, agriculture, civic education, and commerce" through the Junior College Act.
1960	The Master Plan for Higher Education in California reaffirms the CCC mission as providing transfer, general education, and vocational and technical courses.
1983	The CCC Board of Governors officially adds remedial and basic-skills education to the mission.

Data: Adapted from *Keeping the "Community" in California's Community Colleges*, Community College League of California, which looked at community colleges from 1907 to 1997 — EdSource 3/05

The community college's mission is to be all things to all people

In 1960 California's Master Plan for Higher Education promised publicly subsidized higher education to every Californian willing and able to benefit from it. The Master Plan also limited enrollment at CSU and UC campuses. Only students graduating in the top 12.5% of their high school class are eligible to attend the UC system, while those in the top one-third are eligible for the CSU system. That leaves the community colleges responsible for meeting whatever demand for continued education exists among the remaining high school graduates and much of the adult population wanting to return to school.

The only formal enrollment requirements are that students be 18 years or older, *or* hold a high school diploma (or equivalent); and many exceptions to these requirements also exist. Community colleges have no mandatory entrance exams or academic requirements, though campuses generally request that students take placement exams before enrolling.

California's community colleges are expected to provide services at a low cost to students. Attending full time for the 2004–05 academic year costs students just $780 in fees. These fees represent about 5% of the system's total revenues. Thus, taxpayers provide a substantial subsidy for every student who attends.

The 1960 Master Plan also established guiding principles for CCC programs. The colleges were to offer

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transfer, vocational, and liberal arts courses, with each local site having the flexibility to develop its programs based on local needs. In addition to this original charge, over time the state added more responsibilities to the CCC system, including remedial education and targeted workforce development programs.

Over more than 40 years, these imperatives have shaped the education that the community colleges offer and the students that they serve. The campuses are quite different, reflecting the wide variation between urban and rural communities in California, the state's regional differences in ethnic diversity, and its uneven population growth.

The breadth of programs has expanded

As the nonpartisan research organization Public Policy Institute of California (PPIC) describes in its 2004 report, *Financing California's Community Colleges,* "one may reasonably conclude that the system serves as the repository for missions deemed to be a poor fit with the CSU or UC systems, on the one hand, and inappropriate for K–12 on the other."

Today the CCC system as a whole offers an exceptionally wide variety of educational opportunities. Degree or certificate programs vary, and students pursue many different objectives:

- Two-year associate degrees are offered in a variety of fields and subjects.
- Transfer courses—which may not necessarily lead to an associate degree—prepare students to transfer to four-year universities where they can acquire bachelor's degrees.
- Certificate programs in the arts, sciences, occupational, and technical fields prepare students to enter the workforce directly as computer technicians, nurses, bookkeepers, or firefighters.
- Continuing education courses provide adults with avenues for enriching their lives or changing careers.
- Remedial courses support those who arrive unprepared for college-level work or simply need additional math and English skills for their jobs or personal lives.
- English language and citizenship exam–preparation courses help immigrants.
- Other programs allow students to earn college credit while still enrolled in high school.

State law also calls on community colleges "to advance California's economic growth and global competitiveness through quality education and services that contribute to continuous workforce improvement." As a result, the CCC system is arguably the state's largest provider of workforce preparation programs. PPIC reports that when the state began implementing welfare-to-work initiatives, all campuses at some point participated in employment training programs, such as Greater Avenues to Independence (GAIN) and the California Work Opportunity and Responsibility to Kids program (CalWorks). When employers announced a nursing shortage, the colleges responded by accepting more students in their nursing programs.

The CCC system also provides adult education services—a responsibility shared with the K–12 system. Local communities determine which system will provide these services. The state supports adult education in 10 instructional areas: elementary basic skills (called adult basic skills or ABE), secondary education (toward a high school diploma or GED), English as a second language (ESL), citizenship, disabled adults, vocational education, older adults, parent

The California Community College system is arguably the state's largest provider of workforce preparation programs.

education, health and safety, and home economics.

In addition to these other demands, the community colleges continue to fulfill their original assignment of providing an inexpensive, accessible alternative to students whose goal is to continue their education, including transferring to four-year colleges. The CCC system prepares 58% of all CSU graduates and 28% of all UC graduates, according to *Student Profiles 2003,* published by the California Postsecondary Education Commission (CPEC).

Campuses vary in the programs they offer

Consistent with the original master plan, the community colleges have for the most part responded to the varied educational needs they have found in their local communities. In a state that includes the metropolis of Los Angeles and the mountain town of Lone Pine, those needs are quite diverse. Programs that make sense at the College of the Siskiyous in Weed—in the northernmost part of the state—are very different from those offered to Silicon Valley residents at the five districts and nine campuses that serve them.

PPIC's 2004 report, *Evaluating Academic Programs in California's Community Colleges,* found that of total credits offered in 2000–01 at the community colleges, on average 73% were characterized as transfer credits (which includes some career/technical courses), 23% vocational or career/technical education credits (the majority of which were transferable), and 7% basic skills credits. (Note that many basic skills courses are noncredit, which are not reflected in this breakdown.) While one might assume that students planning to eventually obtain a bachelor's degree would take transfer courses and those wanting to learn a trade would take career/technical education courses, their coursework is not that neatly divided.

Some sites choose to emphasize one or another program area. For example, at Santa Barbara City College (SBCC), 85% of all credits are transferable, whereas at Los Angeles Trade Technical College (LATTC), only 63% are. In addition, more than 64% of LATTC's career/technical credits are nontransferable, compared to only 23% at SBCC. This suggests that LATTC's career/technical programs are more geared to helping students gain a degree or certificate as an end in itself, while SBCC is more focused on offering courses that will help students transfer and complete their work at another institution.

The campuses with a more narrow emphasis—particularly those focused on transfer programs—are often located in urban areas where students can easily choose from multiple colleges. In contrast, PPIC data show that many of the campuses in relatively isolated areas of the state have a higher than average percentage of career/technical courses. In addition, campuses that emphasize nontransferable career/technical education courses are more likely to be located in communities with large minority populations or to have more Hispanic students attending.

The programs offered at each campus often reflect the larger community context. For example, those focusing on transfer courses are more likely to be located near a UC or CSU campus. Some of the urban sites with many advanced career/technical education courses serve communities with a large number of manufacturing jobs. Some colleges also now provide courses through contracts with particular employers, with the courses occasionally offered at the company's offices.

The students served by CCC differ from the typical UC/CSU student

With fewer barriers to entry and a much broader mission, the CCC system serves a student body that differs substantially from the state's other higher education systems. About 22% of community college students are more than 40 years old. Some are exploring career changes. Others are minimum-wage workers hoping to improve their lives or homemakers seeking a career as their children get older. Others are immigrants wanting citizenship or English language skills to function more effectively in their new country. The "Community colleges at a glance" box on page 5 provides a profile of this diverse group.

Community college students are also more likely to be from underrepresented groups that might not otherwise have considered attending college. Many CCC students are the first in their family to go to college. A large portion are working or raising a family while going to school, so they attend part time or in the evening. With their low fees, community colleges draw many students from low- and middle-income families. In addition, they serve a significantly higher percentage of African American, Hispanic, and Native American students than the state university systems. Close to 76% of the students in those racial groups who were attending higher education in fall 2002 were enrolled in a community college, according to a CPEC report.

Increasing demand for access collides with financial constraints

In 1994 the California Higher Education Policy Center and CPEC

Community colleges at a glance in 2003–04

California Community Colleges represents the largest higher education system in the world and the largest provider of workforce education in the state, according to the CCC Chancellor's office.

The system as a whole

- 110 colleges organized into 72 districts*
- 52 single-college districts; 20 multicollege districts

The staff (full- and part-time)

- 53,085 faculty members (for a full-time equivalent or FTE of 31,907)
- 3,151 administrators
- 24,317 classified professional and support personnel

The districts and colleges

- Average district size: 22,700 students
- Largest district: Los Angeles (128,749 students on nine campuses)
- Smallest district: Feather River College (1,558 students on one campus)
- Oldest CCC: Chaffey College in Rancho Cucamonga, founded in 1883**
- Newest CCC: Folsom Lake College in Folsom, accredited in 2004

The students

Community college enrollment can be counted in a variety of ways.

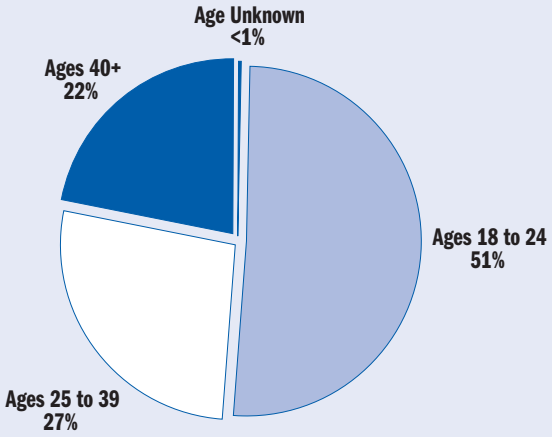
Fall 2003 enrollment

- 1.6 million based on headcount or the number of individuals who enroll full or part time
- *or* 496,000 full-time equivalent students (FTES)

Full year enrollment in 2002–03

- 2.8 million based on headcount
- *or* 1.1 million FTES

This report most often refers to the fall semester enrollment based on headcount because growth projections and funding estimates use this figure. The following data are also based on fall 2003 headcount.



Gender: 56% are female, 42% are male, and 1% are unknown.

