



New data  
needed:  
improving  
survey research  
on two-year  
college  
experiences



Institute of Education Sciences  
U.S. Department of Education

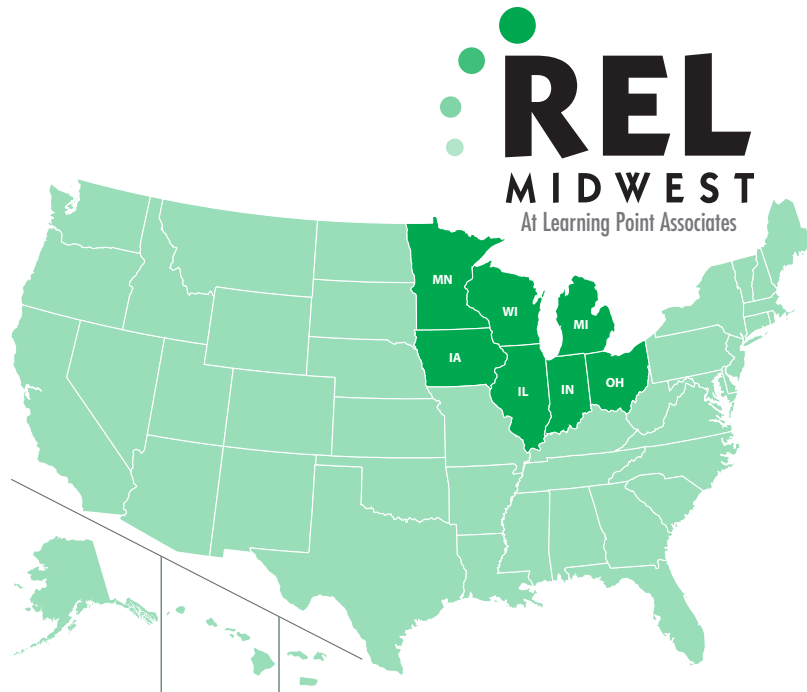


New data needed:  
improving survey research  
on two-year college experiences

**August 2007**

**Prepared by**

**James E. Rosenbaum, Ph.D.  
Northwestern University**



**Issues & Answers** is an ongoing series of reports from short-term Fast Response Projects conducted by the regional educational laboratories on current education issues of importance at local, state, and regional levels. Fast Response Project topics change to reflect new issues, as identified through lab outreach and requests for assistance from policymakers and educators at state and local levels and from communities, businesses, parents, families, and youth. All Issues & Answers reports meet Institute of Education Sciences standards for scientifically valid research.

August 2007

This report was prepared for the Institute of Education Sciences (IES) under Contract ED-06-CO-0019 by Regional Educational Laboratory Midwest administered by Learning Point Associates. The content of the publication does not necessarily reflect the views or policies of IES or the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

This report is in the public domain. While permission to reprint this publication is not necessary, it should be cited as:

Rosenbaum, J. E. (2007). *New data needed: improving survey research on two-year college experiences* (Issues & Answers Report, REL 2007–No. 015). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Midwest. Retrieved from <http://ies.ed.gov/ncee/edlabs>.

This report is available on the regional educational laboratory web site at <http://ies.ed.gov/ncee/edlabs>.

## Summary

# New data needed: improving survey research on two-year college experiences

### **Research can improve understanding of two-year colleges, but new detailed indicators are needed to capture the complexities of this changing sector.**

“College” is more complex today than it was three decades ago. Two-year colleges used to be a small part of higher education, but now they enroll almost half of all entering college students. Research can improve understanding of two-year colleges, but new detailed indicators are needed to capture the complexities of this changing sector. This report identifies new complexities and suggests new data needed from survey research on the following questions:

- What are the unseen barriers in two-year colleges?
- What are the unseen college options?
- What are the implications of new pathways through college?
- What are the ways that college can improve labor market outcomes?

The report identifies the kinds of information that research can obtain to answer these questions and how that information can be useful for understanding new college realities and improving college procedures and policies.

College programs and experiences have changed in radical ways that make many customary assumptions wrong. Adults who attended traditional four-year college programs—including most researchers and educators—may not understand the complexities of nontraditional programs that serve students who do not seek bachelor’s degrees or who do not meet traditional achievement requirements. Educators may give students poor advice and make poor education policy decisions, research may not improve educators’ understanding because of poorly worded or misleading items in surveys, and some outcomes may have different value than traditionally assumed. New measures are needed to make important distinctions and evaluate processes.

This report uses prior studies of two-year colleges and students to identify information, not often collected from national surveys, that researchers need to understand students’ two-year college experiences, and it outlines what information is not being obtained from current national surveys. Surveys need to collect better information about new programs, new colleges, new degrees, noncredit courses, test scores alignment, and job placement. Also needed are new indicators of attainment (such as skill relevance and timely completion). Programs that are preparatory, exploratory, or

recreational in college and occupational programs need to be better understood, as do new patterns of college attendance (delayed entry and college moves). And amid all this, how students understand (or misunderstand) the college experience and its implications must also be examined.

