not lose sight of the importance of noninstructional inputs in student success. The best for-profits realize this and devote considerable resources to counseling and supporting students. Research that Douglas Webber and I conducted showed that the amount colleges and universities spend on student services, broadly defined, influences the persistence and graduation rates of students at four-year colleges and universities, and that these expenditures have a greater impact on students at institutions with large fractions of disadvantaged students in terms of entry test scores and family income levels. The nation will increasingly try to enroll these students in higher education; they will be the focus of efforts to improve persistence and graduation rates. If we care about student success, we need to focus on more than how we staff our classes and the characteristics of the faculty of the future.

The Promise, Performance, and Policies of Community Colleges

Paul Osterman

AMERICA HAS MADE CONSIDERABLE strides in opening higher education to its citizens. In 1980, 49.3 percent of brand-new high school graduates attended a postsecondary institution the following October. By 2007, that figure stood at 67.2 percent. Among those high school graduates whose families were in the bottom twentieth percentile of the income distribution, 32.2 percent were in postsecondary education in 1980, whereas in 2007, that figure, while still lagging the rate for wealthier students, stood at 55 percent.

Community colleges have played a central part in this story. In the fall of 2008, they enrolled 7.1 million students in credit courses compared to 9.3 million undergraduate students who attended four-year institutions. Put differently, community colleges account for 43 percent of postsecondary enrollment. And, as we shall see, millions more attend noncredit-bearing courses in community colleges. The success of the so-called community college access agenda is clear when we consider that between 1963 and 2006, community college enrollment grew by 741 percent compared to 197 percent for public four-year colleges and universities and 170 percent for private.
Community colleges do many things well. Students who receive an associate’s degree or a certificate earn a high rate of return. From the business side, a recent focus group of employers in three cities concluded that, “Among respondents community colleges and vocational colleges were associated primarily with high quality training . . . [they] were generally considered by respondents to be the most credible teaching/training entities . . . Graduates of community colleges were considered to be more ambitious, motivated, disciplined, physically accessible, and literate.”

Community colleges are a central component of America’s human capital development system. They dwarf in scale any other institution in terms of providing vocational training, and they are a resource for firms in training their incumbent work force and for obtaining new skills in emerging technologies. Education is not simply an economic tool. Higher education helps grow young people into citizens and enriches the cultural life of communities in numerous ways. These noneconomic purposes must be respected, and as we shall see, tensions can arise between the different missions of higher education in general and community colleges in particular.

But while there is much to praise, there is also much about which to worry. Those who obtain a certificate or degree enjoy high rates of return, but the fraction of students who successfully obtain these credentials is shockingly low. The majority of students who enter community college do not succeed, and this failure comes at great cost to them and to society.

This chapter aims to help us think about how to improve community colleges. In much of the chapter, I examine these institutions and ask what steps we might take to obtain better outcomes. However, I also ask broader questions: How do community colleges fit into what might be termed our human resource development system? Therefore, what alternatives to community colleges might be viable? One of the great strengths of the U.S. human capital system, compared to other nations, is that we offer multiple pathways to success. While community colleges must, simply by virtue of their scale, be the anchor of any strategy, everyone will benefit if we also strengthen alternative pathways.

Thinking about how to improve community colleges and help them fulfill their promise is very challenging and not simply due to the standard problem of inadequate resources, although that is a serious issue. The difficulty lies in the very fact that community colleges have multiple missions, each of which is legitimate and important but each of which implies a somewhat different approach to teaching and to the very organization of the enterprise. Unless we think sharply about just what each of these missions is and what each requires for success, then reform policy will be a muddle. We need to make hard choices in order to focus on the most essential goals. In addition, community colleges are underfunded, and they need additional resources to improve outcomes. Finally, I argue that the problem is not one of knowledge about what succeeds. We may not understand best practice, but we do understand good practice. Our challenge lies in execution and the resources to support that execution, not in research and development.

In the next section, I provide some basic facts regarding the reach and performance of community colleges and the challenges we face. I then turn to strategies for improvement, both within the context of community colleges and in terms of alternative pathways.

THE LANDSCAPE AND THE FACTS

There are over 1,177 community colleges that enroll over 7 million students in credit-bearing courses. We are not sure how many students are enrolled in noncredit community college courses—on topics ranging from the directly vocational to the recreational—because not all states keep data on these enrollments, but experts agree that the numbers are very close to those in credit courses. Hence, roughly 12 million Americans are enrolled in community colleges. Among students who are enrolled for credit, most are in degree programs, but a substantial minority seeks certificates.

Another way to grasp the magnitude and importance of the community college system is to consider the activities that they undertake. A typical community college prepares students for transfer to a four-year institution,
offers terminal associate's degrees in a wide range of vocational fields, offers less-than-two-year certificates in other fields, provides customized training for incumbent workers for local firms, offers one-off courses (both in skills and for recreation) for area residents, provides Adult Basic Education (ABE) and English as a Second Language (ESL) courses under contract with their state department of education, and provides training as part of a contract with a federal job training program. The range of activities is impressive but also represents a very significant management challenge and may well have an impact on performance. Table 5.1 begins to describe the landscape of sub-baccalaureate education.