Age: 51% are 18 to 24, 27% are 25 to 39, and 22% are 40+.

Student status:

	18- to 24-year-olds	More than 24 years old
Part time	55%	67%
Full time	40%	12%
Noncredit †	5%	21%

Ethnicity:

	18- to 24-year-olds	More than 24 years old
White	20%	41%
Hispanic	31%	25%
Asian (includes Filipino and Pacific Islander)	15%	15%
Other or unknown	27%	11%
African American	7%	8%

Educational goals:

50% seek transfer, 30% want occupational training, and 20% seek basic skills or other educational objectives, according to an estimate by the Community College League of California.***

† Includes English as a Second Language (ESL), health and safety education, citizenship, parenting, home economics, classes for persons with substantial disabilities, and remedial classes in reading, English language arts, and math.

Data : California Community Colleges Chancellor's Office Data Mart, December 2004
*Data: California Postsecondary Education Commission website, February 2005
**Data: *Evaluating Academic Programs in California's Community Colleges,* Public Policy Institute of California, 2004
***Data: *Keeping the "Community" in California's Community Colleges,* Community College League of California, which looked at community colleges from 1907 to 1997

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figure 1 **CPEC calculates increases in undergraduate enrollments based on two sets of assumptions**

	Community colleges		UC and CSU	
Actual enrollments in fall 2002	1.75 million		473,588	
Predicted enrollments assuming that college participation rates **remain constant**	**2006** 1.86 million	**2010** 2.01 million	**2006** 529,655	**2010** 589,420
Predicted enrollments assuming that college participation rates **grow moderately**	**2006** 1.90 million	**2010** 2.07 million	**2006** 536,487	**2010** 610,206

DATA: *Student Access, Institutional Capacity, and Public Higher Education Enrollment Demand, 2003–2013,* California Postsecondary Education Commission (CPEC), 6/04 EDSOURCE 3/05

produced a report alerting policymakers to a new "tidal wave" of students—the children of the Baby Boom generation—who would hit the higher education system early in the 21st century. Three years later, the Department of Finance (DOF) predicted that enrollment would grow to more than 1.7 million students by 2005–06. However, by fall 2002, community college enrollments had already reached the 1.75 million mark.

At that point, California's budget situation also began to unravel. Budget cuts in the 2003–04 year resulted in the state funding CCC enrollment growth at just 1.5%, instead of the 3% to 4% that various population projections indicated was appropriate. To accommodate what was effectively a cut in funding, campuses reduced course offerings, which in turn pushed out potential students. Fall 2003 enrollments were down to 1.66 million. In a June 2004 report on student access, CPEC estimates that this represented about 116,000 fewer students than the enrollment demand.

Suddenly the relationship between community college funding and access became easier for education advocates and state policymakers to see. It became clear that the system's ability to meet its commitment to providing basic skills, transfer, and career/technical education for all who can benefit is constrained by economic realities. Further complicating this issue is the level of funding per student that California provides to its community colleges, which is well below the national norm and below many estimates of how much funding would be adequate. Some observers also say that the way money is allocated to local districts is unfair to some of the districts that are growing the most.

In attempting to address these interlocking issues, state leaders first have to agree on the magnitude of the problem. That requires developing projections of both the number of students likely to want to take courses in the CCC system and the cost of providing educational services that will meet their varied needs.

Demand is growing along with the population—but to what extent?

Community college enrollment estimates are based on a combination of growth projections and predicted participation rates for various segments of the population. Because the CCC system serves adult students of all ages and the mission is so broad, accurate projections are a complex undertaking.

The task of estimating enrollment demand was a challenging issue during the development of the 2004–05 state budget because of the enrollment reductions in 2003. Using the 2003 enrollment as a baseline for projecting growth underestimates demand in comparison to the higher 2002 enrollment. During the 2004 budget deliberations, some conflicting estimates heightened the tension in an already difficult situation. In June 2004 CPEC published a new report that appears to provide enrollment projections with which most of the experts agree.

In its report, CPEC uses the DOF population growth projections as the starting point for forecasting enrollment demand through 2013. The report looks first at how much each age group (15- to 19-year-olds, 20- to 24-year-olds, and so on) is expected to increase or decrease. Then it calculates a participation rate: the proportion of each age group that has in the past enrolled at a public community college during a given semester. Using this approach, CPEC first presents a prediction of demand assuming that participation rates remain constant (See Figure 1). By that measure, they project that the enrollment demand at California's community colleges will reach 2.01 million students by 2010.

CPEC then provides a second estimate of demand based on modest improvements in the participation rates of some population groups. As Figure 1 shows, using that moderate growth calculation, the total number of CCC students grows to 2.07 million by 2010. The report further projects CCC enrollment of 2.18 million in the fall of 2013. This prediction assumes that a slightly larger proportion of the population under age 40 will want to attend college than is currently the case.

Importantly, it further assumes that the UC and CSU systems will

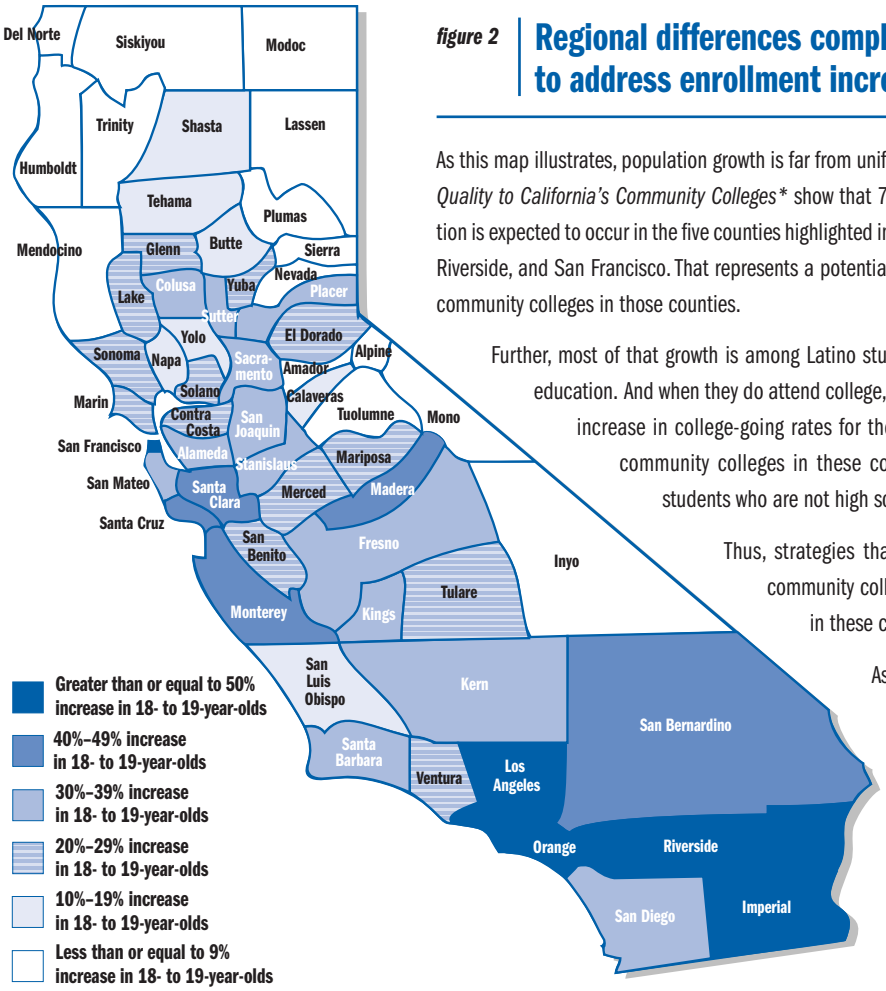

figure 2

Regional differences complicate the state's ability to address enrollment increases

As this map illustrates, population growth is far from uniform across the state. Data from *Ensuring Access with Quality to California's Community Colleges** show that 75% of the increase in the 18- to 19-year-old population is expected to occur in the five counties highlighted in dark blue on this map: Orange, Imperial, Los Angeles, Riverside, and San Francisco. That represents a potential increase of more than 200,000 students for the 35 community colleges in those counties.

Further, most of that growth is among Latino students, who are currently underrepresented in higher education. And when they do attend college, they are more likely to go to a community college. An increase in college-going rates for these students would put even more pressure on the community colleges in these counties. These counties also expect an increase in students who are not high school graduates.

Thus, strategies that successfully address the increasing demand for community college services in most of the state may be inadequate in these counties.

As the map also shows, the few campuses facing little or no pressure from enrollment growth are in the state's least populated areas.

Population of 18- to 19-year-olds by county (Counties are listed in the order of the greatest projected percentage change from 2000 to 2010.)

