CHANGING DIRECTION:

Integrating Higher Education
Financial Aid and Financing Policy

Strategies for Improving Student Success in Postsecondary Education

January 2007

WICHE

Supported by a grant from Lumina Foundation for Education

Strategies for Improving Student Success in Postsecondary Education

January 2007

Arthur M. Hauptman

WICHE

Supported by a grant from Lumina Foundation for Education

The Western Interstate Commission for Higher Education (WICHE) is an interstate compact created by formal legislative action of the states and the U.S. Congress. Its mission is to work collaboratively to expand educational access and excellence for all citizens of the West. Member states are:

Alaska	Idaho	Oregon
Arizona	Montana	South Dakota
California	Nevada	Utah
Colorado	New Mexico	Washington
Hawaii	North Dakota	Wyoming

WICHE's broad objectives are to:

- Strengthen educational opportunities for students through expanded access to programs.
- Assist policymakers in dealing with higher education and human resource issues through research and analysis.
- Foster cooperative planning, especially that which targets the sharing of resources.

This publication was prepared by the Policy Analysis and Research unit, which is involved in the research, analysis, and reporting of information on public policy issues of concern in the WICHE states.

This report is available free of charge online at http://www.wiche.edu/Policy/Changing_Direction/Pubs.asp.

For additional inquiries, please contact the Policy Analysis and Research unit at (303) 541-0254 or ebarber@wiche.edu.

P.O. Box 9752
Boulder, Colorado 80301-9752
Telephone: (303) 541-0200
An Affirmative Action/Equal Opportunity Employer
Printed in the United States of America
Publication Number 2A361

Contents

List of Tables

Acknowledgements

Without the support and initiative of several individuals, this paper would not have been possible. First and foremost, Cheryl D. Blanco, former director of policy analysis and research at WICHE, saw the need for more attention to be paid to the subject of student success and pressed for a more careful look at this important issue. Others who facilitated the preparation and publication of this report include David A. Longanecker, executive director of WICHE, who, of course, has been a leader for many years in the postsecondary education community on the issues of student access and success, and Demarée K. Michelau who guided it through the publication process. Annie Finnigan and Candy Allen also provided their talent and assistance in the editing and production of this report. The paper also greatly benefited from the comments by a number of individuals who attended and participated in a series of WICHE presentations on the subject over the past year.

This publication also would not have been possible without the financial support provided by Lumina Foundation for Education. The opinions expressed in this report are those of the author and do not necessarily represent the view of Lumina Foundation or its employees.

Arthur M. Hauptman

January 2007

Foreword

In American higher education, particularly the public sector, two presumptions have guided most of our past policies. The first was that high school did a fine job of preparing students for college; if students completed high school they were obviously ready to go to college. The second was that the major impediments to attending and succeeding in college were financial and that the best strategy for ensuring financial accessibility was to keep college affordable by keeping tuition low.

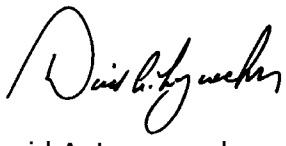
But these two assumptions no longer assure student success, if they ever did, for two reasons. First, our heavy focus on keeping price low has eroded the financial resources that institutions need to provide quality instruction. When a much smaller proportion of Americans went to college, the states, for all practical purposes, were able to subsidize their education at a level that assured institutions sufficient resources, even with only modest tuitions. As participation increased, however, it became difficult for states to sustain sufficient resources to support high-quality education, yet we have continued to restrict tuition levels, thus eroding the financial base for our institutions. In this environment institutions have little incentive, and perhaps even inadequate capacity, to provide an adequate supply of high-quality seats to all the students who want them. Thus, increases in demand cannot be met with the financially limited supply.

Second, our benevolent policies on financial aid, which have traditionally included no quid pro quo from the student recipients, have provided little incentive for many students to prepare well for college while still in high school.

The consequences of this could be dire for the U.S. Many other countries, most notably Korea, China, and India, are investing more in higher education, substantially increasing their levels of participation and success, and are beginning to surpass the U.S. in the share of their populations that are educated at the highest levels.

To redress these conditions, both state and federal policy need to provide greater incentives, both to students and to the institutions that serve them, to enhance the likelihood of student success.

In this paper Art Hauptman adds substantially to the body of work that has been supported by Lumina Foundation for Education in WICHE's *Changing Direction* project, which has focused on how states can intentionally change finance policies – appropriations, tuition, and financial aid – to expand access to success, particularly for the most at-risk young adults.



David A. Longanecker
Executive Director
Western Interstate Commission for Higher Education (WICHE)

Executive Summary

In the past decade, improving student success has emerged as a key federal and state policy objective that complements the traditional focus on increasing student access. This performance-based focus on success entails increasing both the year-to-year retention and degree-completion rates for all students, but particularly for those groups of students who are most at-risk. This paper seeks to identify possible ways in which states can improve the chances of students succeeding in postsecondary education programs by asking two key questions, exploring three possible explanations, and making four suggestions for changes in state policies that would help improve retention and degree-completion rates for a broad range of students. The paper concludes with a brief discussion of what areas of research and analysis might be pursued to help us better understand what policies may be needed to achieve higher levels of student success.

The U.S. record in promoting student readiness for, access to, and success in postsecondary education has been mixed, with college participation rates among the highest in the world. Other indicators are marginal, at best, however. Available data indicate that levels of college readiness in the U.S. are not what they should be, and degree-completion rates are average to below average among industrialized nations. This leads to two questions:

- Why has the U.S. done so much better at achieving high levels of access than in promoting student readiness and success?
- Why have equity gaps throughout the postsecondary educational pipeline proved so difficult to close over a prolonged period of time?

The following are three possible explanations for the mixed record in the U.S. in achieving student readiness, access, and success:

- **Funding and policy priorities favor access over readiness and success.** Federal and state funding and policy debates have tended to focus much more on providing access and much less on ensuring the adequate preparation of students and on whether students stay in school and complete their degree in a reasonable amount of time.
- **Federal and state policies are not well targeted toward low-income students.** Low tuition policies at public institutions do not do a good job of targeting state subsidies toward the lowest-income students. Nor are most student aid programs at the federal and state levels well targeted to the poor. Also, institutional aid packaging practices increasingly contribute to a declining degree of targeting toward economically disadvantaged students. This lack of targeting reinforces chronic inequities at each stage of the educational pipeline.
- **There is a disconnect between policy design, implementation, and effect.** Much of the analysis in the paper focuses on two reasons that policies may have been ineffective in achieving intended results. First, policies and implementation strategies are often not well designed to achieve their intended result. Second,

policies have multiple and offsetting effects that often are not taken into account in the policymaking process.

The paper advises that state policymakers should take into greater account the intended and unintended consequences of policies in addressing the issues related to improving student success. Four suggestions are made for how states could improve the preparation and performance of all students in postsecondary education, but particularly for the most disadvantaged students:

- Increase funding of early intervention programs for at-risk students because this should have positive effects on readiness, access, equity, and retention without much, if any, negative effect on quality.
- Include more stringent preparation requirements as part of eligibility for state need-based student aid programs. It would be better for states to do this than for the federal government to assume this role as it has done in recent legislation.
- Target student aid funds more toward students from low-income families and other traditionally underrepresented groups of students.
- Pay institutions for the number of Pell Grant recipients who finish a year of study, transfer, or complete a degree. This policy should have positive effects on retention and equity, with modest negative effects on quality, if properly designed. The federal government should also consider implementing such a program.

In terms of research and analysis, the paper indicates several areas in which the devotion of additional energy and resources might prove most fruitful:

- **Collection, analysis, and presentation of data on the extent to which federal and state funding favor access over readiness and success.** That funding does favor access as an outcome is a key assertion in this paper, and one that requires further analysis.
- **Collection, analysis, and presentation of data on how well federal and state support and policies are targeted toward low-income students.** It is often asserted that student aid programs are increasingly not well targeted toward the poor, but more data and better analysis of program data and survey results are needed to examine this question, particularly for student loans.
- **Analysis of the direction and magnitude of the effects of various policies on key objectives.** This paper argues that a key reason that policies have not been more effective is that they have not been well designed to achieve their primary objective and are often at cross purposes with one another. Much more work is needed to test this idea, which currently may be regarded more as hypothesis than a confirmed theory.