These data direct our attention to several important patterns. First, public community college students do not resemble the traditional image of a college student. Nearly 40 percent are age twenty-four, and 60 percent attend part-time. Indeed, the rhetoric regarding the diminishing importance of the traditional college student is really about community college students. By contrast, among undergraduates in four-year institutions, 79.5 percent attend full-time and about 70 percent are under age twenty-four.\footnote{At the same time, we should acknowledge that about one-third of community college students are young and attend full-time. Later, I will argue that in the rush to serve older—perhaps more vocationally oriented—students, we should not overlook these younger, more traditional students.}

The second striking pattern in the data concerns private for-profit schools. In terms of enrollment, they are dwarfed by community colleges, even if we add together two-year and less-than-two-year institutions. This conclusion might be slightly softened if we consider two-year degrees awarded by four-year institutions, since many private, for-profit, four-year institutions offer this option. However, the same is also true for public four-year institutions.\footnote{Overall, it is apparent that the private, for-profit sector is quite small relative to the public sector.}

The difference in enrollment patterns between public and private institutions is striking: a far larger fraction of private, for-profit students attend full-time, and they are also much more likely to be older than are the students in public institutions. I will explore the implications of these differences later. In addition, while less-than-two-year institutions are essentially irrelevant in the public realm, they represent a significant fraction of for-profit two-year schools or less enrollment.

While community colleges enroll 43 percent of all postsecondary credit students, if one looks only at June high school graduates who are attending college the following October, then community colleges enroll about 24 percent.\footnote{This points to the first key fact about the community college population—it is more weighted toward working adults than is enrollment in four-year institutions.}

Table 5.2 provides additional demographic data on community college students compared to those who attend public four-year colleges and universities. Recall that we have already seen that community college students are older and more likely to attend part-time. The additional differences are also notable. Community college students are more likely to be minority, are more likely to be self-supporting, and are more likely to be first-generation college students.\footnote{There are, however, two ways to read these data. In one reading, community colleges are a pathway for upward mobility. In another, they are a

| TABLE 5.1  
Postsecondary enrollment patterns, Fall 2007 |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total enrollment</td>
<td>Percent enrollment age 24 or younger and full-time</td>
<td>Percent enrollment age 25 or older and full-time</td>
<td>Percent enrollment age 24 or younger and part-time</td>
</tr>
<tr>
<td>Public two-year</td>
<td>6,374,554</td>
<td>29.6%</td>
<td>8.7%</td>
<td>29.4%</td>
</tr>
<tr>
<td>Public less-than-two-year</td>
<td>54,598</td>
<td>20.7%</td>
<td>30.8%</td>
<td>21.7%</td>
</tr>
<tr>
<td>For-profit two-year</td>
<td>321,221</td>
<td>49.1%</td>
<td>38.6%</td>
<td>4.4%</td>
</tr>
<tr>
<td>For-profit less-than-two-year</td>
<td>232,934</td>
<td>45.6%</td>
<td>38.7%</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

Source: U.S. Department of Education, National Center for Educational Statistics, Enrollment in Postsecondary Institutions, Fall 2007, First Look, NCES 2009-155, tables 1 and 2. Row percentages do not add to 100% because of rounding and because a small number of students have missing age data. Data on student age were not collected for the 2008 report that is cited earlier and hence this table refers to 2007.
TABLE 5.2
Demographic composition of postsecondary enrollment, 2003–2004 academic year

<table>
<thead>
<tr>
<th></th>
<th>Community college</th>
<th>Public four-year institution</th>
<th>Private nonprofit, four-year institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Black</td>
<td>15.3%</td>
<td>10.4%</td>
<td>13.0%</td>
</tr>
<tr>
<td>% Hispanic</td>
<td>14.4%</td>
<td>8.9%</td>
<td>12.0%</td>
</tr>
<tr>
<td>% Asian</td>
<td>5.3%</td>
<td>5.9%</td>
<td>4.2%</td>
</tr>
<tr>
<td>% Parents’ education high school or less</td>
<td>40.8%</td>
<td>26.7%</td>
<td>27.6%</td>
</tr>
<tr>
<td>Dependent students</td>
<td>38.8%</td>
<td>65.7%</td>
<td>62.3%</td>
</tr>
<tr>
<td>Single parent students</td>
<td>17.2%</td>
<td>6.3%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>


channel that less-advantaged students are shunted toward while others enjoy the advantages associated with a four-year school. This tension in fact goes to the heart of the question of how to improve community colleges.

Expectations of Students

Understanding the goals of community college students is important because helping them achieve these goals is the ultimate objective of the system. And as we will see later, sorting through these goals will shape this chapter’s recommendations for how to narrow and focus the mission of the institutions.

One source of data on student goals is the National Postsecondary Student Aid Survey conducted in 2000. In their analysis of these data, researchers at the Community College Research Center distinguished three groups of community college students: those in occupational programs who accounted for 50.7 percent of students, those in academic programs who accounted for 25.3 percent, and the remaining 23.8 percent who at time of survey were undeclared. Of those on an occupational track, one-third were seeking a certificate, and two-thirds an associate’s degree.

These distinctions are useful but are also hard to interpret in terms of student goals. For example, the academic track is defined as people who majored in humanities, mathematics, science, or social science, while the occupational track consisted of a list of majors in fields such as engineering, information technology, and various health-related areas. The problem is that it is totally plausible that many of these occupational students hope to eventually obtain a BA or BS degree. Enrollment in an occupational major does not necessarily imply a truncation of expectations. In fact, the demographic profile of students in the AA degree occupational track (the two-thirds of occupational students) is similar to that of students in the academic track, and the fraction who report wanting to transfer to another institution is not very different and shows a pattern of falling with age (or, to put it differently, rising for younger students).

That many community college students have aspirations beyond community colleges is demonstrated in another survey focusing on graduating high school seniors in 2003–2004. Twenty-eight percent of those who directly entered community colleges reported wanting to eventually obtain a BA or BS degree, and an additional 39 percent reported that they had applied to a four-year school but for various reasons were instead attending a community college. One reading of these data is that 67 percent of high school seniors who directly enter community colleges have further aspirations.

None of this is to deny that a substantial fraction of community college students have more narrowly defined occupational goals. This is clearly true for students in certificate programs and certainly also true for many students, particularly the older ones, in AA degree programs. But at the same time, it is wrong to think of community colleges as simply two-year vocational training institutions.

