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**Community Colleges and Proprietary Schools:
A Comparison of Sub-Baccalaureate Institutions**

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Abstract

This exploratory article describes how community colleges and proprietary schools differ, which students are served by these two types of schools, and how these institutions compare in the areas of financial aid and school quality. I describe and synthesize existing data sources and analyze a new data set of California's for-profit colleges. I find that there are many more proprietary schools and students than previous estimates suggest. I note key similarities and differences between the private and public sectors and investigate hypotheses explaining the observed patterns.

Introduction

Less-than-four-year colleges play a vital role in the market for higher education. Public two-year community colleges and for-profit institutions (hereafter referred to as proprietary schools) open access to postsecondary education for millions of students with limited resources, time, or academic background. Both community colleges and proprietary schools offer training in a wide range of industries and academic disciplines. They also enroll a disproportionate share of low-income, minority, and adult students and garner substantial portions of student financial aid. But despite these similarities, substantial differences exist between public and private sub-baccalaureate institutions. Differences in size, mission, and tuition, are just the beginning. This paper explores some of the key similarities and differences between public and private less-than-four-year education options and asks what drives these patterns. Of particular interest are the institutional characteristics of these schools, student demographics, student financial aid receipt, and measures of school quality, all of which have important implications for social stratification in the United States.

The decline in real wages for high school graduates is well-documented (see for example, Heckman 2000), and opening access to postsecondary education is a widely accepted policy tool for alleviating income inequality in the United States. While researchers and policymakers have been increasingly interested in the role that community colleges play in reducing inequality, narrowing the black-white and gender wage gaps, and promoting investment in human capital, few studies have examined the potential of proprietary schools to work alongside more traditional education options to help students attain postsecondary education and training. Very little research has been done on proprietary schools since nationally-representative data on these institutions is lacking. Merely generating an accurate count of these institutions has eluded researchers for several decades.

This article fills the gap in the literature by exploring a new data set of California proprietary schools and comparing the characteristics of these schools to those of California community colleges. California is an ideal place to begin a study of less-than-four-year institutions. The state is home to

more than 100 community colleges and 3,800 proprietary schools and together these institutions serve over three million students per year. This paper aims to provide a long-overdue foundation for any study of less-than-four-year colleges by describing how community colleges and proprietary schools differ, which students are served by the two types of schools, and how these institutions compare in areas of financial aid and school quality. The answers to these questions offer a substantial contribution to policy debates regarding the public provision and financing of higher education, the regulation of for-profit institutions, and the development and implementation of federal and state-level student financial aid policies.

Related Literature

Very few researchers have sought to compare the various types sub-baccalaureate institutions. This neglect can be largely blamed on the dearth of reliable data on proprietary schools and the dominant, though misinformed, impression that these schools train so few students so as not to be relevant in studies of postsecondary education and vocational training more generally. Apling (1993) provides the most comprehensive description of less-than-four-year college students, comparing proprietary school students to community college students in the 1980s. He provides a description of student demographics, financial aid packages, and the programs and courses offered in each type of institution. Though seemingly comprehensive, his study relies on data from the Integrated Postsecondary Education Data System (IPEDS) and the National Postsecondary Student Aid Study (NPSAS), both of which contain incomplete information on proprietary schools. In the IPEDS, data on private less-than-two-year schools was never systematically collected.¹ The IPEDS simply included some proprietary schools by chance at the start of its sampling, followed those schools from year to year, and added others if they happened to hear about them—a type of snowball

¹ Phone interview with Jan Plotcyk of the National Center for Education Statistics November 11, 2003. Email from Patricia Brown of NCES October 29, 2003.

sampling. Since 1996—almost ten years after Apling’s study—the effort to find these schools has increased, with IPEDS data collectors tracking down all Title IV-eligible² institutions and conducting area searches (searches from the phonebook and Better Business Bureau in a few counties) for more schools every two years. Nonetheless, even in 2002, a comparison of my local phonebook with the IPEDS sample of private less-than-two-year colleges found that the IPEDS contained fewer than one-fourth of the schools in my phonebook. The data from the IPEDS, though complete for public and private four-year colleges, should not be considered a comprehensive list of private less-than-four-year schools—especially before 1996. Even after 1996, it is more likely to pick up large, well-established, Title IV-eligible schools in major metropolitan areas.

Apling makes a valiant effort to compare students in community colleges and proprietary schools with the resources available to him. This article builds on Apling’s research by investigating the patterns in institutional characteristics and student demographics that he found in the 1980s and determining if they still exist today. For example, he pointed out that proprietary schools were generally very small, offered only a handful of programs, and specialized in fields such as business and cosmetology. He also reported that proprietary school students were more likely to be minorities and come from lower-income and less-educated families than public community college students. At the time, proprietary school students not only received double the amount of federal financial aid per student, but they were also more likely to default on their loans than their counterparts at public community colleges.

One of the only other quantitative studies on proprietary school and community college students in the last decade is by Cheng and Levin (1995). Like Apling’s study, this paper draws on data from the early 1980s, and again the data is not representative of the true population of less-than-four-year college students. The authors use the High School and Beyond (HSB) survey which

² Title IV-eligible institutions are those that are eligible to participate in federal student financial aid programs under Title IV of the Higher Education Acts.

follows high school seniors in 1980 for six years after graduation. They base their results on a very small group of students who attended proprietary schools and do not perform significance tests to validate their results. They concede that their small sample may result from few students choosing to attend these schools immediately after high school. By focusing on the years after high school, the authors miss perhaps the most important group of less-than-four-year college students—adult learners. Moreover, the data does not consider high school dropouts and students with GEDs, thereby ignoring some of the students who are most likely to benefit from these schools. But despite the paper’s shortcomings, it is worth noting that Cheng and Levin find patterns of attendance similar to those of Apling in the areas of socioeconomic status and family education.

Data

National data on proprietary schools is difficult to come by. The data set most often to examine proprietary schools is the Integrated Postsecondary Education Data System (IPEDS), but as mentioned above, it has several drawbacks. In particular, the IPEDS collects a non-random sample of proprietary schools and only includes those that are eligible for federal student financial aid under Title IV of the Higher Education Acts. The National Postsecondary Student Aid Study (NPSAS), the related student-level survey, suffers from similar drawbacks as students are sampled from IPEDS-participating schools. On the other hand, the IPEDS data is the only available source of information on several of the topics discussed below. For this reason, I have indicated clearly the areas where I must use IPEDS data in the discussion that follows.

Wherever possible, however, I use data from a unique administrative data set from California’s Bureau of Private Postsecondary and Vocational Education (BPPVE). As part of the California Bureau of Consumer Affairs, the BPPVE’s main function is to protect students attending private sub-baccalaureate institutions. The BPPVE establishes standards for instructional quality and institutional stability and serves as the licensing board for all privately-operated postsecondary

institutions that offer degrees or certificates lasting two years or less. Their administrative data set includes institution-level data on all legally-operating private postsecondary institutions in California, with details on programs offered, location, operating dates, and contact information for each school from 1984 to the present. In addition to this comprehensive list of schools, the BPPVE also conducted a survey of enrollment, program completion, employment, and average starting wages for a sample of 588 schools in 2002. I supplement this data with information from case studies and brief interviews from a random sample of ten California proprietary schools.