Introduction

Over the past decade, one of the more encouraging developments in postsecondary education debates across the U.S. has been the addition of student success to the more traditional discussion – and policy objective – of improving access. As one indication, many publications and organizations now regularly include student success as well as access in their postsecondary titles, and a number of meetings are now organized around the topic.

This recent enhanced focus on improving success derives in part from the traditional inability to achieve high levels of degree-completion rates in the U.S. The American system of postsecondary education, for all of its accomplishments, traditionally has had degree-completion rates that are average to below average when compared to those of other industrialized countries.

Another reason for the increasing policy focus on improving student success is the realization that the chronic gap between haves and have-nots in providing access to postsecondary education is even greater when described in terms of the likelihood that students will complete their education. Estimates vary, but all observers agree that students from low-income families are much less likely to complete a postsecondary degree than students from wealthier families.

It also is reasonable to assume that the problems with achieving greater levels of student success in the U.S. are very much related to the reality that a growing number of entering postsecondary students are not prepared to do college-level work. The research that does exist and common sense suggest that low levels of student preparation are likely to translate directly into low rates of student success, in terms both of retention and degree completion.

But while the ongoing postsecondary education debate now recognizes the importance of attaining greater levels of student success in the form of better retention and degree-completion rates, policies generally have not followed suit. By and large, federal and state policies remain primarily focused on increasing access, with little impetus for improving rates of student success.

Moreover, the debate over how to improve both access and success has been lopsided in its emphasis on how to change the dynamics on the demand side of the equation, principally by reducing the net price that students pay to enroll in postsecondary education. This focus on demand continues when the issue of improving the prospects for student success is discussed in many states, which adopt policies such as encouraging students to complete their degree or penalizing students who do not complete in a 'normal' amount of time. As a result, this traditional policy focus on demand-side solutions has tended to ignore several possibly critical aspects of the "success" problem:

- Student aid solutions traditionally have ignored the issue of preparation, which increasingly is recognized as a large part of the "success" problem.
- Lowering the price that students pay in the hope of improving access may be contributing to low rates of degree completion in the U.S.

- The traditional focus on increasing the access of students to postsecondary education may reduce the incentives for institutions to graduate many of these students.

This paper addresses these issues by, first, briefly describing the mixed U.S. record in achieving student readiness, access, and success. It then examines three possible explanations for why the U.S. has been more successful in achieving high levels of access than in improving student readiness or success and why chronic equity gaps persist at different points in the postsecondary educational pipeline:

1. Funding and policy priorities favor access over success or readiness.
2. Policies are not well targeted toward the poor.
3. Federal and state policies have not been effective in meeting intended objectives.

The paper also describes recent state efforts to improve student success and makes four suggestions of concrete steps that states could take if they are serious about doing more to improve the chances of students succeeding, especially disadvantaged groups of students. In making these suggestions, the paper seeks to look outside the traditional focus on demand-side approaches to include what policies states might adopt that provide incentives for institutions to do a better job at retaining and graduating their students, particularly those who are most at-risk and for whom completion rates are especially low. The paper concludes with a call for more research on issues that mirror the explanations examined here; they each require greater attention if we are to improve our understanding of the student success issue.

The Mixed U.S. Record in Achieving Student Readiness, Access, and Success

The statistics presented below confirm that the record in the U.S. since the federal student aid programs were first created in 1965 to promote greater student readiness, access, and success in postsecondary education has been mixed.

Readiness. A series of reports over time suggest that a large and possibly growing number of entering college students in the U.S. require remediation or otherwise are not prepared to do college-level work. More than three-quarters of postsecondary institutions in the U.S. offer at least one remedial course. Twenty-eight percent of entering freshmen in 1995 and 2000 took at least one remedial course, but the length of time spent in remedial courses was higher in 2000.[1] The percentage of postsecondary students taking at least one remedial course is large and probably growing. In surveys conducted in 1992 and 2000, nearly two-thirds of community college entrants took at least one remedial course and roughly one-quarter of entrants into four-year institutions also took at least one course below the collegiate level.[2]

Access. The U.S. has among the highest participation rates in the world, with two-thirds of all high school graduates entering a postsecondary program in the following fall. This compares to the roughly one-half of 1972 high school graduates who enrolled in a postsecondary program.[3] When a longer time horizon is observed (eight years after high school graduation), more than three-quarters of high school graduates now enroll in postsecondary education.[4]

While this represents significant progress, a number of other developed countries in Europe and elsewhere have had even more substantial growth in their postsecondary or tertiary education participation rates and now outrank the U.S. on this dimension of access. Although the U.S. is no longer first in the world in providing access, its participation rates are still near the top of all industrialized countries, as reported in the annual Organisation for Economic Co-operation and Development (OECD) statistics on education trends.[5] Table 1 shows the tertiary participation, completion, and attainment rates in selected OECD countries.

Success. Student success can be measured in one of several ways: the proportion of the population that has received a postsecondary degree (attainment) by a certain age; the percentage of students enrolling in a postsecondary program who receive a degree (degree completion); or the percentage of those enrolled who finish a year of studies (retention). On these three dimensions, the U.S. rank varies.

If success is measured in terms of educational attainment, the U.S. traditionally has ranked near the top of all countries, though that trend is now changing. According to the most recent OECD compilation of education statistics, the U.S. still ranks among the best in the world with respect to bachelor's degree attainment, with 30 percent of the U.S. population aged 25-64 in 2004 having received a bachelor's degree or its equivalent, compared to an average of 19 percent for OECD countries reporting this statistic. But when all tertiary degrees are taken into account, including those at the associate's degree level, which is critical to our future economic competitiveness, the U.S. tertiary attainment rate was 39 percent for 25-64 year olds, compared to 25 percent for all OECD countries (see Table 1). But when the statistics are reported for narrower age groups, the U.S. rate remains around 39 percent for all age groups, whereas the attainment rates for different age groups in OECD countries show greater variation, with the youngest age group of 25-34 year olds having much higher rates than older age groups. As a result, the U.S. attainment rate for 25-34 year olds has fallen to eighth internationally. The proportion of 25-34 year olds who had received a tertiary degree in 2004 in all OECD countries was 31 percent – more than three-quarters of the U.S. rate – whereas for 55-64 year olds, the percentage was 18 percent, half of the U.S. rate for that age group. This narrowing in the difference for the youngest age group means that attainment rates in many of these countries are rising more quickly than in the U.S.

Table 1. Tertiary Participation, Completion, and Attainment Rates, Selected OECD Countries, 2004

Country	Participation/ Entry Rates	Completion/ Survival Rates	Attainment Rates 25-64 year olds
Australia	70%	67%	31%
Austria	37%	55%	18%
Belgium	34%	74%	30%
Finland	73%	71%	34%
Germany	37%	73%	25%
Greece	33%	79%	21%
Ireland	44%	83%	28%
Japan	43%	91%	37%
Korea	48%	83%	30%
Netherlands	56%	76%	29%
New Zealand	89%	54%	25%
Spain	44%	74%	26%
Sweden	79%	60%	35%
United Kingdom	52%	78%	29%
United States	63%	54%	39%
OECD Average	53%	70%	25%

Source: Organisation for Economic Co-operation and Development (OECD), Education at a Glance, 2006.

Note: **Entry rates** are the sum of net entry rates to university-level programs for each year of age.
Survival rates are the number of graduates from programs divided by number of new entrants.
Attainment refers to the percentage of an age group that has attained tertiary-level degrees.