Research needs to examine a great number of issues that are not being studied at all or in insufficient detail: college students who are several years away from taking college credit classes that count toward a degree, who do not understand noncredit classes, who choose classes that do not count toward their major, or who have unrealistic timetables. Research should also study the implications of new options and pathways: new kinds of colleges, new kinds of associate's and bachelor's degrees, delayed college entry and college mobility, ways colleges prepare students for the labor market, and ways colleges offer job placement services.

Of course, this kind of information is not always readily available. Some students in college are not actually in college-level classes that satisfy degree requirements (students in remedial courses, for example), are not working toward a degree, are proceeding more

slowly than assumed, and have less certain employment prospects than they expect. Researchers can and must endeavor to provide information that helps make the college experience more transparent and encourages policies toward that end.

Examining some of these issues requires institutional information, but that is often hard to gather and interpret. Student surveys can provide much of the data researchers need to begin examining these issues. Students tend to know which associate's degree they are pursuing, about how long it will take to obtain their degree, and whether they are proceeding on schedule. They can later report whether they have lost time in taking the wrong courses and whether they had enough information to choose the right courses. They can report whether their college offers job placement assistance and whether they used it to find a job after graduation. They can also report whether their job uses the skills they learned in college and whether their coursework advances their career. These easily asked questions are a good starting point because they have important implications for education policy and practice.

**August 2007**

---

**TABLE OF CONTENTS**

Summary	iii
Overview	1
Why this study	2
Two-year colleges in the Midwest Region	3
New college realities—and the limits of current research	4
College attendance does not always mean education success	4
Which college courses are really not for credit?	5
What do college students understand about the placement process and the implications for remedial coursework?	6
How do students understand college degree timetables?	7
How have private two-year colleges changed?	7
What are the differences among the new degrees?	8
Delayed college entry	8
Student mobility across colleges	9
Which aspects of college provide labor market payoffs?	9
Can college job placement help students obtain good jobs?	10
References	11

**Box**

1	About this study	3
---	------------------	---

# Research can improve understanding of two-year colleges, but new detailed indicators are needed to capture the complexities of this changing sector.

## OVERVIEW

“College” is more complex today than it was three decades ago. Two-year colleges used to be a small part of higher education, but now they enroll almost half of all entering college students. Research can improve understanding of two-year colleges, but new detailed indicators are needed to capture the complexities of this changing sector. This report identifies new complexities and suggests new data needed from survey research on the following questions:

- What are the unseen barriers in two-year colleges?
- What are the unseen college options?
- What are the implications of new pathways through college?
- What are the ways that college can improve labor market outcomes?

The report identifies the kinds of information that research can obtain to answer these questions and

how that information can be useful for understanding new college realities and improving college procedures and policies.

College programs and experiences have changed in radical ways that make many customary assumptions wrong. Adults who attended traditional four-year college programs—including most researchers and educators—may not understand the complexities of nontraditional programs that serve students who do not seek bachelor’s degrees or who do not meet traditional achievement requirements. Educators may give students poor advice and make poor education policy decisions, research may not improve educators’ understanding because poorly worded or misleading items in surveys, and some outcomes may have different value than traditionally assumed. New measures are needed to make important distinctions and evaluate processes.

This report uses prior studies of two-year colleges and students to identify information not often collected from national surveys that researchers need to understand students’ college experiences, and it outlines what information is not being obtained from current national surveys. Surveys need to collect better information about new programs, new colleges, new degrees, noncredit courses, test scores alignment, and job placement. Also needed are new indicators of attainment (such as skill relevance and timely completion). Programs that are preparatory, exploratory, or recreational in college and occupational programs need to be better understood, as well as new patterns of college attendance (delayed entry and college moves). Amid all this, how students understand (or misunderstand) the college experience and its implications must also be examined.

Research needs to examine a great number of issues that are not being studied at all or in insufficient detail: college students who are several years away from taking college credit classes that count toward a degree, who do not understand noncredit classes, who choose classes that do not count toward their major, or who have unrealistic

timetables. It should also study the implications of new options and pathways: new kinds of colleges, new kinds of associate's and bachelor's degrees, delayed college entry and college mobility, ways colleges prepare students for the labor market, and ways colleges offer job placement services.

**Research has improved understanding of two-year colleges, but new realities are inadequately captured by the questions asked in current surveys**

Of course, the information identified above is not always readily available. Some students in college are not actually in college-level classes that satisfy degree requirements (students in remedial courses, for example), are not working toward a degree, are proceeding more slowly than

assumed, and have less certain employment prospects than they expect. Researchers can and must endeavor to provide information that helps make the college experience more transparent and encourages policies toward that end.

Examining some of these issues requires institutional information, but that is often hard to gather and interpret. Student surveys can provide much of the data researchers need to begin examining these issues. Students tend to know which associate's degree they are pursuing, about how long it will take to obtain their degree, and whether they are proceeding on schedule. They can later report whether they have lost time in taking the wrong courses and whether they had enough information to choose the right courses. They can report whether their college offers job placement assistance and whether they used it to find a job after graduation. They can also report whether their job uses the skills they learned in college and whether their coursework advances their career. These easily asked questions are a good starting point because they have important implications for education policy and practice.