Data on California's community colleges comes from the California Community College's Chancellor's Office (CCCCO). The CCCCCO is the administrative branch of the California Community College system. It serves as a link between the individual colleges and the state—providing leadership, offering technical assistance, and allocating state funding to the individual community colleges. The CCCCCO's web-based Data Mart contains information on student enrollments, demographics, financial aid, services, and programs offered at each of the colleges. The CCCCCO also publishes periodic reports that I use to examine measures of school quality.

Finally, the Pell Institute's Campus Equality Initiative has gathered data on student incomes and financial aid from applications for federal student aid filed with the U.S. Department of Education. I use this data to examine specific questions on financial aid and community colleges in the discussion that follows.

The Case of California

Focusing on California presents some unique opportunities and some inescapable challenges in analyzing sub-baccalaureate education. The state has by far the largest community college system in the country, with 109 institutions and 2.5 million students, thus providing a large sample size for examining hypotheses and drawing inferences. The second-largest system, Texas, pales in

comparison with only 68 colleges and 450,000 students (Center for Community College Policy, 2004), rendering analyses of California data less generalizable to other states in the nation.

But it is not just the size of the community college system that makes California unique, the state's history and educational philosophy are also exceptional. Though California was not the first state to open a community college, it was the first to pass legislation establishing a public junior college system in 1907 (Douglass, 2000). Even in its early years, the system's mission was to open access to postsecondary education for all Californians who could benefit from the instruction offered. This philosophy, and the community college system itself, played an integral role in California's Master Plan for Higher Education. The 1960 Master Plan was the nation's first comprehensive plan for postsecondary education, outlining policies governing the three distinct public systems of higher education in California—the University of California, the California State Universities, and the California Community Colleges. Notably, the role of the community colleges under the plan was to ensure universal access to higher education by keeping community colleges tuition-free—a pledge that remained in place until 1983 when modest tuition was introduced (Center for Community College Policy, 2004). Many other provisions of the 1960 Master Plan are still in effect and the plan remains the foundation of California's higher education policy.

California proprietary schools have not experienced quite as much divergence from the rest of the nation as its public institutions. In fact, for much of the history of proprietary schools, the institutions were subject to the same federal rules and regulations as institutions in all other states. It wasn't until the late-1980s that states took regulation and other proprietary school policy matters into their own hands.

California passed its first major legislation regulating proprietary schools in 1989 with the Private Postsecondary and Vocational Education Reform Act. The act established quality controls, adopted measures to ensure consumer protection, and created a new administrative agency called the Council on Private Postsecondary and Vocational Education (CPPVE). The CPPVE was responsible

for reviewing and approving private postsecondary institutions in California—and ultimately had the authority to shut down schools. But the decisions of the Council did not come without controversy.

The most notorious example came in 1996 when the Council denied Columbia Pacific University's (CPU) application for licensure on the grounds that the school awarded excess credit for prior experiential learning to many students, failed to employ duly qualified faculty, and failed to meet various requirements for issuing degrees. CPU contended that it was unfairly targeted and that the Council was acting on a vendetta against the school. A long court battle ensued and though the court found in favor of the Council, not everyone in government sided with it. When the Council came up for reauthorization in 1997, Governor Pete Wilson vetoed a bill that would have extended the Council's sunset date until 2002, on the grounds that the Council had been "reducing supply for the point of reducing supply" rather than protecting students from scams.

A new bill in 1997 repealed and reenacted many of the provisions of the Reform Act and made some substantive changes to better balance consumer protection and the rights of small business owners. Most importantly, it created a new administrative agency in the Department of Consumer Affairs called the Bureau of Private Postsecondary and Vocational Education (BPPVE). Although there have been some minor amendments since 1997, the legislation is still in place today and the BPPVE retains its authority to grant and revoke licenses to operate—and it serves as the source of proprietary school data for this analysis (BPPVE, 2004).

Institutional Characteristics

Students wishing to pursue less-than-four-year certificate and degree programs face a choice between community colleges and proprietary schools and this choice is undoubtedly influenced by a myriad of factors. Among the most important of these factors are the characteristics of the institutions themselves. The prevalence of each type of school in the student's community will

determine his choice set, while characteristics such as the size of a college, its certificate and degree programs, and tuition will help a student decide which school to attend.

Table 1 compares California community colleges and proprietary schools on a few margins where data is currently available. At first glance, it is obvious that proprietary schools substantially outnumber community colleges in California. As of 2002, there were just 109 community colleges in the state compared to more than 3,800 proprietary schools.³ If a student were to limit himself to attending a college in his home county⁴ he would have, on average, two community colleges to choose from and 70 proprietary schools. The number of proprietary schools reported here, however, is notable for another reason. The BPPVE data show that the number of proprietary schools in California is about one and half times the number of proprietary schools surveyed in the IPEDS for the *entire nation*, suggesting that counts based on the IPEDS come up drastically short.

A similar discrepancy between the IPEDS and BPPVE estimates arise in enrollment counts. The California data shows that proprietary schools enroll a modest 350 students on average per year. Multiplying this figure by the total number of schools, in a back-of-the-envelope calculation, however, suggests that 1.3 million students per year enroll in proprietary schools in California alone. The IPEDS data reports that these schools enrolled only 700,000 students *nationwide* in the fall of 2000 (National Center for Education Statistics, 2002). The discrepancy can be explained by two facts: the IPEDS does not count students who attend institutions outside the sample and it relies on a point-in-time enrollment count. Students who cycle through short programs throughout the year are not picked up in the IPEDS' fall enrollment count, while all students who attend in the academic year are counted by the BPPVE. Keeping this in mind, it is likely that previous estimates by the federal government that rely on the IPEDS have not only underestimated the proportion of students attending

³ This number includes all main and branch campuses of non-religious schools that offer a degree or certificate lasting less than two years.

⁴ The NPSAS (2000) reports that the median distance students travel to attend a public sub-baccalaureate college is 9 miles. The median distance students travel to attend for-profit institutions is 14 miles. In light of these figures it is plausible to assume that a student's choice of schools is generally determined by the options available in his county.

proprietary schools, but they may have also underestimated the total number of Americans receiving education and training.

An average of 350 students per school is actually quite a large number considering that the median enrollment in proprietary schools is just 71 students. Figure 1 shows the distribution of schools by enrollment. Almost 58 percent of proprietary schools in the BPPVE sample enroll fewer than 100 students. However, there seems to be a small number of very large schools as well. In case these few large schools are driving the estimate, I drop the four outlying schools that report enrolling more than 10,000 students per year. This calculation yields an estimate of 861,000 students—still much larger than the IPEDS. Adding in the 2.5 million California community college students who cycle through the system in a year, the estimates above suggest that proprietary schools are training close to one-third of sub-baccalaureate students in the California—and this is the state with the strongest community college system in the nation. Previous national estimates based on Title IV-eligible institutions and point-in-time enrollment counts are likely to vastly underestimate the number of students attending private less-than-four-year postsecondary institutions.

A large part of a student's decision of which type of school to enroll in is likely determined by the types of programs offered at each school. This is especially true for vocational students seeking to upgrade their skills in a particular field. The average community college offers 111 degree or certificate programs, compared to just four programs offered at an average proprietary school in California. This finding closely matches Apling's finding that proprietary schools offered three programs on average in the late 1980s.

