

FINANCIAL AID AND STUDENT PERSISTENCE

Financial aid issues have emerged in public policy in recent years as states and their higher education institutions struggle to determine how best to allocate limited resources across a wide range of financial aid programs. Not only must they consider the needs of their citizens and the state, they must also look at the distribution of funds among programs that serve financially needy students, those that reward academic merit, and those that serve students with special skills. However a state or institution decides to award its financial aid, there is the hope that by granting aid the student will persist in college and graduate. The actual granting of money is done with the expectation that the additional funds will either make it possible for the student to stay enrolled until graduation or will entice the student to stay at that particular institution or in that state. The major objective from the state and institutional perspective is to retain the student by providing financial assistance.

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Support to students through financial aid has evolved over the years and now comes from private, state, institutional, and federal sources. This edition of *Policy Insights* briefly examines the major sources of student financial aid and the relationship between grants, persistence, and degree attainment. Policy implications are presented for further discussion.

Sources of Financial Aid

State support of higher education in the United States began with public allocations to private, largely church-chartered institutions. As early as the first half of the 20th century, some states began to develop state-sponsored financial aid programs. By the end of the 1960s, there were 19 state-run scholarship programs, and in the 1969-1970 academic year they awarded a total of almost \$200 million in grants to 488,000 students. The programs ranged in size from Maine's, which appropriated \$61,000 and served 150 students, to the oldest program in New York, where \$59 million was divided among 263,000 students.¹

The Higher Education Act of 1965 established the federal government's first broad-based student assistance programs. An important feature of the first reauthorization of the Higher Education Act in 1972 was the creation of the State Student Incentive Grant (SSIG) program, which provided federal matching funds for state-run, need-based grant programs. This proved to be a critical catalyst to the development and expansion of the state programs. While in 1969, 19 states appropriated just under \$200 million for these programs, by 1974, this had expanded to 36 states and \$423 million. By 1979, every state (and the District of Columbia) reported at least one grant program, and total appropriations had increased to over \$800 million. State grant programs continued to expand in the 1980s and 1990s. As of the 2001-2002 fiscal year, 48 states (all but Alaska and South Dakota) had programs awarding a total of over \$5 billion in grants to undergraduate students.²

The advent of institutional grants in public colleges and universities is a relatively new phenomenon, and the U.S. Department of Education has tracked institutional spending on financial aid since 1987. In FY 1987, public institutions awarded \$486 million in institutional grants and scholarships. By 1996, this total increased 294 percent, to over \$1.9 billion. In contrast, institutional spending in private institutions increased 227 percent during this same period, and the Consumer Price Index increased 39 percent.³

State and institutional grants to undergraduates in public institutions in the 1999-2000 academic year totaled \$4.7 billion, or over 41 percent of the total grants received by students in these colleges and universities. In contrast, federal Pell Grants represented 40 percent of the total (the remaining grants were from private sources).⁴

State and institutional grants have become an important part of the complex mechanism the nation uses for funding higher education. Understanding how these sources of aid are used – and in particular, how they are used to promote the persistence and degree attainment of students – is an important policy issue for states and higher education institutions alike.

National data provide information about two forms of institutional grants: those awarded using financial need criteria and those awarded without consideration of financial need (often called "merit" grants).⁵ Overall, 12 percent of all students in public institutions received some form of institutional grant, with grants averaging \$1,791 per recipient.⁶ Students in doctoral-granting institutions were most likely to receive a grant, and had the highest average grant awards (see Figure 1).

The characteristics of the students are a factor in determining who receives institutional grants. Students who attended college full-time for an entire year, low-income students, and students under the age of 24 were most likely to receive institutional grants (see Figure 2).⁷

The Relationship Between Grants, Persistence, and Degree Attainment

In recent years, the relationship between financial aid and persistence has received much attention from researchers. As the price of college has increased (as measured against the ability of students and their parents to pay), the role of financial aid both in promoting access to college and in helping to ensure students stay enrolled once there has received increased scrutiny.