## WHY THIS STUDY

In one generation the U.S. higher education system has been radically transformed by three revolutions, each related to two-year colleges:

- The labor market has increasingly demanded college degrees.
- Two-year colleges have emerged as a major societal institution.
- Two-year colleges have adopted a revolutionary policy of open admissions.

Amid these radical transformations policymakers, administrators, parents, and students sometimes have difficulty understanding the new college landscape.

Research has improved understanding of two-year colleges. However, new realities are inadequately captured by the questions asked in current surveys. Based on new findings from a seven-year research project (box 1), this report identifies overlooked phenomena, considers limitations of current survey data for addressing these phenomena, and suggests substantive areas to be examined so that research can better inform policymakers about new patterns of college experience. This report focuses on two-year colleges because they are a growing share of higher education and differ in many respects from traditional higher education experiences.

This report outlines current realities that are poorly studied to identify the limitations in traditional survey questions, and it suggests often-ignored phenomena to be examined by future research:

- Unseen barriers in two-year colleges.
- Unseen college options.
- Implications of new pathways through college.
- Ways college can improve labor market outcomes.

The intended audience is the research community as well as regional policymakers and practitioners.



## BOX 1

**About this study**

This report is based largely on findings from the author's prior research on private and public two-year colleges (public two-year colleges are often called community colleges).

The results of seven years of study are reported in Rosenbaum, Deil-Amen, & Person (2006). After summarizing some of the main findings of that research, this report considers the implications of those findings for improving survey research on higher education.

In the course of the research the author tried to replicate the previous findings from that book using national survey data but found serious limitations to national survey indicators. This report identifies some of the issues that are not well measured in current national survey data. While these may be shortcomings in

all national surveys, efforts here were devoted primarily to the two major national longitudinal surveys that consider higher education (the National Education Longitudinal Study and the Beginning Postsecondary Students Longitudinal Survey).

To address a wider audience, this report avoids detailed discussions of the studies' methods and a comprehensive literature review. Nor does it propose specific new items. (Such items would need to be pre-tested, which was beyond the mission of this project.) This report is intended to stimulate consideration of many different issues for researchers as well as for consumers of research who might not wish to consider methodological details.

This report focuses on national survey data, which the research community relies heavily on because they are large random samples followed for long periods of time and because

they are easily available and accessible. It is crucial that researchers and consumers of research understand the limitations of these excellent resources. This report is not meant to condemn those surveys—it is only natural that surveys are slow to change. After all, one of the great advantages of these surveys is that they repeat questions asked in earlier research to allow comparative analyses with prior surveys. Unfortunately, as reality changes, the same question may have different meanings or different limitations and may ignore new realities. For instance, none of the national surveys has good indicators of multiple types of associate's degrees or of college job placement activities. These aspects of college are relatively new, and traditional questions do not capture them. Recognizing these limitations and considering ways to update current surveys will improve understanding of the changing college landscape.

---

**TWO-YEAR COLLEGES IN THE MIDWEST REGION**

In the Midwest Region, as across the nation, two-year colleges are a large segment of higher education. About 29 percent of college students in the Midwest Region attend two-year colleges, compared with 30 percent nationally. Two-year college attendance in most regional states ranges between 27 percent and 37 percent (except Indiana at 17 percent; unpublished analyses, Rosenbaum, Goble, & Person, 2007).

All the departments and boards of higher education in the Midwest Region states are interested in disseminating information about their community colleges. They all have web sites to inform the public about the state's community colleges. For instance, Iowa provides a short

description and lists the state's 15 community colleges ([www.iowa.gov/educate/content/blogcategory/183/931/](http://www.iowa.gov/educate/content/blogcategory/183/931/)). Michigan provides a list and a brief description of the difference between community colleges, technical colleges, and private colleges ([www.michigan.gov/mde](http://www.michigan.gov/mde)). Although Indiana has the lowest enrollment rate for two-year colleges, it describes its two-year college offerings and the occupations available to graduates with associate's degrees; it also notes three different associate's degrees (although not variations in the time requirements for each) ([www.learnmore-indiana.org/needtoknow/knowyouroptions/Pages/Apprenticeships.aspx](http://www.learnmore-indiana.org/needtoknow/knowyouroptions/Pages/Apprenticeships.aspx)). Illinois provides somewhat more detail about community college alternatives and factors that influence degree completion time ([www.ibhe.org/consumerInfo/faq.htm](http://www.ibhe.org/consumerInfo/faq.htm)). All mention community colleges as important alternatives.

Graduation rates are problematic (Bailey et al., 2005), but none of the web sites specifies potential barriers, the full range of degree options and their requirements, alternative pathways (delaying college, college mobility) and their implications, or relationships between two-year college programs and labor markets. For instance, while many states provide helpful warnings about degree timetables similar to Michigan's statement that "programs can last anywhere from a few months to several years," none of the web sites specifies how to shorten the timetable for a particular degree or choose an alternative associate's degree with a shorter timetable, or even suggests that a "two-year" associate's degrees can take three or more years for many full-time students. Moreover, these problems may not be limited to web sites. Rosenbaum, Deil-Amen, & Person (2006) found that community college staff and students were not clear about these issues either.