The large difference in program offerings speaks to the varying missions of the two schools. The California Community Colleges' mission statement reads,

Primary missions of the Colleges are to offer academic and vocational education at the lower division level for both recent high school graduates and those returning to school. Another primary mission is to advance California's economic growth and global competitiveness through education,

training, and services that contribute to continuous workforce improvement.
(CCCCO, 2004)

As such, the schools offer a wide range of vocational and academic degrees that can sometimes be transferred to four-year colleges. While one student may attend truck driving classes part-time with the goal of obtaining certification that will boost his wages in his current job, another may pursue a full-time program leading to an associate of arts degree in history and have the intention of transferring to a four-year college.

Proprietary schools, on the other hand, typically specialize in a particular industry or field of study and economic theory suggests that their main goal is profit-making.⁵ Computer schools are the most prolific, accounting for 7.4 percent of all proprietary schools in California. Schools specializing in technical trades, cosmetology, and medical assistance are not far behind, with each comprising about five percent of the total. All of the proprietary schools I consider in the BPPVE data offer some type of certificate program lasting two years or less. About half of these schools also offer associate degrees, while a few go beyond this level to provide bachelor's and graduate degrees in their field. Since the schools generally do not offer classes that are transferable to four-year colleges, most students presumably enroll in order to improve their skills or wages in their current occupation or to switch careers.

In light of these differences, a student's choice of institutions might best be considered in the context of which types of programs are offered in his local area by the two types of schools. Table 2 shows the average number of programs per county offered by each type of school in various fields. In most fields community college and proprietary program offerings are quite similar—for example

⁵ About 6% of the schools in the BPPVE sample appear to be non-profits based on exemption rules. Religious schools are excluded from the analysis (these are typically non-profits). Research on mixed-ownership industries shows that for-profits and non-profits behave similarly on most dimensions—including efficiency, pricing, and quality (see Sloan (2000) for a review of this literature as it pertains to the health care market). Based on this body of literature, I assume that non-profit proprietary schools behave the same as their for-profit counterparts in the discussion that follows.

programs in administrative and support services, business, and construction and contracting. But proprietary schools provide significantly more opportunities for students in computers and real estate, while community colleges offer significantly more courses in food preparation and bartending, and the humanities and arts. This latter category is not surprising given the role of community colleges in promoting transfers to four-year institutions. Moreover, proprietary schools, seeking to maximize profits, may make a greater effort than public institutions to provide education in industries with rapid employment growth, such as computer technology. These patterns of program offerings mean that in most vocational fields, students will be able to find similar program offerings in both types of institutions. For students on the margin between community college and proprietary school, other factors such as tuition or proximity, will likely play a larger role in their decision.

Finally, one of the most significant differences between private and public education options at all levels of the U.S. education system is the difference in the cost of attendance. While very little data on tuition is available for proprietary schools, tuition in the ten case study schools ranged from \$3,000 to more than \$10,000 for full-time, full-year programs. Similarly, the IPEDS reports a mean tuition of \$7,615 for proprietary schools. As for the California community colleges, tuition and fees are a mere \$330 for California residents in a full-time, full-year program—one of the lowest in the nation (the national mean is \$2,384 as reported in the IPEDS)—reflecting the state’s budget priorities and the schools’ mission of opening access to all Californians. Non-residents, on the other hand, are charged \$4,020 per year, a figure “based on the actual cost of instruction” (California Community Colleges Chancellor’s Office, 2004) and much closer to tuition at a private institution. Students at both types of schools must also add in the cost of books, room and board, and other expenses when deciding whether or not to attend. The Chancellor’s office lists books and supplies as costing about \$1,200, transportation about \$730, food and housing \$7,500, and miscellaneous personal expenses at about \$2,000. According to this estimate, the total cost to a California resident of attending a community college full-year full-time would be about \$11,760 (California Community Colleges

Chancellor's Office, 2004). Adding in their higher tuition, proprietary school students would generally face much higher absolute costs, making the community college option much more appealing to low-income students—at least at first glance. However, it is important to note that the above discussion has not accounted for the many federal, state, local, and private financial aid programs available to offset these costs. The availability of financial aid will alter the relative prices of the two options and undoubtedly influence students' decisions, a topic addressed in the following sections.

Student Demographics

Community colleges and proprietary schools are typically designed for high school graduates who perceive four-year colleges to be out of their immediate reach or out of line with their career goals. The types of programs offered by sub-baccalaureate institutions are likely to be more appealing to students with limited financial resources, time, or academic background than four-year college programs. Though students' individual preferences and challenges are impossible to discern, general student demographic patterns can shed light on the types of students who find their niche at each type of school.

Table 3 displays some details of the student body in California community colleges. On average each community college enrolls about 10,000 full-time equivalent students per year or about 15,000 students at any point in time. Roughly 72 percent of students enroll part-time, suggesting that community colleges play an important role in providing access to education for working students.

California's community colleges are an important source of education and training for minority students. About 26 percent of community college students are Hispanic—a number that appears quite high. However, according to the U.S. Census Bureau, 32 percent of California residents were of Hispanic or Latino origin in 2000, so Hispanics may actually be underrepresented when compared to the overall California population. Nonetheless, some colleges seem to have a

disproportionately large percentage of Hispanic students, with one college enrolling over 70 percent Hispanic students.

Black and Asian students are served proportionately or better in California community colleges. Asian and Pacific Islanders make up 14 percent of community college enrollments, but comprise only 11 percent of the population. Similarly, 8 percent of community college students are black, but they make up just 6.7 percent of the population in California.

Just under half of community college students are traditional college age or close to it, with 47 percent of students under age 25. Interestingly, almost one-quarter of students are age 40 or over. Apling (1993) found community college students to be bit younger in the 1980s, with two-thirds of students under age 30, compared to 59 percent today. This pattern may reflect the changing role of community colleges from transfer institutions to suppliers of job training for students who seek to upgrade their skills or transition to a new career mid-life.

Data on student incomes is difficult to come by, but using information on federal financial aid applicants, the Pell Institute has created an important measure of the extent to which low-income students are represented in each college. The Equality Quotient Index (EQ) measures the percentage of dependent low-income enrollments relative to the percentage of low-income 18 to 24 year-olds nationwide (it was about 23 percent in 2000-01). A score of 100 means that 23 percent of enrolled students were low-income, while a score above 100 means the college enrolls a greater share of low-income students than is proportional to the national population. On average, California community colleges enroll a much higher share of low-income students than is proportional to the U.S. population—more than two and a half times the representative proportion (EQ of 269), or about 62 percent. In fact, even the least representative community college in California still scores an EQ of 165 (Pell Institute, 2004).

These numbers are even more striking if we consider them in relation to the nationwide average EQ scores. Among public two-year colleges across the U.S., the average EQ score is just 148

(Pell Institute, 2004). These results are encouraging and even astounding if we believe that community colleges are opening access to education for students who would otherwise not attend any college, or if these students are those who might do well starting off in a slow-paced academic environment, or a vocational field. If this is the case, and if community colleges are providing the education these students need, then California is ahead of the game. On the other hand, if we consider that some of these low-income students might be better-served in four-year colleges, then the numbers could be a bit discouraging. It may be the case that low-income students are choosing community colleges over four-year colleges for their low cost—not for their quality or convenience of their academic or vocational programs. Empirical research by Rouse (1995, 1998) suggests that the former scenario is more accurate. She finds that on balance community colleges open access to students on the margin between college and work (a net “democratization effect”), rather than diverting students from four-year colleges.

