ABSTRACT

Projecting the future for California community colleges involves projecting the future for the state and for the nation in general. According to population projections, the absolute number of 18-year-olds in the U.S. will rise to 4 million in 2004 up from 3.3 million in 1992. The tuition differential between California's community colleges and the state's other post-secondary institutions will bring a higher proportion of these students to the colleges, where liberal arts credits can be obtained at bargain prices. With respect to faculty, the state's full-time community college faculty salaries are high, at an average of $48,300 per year. If there are to be salary increases, then faculty work will be reorganized, with professors at the apex of a pyramid of paraprofessionals. While the curriculum and governance structures can be expected to remain stable, the financial contributions that students make to their education will probably double from the current 12%. With respect to instruction, budgetary limitations will make year-round schools a priority, and while distance learning has been hailed as a panacea, diverting half a million students to technological instruction will not solve cash management problems and risks educational segregation. Better approaches would include more peer tutoring, on-campus computer-assisted instruction, and larger classes. The future for the community colleges of California is assured and the built-in inertia of educational systems would suggest that there will be no major shifts in funding, staffing, clientele, or instructional forms. (Includes 16 tables of trends and indicators.) (KP)
California Community Colleges in the Next Decade

Arthur M. Cohen

Paper presented to the faculty and staff of Citrus College
(Glendora, CA, August 16, 1994)
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Projecting the future for California community colleges involves projecting the future for California and for the nation in general. Fortunately, we have many resources upon which to draw as we look toward the next decade. First, of course, is the United States census from which one can extrapolate the number of people in the various age groups with which higher education is concerned. And numerous reports are distributed by the National Center for Education Statistics, including the annual Digest of Education Statistics, 120 Years of American Education: A Statistical Portrait, and the annual Projections of Education Statistics. All these materials display information about trends in faculty, students, finance, institutions, and expenditures. Working between the books one can put together a map of change in the institutions and in the support for the institutions, that is probably accurate to a reasonable degree. There is always the chance for a major societal upheaval such as a war, depression, or severe inflation, but barring those cataclysms the projections seem reasonable.

The first point to make in looking at the future of the community college is that educators are optimists. We have faith that people can learn; we must have that faith or why are we spending our professional lives doing what we do? We hope that the people who learn will take advantage of the opportunity they have been given to better themselves; and the data on social mobility and earnings attained by people who have reached various levels of schooling certainly verify that contention. We also are optimistic that the opportunity for personal fulfillment will remain high in the United States, that California will continue to thrive on population growth and the energy of its young people, and that the community colleges within California will maintain their preeminent place among the nation's open-access, post-secondary institutions.
The community colleges came of age in California. This state was the first to pass an enabling act authorizing the formation of community colleges; Citrus College is the oldest operating community college in Los Angeles County, fourth oldest in the state. California has never relinquished its early lead in number of colleges, number of students, and minimal tuition. The California community colleges enroll 1.8 million students, a number that is 70 percent higher than New York, the state that is in second place, and nearly double that of Texas, the third place state. In terms of full-time equivalent students, California community colleges enroll triple the number of the next highest state. Whereas the community college is still being misunderstood in many parts of the country, Californians have a long experience with it. More than 7 of every 8 students who begin public post-compulsory education in California start in a community college. Most of the people in the state have been touched in one way or another by these institutions.

In general, the community college in the United States has matured. There were colleges in every state by the 1960's. For the past twenty years, few new colleges have been organized; there were 1,230 institutions in 1975 and approximately the same number in 1994. The ratio of part-time students to full-time students has been the same since 1978: 60 to 40. The ratio of occupational degrees awarded has been the same since 1978: 60 occupational to 40 liberal arts. The faculty members have sustained their ratio of 55 part-time to 45 full-time since 1976. But since the mid-1970's, the community colleges' share of all of U.S. higher education has increased--34% of all students twenty years ago, 37% now--as the colleges have grown larger.