Nonetheless, the U.S. attainment rates are still near the top for each age group.[6]

When student success is measured in terms of degree-completion rates, however, the U.S. has been much less successful. Degree completion rates in the U.S. remain average to below average when compared to other industrialized nations. When comparing survival rates in tertiary education – measured as the number of students who graduate from programs divided by the number of new entrants into these programs – the U.S. had a rate of 54 percent, whereas the OECD average was 70 percent in 2004.[7] When measured on the conventional basis of completion rates – the percentage of a cohort who completes a program of study within a prescribed amount of time - less than half of the students in the U.S. who begin a baccalaureate program of study complete their degree. The completion rates for associate's and bachelor's degrees among students who initially enroll in community college are much lower.[8]

Equity. An examination of available data also indicates that concerns about levels of student readiness, access, and success are particularly acute for low-income and minority students:

- Although systematic data on student preparation levels are not available, it appears that students requiring remediation are more likely to attend institutions that disproportionately enroll students from low-income families or come from ethnic/racial minority groups.[9]
- Although U.S. participation rates remain high by international standards, a series of reports and analyses over time have chronicled the fact that the gap between rich and poor has not narrowed since government student aid programs were established four decades ago and equity of access became a key policy objective.[10] Even when ability level differences are taken into account, socioeconomic status remains a key predictor of student access.[11]
- Although estimates vary and data are limited, it is clear that students from low-income families are much less likely to complete their education than students from wealthier families. A variety of surveys suggest that students from middle class families are at least three to four times more likely to graduate from college than students from low-income families, and students from higher-income families are as much as 10 times more likely to receive a college degree.[12] Even when controlling for ability level differences, socioeconomic status seems to be a key predictor of student success.[13]

Discussions of readiness, access, success, and equity often treat the above facts as if they were independent of one another. This paper takes a different view – namely, that the lack of adequate preparation, the ascendancy of access as the key policy objective, the mediocre U.S. record in achieving higher levels of degree completion, and the lack of progress in improving equity in the educational pipeline are all a function of policy priorities and the tradeoffs that exist in trying to achieve sometimes-competing key policy objectives.

Two Key Questions

The trends in student readiness, access, and success lead to two key questions relating to student success:

- Why has the U.S. done so much better at achieving high levels of access than

in promoting student readiness and success?
- Why have equity gaps throughout the postsecondary educational pipeline proved so difficult to close over a prolonged period of time?

To answer these two questions, this paper explores the following three possible explanations:

- Funding and policy priorities that favor access over readiness or success have produced expected results.
- Benefits from a wide range of government-funded aid programs are not well targeted toward low-income students.
- Many federal and state policies have not been well designed to improve student readiness and success or to narrow equity gaps.

Explanation 1: Priorities Favor Access over Readiness and Success

Historically, 90 percent or more of the funds states provide for higher education are devoted to operating support for public institutions.[14] The vast majority of the funds that support public institutions are provided on the basis of the number of students enrolled in those institutions, either through enrollment-based funding formulas or negotiated budgets in which the size of the student body is a key factor in determining the amount of funding. Very little of this state support is predicated on whether the students enrolled are adequately prepared to do college-level work or whether they complete their degree in a prescribed amount of time. Few states require that students be adequately prepared for institutions to receive funds. Nor do many states provide funds to public institutions on the basis of the number of graduates or on the number of course or term completers. Thus, it can fairly be said that current state funding patterns and policies reward access over success or readiness.

The vast array of government funded or sponsored student financial aid programs are another major form of public support for American postsecondary education. Although estimates vary, the federal government spends at least $30 billion annually on student aid in the form of grants, work-study, and loan subsidies and default payments as well as tax benefits related to expenses or savings for postsecondary education. A much larger figure of roughly $90 billion emerges if the $60 billion in current annual volume in federally guaranteed or sponsored programs is included in the federal aid figure. States in 2006-07 spent about $7 billion for student aid.[15]

In addition to focusing on access via funding, both state and federal policymakers traditionally have tended to pay much more attention to access-related issues than to consider whether students are prepared to do the work or whether they complete their educational programs. For example, keeping tuition at public institutions below the cost of educating students is the primary purpose of states providing operational support for public institutions. The primary purpose of most student aid programs, at both the federal and state levels, is to promote access by reducing the net price that students face after aid has been taken into account.

But there is little in most student aid policies that promote better readiness or higher rates of success. For example, federal aid policies contain few incentives or penalties for students to complete their degree in a reasonable amount of time. The federal

ability-to-benefit provisions also mean that students can qualify for aid with minimal levels of preparation, at least in the traditional sense of being ready to do college-level work. Student aid policies in most states are not much different from federal policies: here, too, preparation levels or retention rates are a small factor in awarding aid. Thus, as in the case of public support of institutions in the U.S., federal and state student aid dollars are devoted much more to encouraging greater access than to promoting better readiness or success.

Explanation 2: Policies Are Not Well Targeted toward Low-income Students

Since the federal student aid programs were established four decades ago, improving access to postsecondary education for economically disadvantaged students has become a fundamental policy goal in this country. In recent decades, student success has been added as a high policy priority as data and a series of reports have made it increasingly apparent that retention and degree-completion rates for all students, and particularly for low-income and minority students, are inadequate to sustain economic growth in this country. Despite this rhetorical commitment to increase access and the chances of success for low-income students, state and federal policies, as well as institutional practices, are not well designed to provide subsidies and assistance for the neediest students.

The provision of state support that results in low tuition levels at public institutions is a prime example of a policy that is not well targeted toward low-income students. The distribution of state support for higher education by the income level of the recipients of these benefits is one of the oldest topics in higher education policy debates in this country. Those who worry about the lack of progressivity in the way these subsidies are provided point to the fact that the family incomes of students at the best public institutions in the U.S. are skewed to middle and upper levels, as merit-based admissions policies tend to favor better-prepared students, who come most frequently from better more affluent high schools. The relatively low tuition at these postsecondary institutions tends to serve as a magnet, attracting large numbers of middle and upper class students who could afford to pay more but decide to take advantage of the bargain prices for a very good education. Those who take this position often ask the following rhetorical question: Is it fair to ask hard-working blue collar workers to pay taxes that support wealthier students who enroll in the best public institutions in the state?

The counterargument to having greater progressivity in the distribution of public higher education benefits is that higher-income families typically pay more of the state taxes used to fund public institutions and should be able to enroll in similar proportions to their contributions. Advocates for this view also point out how low or no tuition policies at public institutions have historically allowed millions of immigrant and other at-risk groups of students to pull themselves up by the bootstraps, especially before the 1960s, when student aid programs were not as prevalent as they are today. Examples such as the City University of New York (CUNY) make this point. The modern-day open access successors to CUNY, such as the community colleges that now dot urban, suburban, and rural areas in every state, provide great testimony to the power of open access as an engine for educational opportunity.

Among the federal student aid programs, Pell grants are the best targeted, with an estimated 90 percent of awards going to students with incomes of less than $40,000.[16] (But more than half of Pell Grants are awarded to financially independent students, so the degree of targeting may be deceiving, as the income reported is the student's and not the family's.) One reason that Pell is reasonably well targeted is that costs of attendance have little or no effect on the amount of aid a student receives. The Pell program thus is much more "income-based" than "cost-based," with the effect that lower-income students receive much more of the benefits.

The eligibility for other federal aid programs is based on total student financial need, which includes an estimate of the total costs of attendance. These programs tend not to be as well targeted toward lower-income students as the federal definition of financial need extends aid eligibility to students with family incomes exceeding $100,000 when they attend higher-priced institutions. This includes borrowers in the federal student loan programs who become eligible to receive interest subsidies while enrolled. More analysis of the National Postsecondary Student Aid Survey (NPSAS) data or other sources is needed to provide better estimates of the income distribution of students who qualify for this subsidy.

