THE PELL INSTITUTE
for the Study of Opportunity in Higher Education

OCCASIONAL PAPER 1

STUDENT RETENTION AND GRADUATION

FACING THE TRUTH, LIVING WITH THE CONSEQUENCES

Vincent Tinto
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The Pell Institute

for the Study of Opportunity in Higher Education

The Pell Institute for the Study of Opportunity in Higher Education conducts and disseminates research and policy analysis to encourage policymakers, educators, and the public to improve educational opportunities and outcomes of low-income, first-generation, and disabled college students. The Pell Institute is the first research institute to specifically address the issues impacting educational opportunity for this growing population. A particular emphasis of the Pell Institute is on professional practice and development for efforts designed to encourage, support, and enhance educational opportunity for low-income, first-generation students.

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Foreword

This report marks the beginning of a new series of publications by the Pell Institute for the Study of Opportunity in Higher Education. It is our hope that through these Occasional Papers, we will be able to add vital information and perspectives to the conversations about higher education policy, particularly as it affects postsecondary educational opportunities for low-income, first-generation, and disabled students.

Topics presented in the Occasional Papers will mirror the larger research agenda of the Pell Institute, which focuses on issues of access, success, and innovation. In this first paper, Professor Vincent Tinto—Chair of the Higher Education Program at Syracuse University and Senior Scholar at the Pell Institute—presents data about trends in student retention and applies his expertise to recommending appropriate roles for the federal government to play in assuring that low-income students not only get into college, but stay through the completion of a degree.

The Occasional Papers are an important component in the Pell Institute's efforts to achieve two of our goals: to serve as an information resource for policymakers and practitioners through the presentation of high-quality, rigorous research and policy analysis that is user-friendly and accessible; and to facilitate dialogue about access for low-income, first-generation, and disabled students to higher education. We hope that you will join us in this undertaking by offering any comments you may have on this Occasional Paper and subsequent ones. The value of open exchanges of ideas and information cannot be underestimated when it comes to improving the educational prospects of low-income students.

Colleen T. O'Brien
Director
The Pell Institute for the Study of Opportunity in Higher Education

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FACING THE TRUTH, LIVING WITH THE CONSEQUENCES

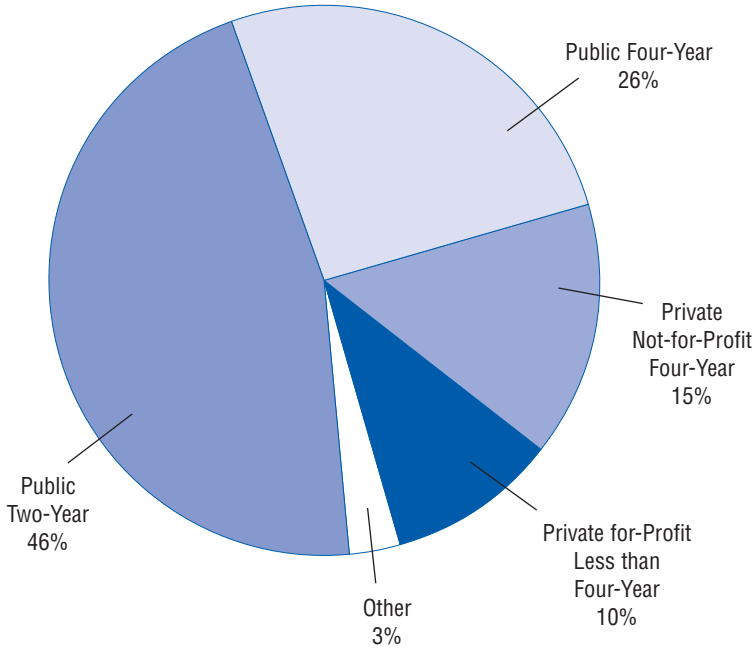
Since the National Defense Education Act of 1958, a primary objective of federal higher education policy has been to increase access to higher education for those who would not otherwise attend, especially those from low-income backgrounds. Increasing attention is now being paid to enhancing student retention and graduation, making sure that students not only get in the door of higher education but also are successful in staying there through the completion of a degree. This paper provides a broad survey of what is known about why students leave college before completing their program of study. It also presents strategies that are successful in promoting retention and graduation and offers suggestions for federal policy directions to improve retention. The information and recommendations contained in this paper are aimed at informing the discussions surrounding the reauthorization of the Higher Education Act.

WHO GOES TO COLLEGE?