This stasis seems likely to continue for the next ten years. The students who will be in the community colleges of the nation in 2004 are already in the lower grades. Total enrollment in community colleges is projected to increase from 5.7 million to 6 million, not much of a change over a ten-year period for an institution that was growing
at the rate of 10-15% per year in the 1960's and 1970's. The enrollment of part-time students is slated to decrease slightly, 65% to 63%; whereas the expenditures per full-time equivalent student will increase slightly: $3,000 to $3,242. The number of associate degrees conferred will rise from 485,000 to 560,000 per year. In brief, a mature set of institutions with some increase in full-time student enrollment and in number of degrees awarded but very little dramatic change.

There will be plenty of students to share among all post-secondary sectors. The absolute number of 18-year-olds in the United States peaked at 4.3 million in 1979, bottomed at 3.3 million in 1992, and is projected to rise to 4 million in 2004. But the number of high school graduates in 2004 will reach 3.1 million, the same as the number that graduated when the population of 18-year-olds was at its peak in 1979. The projections anticipate less school dropout.

California will share in this gradual increase in 18-year-olds and in the number of high school graduates, but other forces will bring a higher proportion of them to the community colleges than in the rest of the nation. The tuition differential in particular will have an effect. At present the University of California charges $3,800 a year; the California State University system $1,600; and the community colleges $400. These differences have become dramatic in recent years, and as the realization of the tuition differential enters more into the planning of people who are anticipating attending post-secondary education in the state, more of the better students will be directed toward the community colleges. The bachelor's degree that they receive from one of the public or independent universities has the name of that institution on it; it does not indicate whether or not the student took the first two years of study at a community college. Students who spend those two years at a community college and then receive the baccalaureate are many dollars ahead with no penalty for having begun at the two-year institution.
There will be increased pressure to sort students at entry. The California matriculation plan that has been in effect for several years has already shown how the pressure to guide students into programs consonant with their abilities exists. Other states have had even longer experience with these types of entry differentiations and the movement seems likely to spread. Texas has an academic skills test; New Jersey a basic skills test; Florida a rising sophomore test, and so on. It will be difficult for a student to find an institution that will allow a random walk through the curriculum. Students will be tested, guided, matriculated into programs that have measurable entry and exit criteria. The concept, "Let everyone in and let them take what they want," has been put to rest. That concept had rather generally permeated community college management, effecting the ratio of part-timers, the presentation of classes as discrete units, student age, college image, research paradigms, and definitions of college success. It had also effected a situation in which a campus might have 12,000 students by headcount, but only 4,000 FTE. The strong moves toward assessment and placement, toward students making steady progress toward completing a program, will change the pattern of attendance more in the direction of fewer students but a high FTE ratio and a more rapid progress toward program completion. That is one reason why we can predict a notable increase in the number of associate degrees that will be awarded, even though the number of students served will not go up nearly in commensurate fashion.

The tables showing enrollments and fees in California's public colleges and universities display the differential in current fees and the widened gap that will be present ten years from now. Even though the community college fees will double from the present $400 to $800 per year, the tuition differential will still be such that attending a community college for the first two years will be quite practical from an economic point of view (table 1 here).
The table showing college age populations between 1979, 1992, and 2004 shows how the number of 18-year-olds, 18 to 24-year-olds, and 25 to 29-year-olds in the latter year will still not equal the number that were in the population in 1979 (table 2).

The table showing the highest grade completed for adults in 1940, 1960 and 1990, displays how the number of years of schooling for the American population has increased so that the median adult attainment is 12.8 years (table 3).

The rewards in terms of individual incomes for four years of schooling attained have shown no sign of diminishing. In fact, during the decade of the 1980's, the mean income for males by years of schooling showed that people who had less than a college education actually fell behind, whereas those with four years of college gained eleven percent and those with five or more years of college gained twenty percent in income (table 4).

The dollar amounts shown in table 5 make the point even more dramatically. People who have been to college earn considerably more than those with fewer years of schooling (table 5). College attendance is and will remain a good investment.