Federal tuition tax credits and deductions also tend to help students with higher family incomes than Pell Grants because only families who pay taxes benefit from provisions that are not refundable to lower-income families, who do not pay much if any federal income taxes. Table 2 shows the distribution of benefits of Pell Grants and tuition tax credits by the family income of the beneficiary.

State student aid programs have also moved in the direction of being less targeted toward the poor, a trend that includes the much-discussed shift toward more merit-based aid and less need-based aid. Over the past decade or more, much attention has been focused on the fact that states have increasingly provided aid that has at least some component of merit in determining eligibility.[17] HOPE scholarships in Georgia have received the most attention in this regard, but a number of other states have followed suit. Less noticed is that many of the students who qualify for merit aid are also financially needy. Moreover, roughly three-quarters of state-based student aid is still awarded on the basis of financial need, meaning that equity concerns may not be as warranted as some of the many reports on this subject suggest.

Perhaps most troubling are data from the NPSAS, which indicate that many institutions seem to be increasingly relying on government aid to provide access for low-income students and are giving more of the aid and discounts they provide to middle-

Table 2. Pell Grants and Tuition Tax Credits, Distribution of Benefits by Family Income, 2004

Adjusted Gross Income	Pell Grants	Tax Credits	Pell Grants & Tax Credits
Less than $10,000	34.7%	2.4%	17.0%
10-20	25.7%	14.9%	18.9%
20-30	21.9%	20.6%	19.0%
30-40	10.6%	16.3%	12.6%
40-50	4.6%	13.0%	9.3%
50-75	2.2%	21.3%	15.0%
75-100	0.1%	11.5%	8.0%
More than $100,000	0.0%	0.0%	0.0%
	100.0%	**100.0%**	**100.0%**

Source: Leonard E. Burman, Elaine Maag, Peter Orszag, Jeffrey Rohaly, and John O'Hare, *The Distributional Consequences of Federal Assistance for Higher Education: The Intersection of Tax and Spending Programs* (Washington, D.C.: The Urban Institute, 2005).

and upper-income students. At private institutions, the NPSAS data indicate, middle-income students are now more likely to receive institutional financial aid – and more of it – than low-income students.[18] This point is made very forcefully in a recent report by Kati Haycock of the Education Trust, which sharply criticizes both government and institutional officials for neglecting their responsibility to promote access and success among traditionally underserved groups of students.[19] Similar trends are explored in a recent report published by the College Board, which focuses on the growth in tuition discounting, particularly at public institutions.[20] Both of these recent reports underscore the same problem: at a wide range of public and private institutions, apparently aid is increasingly being provided to middle- and upper-income students, further diluting the effect of the aid system on the students who most need the assistance.

Explanation 3: The Disconnect between Policy Design, Implementation, and Effect

The previous examination of the available statistics for all students, including those who are disadvantaged, makes it clear that federal and state policies have been ineffective in improving student readiness or success. Two reasons these policies may not be achieving their objectives:

- **Policies often are not well designed to meet the intended objectives of improving success.** For instance, policy design may fail to account fully for unintended effects; the political process often does not produce the best policies; and implementation decisions often undo the intent of the enacting legislation.
- **Policies have multiple effects that offset each other.** Often, many of the possible effects of policies are not well enough considered in their design and implementation or in their evaluation.

Policy Design and Implementation

An examination of a broad range of domestic policies – including health care, transportation, housing, and other domestic concerns as well as education – suggests there are a number of reasons that policies often do not achieve their intended effects.

- **Political considerations overwhelm the results of available policy analysis.** No matter how good or bad the data, research, and analysis may be, the reality is that politics often overwhelm the policy intent. This includes lead policymakers pursuing policies that reflect deeply entrenched ideas that may be contrary to the evidence about the wisdom of pursuing certain policies.
- **Sufficient data, research, and analysis are not available to inform policymaking.** It is too often the case that reliable data and insightful analysis are not available prior to legislation being enacted or programs being implemented.
- **Implementation decisions may prevent intended effects from being achieved.** There are numerous examples of programs that were not implemented in line with the principles and concerns that stimulated the enactment of legislation.

In the case of postsecondary education, there is an additional issue that may lead to policy ineffectiveness: the traditional emphasis on demand-based approaches to deal with issues of access that has been the focus of federal and state policy debates for the past half century. These debates have tended to concentrate far more on stimulating demand

by lowering prices than on increasing the supply of seats by augmenting the resources available to institutions. Federal policy debates have tended to provide student aid to lower the prices that needy students face without adequate consideration of whether enough seats will be available for those students at a wide range of institutions. At the state level, the primary policy focus has been to set tuition well below costs to allow more low-income and middle-class students to attend. Much less attention has been paid to the fact that tuition also is a major source of revenues for public institutions, allowing them to expand or improve quality.

There are a number of examples of demand-based postsecondary policies that often are not well designed to achieve intended objectives. These include the following:

- Student aid programs based on a family's financial need often do not produce desired levels of equity of access because benefits are not well targeted toward low-income students. Under a need-based system in which family contribution and other resources are subtracted from a student's total costs of attendance to determine aid eligibility, middle- and upper-income students enrolling in higher-cost institutions become eligible for more aid than if benefits were better targeted toward students from the lowest-income families.
- Low tuition policies at public institutions increase demand by lowering the price that students face but reduce the supply of seats because of limited resources. Keeping prices much lower than costs can only work as a policy if there are enough seats at a broad range of public institutions to accommodate the students who pay those lower tuitions. But when tuition levels are suppressed, one of the major sources of funds for public institutions is restricted, and fewer seats are provided than if tuitions were set higher and more revenues flowed in. Thus, the net effect of low tuition may be less access than intended or even reduced levels of access.
- Student aid eligibility based on total costs of attendance may be a factor in institutions raising their prices, thereby reducing access. This could be referred to as "the price effect" of student aid – more aid availability leads to higher prices. The possibility of such a price effect has been long debated (since aid programs were first created) without a firm resolution among analysts and other observers. Some argue that more aid inevitably leads to higher prices, just as the ready availability of mortgages is a factor in the rising price of houses. Others contend that no causal relationship has been proven and that a great many other factors account for the continuing increase in tuition and other charges far exceeding the general rate of inflation. One possible point of agreement: Growing loan availability probably has more of an impact on the rapid rise in tuition and other charges than do grants and other forms of nonrepayable aid, such as tuition tax credits, in which the proportion of costs of attendance covered is limited by legislation.
- Simply growing the availability of government student aid may lead institutions to provide less of their own aid and discounts to low-income students. This might be called "the substitution effect" of government-funded student aid. Increasingly, this is a source of concern, as institutions move more and more of the aid and discounts they control up the income scale (see the discussion under Explanation 2).

With regard to student success, as discussed in the section on Explanation 1, federal and state policy debates have concentrated far more on providing access to students than on ensuring that students succeed in terms of completing each year of study and in receiving a degree. Over the past decade, however, more policy attention has been paid to two aspects of student success: the need to prepare students better and the drive to achieve higher rates of degree completion. This increased emphasis on student success has taken several forms. In the 1990s a dozen or more states adopted performance-based funding mechanisms that included graduation rates as one of the key indices on which the performance of institutions would be judged.

In recent years, a number of states have adopted policies that seek to reward both students and institutions for better success. These efforts are described in the following section, which details what states have done in recent years to promote student success. Have these more success-oriented policies achieved the desired results? In many cases, they have not been in place long enough for us to make substantive judgments on their effectiveness; but according to the broadest measures of student success, such as degree-completion rates, progress seems to be slow.

One reason for the slow progress may be that many of the efforts designed to promote greater success have continued the tradition of focusing on student-based approaches. For example, one of the first publications to include success in its title, *The Next Step: Student Aid for Student Success* (by Jamie Merisotis, Colleen O'Brien, and Allison Gray), recognizes the importance of improving student success and makes a set of recommendations to expand student aid and to support programs to achieve this goal.[21] But it is not at all clear that the student-based approaches suggested in the report will lead to higher rates of student success.