During the 1995-96 academic year, approximately 3 million undergraduates enrolled in postsecondary education for the first time, attending a wide variety of institutions including four-year colleges and universities, community colleges, and private for-profit institutions[1]. A representative sample of these first-time beginning students were followed over six years from 1996 through 2001 using the Beginning Postsecondary Students (BPS) Longitudinal Study (NCES, 2003a). Among this student cohort:

- 55 percent were females;
- 70 percent were 19 years of age or younger;
- 29 percent were Black, Hispanic, Asian/Pacific Islander, or American Indian/Alaska Native;
- 42 percent were first-generation college students—neither of their parents had more than a high school diploma;—and
- 26 percent had dependent family incomes in 1994 of less than $25,000 (NCES, 2003a).[2]

College Enrollment of Students Entering Postsecondary Education in 1995-96



Source: *NCES, 2003a, Beginning Postsecondary Student Longitudinal Study: 1996-2001.* Washington D.C. U.S. Department of Education, Office of Educational Research and Improvement.

The largest proportion of this student cohort, approximately 46 percent, enrolled first in a public two-year college. About a quarter, or 26 percent, began their studies in a public four-year college or university and roughly 15 percent in a private not-for-profit four-year institution. Finally, another 10 percent first enrolled in private for-profit institutions.

Over the six years that data were collected, about 40 percent of these beginning students came to be enrolled in at least one other postsecondary institution. Eighty percent of these students, or about 32 percent of the beginning cohort, transferred from their first institution to another institution, with some transferring more than once (NCES, 2003a).

Generally speaking students from less educated families (typically first-generation students), from families with lower income, and students of color (Black, Hispanic, and American Indian/Alaska Native) were somewhat more likely to begin higher education in two-year and less than two-year institutions, attend public rather than private institutions, and work while in college (NCES, 2003a).

[1]Although more recent data are available on postsecondary enrollment, 1995-96 data are used as the demographic information that follows comes from the BPS study.

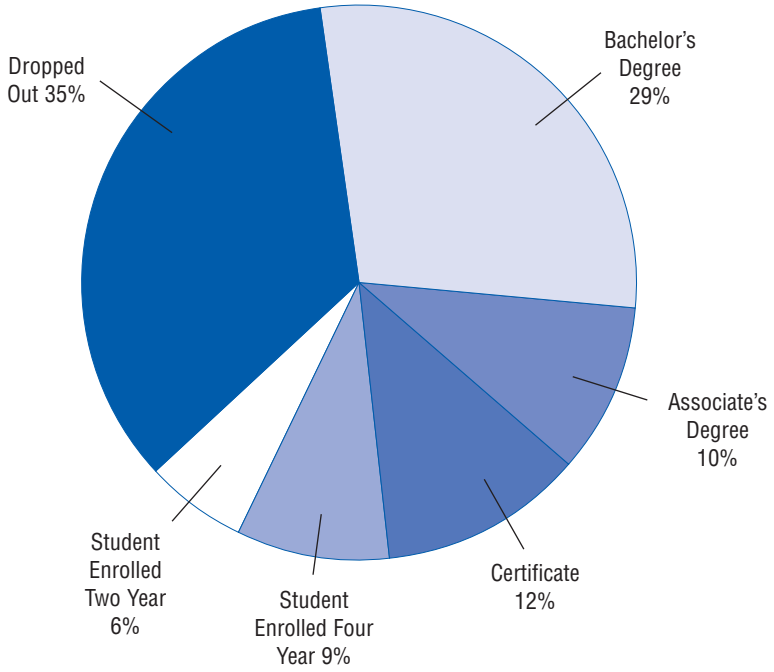
[2]A student is considered dependent for federal financial aid purposes unless he or she is 24 years of age or older; is a veteran of the US Armed Forces; married; is an orphan or ward of the court; has legal dependents other than a spouse; or can document self-sufficiency or lack of parental support. For the purposes of this paper, unless otherwise noted, low-income will refer to dependent students.

WHO GRADUATES FROM COLLEGE?

Six years later, more than a quarter (29 percent) of the beginning students earned a bachelor's degree, 10 percent had an associate's degree and 12 percent had attained a certificate of some kind. Another 14 percent were still enrolled—9 percent in a four-year institution and nearly 6 percent in a two-year institution—while 35 percent left without a degree and/or were no longer enrolled.

