

# Universal Higher Education: Challenges and Alternative Strategies for Serving the New College Student

**W**ithout much public discussion, the United States has been moving quietly toward a policy of universal higher education, largely as a result of three radical transformations in our society. First, the skill demands of the labor market have dramatically increased, augmenting the earnings advantages for college graduates and reducing the real earnings for those with less education (Grubb 1996). Second, college has become much more accessible, and community colleges—a minor factor in the prior generation—have radically increased enrollments. Over the past four decades, enrollments at four-year colleges doubled, but they increased fivefold at community colleges (NCES 1999a). The third transformation has perhaps been the most remarkable: Community colleges have adopted a revolutionary policy of open admissions. Unlike most four-year colleges, community colleges have opened their doors to admit all interested students, regardless of their prior academic achievement. Any high school graduate can now attend, even with barely passing grades. In some cases, students do not even have to be high school graduates or have GEDs to enroll.

These three transformations have significantly changed the rules of college and the labor market. They offer students remarkable new opportunities. As with all revolutions, however, such dramatic changes may be difficult to understand. Indeed, they have led to many misconceptions and unintended consequences.

Common misconceptions abound. First, although students believe that high school is irrelevant, we have found many ways in which high school has a crucial influence on educational and labor market outcomes—but not in ways that students and teachers can see. Second, although colleges have reduced many barriers, we have found that new college students still face many difficulties and that colleges have created hidden barriers. Third, we have found that a

different type of college has developed innovative procedures that avoid these barriers and provide supportive pathways through college. These findings point toward several practical implications for improving the way four-year colleges help disadvantaged students.

### **The College-for-All Policy: Misconceptions about the New Rules of College and the Labor Market**

American high schools have quietly adopted a new policy of universal higher education, the “college-for-all” policy, while moving away from preparing students for work. In the Chicago public schools, for example, the past three superintendents have declared a commitment to getting all graduates into college, and they have systematically reduced vocational programs. Similar reductions have been seen in high schools in six different Chicago suburbs over the past decade (Rosenbaum 2001), and there are reports of similar college-for-all policies across the United States. The California legislature in 2002 considered legislation (S.B. 1731) making the college preparatory curriculum universal and mandatory (Education Trust 2003). This legislation assumes “that most, if not all, of California’s youngsters should attend college” (Walters 2002).

Although this new policy aims to respond to the new reality of college and the labor market, it is based on serious misconceptions. Similarly, educators have formed mistaken beliefs and pursued misguided practices. To better understand the problems associated with the college-for-all policy and to pave the way for proposed solutions, I will first address the misconceptions that have led to the current policy, including five misconceptions about the desirability of college for all and six about the labor market demands for high school graduates.

#### **Misconceptions about the Desirability of College for Everyone**

##### ***Misconception 1: All students should plan to earn a college degree.***

The college-for-all policy has had an impact across the nation. A national survey (NCES 1992a) found that 84 percent of high school seniors planned to get a two- or

four-year college degree. Even many students with bad grades, low test scores, and poor high school attendance planned to earn a college degree.

Many of these students will be disappointed. Although 84 percent of high school seniors expect a degree, only 41 percent of high school graduates age 30-34 actually have college degrees (NCES 1999a). Similarly, the national *High School and Beyond* (HSB) survey found that of seniors who planned to get a college degree, only 38 percent actually completed a degree in the 10 years following graduation (NCES 1999a). The problem is much greater for some students. For seniors with poor high school grades who planned college degrees, less than 14 percent completed a degree (Rosenbaum 1998, 2001).

For this 14 percent, open admissions provided an extremely helpful second chance. However, for the other 86 percent of these students, their second chance was only another experience of failure. It is hard to argue that these

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students should count on getting a college degree. Low-achieving students who graduate from high school can have college plans, but they need to know that they are at risk for dropping out of college and that there are other desirable options. If they were so informed, they might revise their plans, or they might increase their efforts while still in high school.<sup>1</sup>

##### ***Misconception 2: All students will gain some advantage from attending college, even if they do not earn a degree.***

Many students who plan to earn college degrees will enter the labor market without any college credits—about 31 percent of college entrants earn no college credits at all, and more than 52 percent of students with high school

grades of C or lower earn no college credits (Rosenbaum 2001). Such “college-bound” students are really work-bound, and they do not benefit from the college-for-all approach. In fact, they would probably experience better outcomes if they had other plans and preparation.

***Misconception 3: Open admissions policies allow all students to enter college classes.***

If students are taking classes in a college, are they taking college classes? Not necessarily. Open admissions allow all students to enter college, but that does not mean that they will be taking college classes. Many “college students” are actually enrolled in remedial courses—high school level classes (or lower), that provide no college credits (Deil-Amen and Rosenbaum 2002).

The best national estimate of the extent of remedial education comes from a careful analysis of college transcripts from a national survey of students in the class of 1982. The study shows that when they enter college, about 46 percent of students enroll in at least one remedial course, and among those entering community colleges, 64 percent enroll in remedial courses (Adelman 1985). A more recent national survey found that many students take three or more remedial courses, and this doubles their chances of dropping out (Deil-Amen and Rosenbaum 2002). If students are taking three or more remedial courses that provide no college credit, are these students really in college?

Moreover, students may not understand remedial classes. In an effort to reduce students’ feelings of inferiority, college advisors often downplay the fact that courses are remedial. As a result, many students do not even realize the nature of their course work (Deil-Amen and Rosenbaum 2002). This has four implications. First, in national surveys, students are likely to underestimate the number of remedial courses they have taken. Second, because the remedial courses often carry no credit, students cannot earn a two-year or four-year degree in the time they have scheduled. Even in their second year of college, many students still do not realize that they will not graduate at the end of that year. Third, high school students do not understand college remedial placement. High school students might know that prior graduates with poor grades are attending college, but they might not realize that these students are not earning college credits. This partial picture could encourage college-for-all fantasies. Fourth, even high school administrators do not seem to under-

stand remedial placement. Principals often brag about college attendance rates, but college attendance is not a major achievement if graduates are taking many remedial classes. High schools should monitor graduates’ preparation for college credit classes and be proud of that; college preparation, not college attendance, is the real achievement.