Lowering the price that students face – either by maintaining low tuition at public institutions or providing more student aid – may not be the most effective way to increase retention or degree-completion rates. There is a fair amount of evidence to the contrary as degree-completion rates are much lower at public institutions than at private institutions, where prices are much higher. There are many reasons for this difference, including the fact that private institutions do a much better job of providing their students with courses when they need them. But the lower price that public institutions charge is no doubt a factor because it attracts more students; in addition, the opportunity costs of students staying in school longer are lower when prices are lower.

There is another problem to consider: policies that reward students for their success may lead to greater disparities among students from different income groups. For example, a policy that encourages students to complete their education – such as paying off a portion of their debts only if they receive their degree – would end up rewarding students from the highest-income families the most because it is well documented they are the most likely to complete their education. This was the fundamental concern with the very interesting proposal, made by the late Fred Fischer in the 1980s, to provide graduation-contingent aid in the form of loan forgiveness tied to degree completion.[22]

It also has become increasingly apparent to many observers that the student-based

policies most likely to lead to greater student success relate to programs that seek to improve student preparation. Thus, at the federal level, programs such as GEAR UP and the student support services component of TRIO that provides mentoring and counseling services may have the greatest chance of improving student success. This is also true at the state level as programs such as Indiana's 21st Century Scholars Program and the Rhode Island Children's Crusade rely on enhanced support services as a key component for improving student success. These federal and state programs rely on institutions to form partnerships with middle schools or provide the necessary support services directly to students. This suggests that perhaps more attention should be paid to how institutions might be motivated to improve the chances of student success rather than relying on the more traditional notion of expanding student aid or keeping prices low to stimulate greater demand.

Policy's Multiple Effects

Most postsecondary policies have multiple effects, some of which may be adverse with respect to promoting student success. Achieving a better understanding of why existing policies have not done a better job of improving student success requires a better understanding of these multiple effects and their possible interaction. For postsecondary education, the possible effects of policies include:

- **Readiness.** Is the policy likely to increase the degree of student readiness or are unprepared students encouraged to attend?
- **Access – demand effects.** Does policy increase demand by lowering the net price that students face?
- **Access – supply effects.** Is access improved through the expansion in the number of seats or restricted by overall resource limits?
- **Equity considerations.** To what extent are benefits focused on students from low-income families?
- **Success.** To what extent do policies increase the chances of success in the form of higher retention or degree-completion rates?
- **Quality.** Do policies lead to higher quality in the form of better-prepared students or better academic programs, or do stretched resources lead to reduced quality?
- **Relevance.** Are institutions encouraged to offer more programs of the greatest social and economic need, and are students encouraged to enter these high-priority fields of study?

For postsecondary education, there has long been concern that policies designed to improve one of these objectives may have adverse effects on others. For example, policies that are designed to increase access may have adverse effects on quality, readiness, or success. Similarly, policies to improve quality or success may lead to improved readiness but could restrict access. Following are some specific examples of policies that may have adverse effects on student success or readiness:

- Lowering the price that students face in the hope of improving access may be contributing to the low rates of degree completion in the U.S. Low tuition rates at public institutions undoubtedly increase demand and access for public higher education, but they may also reduce degree-completion rates as opportunity costs of staying in school longer are reduced. Low tuition benefits in most states are not limited to students enrolled within the normal course of study, although this seems

to be changing in a number of states. Underprepared students in most states typically pay subsidized tuition rates, and this may tend to discourage greater preparation. The flip side of this issue – that students in remedial courses are charged the same rates as students in regular courses – most probably leads to less remediation and therefore again less preparation.

- Student aid solutions traditionally have ignored the issue of preparation, which increasingly is recognized as a large part of the "success" problem. Student aid programs at both the federal and state levels traditionally have had loose or nonexistent quality requirements. Federal "ability-to-benefit" provisions allow underprepared students to qualify for all forms of federal aid. Most states do not limit how long students are enrolled for public institutions to receive funds.
- Student aid policies may also promote greater access at the cost of reduced success. Need-based student aid tends to increase equity of access but may reduce levels of readiness, retention, and quality, depending on how they are designed. For example, student aid programs which do not limit the number of years or semesters in which aid can be received are likely to lead to reduced degree-completion rates. Similarly, merit-based student aid tends to promote better readiness and success but could lead to less access or equity of access.
- Focusing on increasing the access of students to enroll in postsecondary education may be reducing incentives for institutions to graduate these students. For example, state enrollment-based funding formulas encourage institutions to enroll students, but not to complete their degrees. Enrollment-based funding formulas can thus discourage institutions from having higher rates of degree completion and therefore may detract from improved student retention/success.

Too often, policy debates at both the federal and state level fail to recognize the multiple effects of policies such as those listed above. As a result, policies that are enacted and implemented for the purpose of achieving one objective end up detracting from other important objectives.

Recent State Efforts to Promote Greater Student Success

The increased attention in the U.S. on policies that promote student success is part of a broader international trend in which a number of countries have adopted what have come to be called performance-based policies.[23] These policies are distinguished from more traditional allocation processes in that they use measures of performance as criteria for funding, rather than inputs like staff costs or participation measures such as the number of students enrolled. These performance-based policies include:

- **Performance contracts.** Governments enter into binding agreements with institutions to reward them with resources linked to the achievement of mutually determined performance-based objectives.
- **Performance set-asides.** A portion of public funding for tertiary education is set aside to pay institutions on the basis of their achieving various performance targets.
- **Competitive funds.** Institutions or their faculties compete on the basis of peer-

reviewed project proposals against a set of policy objectives.

- **Payments for results.** Output or outcome measures are used to determine all or some of the allocations from a funding formula, or institutions are paid for the number of students graduating in certain fields of study or with specific skills.

In the 1990s in the U.S., about a dozen states established performance-based set-asides as part of their funding regimes. These set-asides ranged from systems that set aside a very small percentages of public funds (e.g., Ohio, New Jersey, Missouri) to South Carolina where nearly all funds for public higher education were distributed on performance criteria. In most of these cases, graduation rates were one of the criteria used to determine how much institutions received from the funds set aside.

The evaluation of these performance set-asides has generally been mixed to negative. Most observers believe that states that followed this performance-based path as a rule did not set aside a large enough amount of funds to make much of a difference in institutional behavior. On the other hand, in the case of South Carolina, the positives associated with the decision to allocate nearly all institutional funds based on performance indicators for an extended period of time were offset by the complexity of having more than a dozen indicators used as criteria for allocation. As a result, what might have been a good idea did not work well.

In the past five years, the trend among states in encouraging better performance among students has shifted somewhat. The recent focus has been for states to be more specific in laying out goals and procedures in their performance-based policies rather than leave it to institutions to decide how to achieve better outcomes. The activities in the states listed below (culled from a brief survey recently conducted among the state agencies) reflect this recent trend in greater specificity.[24]

Arkansas set aside $1 million for fiscal year 2008 to be allocated to institutions that improved their retention or graduation rates or to exceed their graduation rates, as predicted by a statistical model using student characteristics such as high school GPA and entrance examination scores, as well as race, sex, and age profiles of students. Payments from the pool will be based on the percent of first-time, full-time, degree-seeking students who complete an associate's degree in no more than three years, a bachelor's degree in no more than six years, or a technical certificate in no more than five semesters. An institution will be eligible for payments if its graduation rate improves or it meets or exceeds the anticipated graduation rate. The legislation also requires academic advisors to provide full-time freshmen with course selection advice that will allow the completion of most bachelor's degrees in four years. The amount of funds allocated for this purpose is expected to rise each year.

California has enacted no specific retention and graduation initiatives, but officials report that these remain key goals of recent legislation. On a related front, the California State University (CSU) system has taken a national leadership role in improving preparedness through its "early assessment program," in which high school students are made aware of the requirements for entrance into the CSU system and program support is made available to help ensure that the broadest possible number of students are able to meet these requirements.