This report recognizes Midwest Region states' interest in conveying useful information about two-year college options, requirements, and pay-offs. It identifies these issues and how researchers, including those at the boards of education, can consider and describe the options that policymakers and the public need to know about.

always capture current situations. So their results fail to provide useful information.

There is good news and bad news. The good news is that research is even more important because these rapid changes are so poorly understood. The bad news is that researchers, like everyone else, must struggle to keep up with the rapid changes and devise new variables and new theories of action.

Although college attendance rates are high, some "college students" are not actually taking college credit courses or progressing toward a degree. Other students are in occupational schools or programs that have not traditionally been considered "college" but that now lead to accredited degrees similar to those from traditional colleges. Students can take new pathways through college, but these new pathways lead to poor outcomes for many students (Rosenbaum, Deil-Amen, & Person, 2006). Many students want a college that will help them obtain a good job, but they fail to realize what aspects of college have labor market payoffs. Students are unaware of what choices promote their goals, and administrators and policymakers do not know how to help students attain their goals (Rosenbaum, Deil-Amen, & Person, 2006).

## NEW COLLEGE REALITIES—AND THE LIMITS OF CURRENT RESEARCH

Colleges, especially two-year colleges, have changed dramatically over the past three decades (Brint & Karabel, 1989). Two-year colleges enroll new kinds of students, offer new options with new goals and new procedures, and serve new labor

market demands. But parents, educators, and policymakers give advice and make policies based on old understandings of college, which may be outdated, misleading, or even harmful. In turn, researchers try to understand colleges and students by analyzing older survey items that do not

**Parents, educators, and policymakers give advice and make policies based on old understandings of college, which may be misleading or even harmful**

## COLLEGE ATTENDANCE DOES NOT ALWAYS MEAN EDUCATION SUCCESS

The standard thinking is that getting into college is most of the battle: once admitted, students will probably succeed in college. College attendance is often used as an indicator of education attainment, and on this indicator the United States has made an amazing accomplishment: over 80 percent of high school graduates attend college within eight years of graduation (Adelman, 2003). Even more surprising, the racial gap has nearly disappeared. Despite a persistent racial gap in high school completion, college attendance shows little racial gap among high school graduates. Following high school graduates over the eight years after high school, 83 percent of whites attend college, as do

over 80 percent of Latino and African American high school graduates (Adelman, 2003).

However, almost half of all new college students enter public two-year colleges (commonly called community colleges), and their graduation rates are very low. Based on data from the National Education Longitudinal Study, only 40 percent of students seeking a college degree and entering community college right after high school attained any degree within eight years. And the rates were much worse for Latinos (30 percent) and African Americans (19 percent; Rosenbaum & Stephan, 2005). On average, African Americans and Latinos entering community colleges with degree plans have very poor prospects of obtaining a degree.

*New data needed.* Researchers must be cautious about using college enrollment as a sole outcome. While not meaningless, this indicator is often more complex than usually assumed. High schools brag about their graduates attending college, and researchers examine precursors of college attendance (see Hearn & Holdsworth, 2005, for an excellent review). But the meaning of college attendance should not be exaggerated in an era of open admissions, when 80 percent of high school graduates attend college but fewer than half of community college students obtain degrees.

Researchers need to go beyond examining college attendance to see whether students are taking courses that offer college credit, what level of remedial courses students are taking, and how long until they are taking college credit classes. While recent studies have begun to examine school transcripts regarding remedial courses (Adelman, 2003), that research has not identified the level of remedial coursework, how it is related to the requirements of different kinds of associate's degrees, or students' understanding of remedial courses and their impact on perceived degree timetables. Additional indicators of attainment and more fine-grained measures are needed to highlight subtle but crucial differences in institutional processes in college.

## WHICH COLLEGE COURSES ARE REALLY NOT FOR CREDIT?

Community colleges began as junior colleges, which offered the first two years of college coursework and allowed students to transfer to four-year colleges. Today, however, community colleges offer a wide variety of courses, many of which are not traditional college courses.

To understand what is “not college,” “college” must be defined. Here it refers to any postsecondary educational institution that leads to an accredited degree at the associate's level or above. A “college course” is a course that offers credit toward an accredited degree.

It might seem that any course offered at a college is college course, including such noncredit programs as the General Educational Development (GED) test or English as a second language programs and noncredit remedial courses. All are fundamental parts of community colleges, but classifying them as college classes creates serious ambiguities that can lead to misleading inferences. Students in GED and English as a second language programs are taking high-school level courses and not receiving college credit for them. So, for instance, calculating degree completion rates based on all students taking courses in college, including GED and remedial courses, might encourage policymakers to infer that community colleges have low completion rates, even though these rates include students who are not taking college credit classes.