**Faculty**

A recent book by Derek Bok, former president of Harvard, includes quite a bit of commentary on working conditions and earnings of people in the various professions: law, medicine, business, civil service, teaching and the professoriate. Among several felicitous comments, Bok points out that, "college instruction remains among the small cluster of human activities that do not grow demonstrably better over time" (p.170). He notes also that "teaching is one of the few professions in which members with the least intellectual ability are paid just as much and are promoted just as fast as their most gifted colleagues" (p.186). These direct statements point up why faculty members are paid less than people in the other professions for which five or more years of schooling is a requisite for entry. If the productivity of college instructors does not increase, and if
everyone in the profession is paid and advanced at the same rate, the pay will remain low compared to the other groups. Teachers cannot anticipate making more money merely because they work harder or are cleverer than their fellows. There is little room for the individuals to elevate themselves above their colleagues.

Other characteristics of the profession of teaching at all levels and of civil service make it additionally difficult for salary advancements. Teaching and civil service depend on public budgets. Public budgets are subject to scrutiny by legislatures in which demands for funds run to other agencies may take priority. Witness the situation in California where ten years ago the higher education budget was two and a half times that of the prisons, and now the two are at parity. The trend line shows the prison budget at double that of higher education in 2004.

One more reason why it is difficult to get increases for community college instructors is that California already has the highest salaries for its instructors. The U.S. average for full-time community college instructors for nine months is $39,000; in California $48,300. The case that California instructors are underpaid cannot be made reasonably.

If there are to be salary increases over the next several years, then the conditions of the faculty work will have to be reorganized. The instructors will have to manage a corps of assistants. Instead of, or perhaps in addition to the image of the instructor in the classroom with a group of students, practicing a profession in solo fashion, the perception of the instructor at the apex of a pyramid of paraprofessionals—assistants, readers, test-scorers, peer advisors, and paraprofessional aides will have to come to the fore. All to the good because students need on-campus jobs; their education is enhanced thereby as they become more involved with the institution and have a closer association with role models. And the image of the instructor as a practicing professional is enhanced as the organization of work tends to take on more
the appearance of law, medicine, and business, all areas where salary increases have been noticeable in recent decades.

As for new hires, faculty retirements will not open up many new slots. It takes three retirements to open up one position for a young person. The expectation that because half the faculty will retire in the next ten years or so that people coming out of graduate school will have a ready chance for full-time positions will not be borne out. If three people retire, for one of them the position is collapsed and responsibilities assigned to the rest of the staff or to the retiree on recall; for a second one, a part-time adjunctive instructor is employed at an hourly rate, thus saving the institution money. On average, only when a third one leaves does a full-time slot become available.

Overall the health of the faculty depends more on working conditions than on salaries. Bok notes that the professors who don't want to teach anymore "probably suffer from deeper problems of motivation beyond the reach of crude incentives such as money or loss of tenure" (p.172). Intellectual enthusiasm is not readily manipulated by such external stimuli as money or by threats of dismissal. People who instruct try to do a reasonable job because it is satisfying for them. Merit pay fails because it cannot penetrate the tradition of instruction as that which leads to unknown effects. All people receive extrinsic rewards in equal proportion. Their motivators are intrinsic.

**Curriculum**

The curriculum in California community colleges has been notably stable over the past two decades. Matching that of the colleges across the nation, around half the curriculum is in the liberal arts, and half in other fields, predominately occupationally oriented. For the nation, humanities accounts for 13.4% of the offerings; English for 12.75%; math and computer skills, 10.7%; business and office skills, 10.7%. Thus these four fields total nearly half. The other subject areas accounting for from 5 to 8% each include personal skills, trade, technical, science, and fine and performing arts. These areas changed little between 1975 and 1991. The only major curricular move...
in recent years has been in English as a Second Language which now encompasses 39% of all non-credit classes offered in California. Nationwide it has moved up so that, together with Spanish, it comprises three-quarters of all language enrollments.