Among those who began in a public or private four-year institution, 58 percent had earned their bachelor's degree, whereas only 10 percent did so who first entered a two-year college (NCES, 2003a). Clearly the best path to a four-year degree is the direct one. But even along that path, attending a private institution led to greater completion rates than did attending a public one. Among those who first entered private, not-for-profit four-year institutions, 69 percent earned their bachelor's degree within six years compared to 53 percent of those who began in a public four-year institution.

Educational Progress of 1995-96 Beginning Postsecondary Students Six Years Later



Source: *NCES, 2003a, Beginning Postsecondary Student Longitudinal Study: 1996-2001.* Washington D.C. U.S. Department of Education, Office of Educational Research and Improvement. Note: Details may not sum to totals due to rounding.

RETENTION OF LOW-INCOME STUDENTS

The chances of earning a college degree (both two- and four-year) vary not only among types of institutions, but also among students. For beginning students from high-income backgrounds (dependent family incomes of $70,000 or greater), 65 percent earned some type of college degree within six years, with 56 percent earning a bachelor's degree. In comparison, only about 50 percent of youth with dependent family incomes of less than $25,000 earned some type of college degree within six years, with 26 percent earning a bachelor's degree, 14 percent an associate's degree, and slightly over 10 percent a less than two-year certificate (NCES, 2003a).[3]

Why are these differences so dramatic? There are several explanations for the differences between high- and low-income students:

1. High-income and low-income youth began their studies at different types of institutions. But even among students beginning at similar types of institutions, students from high-income families earned their degrees more frequently than students from low-income backgrounds did.

Explaining Differences in Degree Attainment by Income Levels

Income Matters: Differences in Where You Start = Differences in Degrees Earned

Approximately 64 percent of beginning college students from high-income families first entered higher education via public and private four-year institutions, compared to only 41 percent of beginning college students whose dependent family incomes were less than $25,000 (NCES, 2003a).

Differences in Preparation

A recent study by Cabrera, LaNasa, and Burkum (2001) of high school sophomores whose educational careers were followed over 13 years revealed that only a quarter of low-income youth were academically well-prepared for college—measured as high school grade point averages of B+ to A—at the time of high school graduation, and only half of those students (or about 13 percent of all low-income youth) gained access to a four-year college or university. By contrast, nearly 60 percent of high-income youth were academically well-prepared for college and over three quarters of them (about 45 percent of all high-income youth) entered a four-year college or university.

Social and Cultural Barriers

Among all students who were academically well-prepared, approximately 35 percent failed to earn their bachelor's degree within six years from any institution. Among well-prepared, low-income students, the figure is even higher, 42 percent, compared to 19 percent of well-prepared youth from high-income families (Cabrera, LaNasa, and Burkum, 2001). In some cases these students are important contributors to the economic well being of their families, so their attempts to combine the roles of family provider and student or their inability to contribute while enrolled may undermine their academic commitment and performance. In some cases, these students may feel that they do not belong or are not welcome on a campus that is an alien environment for them. Consequently they are neither firmly attached to the campus nor integrated into higher education and the result is diminished academic progress.

Unmet Need

Low-income students have substantial "unmet need"—the balance remaining after all financial aid and their family/student contribution towards the cost of education is taken into account—at all types of higher education institutions. Faced with this unmet need, low-income students select two-year institutions rather than four-year options, reduce their attendance from full-time to part-time, live off campus rather than on campus, and work longer hours. All of these behaviors significantly reduce the probability that they will persist to completion of a four-year degree (Advisory Committee on Student Financial Assistance, 2001).

2. Youth from low-income backgrounds are, on average, generally not as well-prepared academically when they finish high school than are youth from high-income backgrounds.

3. Even with adequate academic preparation, many students who begin in a four-year institution fail to complete their degree, which may reflect social and cultural factors that pose additional barriers for low-income students.

4. Students from low-income families often do not have sufficient resources to pay the bills for higher education.

[3]When independent students are included in this analysis, the degree completion rates for low-income students are even lower: 47 percent earn some type of degree within six years, with 15 percent earning a bachelor's degree, 12 percent an associate's degree, and 20 percent earning a certificate.

CONSEQUENCES OF ENROLLMENT WITHOUT COMPLETION

Does the disparity in degree completion by income matter? For our nation, the benefits of increased college completion are clear. People with a college education are much more likely to participate effectively in the governance of the nation, contribute their time and money to community service, consume fewer public services, and commit fewer crimes. They also contribute more to economic growth and productivity helping to create a larger economic pie for all to share (Institute for Higher Education Policy, 1998).