County	Actual total 2000	Projected total 2010	County	Actual total 2000	Projected total 2010	County	Actual total 2000	Projected total 2010
Orange	68,569	108,487	Colusa	727	947	Shasta	5,254	6,024
Imperial	5,553	8,685	Fresno	26,407	34,385	Tehama	1,734	1,947
Los Angeles	249,049	383,340	Placer	7,294	9,492	Napa	3,377	3,728
Riverside	45,560	69,067	San Benito	1,556	2,006	Mono	308	334
San Francisco	13,833	20,758	Ventura	21,176	26,957	Tuolumne	1,489	1,529
Monterey	11,843	17,390	Lake	1,682	2,127	Nevada	2,819	2,893
San Bernardino	54,026	77,477	Merced	7,497	9,444	Del Norte	975	986
Santa Clara	42,561	60,795	Marin	5,140	6,466	Mendocino	2,836	2,814
Madera	3,919	5,555	Yuba	2,079	2,599	Lassen	1,161	1,140
Santa Cruz	7,641	10,786	Solano	12,098	15,037	Inyo	516	497
Alameda	36,634	51,160	El Dorado	4,828	5,985	Alpine	36	34
San Diego	90,589	126,013	Tulare	13,071	16,162	Humboldt	4,006	3,675
Kern	21,607	29,759	Glenn	1,005	1,237	Amador	872	793
San Mateo	17,184	23,644	Mariposa	442	535	Trinity	434	344
Kings	3,838	5,169	Contra Costa	24,802	29,892	Plumas	614	474
Santa Barbara	14,613	19,403	Sonoma	12,453	15,003	Siskiyou	1,464	1,099
Sacramento	34,234	45,394	Butte	5,842	6,935	Modoc	338	244
Sutter	2,395	3,154	Calaveras	1,202	1,425	Sierra	120	55
Stanislaus	14,719	19,283	San Luis Obispo	10,545	12,481			
San Joaquin	18,391	23,970	Yolo	8,566	9,982	**Total**	**953,523**	**1,346,996**

*Data: Department of Finance, 2000, as cited in *Ensuring Access with Quality to California's Community Colleges*, National Center for Public Policy in Higher Education, 2004

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In the community colleges, actual enrollment increases do not necessarily result in more funds. Thus, when funding is cut—or does not keep pace with inflation—campuses typically respond by cutting student services and/or academic courses.

also increase their enrollments by the amounts listed. If those systems fail to do so because of state funding cuts or because of overcrowding, the demand for space at the community colleges would increase accordingly.

It should be noted that the CPEC projection for moderate growth assumes increases in the participation rate that are already emerging. These increases are among two types of students in the 18-to-24 age group.

The first type is students needing adult basic skills courses, which often fall under the Adult Education category. Almost a third of Californians ages 18 to 24, or almost 1 million youth, do not have a high school diploma. California ranks 45th out of 50 states on this measure. Many of these students go to community colleges for the basic English language and math courses that will give them the skills they need to participate productively in today's society. In the 2003 fall semester, more than 100,000 community college freshmen were not high school graduates. Assuring these adult students continued and unfettered access to public education is, in the opinion of many, both a wise economic choice and an ethical obligation.

CPEC expects that the percentage of recent high school graduates who go on to postsecondary education will also increase modestly. However, the ongoing push for higher standards in K–12 schools could have a bigger impact if schools and students improve their academic performance in line with state and federal expectations. CPEC data show that the proportion of high school students completing the state's "a-g" college-prep curriculum, for example, grew from 32.2% in 1993–94 to 33.5% in 2002–03. Further, Hispanic students currently represent the largest ethnic group in California public schools, yet their "a-g" completion rate was just 22% in 2002–03. Should the system succeed in its goal of preparing more students for college—particularly more Hispanic students—the participation rates could increase more rapidly.

The reality of this occurring is certainly open to debate. To date, the increase in intent noted above has not resulted in a larger percentage of students actually attending college. In its *Measuring Up 2004* report card, the National Center for Public Policy and Higher Education states that, in California, "the likelihood of 9th graders enrolling in college within four years has decreased by 9% over the past decade, compared with a national decline of 3%."

The projections also assume that the needs of the labor market will not change dramatically, causing an unanticipated increase in the number of students who look to the community colleges for job training. They also rest on the assumption that the CCC's current programs in support of the state's workforce training needs are adequate, at least in terms of the number of students they serve.

Funding reductions also reduce access

For the CCC system, estimates of enrollment demand play an important role in the state's decision about how much money the colleges will receive each year. In the community colleges, actual enrollment increases do not necessarily result in more funds. Instead, the state uses the demand projections to set an enrollment cap, a limit on how much additional community college enrollment it will support. If actual enrollment growth exceeds the limit—throughout the system or at a specific campus— the state does not provide additional funding.

Thus, when community college funding is cut—or does not keep pace with inflation—campuses typically

respond by cutting student services and/or academic courses. Between spring 2002 and spring 2003, for example, course offerings systemwide were cut by 4.7%, according to state data. These reductions were disproportionately from vocational and non-transferable course sections. While colleges were least likely to cut transfer courses, 17% of campuses still reported that they could not offer sufficient sections of the English and math courses that students require for transfer, according to the May 2004 report, *Ensuring Access with Quality to California's Community Colleges,* by the National Center for Public Policy and Higher Education. At some campuses that meant students were placed on waiting lists and eventually turned away.

Certain students are affected by these changes more than others, according to the Institute for Higher Education Leadership and Policy. First-generation college students, older students, and others less familiar with college systems frequently lose out to those who are more system savvy. Anecdotal evidence suggests that, because of limited course availability, those students who enroll first are taking as many courses as possible. This creates a competitive environment for students trying to get the classes they need. With fewer courses or sections offered, students must be able to quickly decide on a second choice that still meets their program requirements, be persistent with the registrar and professors about getting off the wait list, and generally make wise choices that will influence their academic path. This requires coordination and advance planning that less system-savvy students may lack.

Recent enrollment caps and fee increases at the UC and CSU system have further exacerbated this situation for these less system-savvy students. Students displaced from UC and CSU who choose to attend community college are generally more informed about higher education bureaucracies and are likely to push out populations less familiar with the systems and without an alternative for higher education.

Funding issues go beyond the system's ability to respond to increased demand

Adequate funding to accommodate an increasing number of students is certainly a central issue in California. For many, however, it is just one facet of a larger financial crisis for the CCC system. California currently ranks 40th among the 50 states in its per-student funding for community colleges, according to the League of Women Voters of California. Consistent with other estimates, they say that CCC funding is approximately $3,000 per student below the national average. This per-student amount is based on a count of full-time equivalent students (FTES).

Per-pupil funding for the community colleges is also substantially less than the state provides for the other segments of public education. CPEC puts the current cost per FTES (in the 2003–04 academic year) at $4,367. For California's other two higher education systems, CPEC cites a current cost per FTES of $8,956 for CSU and $10,812 for UC. The last two figures include undergraduate and graduate students. The most recent data for the K–12 system is for 2002–03, when total expenditures per students were $7,244.

Certainly the cost of each segment should vary based on objectives and the services required. However, the CCC Chancellor's Office documented in a 2003 report, *The Real Cost of Education,* that an adequate level of funding for community colleges might be closer to $9,200 per FTES. (See the box above for more on this report.)

The CCC system makes a case for additional funding

Through its Real Cost Project, the CCC Chancellor's Office used a prototype community college to estimate the cost of providing a quality education to all students.

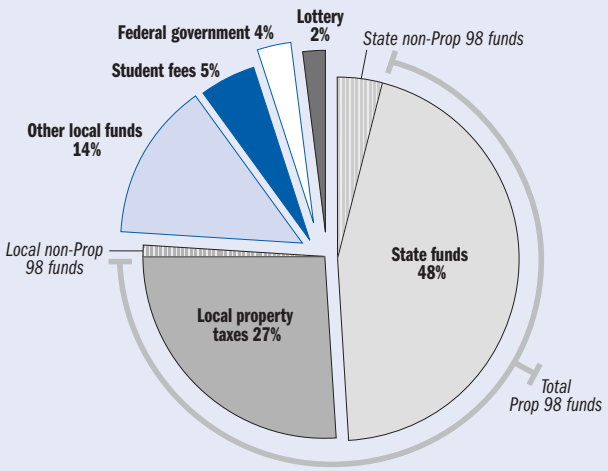
Its prototype college represented typical student demographics within the CCC system—taking into account academic preparation, ethnicity and gender, disability, income status and public assistance, and part-time/full-time status. The prototype enrolled 25,000 headcount students or 10,000 full-time equivalent students (FTES). The analysis further assumed that the program would meet a level of quality consistent with an exemplary education.

The analysis concluded that providing the quality Indicators for all students would cost about $9,200 per FTES. In 1988 the state estimated a similar amount per student (adjusted for inflation) as part of its program-based funding standard, but ultimately it has funded the CCC system at about half that level.

Growing demand will necessitate change in California

California has a few choices for addressing the increased demand for space at community colleges. Providing additional funding is one obvious solution. Public funds cover about 95% of the cost for each community college student. If the state chooses not to provide sufficient funds for the pool of prospective students, it is preventing some students from

figure 3 | **The state provides the lion's share of community college funding**



In 2004–05 the sources of funding for California community colleges include:

State funds $3.3 billion (48%)
includes $3 billion from Proposition 98 sources.

Local property taxes $1.9 billion (27%)
includes $1.8 billion from Proposition 98 sources.

Other local funds $1.0 billion (14%)

Student fees $333 million (5%)
based on fees of $26 per unit, a 44% increase over 2003–04, and an estimated full-time equivalent student (FTES) count of 1.14 million.

Federal funds $251 million (4%)

State lottery $143 million (2%)
projected at about $121 per student, with $12 to be used only for instructional materials.

Total funding for 2004–05: $6.93 billion

Data: California Department of Finance (DOF) EdSource 3/05

accessing this promised opportunity. However, obtaining additional funds from the state could be difficult, given many competing demands and the current budget situation.