The distinctions between the liberal arts and the rest of the curriculum are clear when traditional differentiations are made; the liberal arts are the venerable areas of study in humanities, science, social science, and the arts. But characterizing the liberal arts as transferable and the non-liberal arts as non-transferable, or predominately leading to immediate employment can no longer be done with any confidence. In California five out of eight non-liberal-arts courses carry transfer credit at CSU: business, agriculture, marketing, health, technical education, engineering, personal skills and education. Similar ratios of major portions of the non-liberal arts transferring can be found in other states where the flagship universities and a different tier exists: the University of Texas and Southwest Texas State College, for example, or the University of Illinois and Illinois State University. The flagship institutions such as the University of California or Texas or Illinois will accept fewer non-liberal arts courses for transfer, in large measure because they do not include undergraduate majors in those fields. Still, considering the liberal arts as equivalent to "transfer" and the rest of the curriculum as "non-transfer" is an archaic and decidedly false distinction.

The future for the curriculum suggests that it will continue along the lines currently seen. The humanities, English, math, business, the major areas will account for the predominant number of enrollments. Students who seek immediate employment will still be expected to complete a sizable number of general education credits, most of them drawn from the traditional liberal arts fields. Students seeking transfer will take liberal arts courses along with those areas of the rest of the curriculum that are accepted by the universities. There may be a gradual shift toward degree credit as contrasted with non-degree credit in all areas as tighter controls on student progress toward degree completion are instituted in the next few years. But
these changes are not basic curricular modifications, they are bookkeeping transactions that change the funding for the courses, not the course content or rigor.

Curriculum articulation seems likely to become more prominent. As the number of students transferring to universities increases, the pressure for course, curriculum, and program connectors grows. Anticipate stronger connections, including concurrent enrollment at community colleges and universities; guaranteed admission to the junior year; carry-over financial aid packages; faculty exchanges; and greater expectations of outcomes assessment. Fewer students will be allowed to drop in and out at their pleasure, taking courses that suit their interests.

Calls for tighter curriculum controls have been made by many agencies in California and elsewhere. Florida has had a state requirement that students make satisfactory progress toward completing a program or be dropped from the rolls. Georgia and Texas have tightened the requirements on the number of credits a student may accumulate before completing a program. The California Commission on Innovation report, Choosing the Future (1993), recommended tighter curriculum controls. Noting that the dollars available to community colleges will not expand, if access is to be sustained, the colleges will have to limit the spaces that they allocate to people who are taking classes repeatedly without making progress toward completing a program.

These changes take time to install. Courses are redefined as degree-credit, non-degree-credit, non-credit, or community service continually, because the criteria for each category are permeable. Much of the rationale for awarding greater sums for degree-credit classes stems from the historic view of the college as propelling young people toward further studies or the workplace. The student is expected to use the schools for only a short period and then move on to other pursuits. The notion of recurrent education or lifelong learning, so revered by most community college leaders, does not fit the reimbursement schedules. The nations of Northern Europe
operate on a different notion, paying more for non-credit and community service activities than has been the norm in the United States. Any change in perceptions of value or institutional use will come very slowly.

**Governance**

Governance will change little in the next ten years. There is an increased pressure for state control which will result in many attempts to micro-manage the colleges, but the experience of other states suggests this will have minimal effect. State-level coordination relates more to reporting, compliance with regulations, and accountability for numerous aspects of institutional operations; there is much room for local autonomy within those requirements. Before a major change can be made, the procedure has to be vetted through an incredible array of organizations, especially state-level associations of trustees, deans, presidents, academic senate, humanities faculty, physical education faculty, counselors, librarians, and on and on. Nothing very sudden or dramatic can survive that process. The combination of state and local control is intact.