For individuals, the benefits—particularly the economic ones—are also clear. Consider the recent U.S. Census Bureau study that reports that individuals completing a bachelor's degree earn nearly $1 million more over their working careers than do people with a only high school degree, and that gap is growing. In 1975 full-time workers with a bachelor's degree earned on average 1.5 times what workers with only a high-school diploma earned; by 1999 the difference was over 1.8 times as much—and it was nearly as large for those who began but did not complete their degree. In dollar terms, in 1999 persons age 18 and older who:

- had only a high school degree on average earned $24,572;
- had acquired a bachelor's degree (and no more) earned $45,678, or 86 percent more than high school graduates; and
- had begun college but not completed a bachelor's degree, earned $26,958, only 10 percent more than high school graduates and 69 percent less than those who completed a bachelor's degree (U.S. Census Bureau, 2002).

These figures underestimate the full impact of beginning and completing college, as many bachelor degree recipients go on to earn more advanced degrees, which result in even higher earnings.

Another way of gauging the importance of beginning and graduating from college is through the lens of unemployment. In 2001, when the overall unemployment rate among persons 24 to 64 years of age was only 3.5 percent, 4.2 percent of high school graduates were unemployed but only 2.0 percent of college graduates were unemployed. The unemployment rate among persons who had begun college but had not earned a bachelor's degree (although they may have earned an associate's degree or certificate) was 2.9 percent (U.S. Census Bureau, 2002). Does entry to college matter? **Yes! But finishing college and earning a bachelor's degree matters even more.**

Higher Earnings for First-Generation Students

Not surprisingly, the impact of earning a bachelor's degree is most strongly felt among first-generation college students whose parents may have earned only a high school diploma, if that. Since persons who did not earn a high school degree or its equivalent earned only two-thirds as much as high school graduates did in 1999, it is likely that the impact of completing a four-year degree on the inter-generational earnings of first-generation college student families is at least a doubling of family earnings.

COLLEGES CAN ENHANCE RETENTION AND GRADUATION

An extensive body of research on student retention and successful retention programs spanning 25 years points to several institutional actions that enhance retention and graduation:

1. Provide students clear guidelines as to what they have to do to be successful. Effective advising is an essential part of successful retention programs. But to be effective, advising must address at least two distinct, though related issues:
   - the needs of the many students who begin college undecided about their majors and careers, as well as those who change their majors during college; and
   - the needs of the large numbers of first-generation students who, unlike youth from college educated families, may not have the same knowledge of how to successfully navigate postsecondary education.
2. Provide academic, social, and personal support. Whatever the form, successful retention efforts must empower students to access support when needed. An important feature of effective support programs is that they are connected to everyday student learning needs.

Institutional Actions that Enhance Retention and Graduation

Providing Support

For many students, especially those who begin college academically under-prepared, academic support can come in the form of tutoring, developmental education courses, study groups and summer bridge programs. For others, social support is called for, most frequently in the form of advising, counseling, student support groups, and mentoring. In some cases, personal counseling may be necessary.

On campus, empowering students to access support means the development of support programs that are specifically designed to address the needs of particular groups of students (e.g. first-generation, those in need of academic assistance, and students from different ethnic or racial groups). It typically also means the development not only of specific courses designed to assist students, such as the widely employed freshman seminar, but also of programs that call upon the institution and the student to engage in a series of structured activities during the first year (Muraskin, 1997b).

Connecting Academic Support to Everyday Learning

Rather than being placed at the margins of academic systems as standalone efforts detached from the regular curriculum, effective academic support programs are linked in meaningful ways to student needs to succeed in that curriculum. The point of doing so is to ensure that students are able to make meaningful connections between the skills and knowledge they are acquiring in the support programs and those needed to succeed in their credit-bearing curriculum. This ensures that the student receives support and makes academic progress at the same time. Among the more popular of these "contextualized" academic support programs are the use of supplemental instructional study groups (see Martin and Arendale, 1994) and the use of linked classes, where one of the classes is developmental in character (Tinto, 1998). Universities such as California State University at Hayward and Temple University, and two-year colleges such as DeAnza College in California and LaGuardia Community College in New York have each employed linked classes to effectively assist students in need of academic assistance.

Effective Assessment

Effective assessment of students typically involves a range of activities from entry assessment of student academic skills, to the monitoring of student progress tied to early warning systems that lead to the initiation of institutional actions, to the assessment of student learning activities within the classroom (e.g. see Angelo and Cross, 1993). At the institutional level, effective assessment takes on the form of institution-wide and program-specific formative and summative assessments that are tied into a system of accountability that monitors improvements in retention and graduation. Parkland College in Illinois and University of Akron in Ohio are two of a number of institutions that have taken seriously the task of assessing student learning in the classroom. Among those who have also instituted campus-wide assessment systems are Indiana University-Purdue University at Indianapolis, Johnson County Community College, North Carolina State University, Portland State University, Sinclair Community College, and Truman State University in Missouri.

