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## Equal Access: A National Comparison of Federal Grants-in-Aid Awarded at Public and Private Four-Year Degree Granting Institutions

Lee Waller

Sandra Weeks

Steven Westbrook

Karl Payton

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## Academic Leadership Journal

More than twelve million undergraduate students in the United States benefit from some form of financial aid. Statistics from the U.S. Department of Education (as cited in The American Council of Education 2008) indicate that 76% of undergraduates at public four-year degree-granting institutions during the 2003-2004 academic year received financial aid, while 89% of undergraduate students at private four-year not-for-profit degree-granting institutions were aid recipients.

The large percentage of students accessing financial aid indicates that affordability is a pressing problem for many current and potential college students and their families. After inflation, the cost of tuition and fees at public institutions increased an average 4.4% per year during the ten-year period from 1997-1998 to 2007-2008, and the upward trend continues. During the same ten-year period, the cost of tuition and fees at private four-year institutions increased by an average of 2.9% per year after inflation (Baum and Steele 2007a). These increases in the cost of higher education have been blunted by significant increases in the amount of aid available. In the decade prior to 2007, the total amount of aid to students increased by approximately 82% in inflation-adjusted dollars (Baum and Steele 2007b). So, while the cost of attaining a college education has increased and the number of students receiving aid is significant, the increase in aid available is also noteworthy.

Fitzgerald (2003) found that a student's academic qualifications and ability to afford the expense were the two most important conditions related to enrollment in an institution of higher education. As college costs continue to rise, the availability of financial assistance becomes increasingly important, especially to students from low-income families. Lillis and Tian (2008) indicate that the cost of higher education effectively limits the choice of institutions realistically available to students from low-income groups, further restricting available educational opportunities. Cost concerns also limit the education choices of students from middle-income families. Lillis and Tian question the wisdom and the reasonableness of constraining low and middle-income students in their choices of educational institutions based on limited personal finances. The intent to go to college and the subsequent academic preparation are largely in the control of the potential student. However, factors beyond his or her control, such as financial capacity, continue to have a significant impact on who eventually goes to college and what type of institution they attend (Morris 2005).

The Federal Government has a variety of programs designed to enhance student access to higher education. Perna, Rowan-Kenyon, Bell, Thomas and Li (2008) found, however, that socioeconomic status and race/ethnicity help define access to higher education and choice of institution, regardless of the number of policies and programs in place to assist needy students. Financial capacity, as a driving factor, creates a concentration of students from low-income groups at two-year colleges and less-selective lower-priced institutions. Baum (2007) argues that educational opportunities for low-income students could increase through more effective targeting of student financial aid. Ishitani (2006) found that the availability of financial aid was also a major factor in retention of first-generation college students, i.e. those whose parents did not attend college, and that different types of aid had varying

levels of success. Loans, not surprisingly, showed a negative effect on degree completion by first-generation students. Grants, however, even when packaged with loans, “had a positive effect on student retention” (p. 863).

Due to its needs-based qualification criteria, federal grant aid remains the most essential element of access to higher education for students from low-income families and represents the largest amount of federal aid targeted toward these students. Federal grant aid can reach students through four distinct programs: Title IV Pell Grants, Federal Supplemental Educational Opportunity Grant (FSEOG), Academic Competitiveness Grant (ACG), and the National Science and Mathematics Access to Retain Talent Grant (National SMART). The primary federal grant aid vehicle is the Pell Grant, making up 65% of the federal grant aid distributed to students (Baum and Steele, 2007b). Although the number of Pell grant recipients increased by 41% during the past decade (from 3.7 million to 5.2 million), the grants have not kept pace with increasing costs. The FSEOG is available to undergraduates who have an exceptional financial need. Recipients of Pell grants have priority for the FSEOG. The ACG, first awarded in 2006-2007, assists undergraduates who are receiving a first or second year Pell Grant and have completed a rigorous secondary school program in addition to other criteria (U.S. Department of Education, 2008). The National SMART grants, also first awarded in 2006-2007, are available to U.S. citizens who are third or fourth year Pell Grant recipients enrolled full-time studying computer, life or physical science, engineering, technology, mathematics, or a specified foreign language.