A clear distinction is needed between college students, who are taking credit classes, and other students, who may be called “pre-college students” or “students in preparatory programs.” The point

**Researchers need to go beyond examining college attendance to see whether students are taking courses that offer college credit, what level of remedial courses students are taking, and how long until they are taking college credit classes**

is not to disparage noncredit classes, but to recognize them. Indeed, if research helps identify these students and their range of outcomes, policymakers can consider alternate ways of helping these students, even if they do not obtain traditional degrees.

**Data are needed on students' achievement level and how it matches the level demanded for college credit classes**

*New data needed.* GED programs, English as a second language programs, certificate programs, avocational interest programs, and many isolated courses are offered in these community colleges but do not lead to college degrees

(Dougherty, 1994; Grubb, 1996). Survey data sometimes have indicators on these programs, but researchers need data on what portion of students' courses are in these programs, how these courses affect students' college credits and degree progress, and whether students understand the implications of taking these courses. Moreover, surveys are not always clear on which courses are aimed only at avocational interests or nondegree programs. Transcript data can provide this information, and recent work has made progress in this area (Adelman, 2003). Further research is needed to provide clear information about which students are in credit classes and making progress toward a degree in order to inform policy decisions.

### **WHAT DO COLLEGE STUDENTS UNDERSTAND ABOUT THE PLACEMENT PROCESS AND THE IMPLICATIONS FOR REMEDIAL COURSEWORK?**

Nationwide over 60 percent of students in community colleges take one or more remedial courses. In some urban community colleges over 90 percent do—many in several subject areas. Moreover, community college administrators report that many entering students require remedial coursework at the ninth-grade level or below (Rosenbaum, Deil-Amen, & Person, 2006), which is consistent with Murnane & Levy's (1996) finding that half of high school seniors have skills and knowledge below the tenth-grade level.

*New data needed.* The transcript indicators of the number of remedial course areas for each student that national surveys contain are insufficient. Even if students are taking remedial courses in only one subject area, students taking eighth-grade reading classes in college will need several years before they reach college credit courses. Additional transcript information is needed to assess exactly how long it will take to reach those courses.

Test score data could be useful here, but they are rarely in a suitable form. While high schools test student achievement, these tests are rarely coordinated with college placement tests, so they provide no information about students' likelihood of being placed in college credit classes. In fact, state exit examinations often provide misleading information (Kirst & Venezia, 2004). State exit exams usually have low standards so that most high school seniors can pass, and as a result many seniors who pass the state exit exam for high school competency fail the college readiness test three months later. Instead of giving useful information, state exit exams often lead to mistaken inferences. State and local assessments need to match up with college placement exams (Rosenbaum, 2001).

Similarly, while surveys sometimes test students' aptitude or their achievement percentile, data are needed on students' achievement level and how it matches the level demanded for college credit classes (Kirst & Venezia, 2004). Also needed are data on how colleges classify students' achievement level and interpret its match with college demands. Students' level of remediation—and particularly how much time must be added to students' degree timetables because of the remediation they require—must also be indicated. There are reports that different Midwest Region community colleges use different cutoff points for determining remedial placements, even when they use the same test and that some students take advantage of these different cutoff points, choosing colleges where they could avoid remedial placements. Further research is needed to clarify these issues.

## HOW DO STUDENTS UNDERSTAND COLLEGE DEGREE TIMETABLES?

How many years does it take full-time students to obtain a two-year degree? Not surprising, traditional thinking—by community college students, policymakers, and researchers—is about two years for a “two-year associate’s degree.” But this assumption often turns out to be false. Reformers think they are generous in allowing three years for an associate’s degree and six years for a bachelor’s degree (see Carey, 2005). Unfortunately, this is often too short as well. In many colleges the average full-time student needs 3.5 years to obtain an associate’s degree and 6–8 years to obtain a bachelor’s degree (Rosenbaum, Goble, & Person, 2007). Delays are caused by noncredit remedial courses, students taking the wrong courses, and required courses not being offered when needed.

The delays caused by remedial courses are especially misunderstood. Among 330 second-year students surveyed in two Midwest Region community colleges, less than 30 percent realized that their remedial classes did not count toward their degree (Rosenbaum, Deil-Amen, & Person, 2006, p. 84). Expecting to complete the associate’s degree program at the end of their second year, they did not realize that they would not be graduating that year.

Such miscalculations cause problems for students who invest in their education based on false expectations. It is unknown how students react to these disappointments. Furthermore, families of students also have expectations, and conflicts can arise when they turn out to be incorrect. Interviews show that some students make promises to family members, spouses, or employers about when they will complete their degrees and when they will stop asking for special sacrifices. Over time, when these expectations are not fulfilled, pressures from family and work can lead the student to drop out.

*New data needed.* Along with the traditional questions on education degree plans, data should also

be collected on students’ and their family members’ expected timetables.

## HOW HAVE PRIVATE TWO-YEAR COLLEGES CHANGED?

Twenty years ago private two-year postsecondary schools were usually trade schools, business schools, and technical training schools. These schools were not colleges; they did not offer accredited degrees, and many made fraudulent claims about degree completion and job outcomes (Rosenbaum, Deil-Amen, & Person, 2006). However, federal regulations in the 1990s imposed stringent requirements for these schools to receive federal aid for their students. Since these schools enroll many low-income students, federal funds are the lifeblood of these schools.