Other factors – including academic aptitude and preparation, socioeconomic status, and institutional programs and services – have all been found to be related to persistence and degree attainment.

In general, the research has found that the receipt of a financial aid award is positively related to higher rates of

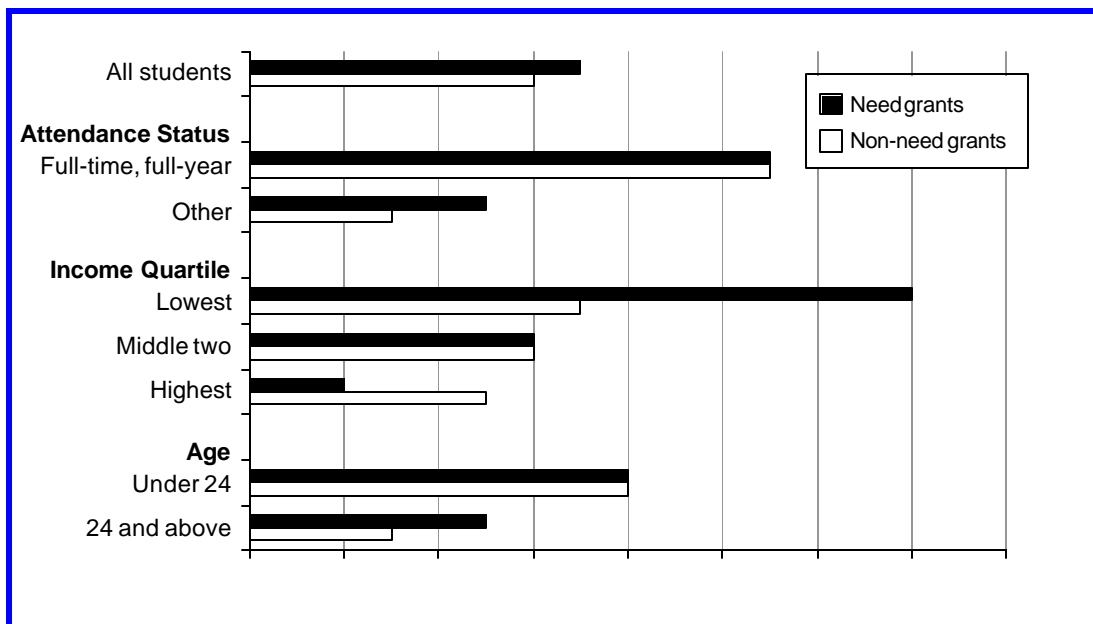
persistence. The positive effects of financial aid on persistence have been reported for all three forms of aid: grants, loans, and work-study. In some studies the effects are more pronounced among students who stay enrolled from the first semester to the second than on year-to-year persistence.

Grants have often been found to be the best type of aid for promoting persistence, and they are most effective when targeted at financially needy students who need the aid in order to be able to afford to stay enrolled in college. While work-study has also been found to promote persistence, there is still some question whether the effect is primarily because of the financial assistance work-study provides or because of its value in helping students become more integrated into their college campuses.

Figure 1: Institutional Grant Awards in Public Institutions by Sector, 1999-2000

Sector	% of students receiving grant	Mean grant amount
<u>Community colleges</u>		
All grants	8%	\$ 757
Need grants	5	422
Non-need grants	2	879
<u>4-year non-doctoral granting institutions</u>		
All grants	14	1,783
Need grants	6	1,064
Non-need grants	8	2,137
<u>4-year doctoral granting institutions</u>		
All grants	19	2,820
Need grants	9	2,185
Non-need grants	11	3,023
<u>All public institutions</u>		
All grants	12	1,791
Need grants	7	1,213
Non-need grants	6	2,296

Figure 2: Proportion of Students Receiving Institutional Grants, by Student Characteristic



Because institutional grants have become an important source of financial aid only in recent years, their impact on persistence has received little analysis from researchers. A new study, *Informing Public Policy: Financial Aid and Student Persistence*, was conducted to address this gap.⁸ An important finding from that report indicated that financial aid was found to be positively related to persistence into the second year of college. For every \$1,000 in state or institutional grants received in the first year, students' probability of persisting into the second year increased five to 10 percentage points.