Unfortunately, the BPPVE does not collect student demographic data from California’s proprietary schools. The only available data on students at proprietary schools comes from the IPEDS, so again, the data under-represents non-Title IV eligible schools.⁶ According to the IPEDS, proprietary schools seem to have a slightly lower proportion of students attending part-time or part-year than community colleges, but the number is still quite high—approximately 67 percent among proprietary school students compared to 80 percent among community college students (72 percent in California community colleges). This might make sense since proprietary schools typically offer more short-term programs and fewer two-year associate degrees, so students may be more likely to take a break from the workforce to attend a full-time, full-year one-year certificate program, for example. On the other hand, both types of schools appear to offer a significant number of part-time programs to cater to working students.

⁶ The IPEDS does in fact have some data on non-Title IV-eligible schools, most likely because they were eligible in past years. From these data, it appears that non-eligible proprietary schools typically have lower tuition, fewer students overall, and a higher proportion of Hispanic students.

Table 4 displays several other characteristics of community college and proprietary school students as reported by the IPEDS. Community colleges appear to enroll a higher proportion of Native American students than proprietary schools—possibly because several states offer public two-year tribal colleges. On the other hand, proprietary schools in the IPEDS enroll a significantly larger share of black and Hispanic students than community colleges. For some Hispanic students, this discrepancy may be due to a reduced public-private price differential. A federal law passed in 1996 banned undocumented students from paying in-state tuition at any public institution. As discussed in the previous section for the case of California, non-resident tuition is typically higher than in-state tuition, and more comparable to that of proprietary schools, so undocumented students face a small or potentially non-existent difference in price between the two schools.⁷ This may also explain the slightly lower than proportional representation of Hispanics in the California community colleges discussed above, but there is no conclusive evidence that this is the case.

To the extent that we can compare the demographic patterns at community colleges and proprietary schools today to those reported in previous research, some patterns appear to have held up over time. Interestingly, the proportion of minority students at each type of school has not changed at all since the late 1980s as reported by Apling (1993). The 1988-89 IPEDS reported that 40 percent of students at proprietary schools were members of minority groups, compared to 25 of students at public community colleges. Today the numbers reported in IPEDS remain at 40 and 27 percent respectively.

Financial Aid

In light of the cost of a less-than-four-year college education and the high percentage of low-income students who attend these colleges, financial aid is an important determinant of accessibility.

⁷ This is the case at least until 2001 when several states passed laws allowing undocumented students to pay in-state tuition. These laws are currently being challenged in the courts.

This is particularly true for proprietary school students who generally face higher tuition than community college students. It also seems logical to expect that many for-profit schools would aim to extract as much financial aid money from students as possible, and historically there seems to be evidence for this (Honick, 1995). But interestingly, only about half of the schools in my case studies were eligible for federal student aid under Title IV.⁸ Moreover, if the IPEDS data collection is any indication of the number of schools participating in aid programs, then it may be that the majority of schools are not eligible. The U.S. Department of Education contends that some schools choose not to participate in student financial aid programs in order to hold on to benefits that they cannot otherwise maintain. For example, some schools may want their students to receive deferments on past program loans, or retain eligibility for the HOPE/Lifetime Learning Scholarship tax credit (U.S. Department of Education, 2001a). More likely, however, is that proprietary schools do not meet the strict eligibility requirements.

Requirements differ by control of institution, with the least restrictive rules for public and private non-profit institutions that offer programs of one year or more. Community colleges fall into this category and they generally have no problems maintaining Title IV eligibility. Vocational nonprofits, which offer programs of less than one year, and all for-profit institutions regardless of the types of programs they offer, face more rigorous regulations. Perhaps the most restrictive rule, which applies only to these latter two groups, is the “two year rule.” It requires institutions to have provided continuous postsecondary instruction for at least two consecutive years before participating in student financial aid programs. Schools in these two categories must also ensure that the programs they offer comply with a minimum length requirement (10 weeks and 300 clock hours). Finally, proprietary schools alone face the additional “90/10 rule” requiring that they derive no more than 90 percent of their revenue from Student Financial Aid program funds (U.S. Department of Education, 2001a).

⁸ In addition, of all of proprietary schools responding to the IPEDS in 2000, about half were Title IV eligible.

In addition to these eligibility rules, schools that participate in federal student loan programs such as Stafford Loans and Supplemental Loans for Students are subject to default rate regulations that may impact their Title IV eligibility. The Default Management Initiative put into place in the early 1990s, stipulates that schools calculate and report a cohort default rate based on the percentage of student borrowers who enter repayment each year. If more than 25 percent of the students in a cohort default on their loans for three consecutive years or 40 percent default in one year, then the school may lose its eligibility for certain Title IV programs, including the federal Pell Grant program (U.S. Department of Education, 2001b).

The rules undoubtedly have a tremendous impact on the market for less-than-four-year education, but without more research we can only speculate about their effects. It could be that these rules offer a layer of protection against scam artists who open schools then close immediately, leaving students with no education and thousands of dollars in debt. The rules may also protect taxpayers from pouring thousands of dollars of federal student aid into low quality institutions, and they add legitimacy to those institutions that finally become eligible for aid. On the other hand, it may be that these rules discourage some students from attending the institution of their choice for lack of financial aid; they may keep legitimate schools from succeeding—especially in the first two years; and mandatory minimum program lengths may stifle innovation in education, particularly with respect to distance education. Without more research we will never know which of these effects dominate, or even how many ineligible schools operate nationwide.

There is much more information on schools that do participate in federal student financial aid programs, largely due to the IPEDS. The remainder of this section focuses entirely on Title-IV eligible proprietary schools as reported in that survey.

The bottom panel of Table 4 reports the amount of aid per student for community colleges and proprietary schools. For most types of aid—state, local, institutional, and most federal programs—the amount of aid per student is not significantly different for proprietary school and

community college students. However, the federal Pell Grant program reveals a strikingly different pattern.⁹ Proprietary school students receive an average of \$1,649 more than their counterparts at community colleges. Moreover, the IPEDS reports that a much higher percentage of proprietary school students receive Pell Grants than community college students—51 percent compared to 32 percent. In contrast, the difference in the proportion of students receiving state and local aid is much smaller, with a difference of less than five percentage points between the two types of schools in both state and institutional forms of aid.

Other scholars have documented similar patterns for the Pell Grant program. King (2003) finds that eligible proprietary schools enroll between 5 and 10 percent of all undergraduates but receive 14 percent of Pell Grant funds. Community colleges enroll about 43 percent of undergraduates but receive just 33 percent of all Pell Grant funds. In another interesting study, Turner (2003) finds that increases in average state public tuition lead to significant increases in the enrollment of Pell Grant recipients in for-profit institutions—suggesting an important role for the Pell Grant program in influencing student choices on the margin between community college and proprietary school.