After these requirements were announced, 1,300 schools went out of business, and the others devoted great energy to improving degree completion and job placement. Some began to resemble colleges. About 5 percent of these schools became accredited to offer associate’s degrees, fitting the definition here of college. Some even developed bachelor’s programs or articulation agreements with four-year colleges.

In many respects these schools became colleges and, because of their occupational emphasis, are referred to here as “occupational colleges.”

They prepare students in the same fields as the occupational programs in community colleges and confer a comparable accredited associate’s degree. Moreover, recent research using propensity score methods finds that private occupational colleges enroll very similar students as community colleges, but they offer much higher degree completion rates than community colleges among comparable students (Rosenbaum & Stephan, 2005). There are also indications that they offer better job placement assistance, as is detailed later.

**The delays caused by remedial courses are especially misunderstood**

*New data needed.* National surveys have not yet responded to these changes. Indicators of occupational programs are often vague or unclear about occupational fields and institutional procedures. The number of survey respondents in any program in private two-year colleges can be quite small, so there is little information about private two-year colleges. Researchers need to expand the concept of college to include new kinds of institutions and new programs and to gather information on them.

### WHAT ARE THE DIFFERENCES AMONG THE NEW DEGREES?

Until the 1970s research rarely examined associate's degrees. The only category between high school and bachelor's degrees was "some college." Surveys now ask about associate's degrees, reflecting changes in the degree and employers' recognition of the degree. However, questions are rarely asked about the various kinds of associate's degrees.

**New degree options did not exist or were not very desirable 15 years ago, but today they are viable options, particularly for students with substantial remedial needs**

Community colleges offer several different kinds of associate's degrees: Associate of Arts, Associate of Science, Associate of Applied Science, and Associate of General Studies. These differences may not be recognized by employers, or they may be recognized in some fields but not others. There is little

overall evidence on the topic, but the differences among these degrees are real, and researchers and students should be aware of them.

The new degree options did not exist or were not very desirable 15 years ago, but today they are viable options that lead to accredited college degrees with fewer requirements, particularly for students with substantial remedial needs. Similarly, private occupational colleges offer shorter degree timetables, higher degree completion rates, and more job placement assistance than community colleges (Rosenbaum, Deil-Amen, & Person,

2006). These degrees often have different academic prerequisites, which means that students entering college with skill deficiencies will need fewer noncredit remedial courses for some associate's degrees than for others. In addition, new "applied bachelor's degrees" have recently been devised in occupational fields that correspond to these alternative applied associate's degrees. These bachelor's programs offer easy transfer opportunities for students with associate's degrees in the same occupational field.

*New data needed.* Data are needed on which colleges offer these new degrees, which students enroll in them, which jobs require which degrees, and how these factors influence labor market outcomes. Indeed, college advisers often have very limited understanding about the degrees. These options are rarely even considered or studied, though they may be suitable for some students. Research needs to examine these options, and, to do so, surveys must distinguish among them.

Data are also needed on students' perceptions. Do students see these different options? Do they realize that they will shorten the time until they can begin acquiring college credits (reducing the number of remedial courses required)? Do they perceive differences in labor market payoffs to these various degrees (and do they actually have different payoffs)?

### DELAYED COLLEGE ENTRY

"The gap year"—a year of traveling, working, or volunteering between high school and college—is widely discussed in popular media today (Harder, 2006). When delayed-entry students approach colleges, college staff tell them that they can still succeed. Hearing about this, high school students may infer that there is no penalty for delay and that they can enter college at any time. In 1999, 46 percent of college students did not begin college in the same calendar year that they graduated from high school (U.S. Department of Education, 2002). With many students delaying entry, research

needs to find out why they do so and whether there is a penalty.

Using data from the National Education Longitudinal Study, Bozick & DeLuca (2005) find that high school graduates who delay entry by seven months or more are more likely to be nontraditional college students (low income, minority, low achieving) and to enter two-year colleges. Yet even after controlling for these factors, delayed entry students were less likely to complete bachelor's degrees. Although influences from unmeasured variables cannot be ruled out, the evidence suggests that delayed entry may reduce the chances of completing a bachelor's degree. Increased flexibility may present options to students who have no alternatives, but it might be best for them to proceed immediately if possible. Given the frequency of delayed entry, it is extremely important to know whether students should be warned against choosing to delay.

*New data needed.* Research is needed on whether students' academic skills decline during the gap year and whether achievement declines at different rates for different kinds of students or for different kinds of gap-year experiences. What kinds of gap-year experiences improve outcomes should also be investigated. Based on Harder (2006), the gap year may work well for affluent high achievers, but his article does not discuss others who take this option. Data are also still needed on what students do during the gap year, how their achievement changes, and what difficulties arise when they return to school.