A need for additional higher education funding is on the horizon

In its analysis of institutional capacity, CPEC estimates the amount of funding that would be needed to meet projected higher education enrollment demand. Assuming moderate growth in participation rates, no increase in the amount per FTES, and no adjustment for inflation, their analysis suggests that a $3.1 billion increase in funding would be required for all of higher education by 2013. That estimate is for instruction-related costs only, not facilities or student support services. Of that amount, $1.5 billion, or about half, would need to go to the community colleges. The CPEC report cautions that "the cost estimates would be much greater if adjusted for anticipated inflation over the projection period." The funding increase would presumably come from a combination of state support and student fees.

Since 1988 the bulk of funding for community colleges—like that for K–12 schools—has fallen under the provisions of California's Proposition 98. (See Figure 3 on this page.) For this reason, both segments can find themselves competing for a finite, and many believe inadequate, amount of money. This is in part because while Proposition 98 officially sets a minimum funding level for K–14 education, it has generally functioned as the maximum the state is willing to allocate.

In the context of California's current state budget crisis—with the governor calling for the suspension of the Proposition 98 guarantee—the K–12 and CCC systems could easily become competitors for scarce resources. The governor's 2005–06 budget proposes a $359 million increase for community colleges, enough to support a 3.93% cost-of-living adjustment (COLA) and enrollment growth of 3%. It also assumes no increase in student fees. The proposal recommends a similar increase covering COLA and growth for K–12.

Under this scenario, neither system receives the funding augmentation that Proposition 98 would have automatically provided, an increase many believe both systems need. Further, it is unclear how the state could substantially improve its investment in either system absent some additional source of revenues.

As a result, many are looking at ways to make the current state funding stretch further. Two suggestions—increasing fees and changing registration policies to limit access and thus enrollment demand—could have

consequences for certain student populations and thus present political challenges. A third suggestion—reviewing the way funds are allocated—might, if implemented, help shift funds to regions where demand is the strongest; but lower-demand districts could possibly suffer from such a reallocation.

Would fee increases boost revenues?

One common suggestion for increasing funds for community colleges is to raise student fees. The fees for the CCC system remain the lowest in the nation. With a 44% increase in 2004–05, the annual full-time tuition cost to attend community college in California rose to just $780. This compares to a national average of $2,155 in 2003–04. The 2004–05 increase, which raised student fees from $18 to $26 per semester unit, was on top of a $7 per unit fee increase the prior year.

Opponents to fee increases argue that while higher fees might be necessary in the long run, changes should be moderate and predictable, enabling students and families to plan. It is also unclear that the impact of fee increases would be worth the moderate amount of additional funding they would provide. In 2004–05 fees are expected to represent only about 5% of total CCC revenues. Even doubling fees would have only a nominal effect on the system's budget problems. In addition, increasing state funding for financial aid to protect access for low-income students would offset a portion of that increase.

Local campus leaders are also understandably skeptical about the extent to which a fee increase would bring more revenues to them directly. All but 2% of CCC fees are currently sent to the state and then reallocated to the system through the CCC funding formula. This ensures that campuses that collect fewer funds because they have many students attending on fee waivers are not penalized financially.

Finally, many worry that a fee increase would discourage or prevent attendance among low-income students. In theory, broad availability of financial aid addresses this concern. Proponents of a fee increase point out that almost a quarter of CCC students receive a fee waiver, which provides a safety net for low-income students. They also highlight the fact that 49 other states have managed to set fees higher without shutting out low-income students. However, as the box on this page describes, many CCC students have difficulty securing the financial aid for which they are eligible.

Would prioritizing students differently serve the state better?

Technically, the community colleges cannot turn away a student who wishes to enroll. They have no admission criteria or early registration deadlines, such as UC or CSU, to help limit enrollment. As previously mentioned, the CCC system instead manages enrollment increases by limiting class schedules and setting up preferences for registering certain groups.

Tensions arise quickly around discussions about which students community colleges should see as their highest priority. Who should determine which mission is most critical at individual campuses and throughout the system as a whole? Are students seeking to transfer and gain a bachelor's degree more deserving of entry than those seeking basic skills? Do either of those groups deserve priority over students needing training to change careers or enter the workforce later in life?

More students could benefit from financial aid

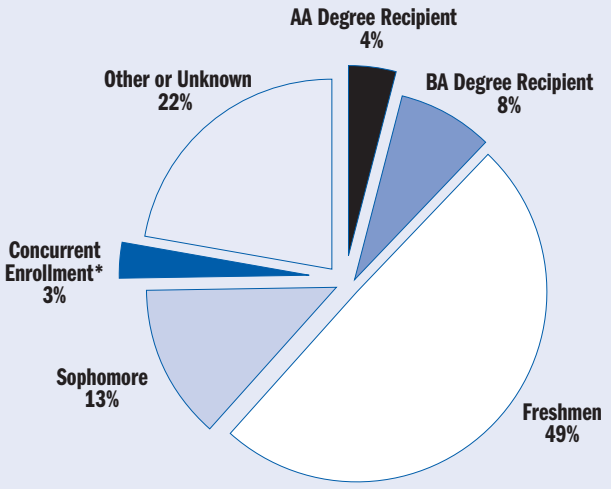
CCC students have access to a variety of financial aid resources, including federal Pell grants, state CCC Board of Governor (BOG) fee waivers, state Cal grants, book grants, and scholarships offered by individual campuses. In 2003–04, 23% of CCC students received BOG fee waivers totaling more than $168 million, and 9% received Pell grants totaling more than $566 million.

The 2003 California Tomorrow report, *California's Gold: Claiming the Promise of Diversity in Our Community Colleges*, states that community college students are less likely to receive federal financial aid than UC or CSU students. Two reasons for this are because CCC costs are so low and part-time students are less likely to receive aid. The 2004 increase in CCC fees to $26 per unit raised the costs enough that low-income students could better qualify for Pell grants.

Meanwhile, not all the available financial aid is applied for and used. In general, the report found that "gaps in information and outreach, staffing problems in financial aid offices, eligibility policies, and the complicated and frustrating process of applying for aid" prevented more students from receiving the aid they needed.

A recent example of this type of discussion illustrates how complex such issues can be. The *2004 California Performance Review (CPR)* is a comprehensive set of recommendations for reforming state government instigated by Gov. Arnold Schwarzenegger. The CPR states that the existing system encourages community colleges to place the highest enrollment priority on students who already have a fair measure of post-secondary success. According to the

figure 4 **Students enrolled in community colleges have a variety of academic backgrounds**



*Concurrent enrollment refers to students who are taking community college courses while still in high school.

Data: California Community Colleges Chancellor's Office Data Mart, December 2004 EdSource 3/05

CPR, 70,000 students in the CCC system in 2002–03 had completed at least 90 semester units, with many having already completed an associate degree. Approximately 60 semester units are needed for an associate degree or to transfer to a CSU. The CPR report estimated that another 250,000 students already held a bachelor's degree.

The report concludes that discouraging further course taking among these students would give access to the equivalent of 88,000 new full-time students. It recommends that community colleges give first priority to students who will transfer or graduate at the end of the semester, then to current or new students who have accrued only limited course units. Last priority would be given to those who have a bachelor's degree or who have accrued more than 90 semester units.

However, a few years ago, the state attempted to implement a differential fee structure to address the same basic issue. This involved charging higher fees for CCC students already holding a bachelor's degree. That plan was implemented for a single year and then revoked, both because of strong resistance from the campuses and reports of some particularly negative effects on deserving students. The campuses said that the policy limited access to many who were out of work or needed retraining to keep their jobs, rather than to those policymakers may have assumed would be affected—wealthier students taking classes for personal enrichment. In addition, campuses had no way to verify that students had a degree, a fact that further limited the policy's effectiveness.

Would a better funding formula increase efficiency and effectiveness?

A third suggestion for meeting the increasing enrollment demand for the CCC system is to make funds go further by distributing resources more effectively. Currently the CCC system uses a rather complex allocation formula to decide how much funding each community college district receives. The funding formula attempts to allocate dollars to districts based on their needs. It uses an approach called program-based funding (PBF), which was established with Assembly Bill 1725 in 1988 and has been adjusted incrementally since.

The calculation starts by dividing the work of the community college into six categories; it then applies a "workload measure" for each category. (Figure 5 provides more detail about this, but it should be noted that it reports the actual amounts from three years ago.) Each year, increases are based on estimated enrollment growth and, usually, on a cost-of-living increase. The state uses the PBF formula to distribute about two-thirds of the system's total revenue. In addition, 27 state and federal categorical programs provide support for specific efforts.

PPIC has published a strong criticism of the existing funding system, saying "…the current funding formula and its disparate effects appear to be more the result of incremental decision making and political compromise than of the differential cost of providing education. The consequence is an apportionment formula that is overly complicated, opaque, and inefficient in the distribution of funds."

One of the central critiques is that the PBF does not relate to the actual cost of many programs. When they first created the formula, officials estimated the cost for each program to reach a desired standard of quality. The state only funds a portion of that amount. According to PPIC's finance report, "…funding levels have hovered at slightly more than 50 percent of the

figure 5 **The program-based funding formula applies set funding amounts multiplied by workload measures that vary by CCC district**

Program category	Workload measure	2001–02 standard rates
Instruction (credit courses)	Full-time equivalent students (FTES) enrolled in credit courses	$4,472/FTES
Instructional services (credit)	An amount per FTES, using a three-tiered scale depending on the size of the campus	Ranges from $85 per FTES (if < 1,003) to $282 (if > 3,303)
Student services (credit)	Headcount of students attending credit courses	$307/new student $246/continuing student
Instruction and services (noncredit*)	FTES enrolled in noncredit courses	$1,574/FTES noncredit
Maintenance and operations	Square footage of owned facilities plus a rate for leased space based on FTES assigned to that space	$10/square foot $442/FTES in leased space
Institutional support	A percentage of the standard allocation to cover overhead costs	16.55% added to the sum of programs

State law also calls for an adjustment based on economies of scale, which provides extra funding for small districts (those with fewer than 10,000 FTES) and small campuses (those with fewer than 5,000 FTES).