What explains these differences in Pell Grant receipt? There are several possibilities. The first and most basic possibility is that the difference is generated simply because the Pell Grant program accounts for the cost of attendance in distributing awards. Since the size of the award for each student is determined by comparing the maximum award amount (\$4,000 in 2002-03) to a student's cost of attendance (including tuition, fees, books, living expenses) minus an expected family contribution (EFC), students attending private institutions receive a significantly larger amount of aid under the Pell Grant program than their counterparts in public institutions. On the

⁹ The Pell Grant program provides need-based grants of up to \$4,000 for low-income students to pursue postsecondary education. The exact amount that a student receives depends upon his expected family contribution and the cost of the attendance.

other hand, several other federal, state, and local aid programs consider the cost of attendance in their awards, so it does not in itself explain the wildly dissimilar patterns for the Pell Grant program.

Another possibility is that proprietary school students have lower incomes than those attending community colleges. If this is the case then each proprietary student would receive a larger grant or alternatively, a higher proportion of students would be eligible for Pell Grants, and clearly both of these patterns appear to hold in the data. Indeed, some researchers claim that proprietary schools often open in low-income inner-city areas hoping to attract the federal financial aid money brought in by very low-income students (Moore, 1995), but more research is needed to know if this is truly the case.

Third, others have argued that more community college students work full-time and attend part-time, increasing their incomes and limiting their eligibility (King, 2003). Figures presented in the previous section indicate that it is indeed the case that community colleges enroll a slightly higher percentage of part-time or part-year students than community colleges proprietary schools. This might explain the difference if the overall proportion of part-time students receiving Pell Grants was low and about the same for both groups of students—then we might be able to attribute low per-student Pell Grant receipt to the greater proportion of part-time students. But this is not the case. The IPEDS reveals that the proportion of part-time students receiving Pell Grants is much higher in proprietary schools. Over 52 percent of part-time students attending proprietary schools receive grants compared to just 14 percent of part-time community college students.

One final hypothesis is worth considering. Perhaps student incomes and part-time status are roughly same at the two schools, but eligible students have higher take-up rates at proprietary schools. The smaller size of proprietary schools may mean that these students are more likely to have personal interactions with administrators than students in community colleges who must make more of an effort seek out help—a topic I consider in more depth in the next section. Indeed, case studies reveal that proprietary schools generally offer more services outside of class, and one such

service might be access to a counselor or financial aid officer who can help students fill out applications for aid.

In addition, proprietary schools have a considerable incentive to help students obtain Pell Grants. As Table 5 shows, proprietary school revenue comes primarily from tuition that students pay either out of their own pockets or with help from outside sources. In fact, student tuition and fees make up over 80 percent of current-fund revenues compared to just 20 percent for community colleges. Community colleges rely mainly on state and local government support. Proprietary schools thus have a much greater incentive than public institutions to increase enrollments and lure students in with offers of financial aid. Moreover, because their tuition is so high, proprietary schools can extract the entire value of the Pell Grant in the tuition payment. In contrast, community colleges receive only a portion of the value a student's Pell Grant: since a student's grant is likely to be much higher than the minimal tuition and fees at a public community college, the balance of the student's grant will be spent on housing, books, and other living expenses—not the college. As a result, proprietary schools have much more incentive to increase take-up among Pell Grant eligibles.

Though there are no comparable statistics for proprietary schools, data on federal financial aid applications gathered by the Pell Institute, offer some insight into take-up rates at public institutions. The Pell Institute calculates that only 18 percent of California community college students actually applied for any type of federal student aid. This percentage appears quite low considering that the colleges enroll a disproportionate share of low-income students. Moreover, only 9 percent of California's community college students received a Pell Grant in 2000-01 (this figure was up to 16 percent in 2002-03 according to the Chancellor's Office), but over 50 percent of those who applied for any federal aid received one. These figures, coupled with the large proportion of low-income students suggest that community college students are largely eligible for aid, but simply do not apply.

Aside from the obvious benefits of increased enrollments, lowered costs to students, and full extraction of Pell Grant funds, the advantages of the Pell Grant program extend even further for proprietary schools: Pell Grants are the least risky form of federal financial aid. The default rate regulations of the federal student loan programs put schools at risk for losing their Title IV eligibility if too many students default, while Pell Grants do not require repayment and do not come with any strings attached. Moore (1995) contends that when the Default Management Initiative was instituted in the early 1990s, many schools actually left the student loan programs voluntarily for fear that these programs would eliminate them from the Pell Grant program. Though there is no evidence that this was the case, at least anecdotally it seems as though the Pell Grant program may be a lifeline for some proprietary institutions.

Quality

The issue of school quality is perhaps the most important, most controversial, and least studied topic in the realm of sub-baccalaureate and vocational education. There are many definitions of quality and none is universally accepted. Indeed, no single measure of school quality can summarize the performance of a school or the value of a school to an individual student. Yet, knowing generally if students benefit from their education is vitally important if society is to judge the contribution of these schools to society. Since low-income and minority students are disproportionately served by proprietary schools and community colleges, policymakers and broader society should be deeply concerned with whether or not students are benefiting from their education. If it is the case that vocational education serves to raise wages or expand employment opportunities for low- and medium-skilled workers, minorities, and other students, then it may be in society's interest to foster more sub-baccalaureate education opportunities. On the other hand, if these schools do not deliver on their promises, the resulting high debt and poor career prospects may simply serve to increase wage gaps and social inequality.

Several studies of community college quality have found promising results on student outcomes. Kane and Rouse (1999) present an excellent review of the literature of the returns to a community college education, finding that community college students realize earnings gains between 5 and 8 percent per year—figures comparable to those calculated for four-year college attendance. Jacobson, LaLonde, and Sullivan (2005) look specifically at the returns to technical and non-technical community college coursework. They find large positive earnings gains (14 percent for men and 29 percent for women) for courses in health professions, technical trades (e.g. air conditioner repair), and technical professions (e.g. software developer), but small or possibly zero gains for courses in humanities, social sciences, and business. These results suggest that vocational sub-baccalaureate coursework is highly valued in the workplace—at least when it comes from a community college.

A report published by the California Community Colleges Chancellor’s Office sheds more light on the quality of a vocational community college education. The report surveyed vocational students in California community colleges who completed at least one course in an occupational program. Some highlights: in 2001, 59.8 percent of vocational students received a certificate or degree, or enrolled in a California public four-year university with no degree. 83.2 percent of vocational students (both leavers and completers) found some type of employment or enrolled in a California public university in the year after leaving the community college, and an impressive 82.8 percent of students stayed employed for three consecutive quarters after leaving (CCCCO 2003).

Data on proprietary school student outcomes is sparse, but the enrollment survey from California’s Bureau of Private Postsecondary and Vocational Education collects a few quality measures that are similar, though not necessarily comparable to those released by the Community Colleges Chancellor’s Office. As Table 6 shows, on average just under half of students who enroll in proprietary school programs complete their program on schedule. Not surprisingly, the data shows that 50.5 percent eventually receive diplomas or degrees, on schedule or otherwise. This number is a

bit lower than the 59.8 percent completion rate for community college vocational students, but the community college number includes transfers to four-year colleges. If the same figure was calculated without including transfer students, the completion rates would likely come a bit closer to each other.