**Finance**

The financing of California's community colleges is linked closely with the funds available at the state level. Since Proposition 13 was passed fifteen years ago the availability of local funds diminished considerably, and decisions about funding moved decidedly to Sacramento. Therefore, when financing for community colleges is discussed it is done in the context of the financing of higher education in the other sectors as well. The community colleges still have a decided advantage in the cost of instruction. Although the precise dollars allocated to lower division instruction in the universities have never been calculated with any reliability, looking at the overall student cost the differential is apparent. In the University of California, a full-time equivalent student costs a total of $12,452 per year; in CSU $8,086; in the community colleges $3,164. Table 6 displays these differences, noting also that although the per-
Student cost in the community colleges is considerably lower than at the universities, the proportion of state and local subsidy for community college education is much higher. In the community college the student contributes only 12% of the cost. Thus there is room for expansion in community college tuition. Look for it to double in the next ten years.

The idea that the colleges should be funded programatically, as the parks, recreation centers, beaches, and libraries are funded has some conceptual appeal, but it seems unlikely to become a characteristic in the state. If it did, a local institution might receive a sum from the state and it would then be free to develop the programs that its staff felt were most appropriate for its local area. Accordingly, one college might have 3,000 students, all attending full time, while another would have 12,000 students, each taking one course. One might emphasize one or another area of the curriculum, depending on what alternative opportunities for education were available in its region. However, it will be difficult to make a shift like that, since the concept of paying for units of instruction is so firmly entrenched in American culture that moves to shift it traditionally have made little headway. However, a turn in the direction of other, less far-reaching indicators of institutional effect might be feasible. These include measures of student access, student success in various areas, student satisfaction, staff composition, and fiscal condition. Creating the indicators, defining them, and organizing the systems so that the data can be plugged into them all must precede any attempt to connect them with the finance formulas. Accordingly, a shift in finance patterns is still years away.
Indicators

The trend toward indicators has accelerated recently with the publication of Goals 2000, a national initiative that has survived a change in national administration. The goals have become a major instrument of policy direction in the United States Department of Education where large portions of the budget have been allocated toward achieving them. The six major goals include: U.S. first in the world in math and science; universal literacy; drug and violence-free schools; a high school graduation rate of 90%; all children starting school ready to learn; and demonstrated competency at grades 4, 8, and 12. Each has a suggestion of an outcomes measurement within it. The National Center for Education Statistics has been directed to collect data on the extent to which the goals are being realized.

Within the community colleges of the nation the trend toward outcomes measurement moves fitfully. Responses to state demands for information may be met grudgingly, with the practitioners supplying data but not using the occasion of collecting them as a way of assessing their own effects. There are some notable exceptions, though, institutions where outcomes assessment has been undertaken locally, and the information used for program modification. Historically this has demanded a major commitment on the part of the local administration, college leaders who understand the importance of outcomes assessment and of an research effort sufficient to produce them. But this is not the norm: as revealed in the reports coming from the colleges, most of the chief executive officers seem more disposed to act as did the preacher who had convinced her congregation that she could walk on water.

When she announced that she was going to give a demonstration of this phenomenon, she asked if everyone in the congregation believed that she could do it. When an affirmative roar resulted, she then announced, "Well, then there's no need for me to show that I can do it." Several presidents have convinced their local constituents that theirs is the best community college, the one that is the most
accessible, the one that transfers the most students to the university, and so on. Since they think that everyone believes this to be true, they are not inclined to produce the data evidencing it.

Nonetheless, some of the national efforts in outcomes assessment have borne fruit. The Center for the Study of Community Colleges has been involved in a transfer rate calculation project over the past six years. As indicated in the data in tables 7 and 8, the national transfer rate has been stable. Indications are that the definition is being widely accepted and colleges and state agencies are routinely providing the data to fit it.

Other indicators that are being worked on are shown in displays 9 through 14: access; job entry; career upgrading; personal interest; general education; and literacy development. We look forward to the time when the chief executive officers will be more inclined to report institutional outcomes in the measurable terms indicated, less inclined to describe their institutions in the fashion of the preacher who could walk on water. Practice demands a conception of the institution as enhancing human development in longitudinal fashion rather than as a lateral, flat profile institution which stands ready to receive people passively with no demonstrable regard for their progress toward any individual or general goals.