COMMUNITY COLLEGES AND THE LABOR MARKET

Community colleges are tightly linked to the job market in their communities. Most states do not collect systematic data on noncredit enrollment; hence, there is some disagreement about just how many students take
noncredit courses. However, all observers agree that the numbers are very close to the 7 million in credit courses. These students take courses in a range of topics from ESL and ABE to health and information technology certifications to recreational courses. The majority are clearly vocational. There is remarkable variation across states in whether noncredit teaching receives any state funding and whether any formal record of student attainment is kept in these courses. In addition, there is some concern that students who enroll in noncredit courses find themselves unable to transfer any credit into a credit program, should they subsequently be interested in doing so. Another indication of the core economic role of community colleges has been the surge of attendance during the recent economic downturn as adults return to school seeking new skills in the hopes of improving their labor market prospects.

The strength of these linkages and the tilt of community colleges toward vocational training have been a source of controversy, as some have argued that these trends have led the schools to diminish their traditional goal of assisting students who seek to transfer to four-year schools. Others argue that the opposite is true, and that, if anything, community colleges are leading the way toward “pay as you go” rather than “cool out” potential transfers. Regardless of where one stands on the debate regarding what should be, the facts about what is are clear: community colleges have a strong vocational training component. Indeed, given the magnitude of the community college system, it is no exaggeration to say that community colleges are America’s primary vocational training system and are an approach toward providing vocational skills that is distinct from many other developed nations.

The connection of community colleges to the local economy is more than passively enrolling students with a vocational interest. Community colleges have been aggressive and entrepreneurial in working with firms to provide customized professional development for incumbent workers and to train students for openings projected by the local employer community. The local community colleges in the San Diego region exemplify this role, as they work closely with biotechnology firms to develop training programs for the technicians those firms need. The curriculum was created in cooperation with the companies, and the firms provided some of the instructors and the equipment. Community colleges in North Carolina launched a similar effort in the same industry.

As another example, the Milwaukee Area Technical College, with funds from the American Recovery and Reinvestment Act, is beginning a nondegree training program to prepare employees for careers in health information technology. Such cases can be multiplied endlessly across the country. In addition, community colleges are often contractors and sometimes the administrative agency, under the Workforce Investment Act.

The community college connection to the job market is so wide and deep that many institutions have created separate administrative divisions that offers the noncredit courses to adults seeking to improve their skills. In addition, these units engage in a wide range of entrepreneurial activities with firms such as the customized programs I’ve described.

What can we say about future demand for the skills community colleges produce? This is a key question at the heart of any argument regarding the future of these institutions. There are two, not necessarily consistent stories that one can tell in response to this question. It is important to be clear about just what lessons to draw.

The first story is that the demand for what has been termed “middle skill” jobs of the kind produced by community colleges will be strong and is likely to grow. There is a good deal of truth to this expectation, and it does provide an important counterweight to an assumption that one might infer from the standard economics literature that the only postsecondary attainment of importance is a four-year degree. As an example, the bread and butter of many community college programs is health careers, a field for which there will be increasing demand for professionals. Information technology is another example of a growing field served by community colleges. Indeed, the U.S. Bureau of Labor Statistics (BLS) projects that for 2008 to 2018, occupations requiring an associate’s degree will experience the most rapid percentage growth rate.

The second story is less optimistic. At the anecdotal level, hospitals are increasingly seeking to hire BS rather than associate’s degree nurses, and in
another signal of possible trouble to come, a prominent community college president recently worried in print that employers were increasingly expecting more education than a community college credential. Turning again to the BLS projections through 2018, when we look at new openings rather than percentage growth, job openings are projected to be 2.3 million jobs for associate's degree holders and 2.9 million for employees with other forms of postsecondary vocational training. If we take these BLS numbers literally, there will be fewer job openings for associate's degree graduates than the community colleges will produce. Recall that there are nearly 7 million community college students currently enrolled, of whom about two-thirds are in associate's degree programs. Even more distressing, that figure is just the current enrollment, whereas the projected openings are for the entire period until 2018.

We should not, of course, take the occupational projections that underlie the educational demand projections as gospel truth, but their track record is reasonably good. However, it is also possible, and indeed likely, that the BLS underestimates the demand for education for jobs that in the past did not require extensive schooling. For example, observers note that whereas in the past automobile assembly workers did not require much in the way of school, auto firms now want even assembly-line employees to have a community college degree because of the skills involved in quality programs. There is a conservative, backward-looking bias in the projections that may miss some of this kind of development. However, even if the BLS underestimates the future demand for community college-level skills by fully a half, there is still good reason for concern, given the magnitude of enrollment.

These projections provide an important note of caution in what may well be a somewhat overheated optimism about future demand for community college-level skills. The implication of this line of thought, which I develop later in the chapter, is that we should continue to take the transfer mission of community colleges very seriously and that we should think of community colleges as more than two-year vocational training institutions.

OUTCOMES

For students who obtain a credential—either a certificate or an associate's degree—community colleges perform well and are an excellent investment. The first widely noted research on rates of return to community college credentials reported positive results, and more recent research has updated these findings and managed to control for a large range of personal and family variables. The rates of return range from 13 percent for men who obtain an associate's degree to a remarkable 38.9 percent for women. In general, the results are more robust for women across all specifications, but for both genders, the overall message is clearly positive for those who manage to obtain a credential.

Thus far, the news has been good. However, when we ask what proportion of students who enroll in community college obtain a degree or certificate, or even accomplish a full year of attendance, the picture darkens considerably. This failure rate is without question the greatest challenge confronting community colleges.