Turning back to proprietary schools, the number of students employed in the field six months after completion divided by the total number of completions yields an employment rate of 64 percent, a number that seems fairly promising given that the recession that was still stifling job growth in 2002. Again, though, this number is not directly comparable to the community college employment rate of 83.2, since that number measures employment or enrollment over the course of a year, so it is understandably much higher. Starting wages for proprietary school graduates average about \$3,200 a month or \$38,400 per year, suggesting that many of these schools succeed in placing students in medium-skilled positions.

Student outcomes such as completion, employment, and returns discussed above are certainly among the most accepted and important measures of school quality, especially when examining implications for social stratification. But other aspects of school quality may also be of interest, particularly those that pertain to the student's experience while in school. These are not only of interest in and of themselves, but they may also help explain the observed patterns in student outcomes.

As discussed in previous sections, the program offerings at community colleges and proprietary schools are quite similar—especially in vocational fields. And while there is no systematic way to compare the quality of the programs and teaching offered at each type of school, a comparison of the course requirements for similar programs in community colleges and proprietary schools is yielded in Table 7. In the first case, an arbitrarily selected proprietary school and community college in Santa Barbara County both offer a certificate in software applications for office support specialists. Though the names of the certificates are different, the number and type of courses

needed to complete the certificate are almost identical. Both require five courses, including one on word processing, one on spreadsheets, and one on databases. The remaining courses could easily contain similar skills at the two schools. Students wishing to enhance their skills in office management technologies would likely have a hard time assessing the relative quality of the two certificates based purely on these course catalog listing. Similar problems would arise comparing the automotive certificates in Stanislaus County and the real estate exam preparation certificates in San Bernardino County. Moreover, in the latter case, both schools aim to prepare students for the licensing examination, so they are likely to cover very similar topics. Data on teaching quality, class size, instructional materials, and student experiences is needed to further assess the quality of the courses at public and private institutions, but from course catalogs, it is difficult to discern a difference.

Another dimension of school quality that pertains directly to the student's experience while in school is the provision of and access to support services. Though there is no comprehensive data on these services, case studies revealed that faculty and administrators of proprietary schools typically spend considerable time and energy helping students find jobs and supporting them with services outside of regular courses—such as career counseling, child care, and loan processing—usually for an extra fee. One student who had experience at both a community college and a proprietary school while obtaining his contractor's license remarked that at the proprietary school, “people fall all over themselves to help you.” This particular school even had on-site legal services to help students go start their own limited liability contracting businesses.¹⁰

Case studies reveal that students at California community colleges must generally seek out support services on their own. Data from the Chancellor's office supports this contention. Eighty-one percent of students report that they did not receive any type of counseling—academic or otherwise—from their community college in 2002-03. Only 12 percent of students took advantage of

¹⁰ Interview with Wayne. May 18, 2003.

academic counseling. A similarly low proportion of students took part in orientation sessions—just 36 percent of community college students participated in orientation at some time in their college career. One of the costs of attending a large public institution may be the lack of access to existing services or simply the effort required to seek out these resources.

National data from the IPEDS on institutional expenditures may reveal more insights into questions of academic quality and support services. Table 9 compares the expenditures of community colleges and proprietary schools in several areas. Proprietary schools spend about \$2,000 more overall than community colleges per full-time equivalent student. However, the amount the schools spend per student on instruction is actually higher for community colleges by about \$600, and this represents a much larger share of community colleges' expenditures than any other category. These figures suggest that community colleges emphasize high quality instruction over other services.

The largest discrepancy between the two schools comes in the category of student services, academic, and institutional support. Proprietary schools spend \$2,600 more per student in this category than community colleges, lending some evidence to the claim that proprietary schools offer more support services such as counseling and child care. However, this contention contrasts with the findings of Apling's study in the late 1980s. He found that a higher percentage of community colleges offered counseling, job placement services, disability assistance, and child care than proprietary schools. Still, the two findings can be reconciled. It may be that community colleges offer more services overall than the average proprietary school due to their larger size, but proprietary schools may invest much more deeply in fewer services, ensuring that every student receives access to certain crucial services. Community colleges may spread themselves thin and offer more services, but reach a much lower percentage of students. Overall, it appears that the provision of student services and academic support is a low priority for community colleges, and a much higher priority for proprietary schools.

School quality is difficult to define and even more difficult to quantify. With allegations of poor quality and unfair dealings constantly leveled against proprietary schools, the figures above provided are just a first step in assessing whether proprietary schools, in particular, help students or possibly hinder them from attaining their goals. If these schools do not provide quality education and job training, they may widen wage gaps and keep low-income and minority students from achieving their goals, despite students' best efforts to obtain education. Though the completion rates, employment statistics, course catalogs, and expenditure breakdowns offered here suggest that students in both types of institutions are receiving some benefit from their educational investment, it is far from clear which type of institution is ultimately of "higher quality." Much more research needs to be done on this topic.

Policy Implications and Recommendations

Proprietary schools and community colleges differ in many important respects—their size, their students, and their services—to name a few, but both types of institutions serve a large share of low-income, minority, and non-traditional students. Policymakers concerned with improving access to postsecondary education for these groups can learn several lessons from the comparisons above.

First, more research is needed on both of these types of institutions. While California has just begun gathering information from proprietary schools on completion rates and employment outcomes, there is much more data to be collected and much more research to be done to examine these issues. Other states and the federal government should follow California's lead in developing a database that contains a truly comprehensive listing of educational institutions, their students, sources of financial aid, and measures of school quality and student success. This data could have a profound impact on our image of postsecondary education in the U.S. As the previous discussion has shown, the U.S. Department of Education's fall enrollment counts vastly underestimate the number of students cycling through shorter programs year round, and they certainly leave out students obtaining

education at non-Title IV eligible institutions. Only with more data will we be able to judge the scale, scope, quality, and success of these institutions and determine if these schools—particularly proprietary schools—are ameliorating or exacerbating social inequality in the United States.

Along these same lines, quality control measures could be enhanced for both of these educational options. While default rate regulations are a step in the right direction, they do not go far enough. To improve socioeconomic mobility, students attending these schools must receive high-quality, workplace-relevant training that will lead to long-term success in their chosen field or to further education. Instead of punitive measures, positive and proactive quality control measures could be created that would elicit support from the local community. For example, some community colleges already involve local employers in curriculum development. Requiring proprietary schools and other community colleges to set up similar local employer oversight and curriculum development committees would enhance course content and program offerings by increasing each school's responsiveness to employer demands. Employers would also benefit from involvement in the committees as they would be assured of a constant stream of well-trained potential employees. Policymakers could encourage employers to participate in oversight committees by designing tax incentives for those who volunteer.

Third, policymakers interested in improving access to education should consider policies that make part-time education and financial aid application even easier—especially for low-income and working students. Access to financial aid and career counselors, on-site child care, reduced-cost transportation, and subsidized at-home web access would all encourage part-time enrollment and financial aid application among students with limited resources who might otherwise not consider attending.

In conclusion, education researchers have ignored proprietary schools for too long. There are so many more than we ever imagined, serving more students than we ever thought possible. Millions of students across the country are paying thousands of dollars in tuition to take classes at for-profit

institutions. These students are more likely to be black, Hispanic, and attending full-time than community college students. Proprietary school students also receive a much larger than proportional share of Pell Grant funding compared to their counterparts at public schools, even though a small number proprietary schools are eligible for federal financial aid programs. While the reasons for these patterns are not yet known, it may be that students at these schools have lower incomes, or that these schools encourage higher take-up rates among eligibles. Proprietary school students seem to attain about the same program completion rates as students in public institutions, but we do not yet know how these groups of students compare in the job market performance or other measures of success. By drawing on new data sources and laying out the little that we know about these schools and their students, this study serves as an important first step in understanding proprietary schools in relation to public institutions that we know more about. Much more research is needed before we can fully assess the costs and benefits of these sub-baccalaureate institutions for students and for society as a whole.