## STUDENT MOBILITY ACROSS COLLEGES

Student mobility across colleges is also a new pattern. Almost half of undergraduates who begin at a four-year college attend another college within six years, and almost a fifth attend more than two (Goldrick-Rab, 2006). Students of all social classes change colleges, but high-socioeconomic status students are more likely than low-socioeconomic status students to successfully make the shift (that

is, without experiencing interruptions such as periods out of school), even after controlling for achievement and other background characteristics (Goldrick-Rab, 2006, p. 71).

Low-socioeconomic status students are more likely to follow unsuccessful pathways that fail to lead to timely degree completion. Since low-socioeconomic status students tend to be more geographically mobile, college mobility might be a particularly useful option, but ironically it could create another source of disadvantage for them. Unfortunately, there is little systematic information about the process.

*New data needed.* Data are needed on why students choose to move from one college to another and whether the reasons differ between high- and low-socioeconomic status students. These moves may be the result of geographic mobility, shifting time schedules, academic or financial difficulties, or other personal choices (such as to explore other subject areas or programs). Although some surveys contain limited information on reasons, they do not consider the influence of institutional variables. Colleges may cause these moves if they do not offer required courses when students need them, if students are disappointed by their progress, or if colleges raise barriers to reentry. Also, needed are data on whether students see the implications of their college changes and whether the increased problems for low-socioeconomic status students come from less awareness or more constraints. Achievement losses may also be involved and can be tested.

**Many students enter college to obtain a good job after graduation, but they do not know what aspects of college lead to such a payoff**

## WHICH ASPECTS OF COLLEGE PROVIDE LABOR MARKET PAYOFFS?

Many students enter college to obtain a good job after graduation, but they do not know what aspects of college lead to such a payoff. Some students think a few college classes will improve

their earnings without a degree. Neoclassical economic theory supports that belief, and Kane & Rouse (1995) find that college credits offer earnings payoffs, with little additional payoff to degree credentials. But these findings were based

on data collected in the 1970s, and analyses of more recent data indicate that credits do not have a substantial dependable impact on earnings and that associate's or bachelor's degrees are necessary for dependable earnings payoffs (Marcotte et al., 2005).

**New survey items should be added to understand how new college courses, programs, and degrees might have labor market payoffs**

Isolated college credits may still have value in some fields, but it is unclear under what circumstances. Isolated credits may have value if students already hold (or can obtain) a job that uses skills relevant to their studies. Isolated credits may help them obtain a job but do not help them be more successful at it. Several studies suggest that jobs related to students' college majors lead to good career trajectories (Pascarella & Terenzini 2005). Placement staff also report this from their (un-systematic) follow-up interviews with graduates (Redline & Rosenbaum, 2006).

*New data needed.* Needed are ways to examine skill-relevant jobs: which jobs are related to students' college majors? This requires better data on the skills provided in college courses, the skill needs of jobs, and how they match—both for jobs during college and jobs after graduation. These are difficult to measure.

It is easy to ask students about whether their jobs require skills they learned in college courses, but survey items rarely ask, and even when they do, they may be too general. New survey items should be added to understand how new college courses, programs, and degrees might have labor market payoffs.

Delayed job responsibility is another problem. New employees may not be assigned to jobs that use their skills in their first year (Rosenbaum, 2001). One technique could be to study employees

one or two years after hiring to assess the skill relevance of their education. Mortimer et al. (2006) asked young adults whether their present job “provides skills or knowledge that will prepare me for my future work.” Besides indicating attainments, these judgments may affect their motivation and behavior.

One possibility is that a few college classes or the completion of a degree may tell employers that employees can handle training, which may prompt employers to offer job training opportunities to these employees.

### **CAN COLLEGE JOB PLACEMENT HELP STUDENTS OBTAIN GOOD JOBS?**

It is generally assumed that schools have no direct role in job placement (Rosenbaum, Deil-Amen, & Person, 2006). In line with neoclassical economic theory, U.S. schools generally regard obtaining a job as a transaction between students and employers; they assume that schools do not contribute (Rosenbaum, Deil-Amen, & Person, 2006). Surveys also assume that schools do not conduct job placement (Rosenbaum, Deil-Amen, & Person, 2006). Although most national surveys ask how students found their first job after schooling, only one national survey included school help as a possible answer, and it only considered placement by high schools (High School and Beyond; Rosenbaum, 2001).

The United States seems to have an informal version of the Japanese formal procedure for placing high school graduates in jobs through their high school's relationships with employers. The High School and Beyond program finds that about 9 percent of high school graduates find their first job through school help, with much higher rates for women and blacks (Rosenbaum, 2001). Moreover, school help has big earnings payoffs: 17 percent higher earnings nine years after high school compared with direct application (Rosenbaum, 2001). Teachers who provide job placement report that they steer students



toward jobs with better training and advancement, placing students in skill-relevant jobs even if they do not offer high immediate earnings (Rosenbaum, 2001).

To maintain high employment rates for their graduates, private two-year colleges often have offices that provide job placement. Full-time staff devote all their time to establishing employer contacts and placing graduates in jobs. An analysis of administrative records in one college found a very high job placement rate, and, like high school contacts, college contacts do not discriminate against women and minorities, and they place students in skill-relevant jobs (Redline & Rosenbaum, 2006).