***Misconception 4: College plans lead to increased school effort.***

It is often assumed that college plans make students more motivated, giving them reason to work hard in high school. Unfortunately, this is often not the case. For many decades, work-bound students have believed that high school achievement will not influence their future career (Stinchcombe 1965), but now many college-bound students also hold this belief. In a survey of more than 2,000 seniors in 12 urban and suburban high schools, researchers found that almost 40 percent of college-bound students believed that school effort had little relevance for their future career (Rosenbaum 1998; cf. Steinberg 1996). Because anyone can enter college, no matter how poorly they do in high school, seniors report that they can wait until college to exert effort. National surveys found that 44 percent of high school seniors do less than three hours of homework a week (Rosenbaum 2001, 178). Not surprisingly, a study showed (even after controlling for other student attributes and beliefs) that students who believe that high school is not relevant show much less effort in high school (Rosenbaum 2001).

***Misconception 5: Counselors should advise all students to attend college.***

School counselors traditionally have been responsible for advising students on their educational plans. In the past, counselors often acted as “gatekeepers,” advising low-achieving students on alternatives to college (Cicourel and Kitsuse 1963; Rosenbaum 1976). However, recent studies indicate that school counselors’ practices have changed. The increased skill demands of the labor market, the vast expansion of higher education, and new open admissions policies have led many counselors to believe that all students can and should attend college.

In the current atmosphere, counselors rarely discourage college plans or suggest alternatives. A recent study in eight diverse urban and suburban high schools found that even if students have poor achievement, school counselors do not dissuade them from attending college, nor do they warn students if they have poor chances of college success

(Krei and Rosenbaum 2001; Rosenbaum, Miller, and Krei 1997, vol. 3). National data suggest that these practices are widespread. Only 32 percent of a national survey of seniors in 1982 indicated that their counselors urged them to go to college, but 10 years later fully 66 percent of seniors made the same statement (comparing *High School and Beyond* with *National Education Longitudinal Study* respondents). Indeed, 57 percent of seniors in the bottom half of the academic rankings reported that counselors urged them to attend college (Boesel 2001; Gray 1996).

Despite popular concerns about counselors being too restrictive, the opposite may now be true. Counselors who wish to warn students that they are unprepared for college report that they lack the authority to do so (Rosenbaum, Miller, and Krei 1997, vol. 3). As one counselor said, “Who am I to burst their bubble?” (Rosenbaum, 2001, p. 106). Similarly, counselors report that when they warn students that they are unprepared for college, parents complain, and principals support the parents. Counselors are not sure they have the authority to be candid and to report that students are not well prepared for college. In addition, counselors often lack information about desirable career alternatives to college—either good jobs or applied occupational programs that require fewer remedial courses.

Counselors have changed their message, and these changes are allowing many students to make college plans that are unlikely to be realized. Counselors alone cannot be singled out for blame. Frightening messages in the mass media have led to extraordinary parent pressures on counselors and have led high school principals to comply with these pressures. Moreover, colleges, employers, and government officials have failed to note the limitations of college for all. No wonder high school counselors and principals have acquiesced to the college-for-all ideology.

### **Misconceptions about the Labor Market**

Is there anything students can do in high school that can improve their success in the labor market? If students must enter the labor market without a college degree, does this mean they are destined for lives of poverty? Many critics claim that labor market statistics indicate that the new labor market makes college essential for a living wage. These critics suggest that without a college degree, nothing one does in high school matters in the labor market. These are serious misconceptions about the new labor market.

#### ***Misconception 1: All good jobs require a college degree.***

College-for-all advice is based on the premise that the labor market requires a college education. Although average earnings are higher for those with college degrees (Carnevale and Desrochers 2002), it is easy to misread these numbers.

First, averages conceal much variation. College degrees do not always have payoffs, and some high school graduates get good jobs. College degrees are not required to enter many rewarding and fulfilling jobs.

Second, researchers who go into the field to observe workers and talk to employers find that employees do not really need college level skills. In fact, although jobs require higher skills than in the past (when many jobs required only physical strength), the skills needed today can often be provided in high school and do not require college. Jobs increasingly require strong *high school* level skills—math, reading, and writing at a ninth-grade level. It is important to note, however, that more than 40 percent of high school seniors lack ninth-grade math skills, and 60 percent lack ninth-grade reading skills (Murnane and Levy 1996).

Third, employers report that they need so-called soft skills even more than academic skills (Shapiro and Iannozzi 1999), and high schools can provide these skills as well as colleges can. Many vocational teachers report that employers are eager to hire students with good social skills and work habits, even if they have poor academic skills. Moreover, social skills predict future earnings, as we show below.

The true lesson of the new labor market is that students need to acquire solid high school level skills and soft skills. The problem is that the high school diploma no longer signals these competencies. In our interviews, employers complain that some high school graduates are illiterate, so they cannot trust high school diplomas to certify high school level skills. They report using college degrees as signals that applicants possess *high school* skills. If high schools provided trusted signals of high school competencies, say employers, they would not have to hire college graduates to get workers with high school skills.

#### ***Misconception 2: High school achievement is irrelevant to job outcomes.***

If employers really want solid high school level skills, not college skills, then we would expect high school graduates who did better in high school to do better in the labor market, even without college. However, many high school

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teachers and counselors believe that academic achievement is not important for students' employment or earnings (Useem 1986). When counselors advise students to take jobs in fast food or retail, students might rightly infer that the diploma is irrelevant to job outcomes because many high school students already have such jobs. In fact, much research shows that employers do not consider high school achievement a great priority in hiring entry-level workers (Bills 1988; Bishop 1993; Crain 1984; Shapiro and Iannozzi 1999). This attitude by school counselors, students, and employers creates disincentives for students in the short term. In the long term, it is simply wrong.