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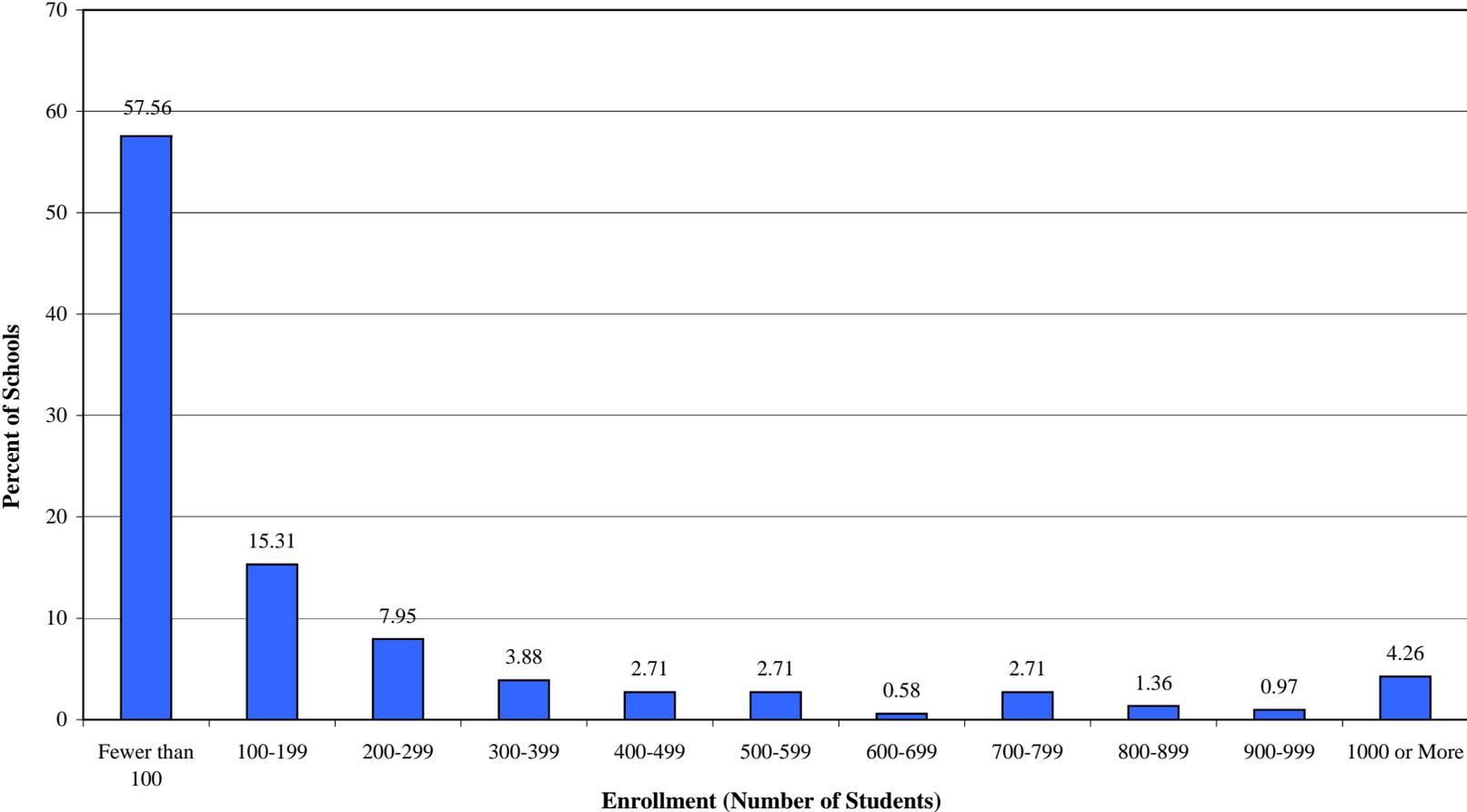
**Table 1. Institutional Characteristics of California Community Colleges
and Proprietary Schools 2002**

	CC	Prop	Difference
Number of Schools in California	109	3,827	
Annual Enrollment	10,107	349	9,758
Number of Programs per School	111	4	107
Number of Schools per County ¹	2.7	69.6	-66.8
Number of Students per County	27,289	24,290	2,999

¹ Number of schools is the mean number across counties with at least one college (39 counties for community colleges and 56 counties for proprietary schools). Across all 58 counties, the average is 1.85 community colleges. The mean number of proprietary schools does not change. Number of students per county is estimated using these figures.

Source: Author's tabulations of data from the Bureau of Private Postsecondary and Vocational Education and California Community Colleges Chancellor's Office.

Figure 1. Distribution of California Proprietary Schools by Size



Source: Author's tabulations of data from the Bureau of Private Postsecondary and Vocational Education.

Table 2. Mean Number of Programs per County in California 2002

Program Name	CC	Prop	Difference	t-stat
Administrative & Support	26	21	5	0.54
Business	22	24	-2	-0.25
Computers	20	70	-50	-1.95
Construction & Contracting	8	7	1	0.52
Finance & Insurance	5	10	-5	-1.26
Food & Bar	5	2	3	2.53
Health & Medicine	24	19	5	0.50
Professional Services	15	31	-16	-1.48
Real Estate	3	18	-15	-2.80
Teaching	6	5	1	0.56
Technical Trades	16	26	-10	-1.00
Transportation	13	15	-2	-0.42
Travel & Hospitality	3	2	1	0.56
Humanities, Arts	74	15	59	2.94

Source: Author's tabulations of data from the Bureau of Private Postsecondary and Vocational Education and California Community College Chancellor's Office.

Table 3. California Community College Student Demographics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Full-Time Equivalent Enrollment, Annual 2002-03 ¹	114 ²	10,107	6,260	686	33,933
Full-Time Equivalent Credit Enrollment, Annual 2002-03	114	9,285	6,273	0	33,068
Full-Time Equivalent Non-Credit Enrollment, Annual 2002-03	114	822	2,001	0	13,018
Headcount, Fall 2002	115	15,203	8,652	643	35,927
Percent of Student Enrolled Full-Time, Fall 2002	109	27.8	7.4	4.8	47.1
Percent of Students Enrolled Part-Time, Fall 2002	109	72.2	7.4	52.9	95.2
Percent of Students who are White (non-Hispanic), Fall 2002	115	42.5	20.0	0.4	85.1
Percent of Students who are Hispanic, Fall 2002	115	26.1	15.7	4.3	86.3
Percent of Students who are Black (non-Hispanic), Fall 2002	115	8.0	10.4	0.6	71.4
Percent of Students who are Asian/Pacific Islander, Fall 2002	115	14.0	11.5	1.1	51.5
Percent of Students who are Other Ethnicity, Fall 2002	115	2.8	1.6	0.2	8.8
Percent of Students who are Unknown Ethnicity, Fall 2002	115	6.7	5.1	0.3	29.7
Percent of Students Age 19 and Under, Fall 2002	115	22.3	7.2	2.7	35.6
Percent of Students Age 20 to 24, Fall 2002	115	25.0	6.5	6.6	37.8
Percent of Students Age 25 to 29, Fall 2002	115	11.9	2.8	5.5	18.9
Percent of Students Age 30 to 39, Fall 2002	115	16.3	4.0	7.6	27.4
Percent of Students Age 40 to 49, Fall 2002	115	11.9	2.9	6.0	20.3
Percent of Students Age 50 and Over, Fall 2002	115	12.2	9.9	3.4	66.1
Percent of Students Age Unknown, Fall 2002	63	0.7	1.3	0.0	5.7

¹ Full-time equivalent enrollment is calculated by the Chancellor's Office by summing the total hours in enrollment records divided by 525. This includes only enrollments in classes eligible for state apportionment payments.