Federal grant aid is available to students irrespective of the type of institution they choose to attend, public or private. Distinct differences exist in the average cost of attending a private institution compared to a public institution. The average annual cost for an undergraduate student to attend a public college or university in the United States during the 2007-2008 academic year was \$13,589. The average annual cost for the same student at a private institution during the same year was \$32,307 (Baum and Steele 2007a).

The amount of grant aid awarded is based on more than financial need alone. Other factors considered include the student’s status as a full-time or part-time student, the student’s intent to attend for a full academic year or less, and the costs to the student to attend the institution they choose (U.S. Department of Education 2008). The fact that federal grant aid follows the student to the institution he or she attends allows students to access a wider range of institutions than might otherwise be possible.

## **Purpose**

The literature highlights the importance of financial aid to undergraduate students. Federal grant aid is a key form of financial assistance enabling students from low-income families to attain a college education. Federal grant aid that follows students to private institutions helps ensure equal access for lower income students to a wider range of education choices.

The researchers examined full-time, first-time undergraduate students attending four-year degree-granting private and public institutions of higher education and addressed the following three research questions:

1. What is the difference between the average amount of federal grant aid awarded to students at public and private four-year degree granting institutions?

2. What difference exists between the percentages of the total cost of attendance that is covered by the average federal grant aid award at public vs. private institutions?

3. What difference exists between the percentages of students receiving federal grant aid at public vs. private four-year degree granting institutions?

## Methodology

The researchers analyzed national data extracted from the Integrated Post-Secondary Education Data System (IPEDS). The study included 1,094 private, not for profit degree-granting colleges and universities and 513 public degree-granting colleges and universities. The extracted data were self-reported by the institutions and include the average federal grant aid award for first-time full-time degree-seeking undergraduate students at these institutions. The researchers excluded institutions that did not report, but retained those that reported zero. The latest complete information available for the full-time student enrollments in the included institutions was from the fall 2005 semester; therefore, the study is delimited to the fall 2005 semester data.

“Federal grants (*grants/educational assistance funds*)” were defined as grants provided by federal agencies such as the U.S. Department of Education, including Title IV Pell Grants and Supplemental Educational Opportunity Grants (SEOG). These grants also include need-based and merit-based educational assistance funds and training vouchers provided from other federal agencies and/or federally-sponsored educational benefits programs, including the Veteran’s Administration, Department of Labor, and other federal agencies. “Average amount of federal grant aid received” was defined as the average amount of federal grants (*grants/educational assistance funds*) received by full-time, first-time degree/certificate-seeking undergraduate students. “Undergraduate” was defined as a student enrolled in a 4- or 5-year bachelor’s degree program, an associate’s degree program, or a vocational or technical program below the baccalaureate. “Full-time student (undergraduate)” was defined as a student enrolled for 12 or more semester credits, or 12 or more quarter credits, or 24 or more contact hours a week each term. “First-time student (undergraduate)” was defined as a student attending any institution for the first time at the undergraduate level. It includes students enrolled in academic or occupational programs. This definition also includes students enrolled in the fall term who attended college for the first time in the prior summer term, and students who entered with advanced standing. “Degree/certificate-seeking students” was defined as students enrolled in courses for credit who are recognized by the institution as seeking a degree or other formal award. At the undergraduate level, this is intended to include students enrolled in vocational or occupational programs. (IPEDS 2008a) “Percentage of students receiving federal grant aid” was defined as the percentage of full-time, first-time degree/certificate-seeking undergraduate students who received federal grants (IPEDS 2008b). “Cost of attendance” was defined as the cost of attendance for full-time, first-time degree/certificate seeking, in-state undergraduate students living on campus for academic year 2005-2006. It includes in-state tuition and fees, books and supplies, on campus room and board, and other on campus expenses. (IPEDS 2008c)

The researchers utilized Statistical Packages for the Social Sciences (SPSS) to obtain descriptive statistics and to compare means. A one-way ANOVA was conducted to explore differences between the average federal grant aid award received by public institution students and that received by private institution students. An alpha level of .05 defined statistical significance. Based on the size of the sample groups, normality was tested by an observation of box plots and the groups were normally

distributed. Homogeneity of variances was not assumed.