Turning to the outcome of whether a student received a bachelor's degree by 2001, results show that 42 percent of all students achieved this milestone. Receipt of financial aid was a predictor of degree attainment. Students who received any form of financial aid for three or more years were 20 percentage points more likely to persist than students who never received aid. Students who received institutional and/or state grants in the freshman year were more likely to have attained a degree five years later. Every \$1,000 in grants received in the first year was related to an increase of three to six percentage points in the probability the student attained a bachelor's degree by 2001.

High-Aid and Low-Aid States

A compelling policy question in designing state aid programs is whether institutions in states without large state-funded aid programs substitute their own grants to make up for the absence of state support, in comparison with states with larger state grant programs. *Informing Public Policy* looked at 10 states to determine if there were differences in the use of institutional grants in states that had large state aid programs, as compared to 10 states with smaller state-funded programs.⁹

High-aid states

New York
Illinois
Pennsylvania
Vermont
Minnesota
New Jersey
Massachusetts
Iowa
Indiana
Connecticut

Low-aid states

South Dakota
Georgia
Alaska
Louisiana
Wyoming
Hawaii
Alabama
Mississippi
Idaho
Arizona

Public institutions in the low-aid states were more likely to award institutional grants to students than were colleges and universities in the high-aid states (see Figure 3). The difference was driven by much larger proportions of non-need grant awards in the low-aid states. Institutions in the high-aid states, however, awarded larger grants on average than institutions in the low-aid states.

In community colleges, students in the low-aid states were more likely to receive institutional grants, while in both four-year sectors, the proportion of students receiving grants in the two groups of states were approximately equal. In all three sectors, students in the low-aid states were more likely to receive non-need grants than their counterparts in the high-aid states. In the four-year doctoral-granting sector, a higher proportion of students received need-based grants in the high-aid states than in the low-aid states.

In both groups of states across all three sectors, need-based and non-need grant were different from one another, as they were in four-year nondoctoral institutions in the high-aid states and four-year doctoral institutions in the low-aid states (the average non-need awards are larger in each comparison).

Figure 3: Institutional Grant Awards by Sector in High-Aid and Low-Aid States, 1999-2000

	Top 10 high-aid states		Bottom 10 low-aid states	
	Percent receiving grants	Mean grant	Percent receiving grants	Mean grant
All public				
All grants*	7 %	\$ 2,443	11 %	\$ 1,884
Need grants*	3	1,847	3	1,071
Non-need grants*	4	2,719	9	2,070
Community colleges				
All grants	3	773	8	1,008
Need grants	1	463	3	621
Non-need grants	2	915	6	1,118
4-year non-doctoral granting				
All grants	9	1,983	10	1,877
Need grants	4	964	NA	NA
Non-need grants*	5	2,718	9	2,031
4-year doctoral granting				
All grants	17	3,376	16	2,625
Need grants*	9	2,633	4	1,639
Non-need grants	9	3,600	12	2,827

Policy Implications for States and Public Colleges and Universities

Both institutional and state aid can play an important role in promoting persistence and degree attainment. Even controlling for other factors influential on these outcomes, grants from institutions and the state – aid awards that are under the direct control of state and/or institutional policymakers – are predictors of postsecondary success.

The states and their higher education institutions have a large amount of resources available to help offset the costs of attending college for their students (and supplement the assistance available from the federal government and private sources). How these two sources of aid are coordinated – or more appropriately, *whether* they are coordinated – varies from state to state, depending largely upon the higher education governance structure in each. States with more centralized control over public higher education institutions or systems have more opportunities to ensure that state and institutional financial aid programs work in tandem to accomplish the state's goals regarding higher education access, persistence, and degree attainment.