Engaging Students in Learning

There are a variety of strategies that engage students in learning. For example, institutions can use cooperative or collaborative teaching strategies that call for students to work together in cooperative groups within the class, and learning communities that require students to enroll together in two or more courses with content and activities coherently linked. In each case, educational activity structures are established that call for students to learn together in ways that promote learning. Enhanced learning leads to retention and eventual graduation.

3. Carefully assess their own activities, as well as students' activities, and provide frequent feedback.

4. Involve students with other students, faculty, and staff, paying particular attention to those activities that are directed toward student learning. Students who are actively involved with peers, faculty, and staff—especially in learning activities—are more likely to learn, persist, and graduate. The focus on the classroom is important, because for the many students who commute or work while enrolled, the classroom is the only time they are sure to be on campus.

Understandably, many of these initiatives call upon the faculty and in some cases student support staff to acquire a range of pedagogical skills that are typically absent from their teaching repertoire. Regrettably, higher education faculties are the only faculty in education that, as a matter of practice, are not trained to teach their own students. Consequently, one of the key actions institutions can take to enhance retention and graduation is to invest in effective faculty and staff development and reward effective teaching.

ENHANCING RETENTION AND GRADUATION

Currently, 46 percent of low-income students graduate from high school and immediately enter postsecondary education—and they are very likely to be first-generation college students. What can colleges and universities do to enhance their retention and graduation?

- Provide financial support in an amount and form that enables low-income students to attend full-time rather than part-time and when necessary, work fewer hours, preferably on campus rather than off campus. This is important because the likelihood of completing a college degree is reduced when students attend part-time and/or work off campus for more than 20 hours a week.
- Emphasize academic support—and what it takes to be successful in college—to address the fact that many low-income students begin college with inadequate academic skills.
- Provide faculty, staff, and peer advising, counseling, and mentoring.

Creating Retention Programs for Low-income Students on Campus

On-campus efforts to address retention for low-income students often takes the form of specific programs such as the successful Federal TRIO Student Support Services program and state programs such as New York State's Higher Educational Opportunity Program (HEOP). One of the many advantages of such programs is that they provide low-income students a visible "home" within the campus. The danger, however, is that these efforts are implemented in ways that may prove counterproductive to the goal of increased retention and graduation among low-income students. There is a tendency for some academic and social support programs to isolate their students from other students and programs on campus, and thus marginalize their presence. That isolation can serve to stigmatize students and thereby undermine their motivation to succeed. Though support programs have to be targeted and, for some students, provide a safe, supportive place for them to meet and work with program faculty and staff, it does not, nor should it, follow that those programs be organized in ways that separate students served from other students and programs.[4] Nor does it follow that support programs should result in lower academic standards. If anything, effective programs should increase standards while providing support. For all students, low-income or otherwise, high standards and hard challenges need to be balanced by adequate levels of support.

[4]As noted earlier, initiatives such as learning communities, supplemental instruction, and carefully planned summer bridge programs can yield substantial benefits to students without the associated costs of marginalization.

Monitoring Progress: Is It Possible?

A recently completed study on state-level databases funded by the Lumina Foundation for Education clearly demonstrates that it would be possible, with additional work, to move toward a national database on college student progress by carefully connecting existing and future state-level databases (Ewell, Schild, and Paulson, 2003). There are at least 46 databases in 39 states that currently contain information on 69 percent of the nation's full-time enrollment and 73 percent of its headcount enrollment. Virtually all have been in place long enough to generate six-year enrollment records using students' Social Security numbers to link records and compile statistics. Equally important, definitions and coding structures are sufficiently compatible that they can be linked (through appropriate recoding) to yield metrics of educational progress that would be national in scope. Though there are obstacles to overcome—federal privacy restrictions and the technical challenges involved in merging and manipulating more than 13 million records annually—a federal system to monitor student retention and graduation is not out of the question.