**Instruction**

The budgetary limitations over the next ten years will continue to constrict the colleges' operations. A genuine year-'round school is an obvious priority. The luxury of operating two semesters and then a summer session or some other kind of adjunctive calendar will no longer be available. The colleges will have to move into three full trimesters or four quarters so that the physical plant and the staff can be utilized more efficiently. Similarly, more aides, adjuncts and paraprofessionals will have to be utilized at lower rates of pay to do many of the jobs for which fully-certificated personnel are not needed. Every community has a pool of talent
comprised of well-educated people from whom these types of assistants can be drawn. Most colleges already draw upon the local people as volunteers or low-paid aides. This area will certainly expand.

Distance learning has been hailed as the solution to many of the community colleges' problems. In fact, the Commission on Innovation suggested that the state's budgetary difficulties could be ameliorated by providing distance learning as the major instructional form for the half-million additional students that the community colleges of California will be expected to serve in the next ten years. However, the notion of saving money by failing to incur future expense in building new campuses or hiring new staff to serve great numbers of incoming students is rather like the couple who, when faced with an immediate cash flow problem, agreed to solve it by not taking on additional debt: "Since we don't have enough money for groceries now, let's agree not to buy a new car five years from now when the one that we have wears out." One thing has nothing to do with the other.

Agreeing to divert a half-million students to some form of televised or computerized instructional situation does not solve the colleges' cash management issues. It does run the risk of setting up yet a new form of educational segregation. Students in residential colleges participate in a different form of education from those who commute to campus. And those who sit at home interacting with various instructional media within the confines of their own space receive yet a different form of instruction, one that denies the presumed value of interaction with other people face to face. The effects of virtual reality have yet to be tested. Look instead for more peer tutoring, more on-campus computer-assisted instruction, and, most particularly, larger classes. Did I hear someone say, "But students learn better in small classes!"? You had better begin gathering evidence to document that contention.

Other anticipated changes in institutional processes and outcomes include more contract training, programs that benefit local businesses and for which they are
willing to pay; more school-to-work connections, with apprenticeships and work-related activities being tied directly to the curriculum. Neither of these ideas is novel, but both will expand. A further anticipated shift is a surge in transfer rates, occasioned by several phenomena coming into place over the next decade: a steady increase in the number of 18-year-olds in the population; fewer ad hoc special courses that draw few students because they are too specialized; the fee differential and the limitations on freshman positions at UC and CSU; and greater flexibility on the part of UC and CSU in offering courses at night and for part-time students in the upper division.

This latter trend toward higher transfer rates would be accelerated if the UC and CSU systems took several actions such as: requiring the associate degree before students could transfer; giving full credit toward the baccalaureate for the 60 or so units that are included in the associate degree; guaranteeing a place in the junior class in the major of a transferring student's choice. Furthermore, transfer rates would be affected positively if the legislature were to provide supplemental funds to any college that increased its rate of student transfer from a prior base point. But none of these actions on the part of the universities or the legislature are pending at this time. The two-year college that would be a full partner in the pattern of graded education that reaches from grade one to the baccalaureate, professional, and graduate degrees and would probably be too threatening to those whose vision of the community college's main contribution is one of student access in an ad hoc fashion.

Conclusion

In summation, the future for the community colleges of California is assured. There will be no major shifts in funding, staffing, clients served, curriculum, or instructional forms. Educational systems have a built-in inertia that is difficult to overcome, even in times of extreme duress. The reasons why people began working in them, the perceptions that the public and the legislatures hold of them, the expectations that students have when they enter them all are deep-set and firmly fixed.
These characteristics suggest a stable social institution, but at the same time they prove frustrating to those whose notion of an ideal educational form is one that is constantly innovating.