Although high school grades and test scores have little relationship to *short-term* outcomes, they strongly predict *long-term* outcomes. High school grades do not predict college attendance (because of open admissions), but they do predict students' ultimate degree attainment. These relationships remain significant after many controls (Miller 1998; Rosenbaum 2001). Although high school grades do not predict earnings right after high school, they strongly predict long-term earnings, even after controlling for educational attainment (Altonji and Pierret 1997, Miller 1998; Murnane, Willett, and Levy 1995; Rosenbaum et al. 1999). For students who earn no college degree, a rise of one letter grade (from C to B) is associated with a 13 percent earnings gain at age 28—almost as much as that of a B.A. degree, which increases earnings by just over 14 percent (Miller 1998; Rosenbaum 2001, 73, 183). It is unfortunate that high school teachers or counselors cannot follow most of their graduates nine years or more after high school. Because they cannot, they rarely realize the long-term importance of high school achievement.

***Misconception 3: Noncognitive behaviors in high school are irrelevant to education and job outcomes.***

It is often assumed that the increased skill demands of the labor market mean that employers primarily need academ-

ic skills. Yet employers say their greatest needs are soft skills, such as good work habits and social competence (Rosenbaum 2001; Shapiro and Iannozzi 1999). Moreover, soft skills are strong predictors of job performance. In an assessment of a large corporation's selection process, researchers found applicants' soft-skills ratings were better pre-

dictors of job performance than performance on a cognitive test (Murnane and Levy 1996; cf. Houghton and Proscio 2002). Similarly, analyses of a national survey indicate that students' educational attainment and earnings nine years after graduating from high school are significantly related to their noncognitive behaviors in high school—their sociability, discipline, leadership, homework time, and attendance—even after controlling for background characteristics and academic achievement (Rosenbaum 2001).

Moreover, young people must learn these behaviors before entering the labor market. Employers report that they do not know how to train for soft skills, so they do not try (Miller and Rosenbaum 1997). Most job training programs focus on academic or job skills, because soft-skills training is difficult, expensive, and time consuming (Herr, Wagner, and Halpern 1996). If new employees do poor work or get into conflicts with coworkers, employers often do not train them, they fire them. If students do not learn soft skills before entering the labor market, they probably will not be given a chance to learn them on the job.

***Misconception 4: Vocational education is irrelevant to job outcomes.***

Studies find substantial employment benefits from vocational education (Arum and Shavit 1995; Campbell et al. 1986; Kang and Bishop 1986). A comprehensive review of research on vocational education concluded that “the strongest, most consistent finding throughout the literature [on vocational education] is that improved earnings do accrue in situations where vocational training is directly related to job tasks” (Boesel et al. 1994, 2:137-39). This means that programs must offer skills in areas that are in demand in the labor market and that programs may need to assist students in finding appropriate jobs.

Vocational education courses have other benefits as well. They contribute to academic achievement in mathematics (Wirt et al. 1989); they can reduce high school dropout rates (Boesel et al. 1994, vol. 2); and they may

even lower teen pregnancy rates (Beattie 2001). Moreover, vocational education does not preclude college enrollment. More than 20 percent of graduates from business and health programs obtain an associate's degree and many go on to attend four-year colleges (NCES 1991). Indeed, the standards in some college occupational programs are higher than the standards in corresponding academic programs in the same college (Brint 2003).

Some college-for-all advocates seek to abolish vocational education, yet vocational education does not necessarily conflict with their goals of college attendance or with improving preparation in students' academic courses. However, vocational education provides a valuable backup option for students who do not attend college, for students who have jobs during college, or for those who do not complete college degrees.

***Misconception 5: High school teachers and counselors cannot help students get better jobs.***

Unlike secondary schools in Germany and Japan, American high schools are not responsible for helping students get jobs after graduation. However, recent research has discovered that some American high schools help some students get jobs. More than 8 percent of work-bound high school graduates obtain their jobs after high school primarily through help by their teachers and counselors. Furthermore, high schools do not merely help students who are already favored in the labor market: Females and minorities are significantly more likely to get school help than white males, and low-income students are equally helped (after controlling for achievement). In addition, students who got jobs through school help had better career trajectories. Nine years after graduating, they had 17 percent higher earnings than students who got jobs through direct applications (Rosenbaum 2001).

In addition, many vocational teachers have developed strong contacts with employers, and they use these contacts to help students get jobs (Rosenbaum 2001). Although these teachers' job placement efforts are not formal job duties and are not widely known, they provide important career benefits to some students.

Most guidance counselors are not aware of good jobs and so advise students to take jobs in fast food or small retail shops, jobs that offer little or no advancement oppor-

tunity. Vocational teachers, on the other hand, report that many good jobs are available to high school graduates. They help students get jobs that lead to rewarding careers in a wide variety of fields, including construction, trades, clerical and administrative support, technical specialties, printing, graphics, financial services, and social services (Krei and Rosenbaum 2001). Many vocational teachers have worked in these fields, and they have contacts with employers who trust them to suggest good candidates for their job openings (Rosenbaum 2001).

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***Misconception 6: Society can wait to address students' employability until after high school.***

The United States prides itself on offering second chances, and the open admissions policies at community colleges are a prime example. Yet doors begin closing after students leave high school. Poor high school preparation can lead to a slow start in the labor market, which can harm later careers. If students get their start in dead-end jobs, if they have many periods of job turnover and unemployment, or if they wander into crime or drugs, these records may stigmatize their future employment prospects. Even society's efforts to help youth may backfire. In a random assignment experiment, a job training program that offered good training led to significantly *lower* earnings than a control group, presumably because it stigmatized participants as having poor employment histories (Bloom et al. 1992; Cave and Doolittle 1991). High school may be the last chance that many students have to fix problems before they confer a durable stigma.

High school staff are reluctant to urge students to make career decisions in high school. They don't want the responsibility, and some feel students are too young.

However, if high school doesn't provide advice, community colleges have worse counselor-student ratios and give students little career advice (Deil-Amen and Rosenbaum 2002). Giving students realistic advice while they are in high school allows them to get preparation and help while it is still available and nonstigmatizing. If they weren't deluded by the college-for-all approach, educators could prevent many problems with job preparation and job placement assistance.