The federal government collects data on graduation rates via its Integrated Postsecondary Data System (IPEDS), and according to the most recent figures, only 22 percent of public community college students who entered in 2005 had obtained a degree or certificate within 150 percent of the expected time, or by 2008. However, the problem with these data is that they only refer to full-time students, whereas, as we saw, a strong majority attend part-time. Another federal source, the Postsecondary Students Longitudinal Survey, includes both full- and part-time students. In these data, among students who enrolled for the fall of 2003, 5.5 percent had obtained a certificate, 10 percent an associate's degree, 39.8 percent were still enrolled, and 44.6 percent were no longer enrolled by June 2006. In other words, the three-year success rate, as measured by a credential, was an even lower 15.5 percent, presumably reflecting worse outcomes for part-time students.

These outcomes are more than a little discouraging. However, many observers would point out that they are also somewhat unfair. Given the
substantial fraction of part-time students in community college, focusing on a three-year completion rate may be too stringent. The U.S. Department of Education does not collect outcomes for a longer enrollment period; however, a recent effort, executed by Jobs for the Future—part of the Lumina Foundation for Education’s Achieving the Dream initiative—did collect detailed outcome data from six states for a six-year period since enrollment. These data are shown in table 5.3.

These data paint a brighter picture than do the three-year federal figures, but the assessment is still grim. Even assuming that the story for transfer students has a uniformly happy ending, at best only four of ten students reach their goals within six years of enrolling, and in most of the states, the results are even worse. When the data are broken out by full- and part-time status, the results get grimmer still, as table 5.4 shows. It is hard to know what is worse: that in three of the states, only around 20 percent of part-time students achieve success after six years or that among students who are devoted full-time to community colleges, the highest success rate is only 45 percent.

### TABLE 5.3

<table>
<thead>
<tr>
<th></th>
<th>Award, less than AA degree (certificate)</th>
<th>AA degree</th>
<th>Transfer (no award)</th>
<th>Total award or transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecticut</td>
<td>1%</td>
<td>9%</td>
<td>14%</td>
<td>23%</td>
</tr>
<tr>
<td>Florida</td>
<td>6%</td>
<td>22%</td>
<td>7%</td>
<td>36%</td>
</tr>
<tr>
<td>North Carolina</td>
<td>10%</td>
<td>16%</td>
<td>14%</td>
<td>40%</td>
</tr>
<tr>
<td>(five-year result)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td>2%</td>
<td>23%</td>
<td>6%</td>
<td>30%</td>
</tr>
<tr>
<td>Texas</td>
<td>5%</td>
<td>12%</td>
<td>25%</td>
<td>42%</td>
</tr>
<tr>
<td>Virginia</td>
<td>3%</td>
<td>19%</td>
<td>13%</td>
<td>35%</td>
</tr>
</tbody>
</table>


### Sources of Failure

Why are failure rates in community colleges so high? As is true for school reform at the K–12 level, characteristics of the students have a significant impact on outcomes. Community college populations are both diverse and challenging: many enter with reading and math skills well below grade level; many are part-time and are distracted by work and family demands; and many more are unsure of what they want to accomplish and lack a clear plan.

All of this said, there are sufficient examples of postsecondary institutions that do succeed with this population, and a “blame the student” response is unacceptable. Instead, it is more fruitful to ask what characteristics of the community college experience lead to such high failure rates.

When students enter community college, nearly 60 percent are channeled into remedial programs, typically called “developmental education.” In many community colleges, the developmental education courses and faculty are housed in a separate administrative unit from the credit faculty. The typical outcome is that students spend several semesters in developmental...
education—sometimes not realizing that they are not obtaining college credit—then use up all their financial aid and drop out due to exhaustion and frustration. According to one study, only 25 percent of students who took three developmental courses completed all three five years later, only 4 percent graduated, and 78 percent left school without a credential. Another study found that less than 40 percent of students referred to developmental education completed their sequence of assigned courses. There are similarly poor results for students who enroll in ESL and ABE programs. To make matters worse, across community colleges, the criteria and cutoffs for placing students in developmental education are a “bewildering plethora.”

In addition, the vast majority of students recount an experience in community colleges in which there is virtually no counseling or support, in which the pathways to the desired degree or credential are very unclear, in which there are few signposts of progress or intermediate achievements, and in which most flounder and give up. The typical student is simply admitted and then implicitly told to sink or swim, and far too many sink. Given the complications and pressures in the lives of the typical students who are part-time, holding a job, and coming from an economically stressed background, the failure to sustain commitment to what on average is a five- or six-year slog to a degree or certificate is not surprising.

EXISTENCE PROOFS: IT’S POSSIBLE TO DO BETTER

A core argument of this chapter is that the challenge of improving community colleges lies not in discovering what works, but rather in finding ways to afford and diffuse good practice. In making this statement, I use the term “good practice” rather than “best practice.” It is certainly the case that we do not know everything and that we can extend our understanding of just what practices are optimal. It makes sense to continue engaging in research and demonstration. In my view, we have in hand good evidence of practices that lead to outcomes that are far superior to what we now achieve, and the continued search for the optimum should not delay the very substantial improvements that are now possible. This argument gains additional force because of the long time lag inherent in community college research. Given a three- or, more realistically, six-year span from implementation to outcome, and then adding the time required to analyze and present results, the delay between the execution of an innovation and useful findings is prohibitively long.

The evidence that we understand good practice comes from a variety of distinctive programs in different parts of the country. These programs are not small boutique experiments within a larger community college structure, but rather substantial stand-alone efforts that offer educational success to a population that is the same as that which normally attends community college programs.

Project QUEST, Inc., and its replications welcome students in an intensive and accelerated remediation component organized by the program, offer a wide range of supportive services and counseling, and then enroll the students in community colleges in a wide range of degree and certificate programs. While in the community college, QUEST counselors provide continuing support and assistance. Year Up, which began in Boston and has been replicated in several cities, enrolls recent high school graduates in a six-month classroom training and remediation experience that is then followed by an additional six-month internship with an employer. The students attend full-time, receive considerable support throughout the experience, and any additional required remedial work is integrated into the regular classroom instruction. The Tennessee Technology Centers require full-time enrollment in certificate programs in a limited range of fields, and classes are scheduled to permit as much flexibility as possible in student schedules.