Still, there are paradoxes in education. For one, education leads to inequality. Since it is an avenue of individual mobility, not of societal restructuring, the more important that education is in determining the individual's future, the greater the competition for a place in a school that is perceived to enhance that individual's value in the marketplace or in his own eyes. Thus, distance learning, the reconfiguring that is supposed to save countless millions, may readily be perceived as suitable only for the marginal, non-directed, non-serious, casual students. Why a paradox? Because only the better-educated people are safe from low-wage competition from abroad, because producer or assembly jobs yield nothing more than poverty wages, because the students from families with a high regard for education will find their way to the campus for a traditional collegiate experience.

Another paradox is that education tends to increase productivity while incarceration decreases productivity. Yet the budget for state prisons has now reached parity with the higher education expenditures in California. If current trends continue, ten years from now the corrections system will enjoy funding at nearly double that the state provides colleges and universities. How commentators can call for increased productivity and competition in the global economy while at the same time advocating more money for the corrections system eludes rationality.

The schools are creatures of their society, reflecting the mores and norms of their sponsoring communities. At the same time they have certain goals and effects. Look at the list of societal conditions in the United States at the turn of the century and look at the patterns of the colleges (tables 15 and 16). Are these conditions reflective of the United States at the turn of the twentieth century or of the twenty-first century? The answer: both. Even though schooling has captured the time and attention of
vastly greater numbers of young people in the past hundred years, the communities from which they come have changed little. Despite the massive growth in access to schooling, societal conditions have been little affected. What is happening here? Do schools not build a better society? The answer is that schools promote individual mobility. It is now considerably easier for a person to move out of the social stratum into which he or she was born. But that salutary result does not translate into reorganized cities, changed working conditions, modified immigration policies, or much of anything else affecting the quality of life across the community. It's a nice paradox, one that has engaged at least a few educational theorists and social commentators for decades. It will not be resolved in the next ten years.

References


Table 1

ENROLLMENTS AND FEES

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### College-Age Populations
U.S. Census Projections, Middle Series
(In Thousands)

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**Source:** U.S. Department of Education
Projections of Education Statistics to 2004
Table 3

HIGHEST GRADE COMPLETED
PEOPLE AGE 25+ IN PERCENTS

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<th>Year</th>
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<th>GR 12</th>
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<th>4 YRS+ COLL</th>
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## Table 4

MEAN INCOME FOR MALES BY YEARS OF SCHOOLING, 1981-1991, AFTER ADJUSTMENT FOR INFLATION

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<th>Education Level</th>
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</table>
## Annual Mean Income by Years of School Completed for Males Aged 25+ (Current Dollars)

<table>
<thead>
<tr>
<th></th>
<th>8 YRS</th>
<th>12 YRS</th>
<th>1 to 3 YRS COLL</th>
<th>4 YRS COLL</th>
<th>5+ YRS COLL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>$ 6,674</td>
<td>8,998</td>
<td>10,554</td>
<td>13,434</td>
<td>14,727</td>
</tr>
<tr>
<td>1990</td>
<td>15,754</td>
<td>24,940</td>
<td>29,792</td>
<td>40,384</td>
<td>49,085</td>
</tr>
</tbody>
</table>
## COSTS OF HIGHER EDUCATION IN CALIFORNIA, 1993-94

<table>
<thead>
<tr>
<th></th>
<th>UC</th>
<th>CSU</th>
<th>CC</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL COST</td>
<td>$12,452</td>
<td>$8,086</td>
<td>$3,164</td>
</tr>
<tr>
<td>STATE (&amp; LOCAL) SUBSIDY</td>
<td>63%</td>
<td>75%</td>
<td>89%</td>
</tr>
<tr>
<td>FULL-TIME STUDENT FEE CONTRIBUTION</td>
<td>28%</td>
<td>18%</td>
<td>12%</td>
</tr>
</tbody>
</table>
Indicator: Transfer

Center for the Study of Community Colleges

TRANSFER RATE DEFINITION

All students entering the community college in a given year who have no prior college experience and who complete at least twelve college-credit units within four years, divided into the number of that group who take one or more classes at an in-state, public university within four years.
### Table 8