## New Rules of the Game

These misconceptions reflect a lack of understanding about changes in colleges and the economy. Because the playing field has drastically changed in the worlds of education and labor markets, new "rules of the game" have arisen. Students and educators should know these rules, but they probably do not because many high school effects cannot be easily seen. The new rules of college and the labor market can be succinctly summarized:

All students can attend college, but low-achieving students should be warned about remedial courses and their own likely prospects of success or failure.

All students can plan to earn a college degree, but if they are unprepared they must be willing to repeat high school courses in college, spending the extra time and effort in noncredit remedial courses, with higher risks of failure.

Even if students have college plans, they must still prepare for work. All career plans should include multiple options, particularly for students who are unlikely to complete college.

College plans *require* increased school effort. If students delay their effort until they get to college, they delay their eventual degree completion and make it less likely.

Policies to improve college preparation should not overlook the need to provide information about students' college prospects and to provide options other than college.

Many good jobs do not require a college degree, and high school graduates can actually get good jobs.

Students can improve their chances of getting good jobs by

- having better academic achievement,
- having better noncognitive behaviors,
- taking vocational courses, and
- getting job placement help from teachers.

In summary, college may be the right course of action for many students, but not for everyone. Even if college

degrees improve job outcomes, that is true only for students who have some prospects of earning college credits and a degree. Students who do poorly in high school have very little chance of earning a college degree, and their chances of earning even just one college credit are less than 50-50. High school will also have an impact if students enter the labor market without college.

Finally, it is important to note that students' employment prospects can best be improved *before they leave high school*. School staff can play a critical role in providing students with information and resources to help them make choices that will support their long-term goals before it is too late. Unfortunately, no one is providing clear information and a clear mandate for high school teachers and counselors to give this advice. Indeed, the college-for-all mentality is giving the false message that nothing can be done for those who do not attend college.

## Do college procedures contribute to students' difficulties in college?

Concern about the financial barriers to attending college is widespread. Students from the lowest quartile of socioeconomic status (SES) are about one-half as likely to attend college as those from the top quartile (53 percent versus 96 percent). Yet these low-SES students are *one-ninth* as likely to *complete* college degrees (7 percent versus 61 percent), according to Wong and Rosenbaum (2002). Disadvantaged students face barriers to college admissions, but they face even stronger barriers to college completion. As noted, deficiencies in soft skills have a significant impact on degree completion, and they seem to mediate some of the social class influence on degree completion.

What social difficulties do disadvantaged students experience in colleges, and can we identify any college procedures that may contribute to these difficulties? Because a high proportion of disadvantaged students attend community colleges, Regina Deil-Amen, Ann Person, and I have been studying these issues in community colleges. We interviewed more than 60 students and 60 faculty members in seven community colleges to find out what kinds of barriers and obstacles students experience in getting through college.<sup>2</sup> Although community colleges have rightly been praised for democratizing higher education and making it accessible to all people, regardless of economic or educational background, we found that students

experience seven kinds of problems in community colleges, as reported below.

### **1. Bureaucratic hurdles**

Although community colleges offer a broad range of courses and degrees, students have great difficulty acquiring and assessing needed information about courses, requirements, and options. Students face many hurdles: coping with class schedules and requirements, filling out enrollment forms, registering for classes, applying for financial aid, making choices that efficiently accumulate credits toward a degree, and fitting in work and family obligations. Students report having to search all over campus for information about specific program requirements and to learn which courses lead to their desired goals and meet requirements most quickly. Many students never learn of the state and federal financial aid options available, and those who do often learn from family or friends, not from college staff.

### **2. Confusing choices**

Students face a confusing array of hard-to-understand choices because of the wide variety of programs, each having different requirements for their various degrees and certificates. Even choosing classes is a daunting task. Students must schedule all the required courses in the correct order, paying attention to prerequisites and general education courses and synchronizing course schedules with work and family schedules. Mistakes can mean that they may have to wait an entire year before the course is offered again, creating overwhelming setbacks for students with limited resources and constrained timetables. My colleague and I, both Ph.D.'s, spent many hours trying to understand some of the catalogs' labeling systems for classes and degrees, and several interviews were necessary to clarify the information. Not surprisingly, disadvantaged students rarely know what questions to ask.

### **3. The burden of student-initiated assistance**

Community colleges require that *students* initiate the process of seeking out guidance. We found several kinds of problems. Some students don't know what kind of help they need nor how to get it. Often, if they know they need help, they don't seek the information they need soon enough, because counselors' schedules are often backlogged for two months or more.

### **4. Limited counselor availability**

Counseling services at community colleges are vastly understaffed, with typically 800 students per counselor (ratios half that size are criticized in high schools). Students seeking a counselor at preregistration may not get an appointment until October. Further, the counseling office is often in a remote part of the campus. As a result, the majority of students we interviewed had not spoken with a counselor because of the difficulties and delays entailed.

### **5. Poor advice from staff**

The complexity of course catalogs and degree requirements is so daunting that getting information proves to be challenging, even for counselors and administrators. Students report receiving conflicting or wrong information, and program heads report that counselors often lack recent information about program offerings and requirements. Many students report being guided into courses that were unneeded, wasting scarce time and money. Some students report taking unnecessary courses that were very difficult, and in some cases, students' persistence in college was threatened because of an unneeded course.

### **6. Delayed detection of costly mistakes**

Students' mistakes are easy to make and hard to detect, and even a few simple mistakes can be devastating. These mistakes are often not detected for some time. Although we did not interview dropouts, our respondents described mistakes that led them to contemplate dropping out, and they report that many of their friends did drop out in comparable circumstances. For such students, delays and mistakes increase the chance that they will run out of time or money and be forced to drop out of college.

### **7. Poor handling of conflicting demands**

Although community college staff boast that the variety of morning, afternoon, evening, and weekend class times allows students to arrange their school schedule around their outside obligations, this approach imposes new problems. Administrators do not create coordinated schedules, needed courses are often scheduled at vastly different times of day, schedules change each term, and some courses are not offered for several semesters. Thus, schedules are extremely difficult to coordinate with outside work and family commitments, and every new term requires changing work and child-care arrangements.