*Noncredit courses are classes that are not at college level.

DATA: ADAPTED FROM *Financing California's Community Colleges,* PUBLIC POLICY INSTITUTE OF CALIFORNIA (PPIC), 2004. EDSOURCE 3/05

amount deemed necessary according to the stated standard rates."

In addition, all credit courses are funded at the same rate regardless of actual costs. Thus courses in nursing, which are particularly expensive to operate, receive the same funding as courses in accounting. This creates a disincentive for expanding much-needed but high-cost programs such as nursing, and an incentive to expand lower-cost programs even if the need for them is less pressing.

Another concern is that the enrollment cap system is not sufficiently responsive to short-term or unexpected changes in enrollment, particularly given the wide variation in population growth throughout the state. (See page 7.) A district's enrollment cap—and thus its funding—is based on the previous year's enrollment dollars. During the course of the academic year, districts constantly monitor their enrollments and adjust where they can to stay within their projections. (Colleges adjust in a number of ways, such as reducing the number of classes if enrollment is too high or promoting specific programs if enrollment is too low.)

If a district's enrollment suddenly drops, it must increase enrollment levels within two years or return a portion of its state funding. (Those funds remain within the CCC system.) While a district's funding can drop dramatically if enrollment declines in a single year, it can only increase gradually. If a district experiences a sudden increase in demand, the enrollment cap will not be raised to accommodate all of that increase.

Many colleges opt to enroll more students than the enrollment cap can support rather than turn students away. However, if a college takes this approach, it must spread its resources more thinly, thereby reducing the quality of services. This further increases the gap in how much is spent per student compared to other education systems in the state or across the country. The number of students a campus accommodates above its enrollment cap does not affect the site's base calculation for enrollment in the following year.

Various groups have made recommendations for ways to change the current funding system. It appears that some consensus has emerged about the need to do so, even if there is less agreement about the details. A task force of the Association of Chief Business Officers drafted a revised funding formula. The chancellor has distributed it to districts for review and, with their input, will present it to the Board of Governors. The topic is expected to be part of the legislative agenda during the 2005 session.

The collision between population growth and capacity will affect access or quality

Over the last 30 years, community college students have accounted for 73% of the increase in California higher education enrollment, according to PPIC's finance report. In fact, the rate of adults attending commu-

Improving transfer and remediation programs holds promise for reducing the amount of time students spend in community college and thus the amount their education costs the state.

nity colleges is higher in California than in any other state. As the above discussion illustrates, the combination of budget constraints and population growth is making it increasingly difficult for community colleges to accommodate all who would like to attend.

Neither the problems nor the solutions are simple. Regional variations in population growth and program needs further complicate the situation. Absent well-considered state policy decisions, individual community college districts will make the choices necessary to keep operating. With little ability to increase their own revenues, the campuses will likely find ways to cut costs, limit enrollments, or both. These ad hoc decisions, constrained by many factors outside of the control of the campuses, may have unintended and/or negative consequences. They will certainly reflect local needs, priorities, and politics that may not advance the greater good of the state as a whole.

Improving student performance benefits the system

Perhaps the good news for the CCC system and the state is that helping students do better could also help address the capacity and funding problems. Improving transfer and remediation programs in particular holds promise for reducing the amount of time students spend in community college and thus the amount their education costs the state.

But how well are students performing now and is improvement a reasonable expectation? Measuring the system's effectiveness is far from straightforward given the CCC's wide-ranging mission and the variety of goals pursued by both students and campuses. For the student who arrives on campus to take one course, the completion of that class represents success. The measure is far different for someone who intends to transfer to a four-year university or who is seeking a technical certification. As the box on performance describes on page 15, a number of technical challenges related to performance data make the answers to these questions elusive at best.

As a result of these complexities, it is not surprising that opinions may vary on how well the CCC system is performing. In certain areas, the system is keeping pace with national averages and meeting established performance goals, implying some success. However, some question whether the goals set are high enough and whether meeting national averages is admirable if those averages themselves are low. Those disagreements need not prevent the adoption of strategies that could help the system and its students improve student success.

Career programs are meeting goals

The Chancellor's Office data indicate that the community colleges advance a substantial number of career/technical students through the system and prepare them for success once they leave. The CCC system tracks both the passing rate for students who attempt courses and the percentage who receive a degree or certificate. These measures are compared to state-established performance goals. These goals meet the requirements of the federal Perkins Act, as reported in the *2000–2004 California State Plan for Vocational and Technical Education* report of September 2000. The state established the performance goals by forecasting the economy, labor markets, academic preparation of incoming first-year students, and number of economically dis-

Community college performance data are positive but insufficient

Program and course completions have increased.
In 2003–04 approximately 117,000 degrees and certificates were awarded, according to the Chancellor's Office. Of those, 64% were associate of arts degrees or associate of science degrees, and 30% were certificates. The remaining 6% were noncredit awards and other credit awards requiring fewer than six semester units.

From spring 1999 to spring 2004, the number of degrees and certificates awarded systemwide increased by 21%, for a total of 20,186. It is important to note that many students earn multiple certificates and/or degrees, while others have no intention of doing so.

In fall 2003, students enrolled in a total of 3.7 million courses. Out of that number 83%—or 3.1 million courses—were completed, but not necessarily passed. This is a 1.5% increase from five years earlier, according to the Chancellor's Office, and part of a steady though gradual increase during that time.

Transfer data show that CCC students do well at completing four-year degrees.
From 1992 to 2001, of the community college students transferring to a four-year institution, an average of 67% went to a CSU, 20% to a UC, and 13% to independent institutions, according to California Postsecondary Education Commission (CPEC) data. These students appear to do well once they arrive at the four-year universities. However, CPEC data also show that the group of students transferring to CSU and UC campuses is not as diverse ethnically or economically as the general population in the CCC system.

- Grade-point averages of CCC transfers at CSU or UC campuses are slightly higher than those of "native" CSU students and comparable to "native" UC students, according to the *Ensuring Access* report. This implies that the CCC system is adequately preparing transfer students for upper-division work.
- Of the 7,146 CCC students who transferred to a UC campus in 1997, 80% completed bachelor's degrees within four years after entering the university, according to the University of California Office of the President (UCOP)—the coordinating body for all UC campuses. From their time of entry into the UC, their average degree completion time was 2.4 years. The average degree completion time for native freshmen at UC campuses is 4.2 years.
- Of 45,546 CCC transfers entering the CSU system in 1997, 44% graduated within three years after starting at a CSU campus, according to the CSU Chancellor's Office. Among students who entered in 2000, this had improved to 50%. The average time-to-degree for native freshmen at the CSU is five years.

Examining CCC outcome data and inferring system quality is complicated for a variety of reasons.

- *Accurate data can be difficult to obtain because of students' varying goals.* Campuses ask for, but do not require, entering students to declare their intent in taking community college classes; and the Chancellor's Office questions the accuracy of the "intent" data it does receive. This makes it difficult to determine whether students are meeting their intended goals in a reasonable period of time. The Chancellor's Office has developed a data approach for predicting student intent for transfer programs that it says is 80% accurate, but the approach is still new and has not yet been used extensively to inform decision making.
- *Changes in data systems make trend analysis difficult.* For example, over the past four years transfer rates appear to have improved, but the increases are in part because more independent colleges have started reporting CCC student transfers. Additional data may become available thanks to new partnerships between the Chancellor's Office and both private and out-of-state universities. New database systems like CALPASS, which uses a unique student identifier, may also help make trend analysis more reliable.
- *Student characteristics can have a significant effect on performance and completion rates.* Because many community college students are from low-income families and are struggling to work, care for a family, and attend school simultaneously, school may be their lowest priority. A proportion of those who do not complete their program may have been more influenced by these social and economic factors than by a college's performance. Student services may help remedy these situations, but generally this is a factor that the CCC system cannot address alone.

Most of the available performance data are developed to meet state and federal reporting requirements.

The state's Partnership for Excellence Fund and the federal Carl D. Perkins Vocational and Technical Education Act both require the system to report on the number of students who complete courses and programs, as well as the distribution of courses, programs, and credits. While these established outcome measures do not fully reflect the system's multiple objectives, they do provide valuable information.

State transfer programs support students

The following programs provide support to community college students interested in transferring to four-year universities, helping them to identify courses that will qualify for transfer to CSU and UC.