Analyzing data from the Beginning Postsecondary Students Longitudinal Survey, Rosenbaum, Deil-Amen, and Person (2006) found that the reported existence of job placement offices increased student degree completion in private two-year colleges but not in public two-year colleges. Report distortions seem to be involved: Detailed local studies suggest that public two-year college administrators often report that career services offices do job placement, when in fact, career office staff report that they do not (Rosenbaum, Deil-Amen, & Person, 2006).

*New data needed.* National surveys should obtain information about job placement, but they need to ask the right actors. Rather than asking school administrators, surveys must ask career staff if they place students in jobs and how they do so (for example, cultivating relationships with employers). More simply, one can ask students whether they obtained their job through school help, just as the High School and Beyond program did.

---

## REFERENCES

- Adelman, C. (2003). *Principal indicators of student academic histories in post secondary education, 1970–2000*. Washington, DC: U.S. Department of Education, Institute of Education Sciences.
- Altonji, J. G., & Pierret, C. (1995). *Employer learning and statistical discrimination*. Working Paper, Institute for Policy Research, Northwestern University.
- Bailey, T., Calcagno, J., Jenkins, D., Leinbach, T., & Kienzl, G. (2005). *Is student right to know all you should know?* Community College Research Center Working Paper No. 2. Teachers College, Columbia University.
- Bozick, R., & DeLuca, S. (2005). Better late than never? Delayed entry in the high school to college transition. *Social Forces*, 84 (1), 527–550.
- Brint, S. (2003). Few remaining dreams: Community colleges since 1985. *Annals of the American Academy of Political and Social Sciences*, 586, 16–37.
- Brint, S., & Karabel, J. (1989). *The diverted dream: Community colleges and the promise of educational opportunity in America, 1900–1985*. New York: Oxford University Press.
- Carey, K. (2005). *One step from the finish line*. Washington, DC: Education Trust.
- Dougherty, K. J. (1994). *The contradictory college: The conflicting origins, impacts, and the futures of the community college*. Albany: State University of New York Press.
- Goldrick-Rab, S. (2006). Following their every move: an investigation of social class differences in college pathways. *Sociology of Education*, 79 (January), 61–79.
- Griffin, L. J., Kalleberg, A. L., & Alexander, K. L. (1981). Determinants of early labor market entry and attainment: A study of labor market segmentation. *Sociology of Education*, 54, 206–221.
- Grubb, W. N. (1996). *Working in the middle: Strengthening education and training for the mid-skilled labor force*. San Francisco: Jossey-Bass.
- Harder, B. (2006). A gap with credibility. August 28, p. 97. *US News and World Report*.
- Hearn, J. & Holdsworth, J. 2005. Co-curricular activities and students' college prospects. In *Preparing for*

- College*, edited by William Tierney, Zoe Corwin, and Julia Colyar, Albany: SUNY Press.
- Kane, T., & Rouse, C.E. (1995). Labor-market returns to two- and four-year college. *American Economic Review*, 85 (3), 600–614.
- Kirst, M., & Venezia, A. (2004). *From high school to college*. San Francisco: Jossey Bass.
- Marcotte, D. E., Bailey, T., Borkoski, C. & Kienzl, G. S. (2005). The returns of a community college education. *Educational Evaluation and Policy Analysis*, 27 (2), 157–177.
- Miller, S. (1997). *Shortcut: High school grades as a signal of human capital*. Presented to the Annual Meeting of the American Sociological Assn., Toronto.
- Mortimer, J. T., Vuolo, M., Staff, J., Wakefield, S., & Xie, W. (2006). *Tracing the timing of “career” acquisition in a contemporary youth cohort*. Unpublished paper, University of Minnesota.
- Murnane, R. J., & Levy, F. (1996). *Teaching the new basic skills: Principles for educating children to thrive in a changing economy*. New York: Free Press.
- Murnane, R. J., Willett, J. B., & Levy, F. (1995). The growing importance of cognitive skills in wage determination. *Review of Economics and Statistics*, 77 (2), 251–266.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco, CA: Jossey-Bass.
- Redline, J., & Rosenbaum, J. (2006). *Institutional job placement: can it avoid reproducing social inequalities?* Unpublished paper, Northwestern University.
- Roderick, M., Nagaoka, J., & Allensworth, E. (2006). *From high school to the future*. Consortium on Chicago School Research, Author.
- Rosenbaum, J. (2001). *Beyond college for all*. New York: Rose Monograph Series, Russell Sage Foundation Press.
- Rosenbaum, J., & Stephan, J. (2005). *College degree completion: Institutional effects and student degree likelihood*. Paper presented to the Annual Meetings of the American Sociological Association, Philadelphia, PA, August 12.
- Rosenbaum, J., Deil-Amen, R., & Person, A. (2006). *After admission: from college access to college success*. New York: Russell Sage Foundation Press.
- Rosenbaum, J. E., Goble, L., & Person, A. (2007, January). *Analyses of college choice and degree completion using national longitudinal data*. Unpublished manuscript, Northwestern University.
- U.S. Department of Education. (2002). *Digest of Educational Statistics*. Washington, DC: author.