## The New Private Occupational Colleges

Although private colleges enroll only about 4 percent of two-year college students (Bailey, Badway, and Gumpert 2002), they may offer some useful ideas about alternative procedures. Similar to the community colleges we studied, the private colleges we studied offer accredited two-year degrees. Because of their emphasis on occupational preparation, we call them occupational colleges. We selected occupational colleges that offer applied programs in the same fields as the community colleges we studied: business, accounting, office technology, computer information systems, electronics, medical assisting, and computer-aided drafting.

Research suggests that public and private two-year colleges differ greatly in their degree completion rates. In the most recent national longitudinal survey, BPS95-01 (BPS 1995), the five-year degree completion rates (A.A. or B.A.) of students who began at public two-year colleges (community colleges) in 1995 was only 26 percent (Bailey et al. 2003).

In contrast, private occupational colleges have much better degree completion rates than community colleges (Jenkins 2002; Bailey et al. 2003; Futures Project 2000). The one private two-year college where we have systematic information may not be typical, but it provides a striking contrast. Its six-year degree completion rate is 65 percent for graduates of the Chicago public schools. The contrast is even more impressive if we focus on black students. In the national data, only 11 percent of black students who began at public two-year colleges completed a degree in five years, whereas 57 percent did so in the private occupational college. We lack completion rates for other private colleges, but it is noteworthy that, according to data collected by the Illinois Board of Higher Education, the ratio of graduates to enrollees is much higher in private two-year colleges than in their public counterparts (IBHE 2002).

What procedures do these occupational colleges use, and do they suggest ways that community colleges could improve student completion rates?

### “Structuring Out” the Need for Social Know-How

Unlike traditional college procedures, we find that these occupational colleges have found innovative procedures that avoid barriers and provide supportive pathways

through college. They have devised ways to transform *implicit* “rules” into *explicit* organizational structures and policies. They create programs that students can easily understand, master, and negotiate without having much prior knowledge about college. They have found that they can improve student success by making their curriculum *more* structured, not less so. By structuring students’ choices, they have found that they also reduce the likelihood that students will make mistakes in their course choices. These colleges also implement strong guidance and tight

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advisory relationships with their students, which facilitate completion and successful work entry. They accomplish this by procedures that address the seven above-noted problems in community colleges, as detailed below.

### *Eliminating bureaucratic hurdles*

First, occupational colleges minimize bureaucratic hurdles. Enrolling is a simple process handled mainly by a single individual who makes all the arrangements for a student. Every student is then assigned to a single advisor, who assists in selecting courses. Information is available in one place, and students do not have to search the campus for information. Similarly, financial aid is a simple process. Whereas community colleges provide little or no help with financial aid, occupational college admissions staff physically walk applicants to the financial aid office, where a staff person answers all questions and fills out the financial aid application with each student (and his or her parents, if desired).

### *Reducing confusing choices*

Second, community college students face a confusing array of course choices with unclear connections to future career trajectories, whereas occupational colleges offer a clear set of course sequences aimed at efficient training for specific career goals. When they enroll, students sit down with an

admissions counselor who reviews all the degree programs and the courses they entail, with an explanation of implications, sequences, requirements, and job outcomes. Students' achievement and goals are assessed. In some cases, students are advised not to attend the college if their goals do not match program offerings.

### ***College-initiated guidance and minimizing the risk of student error***

Third, in contrast to the burden of student-initiated guidance, occupational colleges automatically assign each student to a specific counselor who monitors his or her academic progress. Students are required to meet with this advisor each term before registering for courses, and advisors provide assistance that is specific to each student's needs, informing them of required courses and specific electives.

### ***Investing in counselors***

Fourth, whereas community colleges offer few counselors, occupational colleges have invested in counseling services and job placement staff. Community college counselors perform many counseling tasks, including personal, academic, and career counseling, and typically have 800-to-1 ratios for all these services. Some occupational colleges, on the other hand, have counselor-to-student ratios one-third of those in community colleges, and that is just for academic counseling. In addition to academic counseling, occupational colleges' separate job placement offices have low student-to-staff ratios as well, ranging from 90-to-1 to 122-to-1 at these colleges. None of the community colleges we studied have *any* staff devoted to job placement, and other research suggests that may be typical (Grubb, 1996; Brewer and Gray 1999).

### ***Eliminating poor advice***

Fifth, in contrast with community colleges, the highly structured programs make advising a simple process. Students are organized into cohorts, which makes it easy to know what courses students have had and what they need. In addition, occupational college advisors are regularly informed about departmental requirements, and faculty communicate with advisors about individual students.

### ***Quick detection of mistakes***

Sixth, unlike community colleges, occupational colleges have student information systems that keep advisors informed about students' progress and difficulties. At sev-

eral occupational colleges, attendance is regularly taken in classes, advisors are quickly informed of absences or the first signs of academic difficulties, and students are contacted by their advisor before the problem gets serious. After midterms, instructors notify advisors of those students who are performing poorly in class. Unlike student-initiated advising at community colleges, occupational colleges require regular meetings with advisors, and students get to know their advisors on a personal basis and thus are more likely to approach them for help—even when they are not required to do so.

### ***Reducing conflicts with outside demands***

Seventh, unlike community colleges, which have complex class schedules in noncontinuous time slots, occupational colleges schedule courses that would typically be taken in a program back-to-back. This “blocking” of courses decreases commuting time and makes it easier for students to attend school while they continue to work. Occupational colleges also offer the same time schedules from one term to the next, so work and child-care arrangements made for one term will continue to work in the next. Finally, every program is designed to offer the courses necessary for students to make progress every term.

The occupational college model is not for everyone. Although these occupational colleges offer degrees in several fields, students' options are limited. For students who have the know-how for making these decisions and who do not face strong external competing pressures, community colleges' wide range of programs and courses may work very well. However, community colleges often require students to have the time and skills to obtain information, puzzle among choices, explore, and make false starts and mistakes in pursuit of a degree, often wasting precious time and tuition in this complex system. For students who lack the social know-how or the time to work through these mistakes, their attempts at college may amount to nothing more than a series of unrelated credit hours and failed dreams. Many occupational colleges have devised procedures that reduce the need for students to possess social know-how, and they remove many of the barriers that deter students in community colleges.