ASSIST (Articulation System Stimulating Interinstitutional Transfer): This online information system informs students which institutions accept which courses so they can better prepare for transfer. www.assist.org

CAN (California Articulation Number System): CAN establishes a common course numbering system for lower-division major preparation courses at UC, CSU, and the community colleges. www.can.csus.edu

GE-Breadth (General Education-Breadth): GE-Breadth is a series of courses that satisfy lower-division GE requirements at all CSU campuses. It allows students to keep their options open as to which CSU campus they will attend while safeguarding them against having to take more lower-division GE courses after transferring. www.csumentor.edu/planning/transfer/planning_ge_breadth.asp

IGETC (Intersegmental General Education Transfer Curriculum): IGETC is a series of courses that satisfy lower-division GE requirements at all UC and CSU campuses. Just like GE-Breadth, it allows students to keep their options open and protects them from having to take more lower-division GE courses after transferring. However, some majors–particularly those in science and engineering–at some campuses require more or different GE requirements than the IGETC courses. www.curriculum.cc.ca.us/Curriculum/RegulationsGuidelines/IGETC_Standards.htm

IMPAC (Intersegmental Major Preparation Articulated Curriculum): Faculty from the community college, UC, and CSU systems who teach courses in the most common majors meet regularly to ensure that the community college courses that transfer students take to prepare for their majors will be accepted by the major departments at UC and CSU. www.cal-impac.org

advantaged students served by the CCC system.

More than 80% of students who take a career/technical course complete it successfully. Many of those courses qualify as transfer courses. Approximately 75% of career/technical students are classified by the CCC annually as having completed a program—a measure of students' overall success in the system. This completion rate far exceeds the system's statewide performance goal of 61%.

Since 2000–01, roughly 80% of career/technical education students have found employment within a year of leaving the community college and have remained employed for at least nine months. These figures come close to matching the system's statewide performance objectives. However, the data do not delineate how many of these students already held their jobs before starting the CCC program.

Transitions to four-year universities–is meeting the national average enough?

The CCC Chancellor's Office estimates that about 38% of community college students attend with the hope of eventually transferring to a university and getting a bachelor's degree. The ease with which they make this transition can be influenced by many factors besides their academic performance. For example, if students understand which courses will be accepted once they transfer, they can achieve their bachelor's degree more quickly. Shorter completion times are not only correlated with higher completion rates, but they also save students and the state money.

For part-time students at community college, it can take up to six years to finish their freshman and sophomore courses. By examining the progress over six years for a cohort of students who started in 1996, the Chancellor's Office estimates that 40% of students intending to transfer succeeded. That rate placed California just above the national average of 39%, according to Educational Testing Service's 2000 report, *The American Community College Turns 100: A Look at its Students, Programs, and Prospects.*

The 1996 cohort figure is also an improvement over prior years. Cohorts starting in 1993, 1994, and 1995 had 32%, 34%, and 34% transfer rates, respectively.

In California, larger community colleges and those near a CSU or UC campus have higher transfer rates. Close cooperation and formal transfer agreements between a community college and one or more four-year universities appears to make a crucial difference, as does the availability of extra services to help students with the transition.

Better articulation would remove barriers to successful transfer

Better articulation and instructional improvements could remove barriers and improve transfer rates even more. Under the current system for transferring from a community college to one of the state's four-year universities, students are best served if early in their community college career they choose

both their major and the four-year institution. If they fail to decide early, they may not be able to transfer all their courses and may have to take additional classes.

Each of the state's community college districts has had discretion over its system of course numbering and over course content. In addition, each CSU and UC individually approves the courses that will count for credit on their campuses. Along with the administrative tangle this creates, it can cause confusion for students who may take a course that one university accepts but another one does not. (One alternative that works for some courses is the California Articulation Number System or CAN. See the box on page 16.)

Those community colleges with the strongest transfer rates tend to have good articulation with one or more CSU or UC campus. Central to this are transfer guarantees that assure students that the courses they take will automatically be accepted in the other systems for credit. For example, Santa Monica College has articulation agreements with eight UC and 11 CSU campuses. Some campuses have adopted a common set of course numbers to help students navigate the transition better. These programs provide a model for how the CCC system as a whole could improve its effectiveness in this area—a goal that state lawmakers recently embraced.

In 2004 the Legislature passed both Senate bills 1415 and 1785 to improve the efficiency with which students can transfer from community colleges to CSU campuses. Senate Bill (SB) 1415 requires that by June 1, 2006, the CCC and CSU systems as a whole adopt a common course numbering system for the 20 majors in highest demand. (This is optional for the UC and independent postsecondary institutions. UC has special protections within the California Constitution that limit the Legislature's jurisdiction.) This is expected to make it clearer which courses any CSU will accept, enabling students to follow a logical course progression and finish both their transfer program and bachelor's degree more quickly. The bill also directs postsecondary systems to assess and enhance existing programs that help students with articulation. Some of those programs are listed in the box on page 16.

The second bill, SB 1785, requires all CSU campuses to standardize the list of courses required for high-demand bachelor's degrees. Understanding which courses will be universally accepted will help students progress as quickly as possible in the public university system. CSU is to specify at least 45 units of CCC transfer courses that will be common across all CSU campuses offering the specified major programs.

The new law also requires the CSU system to adapt its admissions procedures to encourage CCC students to commit to a particular CSU campus before taking courses toward their major. If a student commits to a particular campus through a transfer admission agreement, the CSU campus will in return guarantee admission in the student's proposed major. In addition, the campus will guarantee that the student can complete a bachelor's degree in the minimum number of course units required for that degree.

These bills make significant strides toward improving articulation between the CSU and CCC campuses, but they do not represent a comprehensive solution. The UC system has not agreed to these plans, and both bills only apply to high-demand majors. However, it is reasonable to expect that if these policies are effective, there might be more universal implementation. But the state has little influence over independent colleges, which accept 13% of CCC transfer students.

Support services for students help them transfer faster

Effective student support services can often be crucial to students' ability to successfully and quickly complete a transfer program. Students at the CCC level typically need more guidance than those at other levels of higher education because they tend to be first-generation college students.

Effective and adequate counseling can help improve transfer rates. According to a Chancellor's Office report, *Transfer Capacity and Readiness in the CCCs,* anecdotal data strongly suggest that one-to-one counseling is the single, most powerful tool for successful transfer. Friends or uninformed counselors serving as advisers may lead students down the wrong path—costing them time and money.

The CCC system—like its K–12 counterpart—has by most measures a severe shortage of counselors. A spring 2003 Academic Senate report, *Consultation Council Task Force on Counseling,* cites a 1 to 1,918 counselor-to-student ratio. The *Real Cost Project,* on the other hand, cited a 1 to 370 ratio as optimal. In addition, when the system faces tight budgets, counseling services are often cut. For example, from fall 2000 to fall 2003, the number of counselors systemwide was reduced by 152 or 6.3%.

Currently community colleges receive funds to operate a variety of support programs aimed at students with specific needs or backgrounds. With limited funding available and the resulting mass of administrative requirements, streamlining and better coordinating these programs could

In fall 2003 more than 285,000 students on CCC campuses, or about 19%, enrolled in at least one remedial course—and the number may grow, particularly in certain regions.

make them more cost effective, according to the *Ensuring Access* report.

A variety of other resources and programs may help students to transfer more quickly. Well-run transfer centers can help students understand transfer requirements. UC, CSU, and independent college representatives come to the campus for "Transfer Days" to answer questions. Academic support services and programs—including tutoring and writing center services that target math and English skills—also help students improve their chances of transferring successfully. Extended Opportunity Programs and Services (EOPS) offers academic, counseling, and financial aid support for low-income students.

Addressing unprepared students' needs is a central mission

While the transition out of a community college is important, so is a student's successful entry. Although community colleges do not require students to take any type of entrance exam, they do ask most to take placement tests. If test results indicate that students are not prepared to handle college-level courses, they are expected to take remedial classes to improve their skills and content knowledge.

For almost 20 years, remedial education has been an integral part of the community colleges' mission. These courses provide an extraordinary second chance for students who have few other avenues for gaining basic skills at such a low cost.

In fall 2003 more than 285,000 students on CCC campuses, or about 19%, enrolled in at least one remedial course—and the number may continue to grow, particularly in certain regions. In recent years, some colleges have seen particularly dramatic changes. One example is Fresno City College, which reported a 51% increase in the number of students enrolled in pre-collegiate basic skills classes from 1998 to 2003 despite only a 13% increase in overall enrollment.

The UC and CSU systems also enroll a substantial number of students who need remediation. In some cases they send those students to community colleges to complete remedial work. If CSU students do not complete their remediation work within one year, they are sent to community colleges to improve basic skills and then may return to the CSU campus. This may add to the demand for these courses in the CCC system.

With budget reductions forcing community colleges to cut courses or sections, campuses may be motivated to limit the availability of remedial classes. One current legislative proposal suggests giving lower priority to these courses when campuses face funding limitations. However, that would mean restricting educational access for the population that finds it hardest to earn a living wage and who, without an education, would most likely need state support systems.

Two types of remedial courses differ in their objectives

Two different groups of students typically take remedial courses. About one-sixth of remedial students take *adult* basic-skills courses. These students are typically older than college age and may not have graduated from high school. They might take courses to improve their ability to read, balance a checkbook, or pass a proficiency exam to enter the military. The classes they take, which are generally noncredit, are not meant to directly prepare them for college-level work.

The balance of students take pre-collegiate basic-skills courses with

content similar to a rigorous high school curriculum, covering areas such as algebra, advanced English language, and writing. These students finished high school without the skills and knowledge needed to succeed in college-level courses.

While those taking adult basic-skills courses may achieve their goal after completing one course, those taking pre-collegiate basic-skills courses may need significant support to achieve their goals of transferring, earning an associate degree, or obtaining a technical certification. By providing these students with quality instructors and curriculum in an environment that encourages their mastery of the material, the system can help them finish their course of study faster and more successfully. That in turn lowers their costs and increases their confidence and ability to continue with their education.