## Findings

A statistically significant difference was evident between average federal grant aid awards received by public institution students and those received by private institution students,  $F(1, 1605) = 33.1, p < .001$ . A statistically significant difference was also evident in the cost of attending public and private institutions,  $F(1, 1605) = 1009.5, p < .001$ .

The researchers found that the average federal grant aid award at a private institution was 12.6% higher than the average award at a public institution for the period studied. The average federal grant aid award at a public institution was \$3,018, while qualifying students attending private institutions received, on average, \$3,399 in federal grant aid. This difference was found to be statistically significant. (See Table 1 in Appendix 1.)

The average cost to attend a private institution during the time studied was 85% higher than the cost of attendance at a public institution. Data revealed that, while the average federal grant aid award at private institutions was higher, the cost differential greatly reduced the net effect of grant aid for these students. The average federal grant aid award at a public institution covered 19% of the \$15,903 average annual cost, while the average award for qualifying students at private institutions covered only 11.6% of the \$29,355 average annual cost. Researchers found this difference to be statistically significant. (See Tables 2 and 3 in Appendix 1.)

On average, 31.2% of the students attending public institutions during the period studied received federal grant aid. At private institutions, grant aid recipients represented an average of 32.9% of the students. Thus, a statistically insignificant 1.7% difference existed during the study period between the percentages of students receiving federal grant aid public and private institutions. (See Table 4 in Appendix 1.)

## Conclusions and Recommendations for Further Research

Federal grant aid awards follow the student to the qualifying institution of his or her choice. The results of this study indicate, however, that this form of aid alone falls short of the goal of providing true equal access to higher education.

The literature indicates that the need-based calculation formula for federal grant aid includes the cost of attendance (U.S. Department of Education 2005). With an annual cost of attendance 85% higher than that of public institutions, students at private colleges and universities receive a higher average amount of grant aid. As the results show, however, the higher award is not as meaningful in light of the higher cost of attendance at private institutions.

Perhaps one of the more surprising findings, in light of common stereotypes concerning the perceived relative socio-economic status of students at public vs. private schools, was the statistically insignificant difference in the percentages of students receiving federal grant aid. That fact notwithstanding, based upon the results and conclusions of this study, the researchers recommend that the issue of financial aid availability and the crucial role it plays in helping create equality of access to higher education be examined further.

Following an evaluation of the results of this study, the researchers identified possibilities for additional inquiry. The first such possibility involves replicating the current study of public and private institutions, with the addition of segmentation by urbanization. A study by federal grant aid by degree of urbanization promises insights into financial need patterns, especially in light of literature indicating that lower-income students tend not to travel far from home to attend college (Tebbs and Turner 2005). Similar studies segmented by gender and ethnicity might also reveal interesting and useful data for analysis.

In addition to federal grant aid, public and private institutions should be examined relative to other forms of financial aid that are available — such as state grant aid, institutional grant aid and loans — to determine where the differences may lie and where gaps may exist. The amounts and percentages of financial aid that are funded solely by the institution itself should be examined to determine disparities of access between public and private institutions. Studies of total student financial aid available at Hispanic-serving institutions and Historically Black Colleges and Universities as compared to the broader universe of higher education would provide yet another window into the “equal access” question.

In the current era of economic volatility, studying data from two to three years past might be seen by some as inconsequential. The intent of this field of inquiry, however, has less to do with pinpointing current conditions than with spotlighting possible areas of inequity in the availability of financial aid. If access to higher education is to be considered a national priority, access to funding is an inevitable and essential element of the issue.

## References

American Council on Education (2008). What percentage of undergraduates receive financial aid and how much do they get? <http://www.acenet.edu/AM/Template.cfm?Section=home&template=/CM/HTMLDisplay.cfm&ContentID=12443> (accessed October 5, 2008).

Baum, S. (2007, March). It's time for serious reform of the student-aid system. *Change*, 39(2), 15-20. (accessed September 22, 2008).