### ***Statistical indicators of differences between the two types of colleges***

Having observed that students face more confusing circumstances in community colleges than in private occupa-

**The labor market only requires high school skills for many good jobs, but high schools give diplomas to many students who lack these skills. Employers inflate their requirements to college degrees, because they can get no other indication that students possess high school skills.**

tional colleges, we surveyed 4,400 students in the 14 colleges we studied to determine whether students in the two types of colleges had different levels and frequencies of misconceptions. Our survey provided three indicators of student misconceptions.

First, the survey asked, “Have you ever taken any course which you later discovered would not count toward your degree?” Whereas 45 percent of the community college students reported such mistakes, only 16 percent of occupational college students reported likewise.

Second, the survey listed each college’s high-enrollment remedial courses, asked students whether they had taken any of these courses, and asked if the course gave credit toward a degree. We already knew that these courses did not give college credits. Many students, on the other hand, did not. In the community colleges, 47 percent of students in these courses mistakenly thought they counted for credit, and the problem was greater for blacks and Hispanics (more than 50 percent) than for whites (less than 42 percent). In contrast, at occupational colleges, only 26 percent of students believed these courses counted for credit, and the problem was not greater for blacks and Hispanics than for whites.

Third, we asked students how long they expected their degree to take at two time points—when they first entered college and currently. Students in public colleges were much more likely to increase their timetable by a year or more between those two time points than students at private colleges (46 percent vs. 24 percent).

These statistics suggest that students are two to three times more likely to make mistakes, have inaccurate perceptions, and increase their expected timetables in community colleges than in occupational colleges. Apparently, the occupational college approach of establishing very clear procedures and providing extensive advising seems to result in students having better infor-

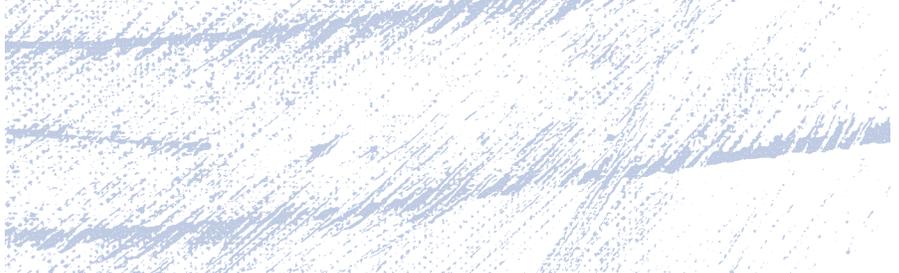
mation and more realistic plans. Although community colleges assume that students can make informed choices, our findings raise serious doubts about that assumption. Many students are making choices based on misinformation and unrealistic plans.

## Conclusion

Universal higher education is an amazingly idealistic policy, but it may lead to many unintended consequences—changing the meaning of higher education, its curriculum, and the ways in which a college education is provided. It may have spillover effects on inputs and outputs—on high schools and on the labor market. Universal higher education may reduce high schools’ authority. Seeing that college access is guaranteed, some students believe that they can challenge teachers’ authority and suffer no penalty, and some teachers may respond to their diminished authority by leaving the profession or by reducing their demands on students (Sedlak et al. 1986). Although these changes have their greatest impact on low-achieving students, even high-achieving students will be in classes where teachers’ authority is questioned, and such students may wonder if they could get an equally good college education with less effort.

Those looking for justice may see it in our finding that unmotivated students will end up worse off—taking remedial classes and earning fewer college credits, with less chance of earning a degree and with lower salaries in the workplace. But this is not a happy ending. Students waste their high school years, they disrupt high school for others, and they force colleges to allocate scarce resources to providing high school courses as an increasingly large segment of their curriculum. Moreover, students’ disappointing outcomes are largely invisible, so they prevent subsequent cohorts from seeing the incentives for high school effort. No one learns from these outcomes until it is too late.

Universal higher education is unrealistic and unnecessary in the United States at the present time. It is unrealistic, so we pretend to offer open admissions into college, when in fact unprepared students take *high school* courses in college classrooms, without realizing they are not earning college credits. It is also unnecessary. The labor market only requires high school skills for many good jobs, but high schools give diplomas to many students who lack



these skills. Employers inflate their requirements to college degrees, because they can get no other indication that students possess high school skills. In other words, poor information is the reason students have unrealistic goals and employers require unnecessary college credentials.

We suggest several policy implications. Society must give students clear information about the achievement prerequisites for college courses and for good jobs. Exams could do this, but the exams we give now are not helpful to students, either in content or form. For instance, after passing state high school graduation exams (which should indicate that students possess high school skills), many students fail the state college placement exams (an indicator that they lack high school skills). The same state government has devised two examinations that often produce contradictory information. We need better articulation between these exams if students are to know whether they are prepared for college. Moreover, many exams report scores in the wrong way—as percentiles rather than achievement level. Every year, exams inform half of all students that they are in the bottom 50 percentile, but students get no useful information from this test. High school seniors need to know whether they possess the academic skills required for college courses and for good jobs, but percentile scores do not answer that question.

One solution is relatively straightforward. Colleges already give examinations to entering freshmen to assess their college readiness. These exams could be given to high school seniors (and another version to high school sophomores), which would tell them whether they are making satisfactory progress toward college. If not, students must either improve their achievement or revise their goals. We must also devise tests to tell students whether they possess the academic skills required for good jobs.

These findings also indicate important steps that can be taken in high schools. First, students must realize that high school grades are important for their future careers. Although any single grade is imperfect, when averaged over a high school career, grade point averages are the very best predictor of how students will do in college and in the labor market. This impact is not because of artificial labels. Although grades are used for admissions to selective colleges, most colleges are not selective, and most unselective colleges, as well as most employers, ignore grades. However, grades provide signals of the capabilities needed in college and the labor market. Arguing with teachers to

improve grades misses the point; grades have an impact on long-term outcomes, even when they do not affect college admissions or early earnings.