In addition, the faster students finish at the community college, the sooner they open a space for the next student to fill. This in turn helps the state to meet the increasing demand for a community college education.

It is also worth noting that, in many cases, the state has already paid for these students to gain basic skills while they were in high school. Paying again for them to gain the same skills at the community colleges is expensive. The quicker students get through these classes, the less "double funding" the state needs to spend.

Helping students succeed in remedial courses is a win-win

Research shows that students who take extensive remedial coursework at the college level are less likely to attain their educational goal, whether that is a two-year certificate or a four-year degree. It costs students time and money to bring their skills up to the level appropriate for success in a post-secondary setting. The resulting psychological and financial hurdles often prevent a student from completing a program.

According to a Chancellor's Office 2002 report, students pass approximately 59% of basic-skills courses, a rate that has remained fairly consistent from 1997 to 2001. This compares to completion rates of 75% or more for transfer and career/technical courses. Research is currently examining how factors such as student readiness, class size, staff qualifications, and instructional quality may affect student success rates in basic-skills courses. Results could help the CCC system improve remedial course completion rates.

In addition to improving support for students already in remedial courses, the system could look at how to decrease the number of students needing this assistance in the first place. This is not a problem the CCC system can or should address alone. The state, community colleges, and the K–12 system should work together to make sure that more students leave high school with the skills and knowledge needed to enroll in college-level classes. Two rather simple, inexpensive strategies hold particular promise in decreasing the number of students needing to take pre-collegiate remedial courses.

High school students need more accurate information

Many California high school graduates are surprised and dismayed to learn that although they received a diploma, they are being placed in remedial English or math classes at the community college. Stanford University Bridge Project researchers interviewed students for its 2001 report, *Betraying the College Dream,* and determined several causes for this disconnect. They say some students took light course loads during their high school senior year and forgot some basic skills learned previously. Still others attended an underperforming high school that inadequately prepared them for college-level courses. Equally important, it appears that many high school students, their parents, and even their counselors and teachers are uninformed about the academic preparation needed to succeed at community colleges.

The Bridge Project report found that while most students knew that almost anyone could attend a community college, many wrongly assumed that these colleges have no curricular requirements. Students were unaware that they would be expected to take placement tests before enrolling in community college classes. They also did not know what was asked on those tests. In particular, non-honors students assumed that a high school diploma was enough.

In California, the minimum skills and knowledge required to graduate from many high schools are not enough to qualify a student to take community college courses, even career/technical courses. Adding to the confusion, the knowledge needed to pass the new California High School Exit Exam (CAHSEE) includes only 8th grade–level math and 10th grade–level English, which is certainly below what one would expect as preparation for college-level work.

The Bridge Project report suggests several ways to address students' misperceptions and increase their motivation in high school. Offering a community college placement exam to students while they are in high school, and focusing the exam diagnostically, could help students understand the areas in which they need to improve before they graduate. This not only

Further information on dual enrollment programs

What Role Can Dual Enrollment Programs Play in Easing the Transition Between High School and Postsecondary Education? Bailey, T., Hughes, K., Karp, M. Community College Research Center, Institute on Education and the Economy at Teachers College, Columbia University, March 2002. www.tc.columbia.edu/ccrc

State Dual Enrollment Policies: Addressing Access and Quality. U.S. Department of Education Office of Vocational and Adult Education, 2004. www.ed.gov/about/offices/list/ovae/aboutus.html

Early College High School Initiative: Core Principles. Coordinated by Jobs for the Future. www.earlycolleges.org/Library.html

could provide focus for students' senior year, but could also motivate them to build needed skills while education is still free to them.

In 2004 the CSU system implemented a strategy to address this challenge that could also be used for community colleges. It aligned its placement exams with an expanded version of the 11th grade California Standards Tests (CSTs). If students test proficient or advanced in the expanded CSTs in English and math, they can avoid CSU placement exams; if they fail, they can identify their weaknesses and work on improving those skills.

In addition, middle and high school counselors—as well as teachers—may need to better understand the academic expectations that lead to postsecondary success. They could then communicate to students that while the skills and knowledge required for community college work may not be identical to those required for entrance to a four-year university, they are as rigorous. In terms of challenge, they are closer to the proficiency levels on the CSTs than they are to what is required to pass the CAHSEE or receive a high school diploma.

High schools and the CCC system need better alignment

Some students end up taking remedial classes because curriculum and assessments in the CCC and K–12 systems are not well aligned. After mastering the coursework at their high school, they discover that they must master a different set of material to enroll in college-level courses at their local community college. Ideally, the two systems would coordinate the course progression so students successfully completing high school would enter the CCC system taking courses that followed logically.

The Bridge Project found that those in the K–12 system are generally unaware of the admission and placement policies at community colleges. Similarly, CCC staff are not well informed about the state's K–12 standards and assessments. No one is held accountable for the lack of communication between the two systems, and students suffer because of it.

State policies that encourage better articulation between the two systems could improve the effectiveness of both by addressing existing barriers and increasing support for collaboration. One state initiative attempting to do so is CalPass, or California Partnership for Achieving Student Success, which tracks students from elementary school through community colleges and on to CSU and UC. It uses local data to examine who is doing well or struggling and then looks for solutions to address weak areas in the whole K–16 system. Initiated in 1998 by Grossmont-Cuyamaca Community College District and San Diego State University, the project was formally expanded to a state-level initiative in 2003. According to the CalPass website, a quarter of community colleges are currently part of the consortium.

Another avenue for improving articulation between segments would be for policymakers and educators to consider how to use the accreditation process to encourage alignment. Both high schools and community colleges receive accreditation through the Western Association of Schools and Colleges (WASC).

Site-specific placement exams prevent a more comprehensive approach

One hindrance to state-level action to improve articulation between high schools and community colleges is that each local district and/or campus has its own placement exams. Across all CCC campuses, there are more than 495 forms of English, math, and ESL (English as a second language) exams. Not only can the tests differ dramatically, but they also are not a mandatory condition for enrollment.

The varied exams and their voluntary status are the result of a 1988 lawsuit aimed at placement tests then being developed. As a direct outgrowth of that suit, each campus now has its own placement exam that has been validated by the Chancellor's Office to ensure that it fairly assesses local students—remaining sensitive to cultural and

language differences among them. A task force is currently interviewing constituents to determine whether the state can change these multiple placement exams without undermining the earlier legal directives.

Dual enrollment programs can help improve alignment

Some see dual enrollment programs as an effective strategy for improving alignment between high schools and community colleges, while also enhancing student preparation for college. These programs allow students to take college courses while still enrolled in high school. The programs vary, with courses taught at the college or high school site; by a CCC professor or a specially credentialed high school teacher; with a college curriculum or one combined with high school curriculum; with a full-time program or a part-time one; and with a mix of college and high school students or only high school students. Examples include "middle college" and "early college high school."

Dual enrollment programs can help the K–12 and CCC systems understand each other's requirements and challenges. One study found that they are particularly effective in this regard when high school and CCC faculty teach at each other's facilities.

In addition to helping with alignment, the programs appear to benefit students academically. They introduce participants to college-level material and provide access to courses their high schools might not offer, including career/technical education classes. Some programs offer online classes, which are particularly beneficial to students in rural areas. More generally, the experience demystifies college for students, helping ease their transition by making them aware of support services, the expectations of professors, and the physical layout of the campus.

Dual enrollment programs can also save money for both students and the state. Students can accumulate up to a year's worth of college credits without having to pay tuition costs. And the state ends up subsidizing the student's education for a shorter period.

For the state of Utah, this financial advantage was compelling enough that the state created an incentive for students to participate. The state waives 75% of junior and senior year tuition at its public universities if students participate in a dual enrollment program and earn an associate degree by the summer after their graduation from high school.

Dual enrollment programs have existed for more than 30 years, but national data on their growth and the number of participants are not available. According to a 2004 report from the Education Commission of the States (ECS), 47 states were operating some sort of dual enrollment program. In California, dual enrollments increased from 2% of total CCC enrollment in 1992 to about 4% in 2002, serving approximately 60,000 students.

In 2002, however, state officials concluded that some high schools and community colleges were taking inappropriate advantage of the dual enrollment option—loading up physical education classes with high school students and getting funding from both systems. To address the situation, SB 338 was passed in 2003. It limited the extent to which physical education courses could be included in dual enrollment programs. Although that particular issue was formally addressed, the cloud surrounding it has left many campuses hesitant to build up their dual enrollment programs.

Dual enrollment programs can help the K–12 and CCC systems understand each other's requirements and challenges.

The governance structure for community colleges has similarities with K–12

The governance structure of the CCC system has much in common with that of K–12 education.

Community college districts—whether they are made up of one campus or several—have **locally elected boards** with members that serve four-year terms. Their responsibilities include approving the district's budget, establishing policies for planning and operations, approving courses and programs, establishing personnel policies, and hiring the district's chief executive officer. They also may set up partnerships with local organizations and seek local funding. Local boards consist of five to nine members, for a total of 517 members statewide. Faculty and administrative staff at community colleges generally play an active role in governance as well.

At the state level, the community colleges are governed by a **17-member Board of Governors,** all but one of whom is appointed by the governor. Thirteen of those appointed must be approved by two-thirds of the Senate and will serve six-year terms. The remainder—two faculty members and two students (one of whom does not vote)—serve two-year terms without Senate approval. The law requires that two locally elected trustees be among the members of the board.