Baum, S., and Steele, P. (2007a) Trends in college pricing. *College Board Publications*. [http://www.collegeboard.com/prod\\_downloads/about/news\\_info/trends/trends\\_aid\\_07.pdf](http://www.collegeboard.com/prod_downloads/about/news_info/trends/trends_aid_07.pdf)(accessed September 30, 2008).

Baum, S., and Steele, P. (2007b) Trends in student aid. *College Board Publications*. [http://www.collegeboard.com/prod\\_downloads/about/news\\_info/trends/trends\\_aid\\_07.pdf](http://www.collegeboard.com/prod_downloads/about/news_info/trends/trends_aid_07.pdf)(accessed September 22, 2008).

Fitzgerald, B. (2003, November). Real promise or hollow rhetoric?. *About Campus*, 8(5), 3-10. (accessed September 23, 2008).

Integrated Postsecondary Educational Data System (IPEDS) (2008a). [http://www.nces.ed.gov/ipeds/pas/dct/plabel.asp?vari=70216&varn=FGRNT\\_A&yr=05&ictbl=HD2007](http://www.nces.ed.gov/ipeds/pas/dct/plabel.asp?vari=70216&varn=FGRNT_A&yr=05&ictbl=HD2007) (accessed November 20, 2008).

Integrated Postsecondary Educational Data System (IPEDS) (2008b).

[http://www.nces.ed.gov/ipeds/pas/dct/plabel.asp?vari=70211&varn=FGRNT\\_P&yr=05&ictbl=HD2007](http://www.nces.ed.gov/ipeds/pas/dct/plabel.asp?vari=70211&varn=FGRNT_P&yr=05&ictbl=HD2007)  
(accessed November 20, 2008).

Integrated Postsecondary Educational Data System (IPEDS) (2008c).

<http://www.nces.ed.gov/ipeds/pas/dct/plabel.asp?vari=11576&varn=CINSON&yr=05&ictbl=HD2007>  
(accessed November 20, 2008).

Ishitani, T. (2006, September). Studying attrition and degree completion behavior among first-generation college students in the United States. *Journal of Higher Education*, 77(5), 861-885.  
(accessed September 22, 2008).

Lillis, M. P., and Tian, R. G. (2008). The impact of cost on college choice: beyond the means of the economically disadvantaged. *Journal of College Admission*, (200), 4-14. (accessed September 20, 2008).

Morris, L. (2005, September). Challenges of access, affordability, and persistence. *Innovative Higher Education*, pp. 147,148. (accessed October 5, 2008).

Perna, L., Rowan-Kenyon, H., Bell, A., Thomas, S., & Li, C. (2008, May). A typology of federal and state programs designed to promote college enrollment. *Journal of Higher Education*, 79(3), 243-267.  
(accessed September 22, 2008).

Tebbs, J., and Turner, S. (2005, July). College Education for Low-Income Students. *Change*, 37(4), 34-43. (accessed September 22, 2008).

U.S. Department of Education. (2008) Federal pell grant.

<http://studentaid.ed.gov/PORTALSWebApp/students/english/PellGrants.jsp?tab=funding%20>(accessed October 9, 2008).

U.S. Department of Education. (2005) FSA handbook: Calculating awards & packaging.

<http://www.ifap.ed.gov/sfahandbooks/attachments/0506Vol3Master920.pdf> (accessed November 20, 2008).

Appendix 1

Table 1

*Average amount of federal grant aid*

Group	<i>n</i>	Mean	SD	Range
Public	513	\$3,018	\$ 559	\$ 6,948
Private	1094	\$3,399	\$1,453	\$38,532

Table 2

*Average total cost of attendance*

Group	<i>n</i>	Mean	SD	Range
Public	513	\$15,903	\$3,253	\$28,332
Private	1094	\$29,355	\$9,325	\$46,590

Table 3

*Percentage of total cost of attendance covered by federal grant aid*

Group	<i>n</i>	Percentage Covered
Public	513	19.0
Private	1094	11.6

Table 4

*Percentage of students receiving federal grant aid*

Group	<i>n</i>	Mean	SD	Range
Public	513	31.21	15.95	90
Private	1094	32.93	19.96	99