The following list of questions may help state and institutional policymakers begin a dialogue on how state resources can best be used to promote the persistence and degree attainment of postsecondary students.

■ *What are the state's overall educational attainment goals? Does the state need more people with shorter-duration credentials, such as certificates or vocational training? Or does it need more people with bachelor's degrees? In what fields are these skills needed?*

■ *How will the state encourage degree and certificate holders to stay in the state and contribute to the economy?*

■ *To what degree does the state have a history of providing a significant level of centralized (state-run) grants to undergraduate students? If there is little or no history, is there political will to fund a new program or expand existing ones?*

■ *To what degree are campus leaders willing to use institutionally funded grants (either from restricted funds or from recycled tuition revenue) to help accomplish broader state goals? Or are institutional grants used exclusively for more narrow enrollment management objectives?*

■ *How should resources available to help promote persistence and attainment be distributed among the already-proven strategies?*

Whether in a state with a strong, centralized higher education governance structure or one with a more decentralized configuration, there are a number of steps states should go through to determine how best to use the limited resources available that can be focused on promoting the persistence and degree attainment of public college and university students. These discussions should be engaged in by a broad array of constituents who have responsibility for establishing the goals of

public higher education in the state, as well as for carrying out the programs to achieve those goals.

Legislators, executive branch education advisors, higher education governing or coordinating boards, system heads, campus leaders, leaders of the business sector, and community organizations – all can play an important role in helping establish objectives and devising programs and strategies for accomplishing them.

Endnotes

¹ Carnegie Commission on Higher Education, *The Capitol and the Campus: State Responsibility for Postsecondary Education – A Report and Recommendations* (New York: McGraw-Hill, 1971).

² National Association of State Scholarship and Grant Programs, *NASSGP/NASSGAP Annual Survey Report* (Deerfield, IL, Harrisburg, PA, and Albany, NY: Illinois State Scholarship Commission, Pennsylvania Higher Education Assistance Agency, and New York State Higher Education Services Corporation, various years).

³ Quantum Research Corp., CASPAR database system, online data file (Bethesda, MD: Author, 2003). The IPEDS data include grants to both undergraduate and graduate students.

⁴ National Center for Education Statistics, National Postsecondary Student Aid Study 1999-2000 Restricted Use Files, computer data file (Washington, D.C.: U.S. Department of Education, 2003).

⁵ The National Postsecondary Student Aid Study (NPSAS), conducted by the National Center for Education Statistics in the 1999-2000 school year, is a nationally representative survey of over 50,000 college students across the country. The NPSAS survey data were used to analyze the awarding of institutional grants to undergraduates in public institutions.

⁶ Some students receive both types of awards.

⁷ The income quartiles used in this analysis are:

<u>Students</u>	<u>Dependent students</u>	<u>Independent</u>
Lowest quartile	Below \$31,646	Below \$9,000
Middle two quartiles	\$31,646 to \$85,583	\$9,000 to \$41,999
Highest quartile	Above \$85,583	Above \$41,999

⁸ In order to untangle the effects of these grants from the other variables that affect persistence, a multivariate analysis of data from the Beginning Postsecondary Students study (BPS), conducted by NCES, was performed. This analysis focused only on students who began their college careers in a public institution.

⁹ The selection was made based on a ranking of the states on how much they spent on need-based grants to undergraduates for every 18- to 24-year-old resident in the state in the 1999-2000 academic year.

This *Policy Insights* is one of several publications through WICHE's project *Changing Direction: Integrating Higher Education Financial Aid and Financing Policy*. Supported by Lumina Foundation for Education, the multiyear project's goal is better, more informed decision making on issues surrounding financial aid and financing in higher education to maximize access and success for students.

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