The Board of Governors sets policy for the CCC system as a whole—establishing requirements for graduation, credit and noncredit courses, and employment; preparing and adopting a budget for the system, and administering federal and state programs to support the colleges. It approves local educational programs, helps coordinate programs among districts, and works with other higher education segments in the state. The board appoints the **CCC Chancellor,** who manages the system with board approval. One stated responsibility of the state board is to help local districts maintain their own authority.

The board and chancellor receive feedback on major decisions from the **Consultation Council.** This 18-member council was created to allow representatives of various CCC constituencies, including faculty, to give input on major decisions or issues affecting the system. The Council includes representatives from around the state who advise the board.

The **Legislature and governor** control funding and regulations through the budget and legislative process. Over time, they have used this power to change expectations for the CCC system and mandate the way funds are distributed. By providing a portion of CCC funding through categorical programs, both the state and federal governments have also established reporting requirements on performance.

Experts estimate that **more than 20 other independent organizations** exert some influence over the CCC system. The California Postsecondary Education Commission (CPEC) coordinates and conducts long-range planning for postsecondary education and serves as an adviser to the governor and Legislature on fiscal and program matters. The California Student Aid Commission handles financial aid issues. The Community College League serves as a hub for various organizations that provide formal representation for constituency groups within the system, including local boards and chief executive officers. The commission develops consensus among the campuses and then advocates for specific issues, working with the chancellor. The Fiscal Crisis and Management Assistance Team (FCMAT) that assists K–12 schools in financial crisis also helps struggling community colleges. Faculty unions represent the interests of their members, including handling collective bargaining.

According to a CCC League issues brief published in 2002, governance structures in other states vary widely. Some operate within a larger university structure, some with only local boards, others with only a state board, and still others with a mix of state and local boards. Some have appointed and others have elected board members. Eleven states, including Texas and Wisconsin, have a structure similar to California's system.

Typically dual enrollment programs have targeted honors students, but there is increasing interest in offering them to lower-achieving students as well. For example, Early College High Schools attempts to focus on first-generation college students and others who might face significant barriers to enrolling in college.

Community college issues may get attention from policymakers

With the state's population growing steadily and the possibility of more students seeking a college education to compete in today's economy, the CCC system will have trouble meeting its historic mission on limited funds. Whether the state develops strategies to provide more funding, finds ways to use current funds more effectively, or narrows the mission of the colleges so less funding is needed, a strategic approach to the current situation could prevent the existing quality of CCC programs from eroding.

The emerging body of research on community colleges may indicate that

To Learn More

For more in-depth information on community college issues, see the following publications, many of which are cited in this report:

- *The American Community College Turns 100: A Look at its Students, Programs, and Prospects.* Educational Testing Service, 2000. www.ets.org/research
- *Betraying the College Dream: How Disconnected K-12 and Postsecondary Education Systems Undermine Student Aspirations.* Venezia, A., Kirst, M., Antonio, A. Stanford University's Bridge Project, 2003. www.stanford.edu/group/bridgeproject
- *California Community College Access and Equity Policy Brief.* California Tomorrow, 2004. www.californiatomorrow.org
- *California's Gold: Claiming the Promise of Diversity in Our Community Colleges.* Woodlief, B., Thomas, C., Orozco, G. California Tomorrow, 2003. The introduction is available at: www.californiatomorrow.org
- *California Performance Review,* 2004. www.report.cpr.ca.gov
- *Community College Governance: An Effective Bilateral Structure for a Diverse System.* Community College League of California, February 1998. www.ccleague.org/pubs
- *Community College System Study—Part 1: Guide for Leagues Examining Their Own Community College Districts,* April 2002. And *Community College System Study—Part 2,* October 2002. League of Women Voters of California Education Fund. http://ca.lwv.org/lwvc/edfund
- *Community Colleges: Fact Sheet for Legislators.* League of Women Voters of California Education Fund, summer 2004. http://ca.lwv.org/lwvc/edfund
- *Consultation Council Task Force on Counseling,* spring 2003. www.academicsenate.cc.ca.us
- Data Mart, California Community Colleges Chancellor's Office. www.cccco.edu
- *Ensuring Access with Quality to California's Community Colleges.* Hayward, G., Jones, D., McGuinness Jr., A., Timar, A., with a postscript by Shulock, N. of Institute for Higher Education Leadership and Policy. National Center for Public Policy and Higher Education, May 2004. www.highereducation.org
- *Evaluating Academic Programs in California's Community Colleges.* Gill, A., Leigh, D. Public Policy Institute of California, 2004. www.ppic.org
- *Financing California's Community Colleges.* Murphy, P. Public Policy Institute of California, January 2004. www.ppic.org
- *Keeping America's Promise: A Report on the Future of the Community College.* A joint project of Education Commission of the States and League for Innovation in the Community College, July 2004. www.league.org
- *Keeping the "Community" in California's Community Colleges.* Community College League of California. www.ccleague.org/pubs
- *Keeping the Promise.* Wolf, D., Weiner, S., Kramer, M., Kipp, S. The Campaign for College Opportunity, February 2003. www.collegecampaign.org
- *Master Plan for Higher Education in California.* www.ucop.edu/acadinit/mastplan
- *Measuring Up 2004: The State Report Card on Higher Education.* National Center for Public Policy and Higher Education, 2004. http://measuringup.highereducation.org
- *The Real Cost Project—Preliminary Report.* Boatright, D. Chancellor's Office for California Community Colleges, March 2003. www.cccco.edu
- *Toward a State of Learning: California Higher Education for the Twenty-first Century.* California Citizens Commission on Higher Education and its publisher, the Center for Governmental Studies, March 1999. www.ucop.edu/acadinit
- *Transfer Capacity and Readiness in the CCCs.* Chancellor's Office for California Community Colleges, March 1, 2002. www.cccco.edu

the system is finally garnering the attention it deserves. Some advocates hope that the Legislature will also turn to CCC issues during the 2005 session. In particular, the state's community college governance, accountability, and funding systems could soon attract the attention of policymakers.

Issues of state versus local control frame the governance debate

As is the case in K–12 education, control of the CCC system is divided between the state government and locally elected boards. Some researchers and advocates view this bilateral structure as a major problem—seeing it as unwieldy and an impediment to the decision-making process. (See the box on page 22 for a description of how the CCC system is governed.)

Over the years, various state commissions have recommended changes to this structure, only to encounter strong opposition from one side or another. Some believe that CCC governance should be closer in structure to the UC and CSU systems with their powerful regents and chancellors. Others point out that community colleges are distinctly local institutions in contrast to the university systems, which serve students from all over the state and even the world. In *Ensuring Access,* the authors found that regional approaches—best managed by local boards—were some of the most promising for improving the quality of community college programs and student access to them. In addition, locally elected boards promote the essential principles of democracy, giving people a direct say in what happens in their own communities.

Higher-education accountability is an emerging topic

Another policy issue gaining momentum is increased accountability for higher education. What extent should publicly funded colleges and universities—including the CCC system—be held accountable to taxpayers for outcomes and financial decisions? Some policy experts say that a formal accountability system with clear incentives—or consequences—could prompt higher education to more carefully

examine why certain students are not meeting their goals and develop solutions to address system weaknesses.

In 2002 the Institute for Higher Education Leadership and Policy published *An Accountability Framework for California Higher Education.* This document described the challenges inherent in developing such an accountability system while also documenting the reasons why attempting to do so could benefit the state and its students. To date, proposals for a formal accountability system for higher education have not received a great deal of attention in California.

The community college mission and funding system are also on the table

State lawmakers may use the upcoming session to address both the broad mission of the CCC system and its current finance system. The initial language in one bill (Assembly Bill 23) suggests that the system place the highest priority on those courses focused on transfer leading to a bachelor's degree, workforce training, and adult literacy. Less attention would be given other adult noncredit programs and remediation courses. This proposal could ignite a broader discussion about whether some part of the CCC system's broad mission should be considered a higher priority in the funding scheme.

The same bill also proposes replacing the CCC system's current complex funding formula with something simpler and more equitable by 2007–08. If a new funding formula could better accommodate regional differences and allow funding to keep pace with vigorous growth, it could help address the challenge of Tidal Wave II—particularly in the five counties being hit the hardest. (See page 7.) As the session proceeds, it is likely that many other specific proposals will emerge and further fuel this debate.

Discussions about such structural remedies are important ones for California to have. State leaders seem less inclined, however, to directly consider the amount of funding the CCC system receives. More than one analysis indicates that the amount of funding required to provide a quality education to students is significantly higher than what California currently provides. But the K–12 system, which competes for the same dollars, makes a similar case. It is unclear whether leaders in these two systems can avoid a win/lose confrontation, instead presenting a united front to advocate for adequate funding for the K–14 system as a whole.

Certainly the K–12 and CCC systems share many of the same goals and students. It is reasonable to think that legislators, higher education and K–12 administrators, and civic and business leaders will be more effective if they tackle the issues collectively. Yet, historically, the two systems have operated separately in most regards.

For the community colleges to provide quality programs and fulfill their core mission, the state may have to either increase funds or establish priorities to determine which students will be served. It may also need to craft some special regional approaches for those campuses that are seeing the most change. Addressing some of the cumbersome areas of the governance and funding systems—and examining the system's accountability mechanisms—could also make a difference. The *Ensuring Access* report suggests that making such changes will require skillful leadership from the governor and the Legislature. Absent that, it recommends that a group of foundations might be able to gather a nongovernmental coalition to lead the way.