Project QUEST has been the subject of several extensive evaluations, while data on Year Up and the Technology Centers largely come from the programs’ own administrative records. Taken as a whole, the outcome data are far more impressive than is normal for standard community college programs.

Although the programs differ in their design, what they have in common points to the strategy for moving forward. First, remediation either is integrated into the credit curriculum or else is intensified and collapsed into
a brief period. In addition, organized peer groups—or so-called “learning communities”—are utilized to provide additional support and motivation. The key point is that developmental education is not allowed to soak up a great deal of time or resources. Second, the programs are focused with a clear but narrow path provided for success. Students are not permitted to flounder as they try to piece together a set of courses that add up to their goals. In some cases, this is achieved through a rich set of counseling supports and, in other cases, simply by limiting the range of choices. Third, the students are encouraged to attend full-time or as close to full-time as is practical, enhancing the strategy of focus and speed. Fourth, counseling and support services play a core role in maintaining enrollment and progress. Finally, courses are scheduled in a way that makes attendance easy, and much of the material is presented in stackable modules so that progress is visible and cumulative.

Exactly how these principles are implemented varies with the nature of the program and of the students. Those students for which full-time attendance is feasible—most typically younger students—can benefit most if the elements can be combined in their “purest” form. The example of the City University of New York’s plans for a new community college built from scratch so that the elements are virtually all incorporated in the new design illustrates this point. On the other hand, many working adults simply cannot be full-time students, and for these students, additional flexibility is necessary, but the core elements of the good practice principles are still relevant.

MOVING FORWARD

How should we think about moving the community college system down the road in the direction of good practice? Turning around this massive but diverse enterprise will be far from easy, and in some respects, it is even more challenging than the case of K–12 school reform. Multiple missions, multiple constituencies, and very differentiated governance and finance systems across locales make it difficult to devise a coherent and plausible reform strategy.

The importance of community colleges has not escaped the attention of the policy community, and several national foundations are devoting substantial resources to the effort. In addition, the Obama administration—via the American Graduation Initiative—has sought to make community college reform a centerpiece of its domestic policy agenda, although the effort was substantially trimmed in the tightening fiscal climate.

As we think about reform, we must keep in mind two principles: first, it is important to build a system that offers multiple options, and second, the system should not track students—particularly low-income or minority students—into a narrow vocational path. These principles make the reform project so hard. The vocational functions of community colleges are significant both to young students and, increasingly, to older ones who rightly view community colleges as central to their efforts to navigate and succeed in a volatile labor market. Indeed, this is one of the core missions of community colleges, and it fulfills a vital function in developing human capital and bolstering the national labor market system. However, as we have seen, a substantial number of students, particularly students who enter community colleges directly from high school, aspire to a bachelor’s degree. The colleges should encourage and nurture these aspirations and not shunt the students into a purely vocational path. There is, in fact, reason to fear that the current system does track low-income students who are qualified for and aspire to four-year degrees into community colleges. The challenge then becomes how to create a system that can provide both high-quality vocational training and also serve as an effective pathway to higher levels of education.

As I discuss how to move ahead, I will devote little attention, with the exception of distance learning, to efforts to understand best practice. To date, a substantial amount of policy energy has gone into experiments and demonstration programs to test different versions of best practice. These are worthwhile efforts; however, as I argued earlier, while we may not have
an understanding of perfect practice, we do know enough about good practice to move forward with more aggressive reforms.

ALTERNATIVE PATHS

One approach for achieving better outcomes is to strengthen alternative pathways, particularly for young people and adults who are primarily interested in vocational training. Two strengths of the American system have always been flexibility and choice, and any steps we can take to support these values are all to the good. Competing pathways also offer some degree of competition to community colleges, as well as providing laboratories to study alternative practices that can act as release valves for the enrollment pressures that community colleges now face.

The categories of alternative pathways that seem worth considering are private, for-profit, proprietary schools; apprenticeships; and a select group of employment and training programs. In thinking about alternative pathways, we should avoid any stratification or, more specifically, avoid the reality or impression that one pathway is reserved for a relatively more disadvantaged group of students. Long experience with social programs demonstrates that when such stratification emerges, the “poor person’s pathway” loses support and funding over time. The key here is to ensure that choices about pathways are in the hands of students and that these choices are not constrained by family income.

Proprietary Schools

Proprietary schools have grown rapidly since their students became eligible to receive federal Pell Grants. In 2007 to 2008, students at proprietary schools received 19 percent of all federal financial aid funding. 40 Four-year institutions account for 57 percent of proprietary schools, two-year schools account for 24 percent, and less-than-two-year programs account for 19 percent. 41 As we have seen, proprietary school students are older and more likely to be minority and female than are students in public institutions. In addition, a significantly larger fraction of proprietary students attend full-time than do students at public institutions.

According to reported federal data, graduation rates for two-year proprietary schools are better than those in public institutions. The most recent IPEDS data are that 22 percent of public and 59.7 percent of proprietary school students receive their credentials within three years of entry. 42 These figures are biased against public institutions because they only include full-time students, and some observers have expressed concern that the figures are subject to some manipulation, for example, by changing the status of students in trouble to part-time so that they are not included in the IPEDS data. Nonetheless, other observers agree that at least some proprietary schools perform better than does the average public institution, likely because of the more tightly focused program and the more extensive support the proprietary schools provide. 43 However, the comparison to public community colleges may also be unfair, given that a higher percentage of for-profit students are older and attend full-time. Although some researchers argue that the profile of students in the two types institutions is similar, these patterns cast significant doubts on that argument, while also reinforcing the point that full-time attendance is desirable and should be encouraged. 44

Given their growth rate and their apparent success with many students, proprietary schools seem to represent an important alternative to public community colleges. However, three considerations counsel against becoming too optimistic. First, the growth rate in percentage terms notwithstanding, proprietary schools remain small compared to the community college universe and are thus unlikely to exert a great deal of impact on the distribution of outcomes. Second, proprietary schools are much more costly than community colleges, a fact that both limits their range and also helps explain their success. And third, there are serious reasons to worry about how well a significant minority of proprietary schools treat their students.