² Though there are only 109 official California community colleges, the Chancellor's Office reports student demographics by college center. A center is a part of the college that is on another campus, typically these are adult learning centers that offer non-credit courses only. Six colleges report data for such centers, yielding 115 observations. Source: Author's tabulations of data from the California Community Colleges Chancellor's Office Data Mart.

Table 4. Characteristics of Proprietary School and Community College Students

	CC	Proprietary	Difference	t-stat
Observations	1,481	2,549		
Full-time Enrollment	2,286	194	2,092	19.02
Percent Minority Enrollment:				
Black	12.93	19.71	-6.78	-9.98
Native American	2.58	1.06	1.52	4.96
Asian/Pacific Islander	3.52	3.92	-0.40	-1.24
Hispanic	7.55	16.01	-8.46	-12.40
Tuition	2,384	7,615	-5,230	-54.82
Amount of Student Aid Per Student:				
Pell Grants	1,370	3,020	-1,649	-6.54
Other Federal Grants	1,021	337	685	0.85
State and Local Grants	446	651	-205	-1.45
Institutional Grants	191	152	39	1.12
Total Student Aid Grants	3,031	4,160	-1,129	-1.13

Source: Author's tabulations of the U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Data System (IPEDS) 1999-2000.

Table 5. Current-Fund Revenue, by Source of Funds 1999-00

	<i>Dollars Per Full-Time Equivalent Student</i>			<i>Percent of Expenditures</i>		
	CC	Prop	Difference	CC	Prop	Difference
Total Current Fund Revenue	9,228	12,034	-2,806	100.0	100.0	0.0
Student Tuition and Fees	1,877	9,799	-7,922	20.3	81.4	-61.1
Federal Government ¹	502	555	-53	5.4	4.6	0.8
State and Local Governments	4,244	195	4,049	63.0	1.6	61.4
Other Sources ²	1,032	1,485	-453	11.2	12.4	-1.2

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) as cited in the Digest of Education Statistics 2002.

¹ Includes appropriations, grants, contracts, and revenues associated with major federally funded research and development centers. Excludes Pell Grants.

² Includes private gifts, endowment or investment earnings, educational activities, auxiliary enterprises, and other current income.

Table 6. Student Outcomes of California Proprietary Schools 2001-02

Variable	Obs.	Mean	Std. Dev.	Min	Max
Total observations	588				
Total Students Enrolled	516	349	1,589	1	21,914
Number of On-Schedule Program Completions	516	90	457.8	0	9,726
Ratio of Completions to Enrollments	516	47.9	42.6	0	100
Number of Degrees or Diplomas Awarded	516	143	707.9	0	10,798
Ratio of Degrees to Enrollments	516	50.5	40.2	0	100
Passage Rate on State Licensure Exam	200	53.9	41.0	0	100
Number of Students Employed in Field within 6 Months	516	51.4	206.0	0	4,198
Ratio of Employment to Completions	309	64.0	32.2	0	100
Monthly Salaries of Graduates Employment in Field	516	3,197	9,343	0	56,655

Source: Author's tabulations of data from the Bureau of Private Postsecondary and Vocational Education Enrollment Survey.

Table 7. Examples of Public and Proprietary Programs and Courses

PUBLIC CC

PROPRIETARY

Santa Barbara County

Alan Hancock College		Atlas Computer Centers	
<i>Office Software Support Certificate</i>	units	<i>Office Technician Certificate</i>	wks
Computer Concepts and Applications	3		
or		Office Computer Basics	3
Word Processing applications	3	Word processing with Microsoft Word XP	3
Spreadsheet applications	3	Spreadsheets with Microsoft Excel	3
Database applications	3	Databases with Microsoft Access	3
Internet Business applications	3	Intermediate Office Skills	3
Presentation design	3		
<hr/>		<hr/>	
Total units:	15	Total hours:	263

Stanislaus County

Modesto Junior College		Central Valley Opportunity Center	
<i>Maintenance Mechanic Certificate</i>	units	<i>Automotive Service & Repair Certificate</i>	
Introduction to Technical Industries	1	Shop safety	
Basic Automotive System	3	Tire Repair and Maintenance	
Automotive Electricity 1	3	Oil Change and Lubrication	
Automotive Electricity 2	3	Tune-up Fuel Systems	
Automotive Transmissions & Transaxles	4	Engine Diagnosis	
Manual Transmissions & Drive Axles	3	Steering Systems Inspection and Repair	
Braking Systems	3	Brake Service and Repair	
Steering, Suspension & Alignment	3	Front-end Alignment/Suspension	
<hr/>		<hr/>	
Total units:	23	Total hours:	?

San Bernardino County

San Bernardino Valley College		The Realty Institute	
<i>Real Estate Certificate</i>		<i>TRI Salesperson Licensing Courses</i>	hours
Real Estate Principles	3	Real Estate Principles	45
Real Estate Practice	3	Real Estate Practices	45
Real Estate Appraisal: Residential	3	Real Estate Appraisal	45
Real Estate Finance	3	Real Estate Finance	45
Legal Aspects of Real Estate	3	Property Management	45
Real Estate Economics	3	Real Estate Office Administration	45
or		<hr/>	
Introduction to Accounting	3	Total hours nec. for license:	135
<hr/>			
Total units:	18		

His home study courses have prepared thousands of students to enter the real estate industry, by offering salesperson and broker

"The Real Estate program is designed to provide students with the course requirements for pre-qualification for the real estate sales or broker's examination."

Source: Individual schools' web sites.

Table 8. Current-Fund Expenditures, by Purpose 1999-00

	<i>Dollars Per Full-Time Equivalent Student</i>			<i>Percent of Expenditures</i>		
	CC	Prop	Difference	CC	Prop	Difference
Total Current Fund Expenditures	8,932	10,942	-2,010	100.0	100.0	0.0
Instruction	3,912	3,305	607	43.8	30.2	13.6
Research and Public Service	212	114	98	2.4	1.0	1.4
Student Services, Academic, and Institutional Support	2,994	5,603	-2,609	33.6	51.2	-17.6
Scholarships, Fellowships, and Grants to Students	332	90	242	3.7	0.8	2.9
Auxiliary Enterprises (e.g. residence halls, food service)	527	364	163	5.9	3.3	2.6
Other	955	1,466	-511	10.7	13.4	-2.7

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) 1999-2000 as cited in the Digest of Education Statistics 2002.