Colorado was one of the first states to establish performance contracts with each of its public institutions, as part of a broader reform effort that included the creation of the College Opportunity Fund (COF), a voucher-like system of allocating funds to public and private institutions to offset some of the costs of instruction and operation. Improving retention and graduation rates are goals in the language of the contracts.

Kentucky reports that it now requires all public postsecondary institutions to participate in surveys that identify retention and graduation efforts and set goals for institutional improvement. It also created a pilot program in 2006 designed to increase graduation and retention rates by rewarding institutions for increasing the number of degrees awarded.

Louisiana has adopted a number of initiatives relating to improving student success in recent years, including: minimum admissions criteria at all public four-year institutions; funding partnerships with all public middle and high schools; development of individual campus retention plans; and the inclusion of retention data in its annual accountability report. The state is considering changes in its funding formula to reward course completion and retention.

Maryland appropriated $100,000 in 2006 for a program to improve the retention of "first-year students" at its historically black institutions.

Missouri included graduation rates in its performance-based set-aside, although the last year funding was provided for this program was 2001. More recent initiatives include: new high school graduation requirements to ensure better preparation of students and a possible program to provide scholarships to students who complete a two-year program to improve the chances that they will successfully transfer to a four-year institution.

New Jersey now includes improving graduation and retention rates for all students and for low-income and minority students as part of its long-range plan. A number of public institutions in the state have chosen to include graduation rates, including those for minority and low-income students, as one of the key outcomes in their strategic plans.

New Mexico proposed a program of payments to public institutions in 2005, based on the number of Pell Grant recipients who complete a year of study, transfer, or graduate.

Ohio has had a "student success policy" in place for over a decade. This policy includes basing as much as 8 percent of its funding on performance objectives and increasing the chances of at-risk students succeeding through a series of challenge funds. One key question in Ohio is whether these success-related efforts represent new funding or have been drawn largely from more traditional funding sources.[25]

Oklahoma implemented the Brain Gain initiative in 1999 for the purpose of increasing the proportion of adults in the state with a college degree. A major component of this initiative is the performance-funding formula implemented in fiscal year 2002, which emphasizes increasing retention and graduation rates at each institution, along with increased number of degrees conferred. In addition to the performance-based funding component, the Oklahoma State Board of Regents set up competitive fund grants in fiscal years

2005 and 2006 to selected institutions to assist them in improving student retention and graduation. The Oklahoma program includes a common curriculum offered at multiple locations, which is developed by faculty at participating universities. The lead university provides the overall organization of the program, develops the orientation and core curriculum with faculty from other institutions, and works with the board of regents to provide faculty development and training and to market the program.

South Dakota established new performance funding for retention in fiscal year 2004, but the amount was only $200,000.

Virginia has made student retention and graduation rates prominent components in the performance contracts that were established for each public institution in the state as part of the 2005 Restructuring Act. The performance standards require that institutions maintain and improve average annual retention and progression rates of degree-seeking undergraduates, and that they increase the ratio of undergraduate degrees awarded to the number of full time equivalent undergraduate students.

West Virginia initiated a series of annual conferences three years ago, with the goal of promoting better student retention through a review of best practices and other issues. In 2005, the Higher Education Policy Commission also awarded minigrants to four institutions to develop new and innovative retention practices.

What More Should States Be Doing to Improve Student Success?

In the context of the preceding discussions, the challenge to state policymakers is to:

- Consider whether policies are well designed to achieve their intended effects.
- Anticipate offsetting effects in designing and implementing policies.
- Adopt policies that maximize net positive effects on key objectives.
- Design policies that minimize negative effects on key objectives.
- Adopt a mix of policies that in combination produce positive effects.

This paper recommends the following four steps that states can take along the lines outlined above to improve student success by increasing retention and degree-completion rates of low-income students. These steps would have the cumulative effect of improving the preparation of a broad range of students; improving equity of access and success by targeting more of the aid toward the lowest-income students; and providing incentives for institutions to enroll and graduate these students.

Increase funding of early intervention programs for at-risk students.

The past decade of increased focus on issues of student success has made it clear that better prepared students are more likely to succeed in college than those who are not ready to do the work when they enroll. In addition, access, equity, and retention will also be enhanced if students are better prepared when they enroll.

But despite the benefits that would accrue from better preparation, relatively little historically has been done at either the federal or state level to make this happen. With the exception of the GEAR UP program, federal programs have not focused on making sure students are better prepared to do college-level work when they enroll. One recent notable exception is the State Scholars Initiative (SSI), a national program funded by the U.S. Department of Education and administered by the Western Interstate Commission for Higher Education (WICHE) that uses business leaders to motivate students to complete a rigorous course of study in high school. Currently 24 states are participating in the program that boasts a Scholars Core that includes at least four years of English; three years of math (algebra 1 and 2 and geometry); three years of lab science (biology, chemistry, and physics); three and a half years of social studies (U.S. and world history, geography, economics, and government); and two years of the same foreign language.

Few states, however, yet have created programs that fund better preparation. Most of the activity related to preparation has focused on adding requirements to student aid programs, which students must meet in order to qualify for aid. While these requirements may be an effective tool (see the second recommendation below), they should not be regarded as a substitute for a greater financial commitment from states.

An important part of any strategy to improve student success thus should be greater funding of programs that promote better preparation of students. At the federal level, GEAR UP represents just such a program and should be funded at higher levels. The increase in university/middle school partnerships that would result from such funding would surely enhance state efforts to improve preparation. The federal government should also consider establishing a matching program to encourage more states to establish GEAR UP-type programs of early intervention and commitment.

Require more stringent preparation requirements for student aid.

More funding for early intervention efforts is only part of the answer to improving student preparation. It is also important to motivate students to be better prepared. Some states have instituted more stringent preparation requirements as part of eligibility for state need-based student aid programs. The federal government has also gotten into this game by creating the Academic Competitiveness Grant (ACG) program; Pell-eligible students may receive these grants only if they demonstrate a certain level of preparation.

While the federal government should be commended for taking more notice of the importance of better preparation, the way in which this new program was designed leaves much to be desired. Folding it into Pell Grants greatly complicates the federal aid application and awards process at a time when there is growing recognition that these processes must be streamlined to achieve greater effectiveness. Thus, in this case at least, promoting better preparation may detract from the possibly more important goal of simplifying the aid process for most students and families. Moreover, states are largely responsible, under the regulations governing these programs, to identify whether students have taken the necessary courses and achieved the necessary grades to qualify for this aid. For example, the SSI requirements meet the ACG preparation requirements with the details worked

out at the state and institutional levels. Thus, the recent legislation interjects state governments into what has been the federal practice of identifying students eligible for federal aid, which may be problematic.

For both these reasons and others, it would have been better for the federal government to rely on the states to take the lead on this dimension than what the federal government decided to do on its own through the recent legislation. For example, a better path would have been for the federal government to provide funds to states that established aid programs in which minimal levels of academic preparation were a key criterion for determining eligibility. At the levels of funding that are now being discussed for the new federal program, a federal matching program with the states would have created the incentive for states to increase funding for their own student aid programs by sizable levels of 20 percent or more.

Target state student aid toward the most disadvantaged students.

Much has been made in the past decade of the trend in the states to provide more merit-based aid as a share of all the aid they provide. Much less discussion has been devoted to the fact that in a number of states, political pressures to expand aid eligibility to the middle class have led many state need-based programs to broaden their definition of need to allow many more middle class students to qualify for aid. These two trends mean overall state student aid has been part of the broader trend in which all forms of aid are less targeted toward the lowest-income students, who might benefit the most from the provision of aid to help meet both tuition and living expenses.