As we saw in table 5.1, two-year and less-than-two-year for-profit schools add up to less than 10 percent of public community college enrollment.
This is not trivial, but it is hard to say that these schools represent a significant alternative. Another way of seeing this is to note that proprietary schools get almost no enrollment from graduating seniors: 18.8 percent of graduating seniors went to public community colleges and only 1.4 percent to private ones.

The second problem with relying to any great degree on proprietary schools is their cost. Whereas public postsecondary schools receive only 30 percent of their revenue from tuition, proprietary schools rely on tuition for 88 percent of their revenue. The average two-year tuition for a proprietary school is six times that of an average public institution (roughly $12,000 versus roughly $2,000). From the student perspective, Pell Grants cannot offset this cost disadvantage.

The final, and perhaps most serious, worry is performance. Many observers believe that the best-performing proprietary schools have much to teach the public system and that these schools do in fact serve their students well. However, the darker side of this picture is that there appear to be significant problems among a nontrivial set of proprietary institutions. The history of these schools has been marked by periodic scandals and newspaper reports of fraud or near-fraud.

The debt load of students in proprietary schools is considerably higher than that of students who attend public institutions. According to the College Board, in 2007, 43 percent of students in for-profit associate’s degree programs carried a debt load of $20,000 or more, compared to 13 percent of students in public AA degree programs. The median debt load in the proprietary institutions was $18,783 compared to $7,125 in publics.

Not surprisingly, this debt load has consequences. The Government Accounting Office (GAO) recently compared student loan default rates at proprietary and public community colleges and projected that the four-year default rate at proprietary schools is 27.2 percent versus 16.6 percent at public community colleges. Among less-than-two-year schools, the proprietary default rate was 26.6 percent. In the same report, the GAO documented evidence of outright fraud—for instance, providing students with answers on placement tests or helping them obtain high school degrees from diploma mills—although the GAO also notes that it is not claiming that this fraud is typical.

Apprenticeships

The term apprenticeship refers both to a pedagogy—a combination of practical instruction and classroom learning—and to a particular formalization of that style of teaching. As a pedagogy, it holds great promise in many settings. As a specific institution, its possibilities are considerably more limited but still worth exploring.

There are more than four hundred fifty thousand people currently in registered apprenticeship programs and about the same number in nonregistered ones. A program is registered if it is formally certified by the U.S. Department of Labor or a state agency and meets certain standards regarding instruction and practice. It is not clear what “nonregistered” means, and it may be hard to distinguish these from relatively well-structured, firm-based training to which the employer simply appends a label. The evidence on rates of return is that completing a registered apprenticeship program pays off very substantially.

More than half of registered apprenticeships are in construction (56 percent) with another nearly 11 percent in the military. These patterns do narrow somewhat the scope of apprenticeships as an alternative pathway, as does the fact that virtually all registered programs are linked to a labor movement that is not growing. Nonetheless, it is certainly reasonable to encourage deeper penetration of the apprenticeship model in current apprenticeship occupations. It is also worth noting that nonconstruction apprenticeships use community colleges as the most common source for their formal instruction.

Alternative Training Providers

There are a wide range of employment and training programs that, taken together, constitute an alternative job training system. Some of these programs
are funded by the WIA and many others—such as the intermediaries supported by a consortium of foundations called the National Fund for Workforce Solutions—are funded privately by foundations. Some programs rely on a mixture of public and private funding, while others draw their resources from state training funds that are often based on the Unemployment Insurance Tax.

Although there is a widespread perception that the training programs that fall into this grouping are ineffective, the data point to a quite different conclusion. Evaluations of intermediary models are quite positive, intensive training programs show excellent results, and even WIA performs better than the popular perception. After many years of experimentation and the involvement of national technical support organizations, a promising best-practice model has emerged. The model involves a dual customer focus, with the programs responding to the needs of both trainees and the firm, and a higher level of support to trainees than is typical in job training programs. The problem is more one of reach and resources. While the best of these efforts do represent viable alternative pathways, they remain very small relative to the universe of need. WIA trains just over three hundred thousand people annually in occupational skills, and its funding has fallen by over 40 percent in real terms in the past two decades. Several of the good practice models that have demonstrated success are considerably more costly on a per-student basis, or even a "per graduated student," basis than the cost of community colleges.

Another promising source of training is public vocational institutions that enroll students for less than two years. In the fall of 2007, these institutions enrolled a total of 54,598 students, so the scale is small. However, at least some of these appear to be very successful and offer a model for community colleges. As an example, the Tennessee Technical Colleges report a graduation rate of 75 percent, which they achieve via a tightly focused curriculum, a requirement that students attend full-time, and teaching that is organized in blocks or modules and scheduled at times that are convenient for students.

**IMPROVING COMMUNITY COLLEGES**

Expanding and strengthening alternative pathways is important but, given the realities of scale, we need to direct most attention squarely on the community college system. The key to improving community colleges is to think sharply and ruthlessly about the missions of the institution and to focus on what it takes to achieve each mission and on how to prevent overlapping missions from interfering with each other and providing excuses for failure. This is even more vital as some community colleges continue to expand their responsibilities.