Second, success in college and the labor market is not one-dimensional; students' work habits and social skills have an impact. Even students with low academic achievement can benefit by high school experiences that help them develop these soft skills. Both academic and vocational classes can help students develop these skills.

Third, high schools can improve the information they convey to employers. Because students' work habits and social skills are hard for employers to see, high schools can create appropriate ratings that help employers identify students who have these soft skills. In response to an earlier article (Rosenbaum 1989), a high school developed a new "employability rating," which informed employers about students' work habits and social skills. Employers found this rating helpful; they used it for hiring, and students quickly saw reasons to learn these skills. Such ratings, if accepted by employers, provide incentives to students.

Fourth, teachers can help students enter promising careers after high school. We have discovered that many students across the United States are getting jobs after high school through the help of their teachers, and these jobs lead to much higher long-term earnings. Our results indicate that teachers' contacts are especially helpful to students who otherwise would have difficulty in the labor market: females, blacks, and Hispanics. Teachers report that their contacts are especially effective in helping students who do not look impressive in job interviews, such as those who have low academic achievement, limited English proficiency, or disabilities. The world is not one-dimensional, and high schools can devise ways to develop and signal students' other positive attributes besides academic achievement.

More generally, open admissions and changing labor market demands have given the mistaken impression that high school is not important. This is true in the short term, but not in the long term. Unfortunately, people usually cannot see long-term consequences. Our research found that a wide variety of achievements, behaviors, programs, and teacher actions have long-term effects on students' outcomes. These influences are not seen by students, teachers, counselors, or employers, however, so all of these individuals are acting on misconceptions in ways that are counterproductive to their own interests and the interests of others. All of these individuals need this information.

The second set of studies, the research on two-year colleges, also raises important questions about information and how it is acquired and disseminated. Although our findings do not necessarily apply to four-year colleges, it is useful to think about possible implications for four-year colleges. As I note below, the studies raise important questions, suggest new procedures, and identify unconventional innovations that could benefit students, particularly those from disadvantaged backgrounds. Each of these three points is addressed below.

First, the results *raise important questions*. If we ask the same questions about four-year colleges as we have asked about two-year colleges, I'm not sure we know the answers. What difficulties do disadvantaged students face in four-year colleges, and to what extent do procedures in four-year colleges pose *hidden* obstacles for these students? Do disadvantaged students in four-year colleges experience difficulties similar to those found in two-year colleges—that is, do they have difficulty getting information, assessing that information, or accessing advising resources? Are disadvantaged students more likely to make mistakes, and what are the consequences of these mistakes for their education and degree completion? The most disturbing aspect of these findings is that they defy commonsense conceptions, suggesting the possibility that the commonsense assumptions we make in four-year colleges may also be incorrect. In fact, the nonobvious findings in two-year colleges—students' misinformation, unrealistic plans, and mistaken choices—may force us to ask how much we know about the experiences and difficulties of disadvantaged students in our four-year colleges and about how college procedures influence these difficulties. At the least, these findings should make us ask new questions and conduct new studies of our four-year institutions.

Opening admission to disadvantaged students may pose far more challenging difficulties than most colleges have realized. We can call them low-income students, but their problems may transcend income. Providing adequate financial aid is necessary, but it may not be sufficient. These students face academic challenges, but they also face challenges beyond academics, including a vast array of

informational, advising, support, and structural challenges that we have not yet fully considered.

Second, these results suggest some new procedures that colleges might employ to reduce the difficulties experienced by disadvantaged students. What kinds of information, skills, and advising do colleges need to present, and what is the best way to do so? Community colleges have increasingly improved the information they provide in their catalogs, but as their catalogs get thicker, students cannot always find the information they need. Can four-year colleges devise procedures that will provide adequate information and support to students

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whose parents can provide neither? Can they, like occupational colleges, provide larger numbers of advisors and create cohorts of students to meet regularly with these advisors, so that the advisor and the cohort members become easily available sources of information? Obviously, hiring more advisors requires additional resources. However, if advising procedures are made systematic, then college seniors could become proficient advisors for freshmen, and advisors for seniors would not need extensive professional training.

Third, these results *identify unconventional innovations that may be beneficial, particularly for students from disadvantaged backgrounds*. Even more difficult than finding additional resources is implementing procedures that challenge deeply held norms. Four-year colleges generally avoid offering structured programs, preferring to encourage students to explore widely diverse options. Although unstructured exploration may work well for many students, we must wonder whether current norms about exploration and choice pose special difficulties for disadvantaged stu-

dents, whose parents and prior experience do not provide requisite information.

Four-year colleges cannot and should not emulate occupational colleges in every way. However, occupational colleges have been innovative in devising procedures for disadvantaged students, and they may offer some good ideas.

We have seen that occupational colleges take steps to “structure out” the need for social know-how by reducing (1) bureaucratic hurdles, (2) confusing choices, (3) student-initiated guidance, (4) limited counselor availability,

**Occupational colleges systematically analyze the most common conflicts students experience, devise practical strategies for students to handle those difficulties, and then train advising staff with these procedures. Especially prominent in for-profit colleges, this approach has a certain corporate style: analyzing an institutional problem, devising a solution, and disseminating the solution throughout the institution.**

(5) poor advice from staff, (6) slow detection of costly mistakes, and (7) poor handling of conflicting demands. They have simplified information requirements, clarified choices, required advising sessions, increased counselor availability and proximity, coordinated information, created rapid student information systems, and devised strategies students can use to reconcile competing demands. If disadvantaged students in four-year colleges experience difficulties similar to the ones we found in community colleges, these strategies may be beneficial. Are there ways these strategies can be reconciled with the goals of four-year colleges? The answer to that question is unclear, but here are some initial thoughts.

**Exploration within structure.** It is my impression that colleges’ emphasis on intellectual exploration has been turned into a new model of the “shopping mall college.” Instead of offering highly structured programs in which there is an open exploration of ideas, the college curriculum has vastly expanded into a proliferation of electives,

while reducing requirements and prerequisites. Regardless of the merits of this change, our comparison of community colleges and occupational colleges indicates that disadvantaged students have a disproportionate amount of difficulty with unstructured choice. Can four-year colleges offer more structure without sacrificing intellectual exploration?