Improvements in retention and graduation should not be measured, however, by aggregate institutional rates of completion, as is typically the case. We should look at improvements over time in rates of persistence and completion for different segments of the student population (e.g. low-income students, under-prepared students) tied to profiles of entering students and patterns of transfer. The use of aggregate rates of graduation may lead some institutions to respond to perceived accountability pressures by reducing the number of low-income and/or under-prepared students they admit hoping that restricting access will immediately improve aggregate graduation rates. The end result would be to punish, in effect, those institutions that maintain their commitment to serve our most needy students, thereby reducing access to higher education.[5]

Unfortunately, the desire to monitor institutional performance through the use of student record systems presents some very real problems with some of the metrics that would be used to measure institutional retention and graduation. Two issues arise:

- many students register at more than one institution during the academic year, in some cases concurrently, and many more transfer between institutions, sectors, and states. More to the point of the current discussion, the pattern of these behaviors among institutions is not uniform. Many institutions, especially in the public sector, have long served as jumping off points for students seeking entry to other institutions. Particularly in the larger metropolitan areas, institutions find that many of their students also register at other institutions either to enroll in courses not taught in their home institution and/or to earn credits at lower costs. Any retention and graduation metric that fails to take these behaviors into account would favor the larger, more well-funded public universities to which transfers tend to flow, and penalize those from which students transfer. The failure to understand and track multiple registrations would result then in distorted measures of retention and graduation that typically presume that every registrant is in fact seeking a degree in the institution in which registration occurs.
- not all students begin college with the goal of completing a degree. For many, college may be the vehicle for upgrading job skills, gaining a promotion, or changing jobs. For others, it may simply be a way of gaining more knowledge. The problem is not simply that these behaviors occur, nor only that they confound our ability to make sense of differences between institutional retention and graduation rates, but that they are not uniformly distributed across institutions. Two-year colleges and four-year public colleges, especially in urban areas that typically serve larger numbers of low-income students, are likely to attract more students whose purpose of entering college is not the completion of a degree. Attempts to measure institutional performance by the simple metric of retention and graduation rates, without regard to individual goals, would serve to penalize these institutions relative to those colleges and universities that attract the more traditional college student, namely the larger public and private universities.

But even with more sophisticated student tracking systems, the federal government would be well advised to leave the task of using retention and graduation metrics to measure institutional performance to the states that are better able to interpret those data within the contexts from which they arise. The fact is that institutional performance is shaped by a complex array of forces that are often specific to the particular situation and state in which the institution finds itself. No national system of accountability, however well intended, can ever capture that complexity without generating distortions in institutional behavior. Although our nation must begin to measure institutional retention and graduation, especially institutional capacity to serve the neediest students, it is best to proceed with caution lest we undermine the very institutions that have long served those students.

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[5]Similar problems arise with those accountability and incentive systems that reward institutions for meeting graduation targets. Take for instance the case of Pennsylvania. Under the guidance of Secretary of Education Hickok, the state created a $6 million grant program to reward colleges and universities that graduate at least 40 percent of their in-state students within four years. When the first set of grants were awarded, all 65 institutions receiving awards were private. No public college received a grant (Burd, 2002).

CARROTS AND STICKS

Student persistence is primarily an institutional event, and therefore primarily the responsibility of the institution and, in the public sector, of the states that govern those institutions. Nevertheless, there are steps the federal government can take to increase the likelihood of college graduation, especially among low-income students.

Increasing retention and graduation over time

The federal government should work with states to develop a system ***to monitor student progress and institutional performance*** over time. This new tracking system must be sensitive to the diversity of institutions and institutional missions. Data or findings should be reported annually in a format that is readily accessible and user-friendly.

Beyond monitoring institutional performance, there are a number of actions the federal government can take to ***promote innovation:***

- Greatly expand programs such as the highly regarded but much under-funded Fund for the Improvement of Postsecondary Education (FIPSE), which provides institutions resources to develop and pilot innovative programs designed to improve student persistence and graduation over time, particularly for low-income and first-generation students.
- Create a special national initiative within FIPSE to address the retention of under-prepared college students. It is clear that preparation matters, especially for first-generation and low-income students (NCES, 2001). It is also clear that colleges and universities, working with high schools, can do more not only in linking their efforts, but also in being more innovative in the use of summer bridge and first-year developmental education programs (Tinto, 1998).
- Provide support for state demonstration programs that would encourage states to "think outside of the box" in ways that have thus far escaped us. While some states have established statewide efforts to improve retention, there is more that can and should be done.
- Join with other organizations to support the development of programs within universities that enable future faculty to acquire the skills needed to teach at the postsecondary level.