Thus, one important step toward improving equity in postsecondary education would be for states to target more of the aid they provide toward students from the lowest-income families. This could be accomplished in a number of ways, including the following:

- States could institute need-based aspects into the merit-based programs they now provide. Combining need and merit criteria can be a very effective tool for meeting the often-conflicting goals of improving access, equity, and quality. This could be accomplished by having merit be a key criterion for eligibility but providing higher awards to students deemed to be financially needy. An example of such a strategy is the Wyoming Hathaway Scholarship Program, in which all students who take a rigorous curriculum receive aid equal to tuition, but students who are eligible for finanicial aid as determined by the Free Application for Federal Student Aid (FAFSA) may receive a substantial supplement.
- States could redesign their need-based programs to provide more of the aid to students from the lowest-income families. This would require moving away from systems that calculate the total financial need of students to ones in which low family income is the primary criterion.

Pay institutions for the Pell Grant recipients who enroll and persevere.

One of the key concerns here (as discussed earlier) is that policy debates have focused too much on demand-based policies aimed at reducing the price that students face. These policies are unlikely to have much impact on the probability that students will complete their degree. If anything, it

appears that reducing the price that students pay may reduce the chances of success as the opportunity costs of staying in school are reduced. This leads to the suggestion that providing incentives for institutions to increase their retention and graduation rates might be more effective in increasing the chances of student success.

Along these lines, one possible incentive to consider is for public bodies to pay institutions for the student aid recipients that they retain and graduate. An obvious policy in this direction is for the federal government to do it directly – for example, by creating a program in which payments are made to institutions based on the number of Pell Grant recipients they graduate. If institutions have a greater reason to see these students succeed, it might enhance the effectiveness of Pell Grants and state grants.

Another formulation would be for the federal government to establish a program in which states would receive federal funds if they established such programs or funding regimens. This would then encourage states to explore various ways in which they might encourage their institutions to make greater efforts both to enroll and graduate students from lower-income families. One caveat: The rules of eligibility for participation in such a program should be narrowly enough structured so that institutions only have incentives to recruit, enroll, and graduate students from low-income families. The provisions that New Mexico considered and enacted in 2005 might serve as a starting point for states to debate this kind of program.

The biggest concern regarding this kind of incentive, whether it is provided by the federal government or the states, is that institutions would lower their standards to increase the amount of payments they would be eligible to receive. The best way to mitigate this concern would be to limit the size of the payments, so that institutions would not be tempted to alter their standards. For example, paying institutions several thousand dollars for each Pell Grant recipient they graduate would probably not be incentive enough to lead institutions to lower their standards.

Moreover, if adequate safeguards are instituted against quality debasement, then this policy of providing incentives to institutions should, on balance, be a positive force and improve student success. If properly designed, institutional incentives for graduation should have positive effects on readiness, access, equity, and retention, without much in the way of negative effects on quality or adherence to standards.

The Need for Better Research and Analysis

Many of the questions regarding student success are not easily answered because data are not available or analysis of key issues has not occurred. Several of these issues are described below, as guideposts for those policymakers and others who would like to know more about how states are doing in the effort to promote student success and how they might do better in the future. These issues fall within the following three categories, which mirror the explanations presented in this paper:

- Collection, analysis, and presentation of data on the extent to which federal and state funding favor access over readiness and success.
- Collection, analysis, and presentation of data on the degree to which federal

and state support and policies are well targeted toward low-income students.
- Analysis of the direction and magnitude of the effects of various policies on key objectives.

The Bias in Funding Toward Access.

The data presented in this paper regarding the bias of funding and policies toward access and away from readiness or success are based on rough estimates of how much funding is currently devoted to providing access, as opposed to funds that reasonably could be said to be focused on the better preparation of students or their success. It would be worthwhile to consider in greater detail the fundamental purposes of different legislation and funding patterns, with an eye toward providing a more precise estimate of how federal and state funding is allocated along the educational pipeline.

The Targeting of Aid toward Students from the Lowest-Income Families.

While there is a fair amount of data on how well funds are targeted toward the poorest students, relatively little work has been done on analyzing these data. The one exception is the Pell Grant program, where program data have been regularly examined over time to determine how much funding is awarded to students in different income groups. Even these data, however, are not always examined carefully. For example, more than half of the students receiving Pell Grants are deemed to be financially independent of their parents (the income reported is that of the student and not of the parent); yet the data are often presented for all students, with no distinction being made between dependent and independent students. For most other aid programs, data are no longer regularly reported on the family income of the recipient. This lack is particularly acute for the student loan programs.

The NPSAS contains a good deal of information on the family income of student aid recipients and could be used to produce better estimates of the income distribution of a variety of student aid benefits. This data source should be further pursued for this purpose. There are several areas, however, in which data from the NPSAS on the benefits that students and families receive would be less useful. One is data on families who benefit from various income tax provisions, either as credits for current tuition expenses or as incentives for families to save for college as neither of these are reported as part of the NPSAS. Income tax data, if made available by the IRS, would be a better source of information on these benefits.

Estimating the Direction and Magnitude of Various Policy Effects.

The explanations in this report relating to the direction and magnitude of policy effects were based more on intuition and observation than on systematic research and analysis. The reason that this section is mostly speculative frankly stems from the lack of serious research in many areas and the difficulty in estimating the direction and the magnitude of many policy effects because:

- Many of these effects have not been adequately researched and analyzed.
- It may not be feasible to measure some of these effects because of research design issues.
- The direction and the magnitude of the effects depend critically on how policies are designed.
- Stakeholder pressures, including political considerations, affect policy design and effects, often adversely.
- It is difficult to sort out the impact of different effects interacting with each other.

To improve the rates of student success, the research that might be most useful in examining the effects of policies would focus, at least, on the following questions:

- Which public policies and institutional practices seem to be most effective in raising retention rates?
- Are demand-based or supply-based policies more effective in raising retention rates?
- Are regulatory or market-based approaches more suited to increasing retention?
- Do incentives or penalties work better in raising retention and increasing degree completion?
- What is the effect on retention of programs targeted toward the lowest-income students?
- What is the evidence on effects of low tuition at public institutions on retention?
- What is the evidence on the impact of various student aid programs on retention?
- How effective are early intervention programs in raising retention and degree-completion rates?

These and others are serious questions that require much further work. Finding the answers would represent an important step forward in improving student success.

Conclusion

This examination of how states might improve rates of student success has yielded a number of important conclusions.

First, while there is a growing rhetorical commitment to student success, the reality is that policies often do not mirror the rhetoric. Whether intentional or not, policies in many states are at best benign and often antithetical to improving student success.

Second, there is often an imbalance between demand side and supply side strategies. The policy focus in most states as well as the federal government typically has been on pursuing demand-related objectives such as lowering the price that students face either through low tuitions or the provision of student financial aid. This ignores the importance of ensuring adequate supply of seats to accommodate all students as well as providing a proper set of incentives that encourage institutions to recruit, enroll, and graduate the students who are most at-risk.

Third, some progress has been made in developing contemporary practices that have great potential for providing the right incentives in place to redress this traditional imbalance. But much more needs to be done in this regard.

Fourth, student success is an area where intentionality can really make a difference. Efforts to create incentives for students to be better prepared and for institutions to enroll and graduate more at-risk students have the potential for greatly improving rates of retention and degree completion.