Community colleges have three distinguishable missions:

- Serving young high school graduates, some of whom want to enter a vocational track, many of whom want to transfer to a four-year school, but virtually all of whom want and would benefit from a "traditional" college experience. As we saw earlier, these students overwhelmingly aspire to a four-year degree. In the rush to think of community colleges as an extension of America's vocational training system, these students and their aspirations can be too easily overlooked. Furthermore, as we saw earlier, occupational projections suggest that the demand for associate's degree graduates may be insufficient to provide opportunities for future supply, and this adds additional weight to the transfer mission of community colleges.

- The second core mission of community colleges is serving older students and adults who are returning to school largely for vocational reasons. For these students, a narrower and more focused vocational program is appropriate, and part-time attendance is frequently unavoidable.

- The third mission is encompassed in the activities of the continuing education activities of community colleges. The most important of these activities is working with employers to design customized training programs and offering noncredit courses to local residents.
What is gained by sharply identifying these missions and distinguishing between them? The point is that community colleges should organize themselves to optimally achieve each mission rather than offer an undifferentiated menu that tries to serve all purposes. What we know about good practice suggests that for the younger students, school should be full-time and intense. The curriculum, support system, and financial aid should be structured to move students rapidly toward attainment of their degree or their transfer. For these students, smaller learning communities are a promising approach, and to the maximum extent possible, faculty should be full-time and as committed to the success of their students as are faculty at the best four-year schools. By contrast, adults who are returning to school to obtain new skills typically cannot attend full-time. The good practice keys to success here involve flexible scheduling and a modularized curriculum. In addition, the realities of scheduling make some elements, such as learning communities, more difficult to implement but make other components, such as day care, more essential.

In a simple world, we would stop with the first two missions described. Today, community colleges do neither of these well, and making substantial improvements is such a challenge that, at first glance, it makes little sense to ask anything else of the institution. However, this is not realistic. Community colleges cannot turn away from their local community of employers, because this mission speaks to an important need, because there are powerful internal and external constituencies that would resist such a move, and because employer support is essential for political and budgetary reasons. The challenge, then, is how to prevent this set of activities from diverting attention and resources from the core missions of the institutions. This consideration implies that the more entrepreneurial activities of community colleges—ranging from noncredit courses to customized training to ABE to serving as a WIA contractor—should be housed and administered in structures that are distinct from the degree-granting efforts. This unit should be self-supporting and internally “taxed” to support the more core missions of the institution (although there also should be more effort in terms of local and state policy to facilitate transfer of credit for students who want to move into a credit degree program).

Resources

Although arguing for throwing resources at problems is easy, any serious attempt to improve the performance of community colleges must start with an understanding that more resources are needed. Some key facts regarding finances are presented in table 5.5.

As is apparent, community colleges spend far less per full-time equivalent (FTE) student than do four-year schools, even when expenditures are limited to direct instructional expenses. In addition, consistent with their commitment to access, community colleges have not sought to make up the funding shortfalls via increases in tuition that exceed those of four-year institutions. Adding to the difficulty is that state support for community colleges has declined in recent years, and expectations are that, even in the face of growing enrollments, the declines will continue. There are

<table>
<thead>
<tr>
<th>TABLE 5.5</th>
<th>Community college finances</th>
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<tr>
<td>Sources of revenues for community colleges</td>
<td>38% from state, 20% local, 15% federal, 17% tuition</td>
</tr>
<tr>
<td>Average expenditure per FTE student</td>
<td>Community colleges = $10,500</td>
</tr>
<tr>
<td>Public four-year colleges = $31,900</td>
<td></td>
</tr>
<tr>
<td>Average instructional expenditure per FTE student</td>
<td>Community colleges = $4,100</td>
</tr>
<tr>
<td>Public four-year colleges = $8,000</td>
<td></td>
</tr>
<tr>
<td>Tuition and fees</td>
<td>Public community colleges = $2,017</td>
</tr>
<tr>
<td>In-state public four-year colleges = $5,685</td>
<td></td>
</tr>
<tr>
<td>Private two-year community colleges = $12,620</td>
<td></td>
</tr>
<tr>
<td>Increase in tuition and fees, 1976–2006 (after inflation)</td>
<td>Public community colleges = +105%</td>
</tr>
<tr>
<td>Public in-state four-year colleges = +165%</td>
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</table>

certainly tweaks that can be made in community college operations that will improve outcomes, but very substantial progress will unlikely be made without additional funding.\textsuperscript{64}

The realities of budgets underlie two personnel issues that have a significant impact on the performance of community colleges: the widespread use of part-time adjunct faculty and the very high student-to-counselor ratio. Across the country, two-thirds of community college faculty are part-time.\textsuperscript{65} In addition, the resources that community colleges devote to faculty development are minimal even for full-time faculty and almost nonexistent for part-time.\textsuperscript{66} Second, although we have seen that good practice entails counseling and support, the availability of these resources is scarce. Ironically, at Macomb Community College, where President Obama announced the American Graduation Initiative, there are fifty-eight counselors for thirty-three thousand credit students and fifteen thousand non-credit students.\textsuperscript{67}

Loosening the Constraints

I have argued that we know enough about "good practice" or "effective practice," and hence an excessive focus on demonstration programs and boutique experiments may not be wise. The exception to this point is the possible role of information technology and distance learning in loosening the fiscal constraints that confront reform. A full 45 percent of public community colleges offer at least one certificate or degree course that could be completed entirely via distance education, and nearly all institutions offer at least some distance options.\textsuperscript{68} The annual rate of increase in online instruction in recent years has been 12.9 percent, substantially above the overall increase in higher education enrollment.\textsuperscript{69} Whether these efforts lead to improved results is an open question, but pilot programs suggest that distance learning can be effective even in groups that have not had a great deal of exposure to computers and information technology.\textsuperscript{70} Whether this represents a strategy that can be successful at scale is very much worth exploring.