The federal government can act to ***enhance transfer programs.*** Approximately 70 percent of students who begin higher education in a two-year college aspire to earn a bachelor's degree or more (NCES, 2003a). But after six years, only 10 percent of students who began in a two-year college earned a bachelor's degree. Among low-income students, the percentage is even lower (NCES, 2003a). The unavoidable fact is that transfer programs in two-year colleges have not been very effective. Yet

Examples of Thinking Outside the Box

The GEAR UP state grant program could provide a mechanism for state demonstration programs that address retention. For example, GEAR UP currently supports the innovative and successful Indiana 21st Century Scholars program, which combines comprehensive support services such as tutoring, mentoring, and information about college for students beginning in middle school with an assurance of adequate financial aid for college. The GEAR UP state grant program could be more clearly focused and targeted on supporting additional such efforts tailored to the needs of other states.

Models of Postsecondary Teaching Programs

A potential model already exists in the Higher Education Act under Part D of Title VII, the "Demonstration Project to Ensure Students with Disabilities Receive a Quality Higher Education." It provides for the development of effective methods and strategies to teach students with disabilities and for the transfer of these methods and strategies to college faculty through professional development and training activities. It would seem only a short step to provide federal support to improve the quality of teaching targeted on the special needs of low-income and first-generation students. Indeed, there is more than sufficient reason for states, professional associations, and accreditation agencies to work together to establish preparation guidelines for faculty who intend to teach in higher education. If we can agree on the need for preparation guidelines for student affairs professionals, we can surely agree on the need for similar guidelines for people who are given the responsibility of teaching college students.

for low-income students, the two-year college is most frequently the point of entry to postsecondary education and therefore their primary pathway to the four-year degree. The federal government can help by conducting a careful assessment and dissemination of best transfer practices, in particular in those institutions—both rural and urban—that serve low-income students. The government should provide funds (perhaps through FIPSE) to develop effective transfer programs, again in those institutions serving low-income students.

The federal government should ***remove disincentives that discourage institutions from serving low-income and first-generation students.*** For example, under the Higher Education Act, cohort loan default rates are calculated for each institution of higher education and used to determine eligibility for participation in the federal student aid programs. The rates are measured by the percentage of borrowers who enter repayment in a fiscal year and default by the end of the next fiscal year. Institutions with cohort default rates of 25 percent or more for three consecutive years are excluded not only from the loan programs but also from all of the student financial aid programs authorized by the Higher Education Act, including Pell Grants.[6] Not surprisingly, students from low-income families, who are often forced to borrow because of inadequate grant assistance, are the most likely to default (Dynarski, 1994). Therefore, institutions of higher education have a disincentive to serve the neediest students, as they risk their eligibility to participate in the student financial aid programs if too many of their students default. Congress should consider alternative measures to screen out low-quality higher education institutions that do not discourage the enrollment of low-income students.

[6]Since the loan default provisions were first applied in 1991, approximately 1,200 institutions have lost Title IV eligibility due to higher than allowable default rates.

Increasing retention and graduation now

Increase student aid to address the financial barriers that low-income students face. College costs are increasing rapidly, but while financial aid over the past decade has also increased, students with the highest incomes have received the largest increases in aid.The net result is that paying for college is taking more of a family's resources, especially for those with the lowest incomes: total costs at public four-year institutions represent about 6 percent of income for students from families with the highest income, 19 percent for middle-income families, and 71 percent for low-income families; in 1979-80, total costs were 31 percent for low-income families (College Board, 2003).

Total costs at public four-year institutions represent about 6 percent of income for students from families with the highest income, 19 percent for middle-income families, and 71 percent for low-income families; in 1979-80, total costs were 31 percent for low-income families (College Board, 2003).

Unfortunately, the purchasing power of the Pell Grants—the largest federal grant aid program for low-income college students—has not kept up with the increasing cost of college. The result is that more students, especially those from lower income families, have been forced to either forego higher education altogether or take on additional loan debt, attend

part-time, and/or increase the number of hours they work to pay for college (St. John, 2002). All of the latter have the net effect of decreasing the likelihood that students will complete their degrees.

There are two direct steps the federal government can take to address these issues:

- Substantially increase Pell Grant funding. Despite increases in appropriations for the program over the last few years, so much more remains to be done in order to restore the Pell Grant's impact on making college affordable for low-income students. The maximum award should be substantially raised, and significant new monies need to be supplied to the program to ensure larger awards for all recipients. The point of doing so is not merely to enable more people to begin higher education, but allow them to participate in a manner that does not impede their likelihood of success (e.g. attending full-time rather than part-time).
- Encourage states and institutions to link increases in need-based aid to increases in college tuition. Failure to do so can have serious consequences on student enrollment most notably among low-income students: recent double-digit increases in tuition have resulted in decreased enrollment most notably in the two-year colleges, which most frequently serve low-income students (Education Commission of the States, 2003).