Endnotes

[1] National Center for Education Statistics (NCES), *Condition of Education 2006* (Washington, D.C.: U.S. Department of Education, 2006), Indicator 31.
[2] Ibid., Indicator 18.
[3] Ibid., Indicator 29.
[4] Ibid., Indicator 22.
[5] Organisation for Economic Co-operation and Development (OECD), *Education at a Glance 2006* (Paris: OECD, 2006), Table C2.1. Entry rates into tertiary education and age distribution of new entrants (2004).
[6] Ibid., Table A1.3a, Population that has attained tertiary education (2004).
[7] Ibid., Table A3.2, Survival rates in tertiary education (2004).
[8] These data and this issue of low completion rates was a central focus of the Commission on the Future of Higher Education as an indicator of low quality. The Commis-sion report pays little or no attention to the fact that attainment rates in the U.S. remain near the top of all countries. Commission on the Future of Higher Education, *A Test of Leadership: Charting the Future of U.S. Higher Education* (Washington, D.C.: U.S. Department of Education, 2006).
[9] National Center for Education Statistics (NCES), *Condition of Education 2004* (Washington, D.C.: U.S. Department of Education, 2004), Indicator 31.
[10] NCES, *Condition of Education 2006*, Table 29-1.
[11] See, for example, Advisory Committee on Student Financial Assistance, *Access Denied: Restoring the Nation's Commitment to Equal Educational Opportunity* (Washington, D.C.: Advisory Committee on Student Financial Assistance, 2001); or Kati Haycock, *Promise Abandoned: How Policy Choices and Institutional Practices Restrict College Opportunities* (Washington, D.C.: Education Trust, August 2006). These and other publications make the point that students from the lowest socioeconomic status (SES) and highest ability quartiles are roughly as likely to enroll in college as a student from the highest SES group that tests in the lowest ability quartile.
[12] One survey indicates that among a group of 8th graders in 1988, only 7 percent of low SES students completed a degree by 2000, compared to 24 percent of mid-SES students and 60 percent of high-SES students. Reported in National Center for Education Statistics (NCES), *Condition of Education 2003* (Washington, D.C.: U.S. Department of Education, 2003), Indicator 23. Similar statistics come from reports on the results in 1992 of the 1980 survey of high school sophomores reported in National Center for Education Statistics (NCES), *Digest of Education Statistics 2000* (Washington, D.C.: U.S. Department of Education, 2000), Table 307.
[13] From the same survey of 8th graders cited above, among students in the highest math quartile, 29 percent of students from the lowest SES group received a college degree, compared to 47 percent for students from the middle SES group and 74 percent from the high SES group; from NCES, *Condition of Education 2003*, Indicator 23.
[14] State Higher Education Executive Officers, *State Higher Education Finance FY 2005* (Boulder: State Higher Education Executive Officers, 2005); State Higher Education Executive Officers, *State Higher Education Finance FY 2004* (Boulder: State Higher Education Executive Officers, 2004).
[15] The College Board, *Trends in Student Aid 2006* (Washington, D.C.: The College Board, 2006).

[16] Leonard E. Burman, Elaine Maag, Peter Orszag, Jeffrey Rohaly, and John O'Hare, *The Distributional Consequences of Federal Assistance for Higher Education: The Intersection of Tax and Spending Programs* (Washington, D.C.: The Urban Institute, 2005).

[17] These trends appear in data presented in National Association of State Student Grant and Aid Programs, *36th Annual Survey Report on State-Sponsored Student Financial Aid: 2004-2005 Academic Year* (National Association of State Student Grant and Aid Programs, 2005).

[18] *Trends in Student Aid 2006*; Lutz Berkner, Christina Chang Wei, and James Griffith, *Student Financing of Undergraduate Education: 2003-2004* (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, 2006).

[19] Haycock, *Promise Abandoned*.

[20] Sandy Baum and Lucie Lupovsky, *Tuition Discounting: Not Just a Private College Practice* (New York: The College Board, 2006).

[21] Jamie Merisotis, Colleen O'Brien, and Allison Gray, *The Next Step: Student Aid for Student Success* (Washington, D.C.: Institute for Higher Education Policy, 1995).

[22] The specific reference to the article in which Fred Fischer described this plan could not be located.

[23] This discussion of performance-based allocation mechanisms is drawn from Jamil Salmi and Arthur M. Hauptman, *Innovations in Tertiary Education Financing: A Comparative Evaluation of Allocation Mechanisms* (Washington, D.C.: The World Bank, 2006).

[24] In August 2006, the State Higher Education Executive Officers (SHEEO) sent a brief email survey on retention initiatives to its listserv members. State officials were asked to respond to the question "Within the past five years, has your state established, through legislation or other policy efforts, a program or initiative (such as performance or incentive funding) specifically designed to increase the retention-to-graduation rates at public postsecondary institutions?"

[25] David A. Longanecker, "Financing Tied to Postsecondary Outcomes: Examples from States," in Richard Kazis, Joel Vargas, and Nancy Hoffman, editors, *Double the Numbers: Increasing Postsecondary Credentials for Underrepresented Youth* (Cambridge: Harvard University Press, 2004).

References

Advisory Committee on Student Financial Assistance. *Access Denied: Restoring the Nation's Commitment to Equal Educational Opportunity*. Washington, D.C.: Advisory Committee on Student Financial Assistance, 2001.

Baum, Sandy and Lucie Lupovsky. *Tuition Discounting: Not Just a Private College Practice*. New York: College Board, 2006.

Berkner, Lutz, Christina Chang Wei, and James Griffith. *Student Financing of Undergraduate Education: 2003-2004*. Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, 2006.

Burman, Leonard E., Elaine Maag, Peter Orszag, Jeffrey Rohaly, and John O'Hare. *The Distributional Consequences of Federal Assistance for Higher Education: The Intersection of Tax and Spending Programs*. Washington, D.C.: The Urban Institute, 2005.

The College Board. *Trends in Student Aid 2006*. Washington, D.C.: The College Board, 2006.

Commission on the Future of Higher Education. *A Test of Leadership: Charting the Future of U.S. Higher Education*. Washington, D.C.: U.S. Department of Education, 2006.

Haycock, Kati. *Promise Abandoned: How Policy Choices and Institutional Practices Restrict College Opportunities*. Washington, D.C.: Education Trust, August 2006.

Longanecker, David A. "Financing Tied to Postsecondary Outcomes: Examples from States," in Kazis, Richard, Joel Vargas, and Nancy Hoffman, editors, *Double the Numbers: Increasing Postsecondary Credentials for Underrepresented Youth.* Cambridge: Harvard University Press, 2004.

Merisotis, Jamie, Colleen O'Brien, and Allison Gray. *The Next Step: Student Aid for Student Success*. Washington, D.C.: Institute for Higher Education Policy, 1995.

National Association of State Student Grant and Aid Programs. *36th Annual Survey Report on State-Sponsored Student Financial Aid: 2004-2005 Academic Year*. National Association of State Student Grant and Aid Programs, 2005.

National Center for Education Statistics. *Condition of Education 2003*. Washington, D.C.: U.S. Department of Education, 2003.

National Center for Education Statistics. *Condition of Education 2004*. Washington, D.C.: U.S. Department of Education, 2004.

National Center for Education Statistics. *Condition of Education 2006*. Washington, D.C.: U.S. Department of Education, 2006.

National Center for Education Statistics. *Digest of Education Statistics 2000*. Washington, D.C.: U.S. Department of Education, 2000.

Organisation for Economic Co-operation and Development. *Education at a Glance 2006*. Paris: Organisation for Economic Co-operation and Development, 2006.

Salmi, Jamil and Arthur M. Hauptman. *Innovations in Tertiary Education Financing: A Comparative Evaluation of Allocation Mechanisms*. Washington, D.C.: The World Bank, 2006.

State Higher Education Executive Officers. *State Higher Education Finance 2004*. Boulder: State Higher Education Executive Officers, 2004.

State Higher Education Executive Officers. *State Higher Education Finance 2005*. Boulder: State Higher Education Executive Officers, 2005.

About the Author

Arthur M. Hauptman has been a public policy consultant specializing in higher education finance issues since 1981. He has written or edited a number of volumes and dozens of chapters and articles on issues relating to the provision of student financial aid, fee setting, and the public funding of institutions. In the U.S., he has consulted with a number of federal and state agencies, higher education associations and institutions. Internationally, over the past decade, he has consulted with government ministries or funding bodies in more than a dozen industrialized and developing countries. He holds a B.A. in economics from Swarthmore College and an M.B.A. from Stanford University.

WICHE
Western Interstate Commission for Higher Education

PO Box 9752
Boulder, CO 80301-9752
303.541.0200 www.wiche.edu