Incentives

It is simply unrealistic to expect substantial improvement without the resources to underwrite it. What we know about good practice, for example, the importance of support services, makes this clear. However, it is also irresponsible to call for additional resources without being adamant that they must be conditioned on performance. Just how to do this is not entirely clear, and the problem is made more difficult by another current reality. In the past two years, as the recession has deepened, community colleges across the nation have been inundated with adults who are returning to school in search of new skills. This huge demand poses two challenges. First, resources are stretched even thinner and hence reform is even more difficult. Second, the pressure on community colleges to do better is softened by the overwhelming success of their "access agenda." As things stand, there is no penalty in terms of enrollment or finances for the current level of success or lack thereof.\textsuperscript{71}

The record of efforts to impose accountability is very mixed. In the past three decades, twenty-six states have adopted incentive funding schemes, but fourteen of those states subsequently discontinued the effort. Even in those states that continued, the amounts of money involved relative to the overall budget were very small and often unstable.\textsuperscript{72} The fraction of budgets used as incentives varied, and both internal and external political pressures led to frequent changes in the indicators used for determining the incentives. Researchers found that community college opposition, unstable higher education budgets, and highly variable political support all undermined the effort.

The story of incentive funding is not entirely negative, and the best case appears to be in Tennessee. The percentage of each institution's budget available for performance funding steadily increased to 5.5 percent, and the indicators remained reasonably stable. However, a moment's consideration suggests that the impact of this program is largely symbolic. It is a rare, if nonexistent, institution that receives none of its potential performance funding, and hence the actual budgetary swing is relatively small.
Also notable is that the IPEDs graduation rate for two-year schools in Tennessee is 11 percent. The state has recently taken important steps to strengthen its performance funding system, but, for now, our overall judgment has to be cautious. What the foregoing suggests is that a state strategy has to involve a more aggressive and consistent use of incentive funding, with governors and legislators exhibiting strong leadership and strategy development.

Currently, the greatest source of pressure and incentives for improvement is coming from the foundation community, notably the Bill & Melinda Gates Foundation and the Lumina Foundation. Lumina, in its Achieving the Dream initiative, has focused on data in an effort to develop a "culture of evidence" that forces leadership and faculty to understand the outcomes of their institutions and the sources of failure. The Gates Foundation has a three-pronged strategy that aims to improve institutional practices, help students make smarter choices, and encourage public debate and political support for improving community colleges. This sophisticated approach holds very considerable promise, but at the end of the day, a strong governmental role must replace foundation resources and stimulation of new thinking.

Just as it has pushed K–12 educators to improve through initiatives like Race to the Top and i3, the federal government needs to become more actively involved in incenting, encouraging, and in some cases requiring community colleges to improve. As the GAO has pointed out, there is a need for stronger oversight regarding proprietary schools, but this need can also be generalized to the community college system overall. The current failure rate is simply unacceptable, and, via oversight, links to financial aid or to accreditation or both need to be addressed. Since the federal government provides substantial resources to community colleges through Pell Grants, there are many opportunities to leverage this investment to incite better performance.

Improving community colleges will require that other constituents, notably the business community and public interest groups, push for community college reform with the same intensity that they have pushed for reform at the K–12 level. There is simply no national movement or pressure currently comparable to that for public schools.

CONCLUSION

Community colleges are a source of great educational and economic promise. Nearly half of America’s postsecondary students attend these institutions, and the returns for those who obtain a credential are impressive. At the same time, community colleges are falling well short of their promise. The fraction of students who actually manage to obtain a credential is far too low; indeed, it is well below the success rates of high schools in graduating their students or four-year postgraduate schools in graduating theirs. Improving this record is an urgent priority.

This chapter argues that the search for best practices should not obscure the fact that we know enough about good practice to move forward. The key lies in thinking sharply about the mission of community colleges and the strategies for improvement. Not only do community colleges try to do too many things, but they also suffer because the current discussion has tended to treat them as purely vocational training institutions. This goal is important for many students, especially working adults and younger students who are seeking certificates. But many students see community colleges as a step toward a four-year degree, and we should also support this objective. It is important to avoid creating a class- or income-stratified higher education system because we should respect student aspirations and be concerned that the demand for community college skills may fall below the number of students the institutions may produce. Indeed, this latter point is often underappreciated in contemporary discussions but is potentially very significant.

One strategy for improving outcomes is to build up alternatives to community colleges; however, the scale of these alternatives will never match that of community colleges, and an improvement strategy aimed directly
at these institutions is imperative. Any such strategy faces very difficult realities: the underresourcing of the institutions, the large fraction of faculty who are part-time, the paucity of support and counseling for students, and the political inertia created by the multiple missions and their constituents. Forward progress requires additional resources that are aggressively linked to performance.

For-Profit Sector Innovations in Business Models and Organizational Cultures

Guilbert C. Hentschke

IN RESPONSE TO INCREASED demand over the last quarter-century, for-profit institutions of American higher education have grown much more rapidly, on average, than their traditional public and nonprofit counterparts—due in large part to their ability and willingness to provide innovative programs and services to the growth segments of the higher education marketplace. This chapter examines the largest and fastest growing of those for-profit institutions—primarily those publicly traded—in order to identify the most fundamental innovations, underlying business models, corporate cultures, and resulting market impact of these educational organizations.

In recent years, criticisms of the motives, educational quality, recruiting practices, and even legitimacy of for-profit colleges and universities have been highly publicized, in contrast to largely unexamined issues of their internal governance, corporate strategies, and pedagogical practices. I examine all of these organizational attributes here with the aim of understanding how these institutions are different—and why. Specifically, I suggest that governance differences associated with for-profit status provide