Trends in College Costs and Student Aid

- The most recent increases in public tuition are the highest in the past 10 years. Over the past year, average tuition and fees for in-state residents have increased 14 percent at public four-year institutions, and slightly below 14 percent at public two-year colleges (College Board, 2003).
- Financial aid has also increased over the last decade. In the 1992-93 academic year, 17 percent of students enrolled in public four-year colleges and universities received aid that averaged about $2,200 per student. In 1999-2000, that percentage increased to 23 percent and the average award grew to $2,700.
- Most of the increases in aid seem to have gone to students from the highest income backgrounds. The percentage of highest-income students receiving financial aid grew from 13 percent to 18 percent, while there was no increase in the percentage of lowest-income students receiving aid.
- Some, but not all, of that increase has been the result of the shift of financial aid to more merit-aid. At the same time, the average amount of aid received increased far more for highest-income students than it did for low-income students (NCES, 2003b).

The federal government should ***expand funding for TRIO.*** On most campuses, two of the TRIO programs, Student Support Services (SSS), and the McNair Program (for juniors and seniors), serve as important components of retention efforts for low-income, first-generation, and disabled students. Indeed, a national study of SSS that followed students over three years found that SSS had a positive and statistically significant effect on college grades, credits earned, and retention (Muraskin, 1997a). Retention at the same institution was 7 percent higher in the second year and 9 percent higher in the third year than the comparison group, and the gains in retention increased with the amount of service students received. Unfortunately, Student Support Services programs serve only a fraction of the eligible college student population. It is estimated that at current funding levels, SSS serves only 7 percent of eligible students. Similarly, though the Student Support Services program has increased greatly in size over the past several decades, when adjusted for inflation, the funding per program and per participant is less than it was in 1970.

Retention of Pell Grant Recipients

Pell Grant recipients in four-year institutions do as well as higher income non-recipients students who are, on average, academically better prepared (NCES 2002). Indeed, among those who scored in the lowest SAT I/ACT quartile, Pell Grant recipients were in fact more likely to persist than non-recipients.

CONCLUSION

Increased student retention and graduation is possible. Research has more than amply demonstrated that there are a variety of actions that can be taken to increase retention and graduation of students. Though it is primarily an institutional matter, the federal government can improve retention and graduation by assisting in the development of an accurate national database that tracks students over time, promoting innovation, enhancing transfer programs, and increasing financial aid for low-income students.

Though these actions are costly, inaction is even more expensive. Our society cannot afford to keep losing four out of every ten students who begin college, or graduate only three bachelor degree recipients for every ten entrants. Nor can it afford a system of higher education in which low-income students are less than half as likely to earn a bachelor's degree as are students from high-income backgrounds. If we want a society that provides meaningful educational opportunity to all its citizens, enabling all citizens regardless of income to earn a college degree, we must and can do more. We know that increasing retention and graduation is possible. What is required now is the commitment to do so.

Roles for the Federal Government in Improving Retention and Graduation

Increasing Retention and Graduation Over Time

- Monitor student progress and institutional performance
- Promote innovation
  - Expand programs like FIPSE
  - Create national initiative to address retention of under-prepared college students
  - Provide support for state demonstration projects
  - Support the development of programs that promote postsecondary level teaching skills
- Enhance transfer programs
- Remove disincentives to serving low-income and first-generation students

Increasing Retention and Graduation Now

- Increase student aid
  - Increase Pell Grant funding substantially
  - Encourage states and institutions to link increases in need-based aid to increases in tuition
- Expand funding for TRIO, especially Student Support Services

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Professor Vincent Tinto received his Ph.D. in education and sociology from The University of Chicago. He is currently Distinguished University Professor at Syracuse University and chair of the higher education program. He also serves as Senior Scholar for the Pell Institute for the Study of Opportunity in Higher Education. He has carried out research and has written extensively on higher education, particularly on student retention and the impact of learning communities on student growth and attainment. He has consulted widely with Federal and State agencies, with independent research firms, foundations, and with two and four-year institutions of higher education on a broad range of higher educational issues, not the least of which concern the retention and education of students in higher education. His current research, funded by a grant from the Lumina Foundation for Education and the William and Flora Hewlett Foundation, focuses on the impact of learning communities on the academic achievements of under-prepared college students in urban two and four-year colleges.

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