In the 1960s, Yale University had a highly structured Directed Studies program, which required most courses in the first two years of college. This allowed faculty to assume that all students had a shared familiarity with some subjects across different disciplines. Students who entered college with no knowledge of European history, philosophy, or literature would soon have a shared knowledge to bring to bear in every course. That is not possible in the shopping mall system we currently offer. Yale’s program selected only 120 students who were especially motivated and well-prepared (because it required heavy reading and extensive writing), yet the structured approach is very good at leveling the playing field between students from elite prep schools and inner-city schools.

**Information systems.** Four-year colleges vary in their student information systems. At some small four-year colleges, faculty know that a student’s grandmother is ill, whereas at some large universities, faculty may not know when a student is ill. Colleges may avoid collecting information about students because of some general principle about student autonomy, but informal mechanisms in small colleges allow such information to be available anyway. Do large universities have adequate information systems for the early detection of students’ problems before they get serious, especially for disadvantaged students? The answer to this question is unclear, but if there is a problem, computerized information systems may provide part of the solution.

**Continuing advising.** Four-year colleges are aware of the need for close advising in freshman year, but advising often declines in later years. Disadvantaged students may need additional information in later years when choosing a major, choosing careers, or preparing to job search. Like the community colleges we studied, many four-year colleges offer optional career counseling, but student-initiated programs may not be adequate, as we discovered in the

extensive serious mistakes among community college students—especially those from disadvantaged backgrounds.

In my own four-year college, I marvel every spring to discover that many undergraduates who wear jeans for three years suddenly appear impeccably dressed during the job interview season. Some hidden training from their middle-class past emerges when it is needed. A few students lack that information, however. One student's idea of dressing for a job interview was a short skirt and bare midriff, and she told interviewers she was eager to work for "capitalists." Student-initiated advising isn't always sufficient. Although four-year colleges are reluctant to make anything mandatory, if disadvantaged students are making serious mistakes in their course choices and job searches, mandatory advising may need to be considered.

**Practical strategies for advising on student problems.**

Occupational colleges systematically analyze the most common conflicts students experience, devise practical strategies for students to handle those difficulties, and then train advising staff with these procedures. Especially prominent in for-profit colleges, this approach has a certain corporate style: analyzing an institutional problem, devising a solution, and disseminating the solution throughout the institution. In contrast, some four-year colleges tend to take a professional approach, which requires individual advisors to determine how to address each problem. Although this makes sense for idiosyncratic problems, strategies for addressing common student problems should not have to be reinvented by individual staff members. Advisory staff members should devise some standard best practices to use routinely. Advisors can tailor those approaches and add to them, but they shouldn't have to reinvent the wheel. Moreover, routine advice and good training allow use of nonprofessional advisors, including college seniors, which may lower costs.

**Backup options.** Four-year colleges avoid offering one- and two-year degrees and certificates, and they do so for good reasons. However, the procedures in occupational colleges provide disadvantaged students with potential backup options, which they may need or expect to need. Because low-income families are much more likely to face serious health or economic problems, disadvantaged students face the risk of family emergencies forcing them out of school without warning. They need fallback options and some reassurance of labor market payoffs. Traditional four-year colleges ignore these issues, which are not so important for middle-class students whose parents have labor

market knowledge and contacts. For students who worry that they may need a guaranteed job to support their family in two years, four-year colleges may offer less secure backup options than two-year occupational colleges. Are there some steps four-year colleges could take to anticipate and respond to such difficulties? Would one- and two-year degrees and certificates provide backup options, without creating disincentives for completing the bachelor's degree? (Many doctoral programs offer master's degrees without drawing many students away from the Ph.D.) Clearly, this is controversial, but I suspect this is an important question that four-year colleges should consider if they want to serve disadvantaged students.

In sum, the American educational system has taken some bold steps and accomplished some revolutionary reforms in opening access to new groups of students. The revolution is still incomplete, however, given the myriad misunderstandings on the part of both students and prospective students about college and what it requires. Universal higher education poses new challenges that demand innovative solutions to address them.

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## Notes

1. In the recently released 2000 follow-up data for the class of 1992 (NCES 1992b), these numbers got a little better, but they are still of concern. For seniors with poor high school grades who planned college degrees, less than 21 percent completed a degree. Such students still face poor odds.

2. Although for-profit colleges acquired poor reputations due to past abuses and even fraud, 1992 federal legislation led to the demise of 1,500 schools and compelled the remaining schools to improve. Although proprietary schools as a category have a checkered history, we find that they sometimes devise innovative procedures that are highly responsive to their students and their labor markets. These procedures are not without costs; they sacrifice some traditional aspects of college, but in the process they achieve significant benefits, particularly for students from disadvantaged backgrounds. We selected occupational colleges that passed the same accreditation standards as community colleges and offer associate's degrees of similar quality to community colleges. As such, they are comparable to community colleges but dissimilar to 94 percent of other business and technical schools, which offer no degree above a certificate (Apling 1993). These private colleges should not be considered a random sample; they are some of the best programs in these fields and may be considered to represent an ideal type.

Along with our sample of seven community colleges, we sampled seven private occupational colleges in a large midwestern city and its surrounding suburbs. In both types of colleges, we focused on accredited programs leading to applied associate's degrees in a variety of business, health, computer science, and technical occupational programs. In these 14 colleges, we conducted more than 130 semistructured one-hour interviews with administrators and program chairs, and we interviewed 120 students and surveyed more than 4,400 students. We found strong similarities in the types of students at the two types of colleges: Both enroll large proportions of low-income and racial minority students.

Our study has limitations. We are not studying completion rates, labor market outcomes, or employers' reactions. Although our occupational colleges and community colleges are comparable, it is hard to assess whether they are typical. Therefore, our book repeatedly draws on findings from national surveys and other studies (Deil-Amen, Rosenbaum, and Person, forthcoming, 2005).