**Center for the Study of Community Colleges**

**Transfer Assembly**

**National Transfer Data**
**1984 - 1988**

**Entrants With No Prior College Experience**

<table>
<thead>
<tr>
<th>Year</th>
<th>Colleges</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>48</td>
<td>77,903</td>
</tr>
<tr>
<td>1985</td>
<td>114</td>
<td>191,748</td>
</tr>
<tr>
<td>1986</td>
<td>155</td>
<td>267,150</td>
</tr>
<tr>
<td>1987</td>
<td>366</td>
<td>507,757</td>
</tr>
<tr>
<td>1988</td>
<td>395</td>
<td>522,758</td>
</tr>
</tbody>
</table>

**Entrants Receiving 12+ Credits Within Four Years**

<table>
<thead>
<tr>
<th>Year</th>
<th>Credits</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>39,351</td>
<td>50.5%</td>
</tr>
<tr>
<td>1985</td>
<td>89,638</td>
<td>46.7%</td>
</tr>
<tr>
<td>1986</td>
<td>124,885</td>
<td>46.7%</td>
</tr>
<tr>
<td>1987</td>
<td>237,965</td>
<td>46.9%</td>
</tr>
<tr>
<td>1988</td>
<td>261,625</td>
<td>50.0%</td>
</tr>
</tbody>
</table>

**Transfers to In-State, Public Universities Within Four Years**

<table>
<thead>
<tr>
<th>Year</th>
<th>Transfers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>9,316</td>
<td>23.7%</td>
</tr>
<tr>
<td>1985</td>
<td>21,171</td>
<td>23.6%</td>
</tr>
<tr>
<td>1986</td>
<td>29,180</td>
<td>23.4%</td>
</tr>
<tr>
<td>1987</td>
<td>53,863</td>
<td>22.6%</td>
</tr>
<tr>
<td>1988</td>
<td>57,796</td>
<td>22.1%</td>
</tr>
</tbody>
</table>
Table 9

Indicator: Access

The percentage of various demographic subgroups that enroll in the college each year relative to that group's representation in the district's population.
Indicator: Job Entry

The number of students who enter a program related to an occupation with no prior experience working in that field, divided into the number who within two years after leaving or completing the program obtain a position in that field.
Indicator: Career Upgrading

The number of students who enter a program related to an occupation after having worked in that field, divided into the number who within two years advance in that same occupational field.
Table 12

Indicator: Personal Interest

Standardized questions administered to small samples of students periodically; e.g.,

- What is your primary reason for attending this college at this time?
- Are you attaining that goal?
Table 13

Indicator: General Education

The gains on a test of general academic ability shown by a cross section of students who have taken none, one, two, or three courses in Science, Social Science, Math, Humanities, and English Usage.
Indicator: Literacy Development

The percentage of students in developmental courses whose reading, writing, and/or computing abilities have improved according to standardized measures administered at the beginning and the end of the courses.
The United States at the Turn of the Century

- High immigration both in absolute numbers and in percentages of the American population.
- Multilingualism with scores of foreign language newspapers and a population housed in ethnic enclaves.
- Overcrowded cities with unclean pavements and parks and intractable homelessness.
- For the workforce, practically no fringe benefits; much in the nature of piecework in the workplace and take-home or cottage industries.
- Powerful media determining what people think.
- A great gap between the rich and the poor.
- Producer or assembly jobs yielding wages insufficient to sustain a family above the poverty line.
- Weak trade unions, representing a small proportion of the workforce.
- For the individual, business entrepreneurship as the path to capital formation.
- A seeming paucity of civility when compared with an earlier era.
- A tendency of the youth to form gangs and engage in various criminal activities.
The Colleges at the Turn of the Century

- Few faculty with tenure.

- A curriculum tugged between the forces of Creationists and Evolutionists.

- A high percentage of remedial studies, approximating half the entering class.

- Discrimination in student admissions on various criteria.

- Continual debates over the best ways and the desirability of preparing students for immediate employment or for further studies.

- Accelerating per capita costs of instruction.

- Uncertain funding base as support fluctuates: state, federal, local, student.