Literature Review

Degree Attainment and College Completion among Income Groups

According to a Department of Education analysis of the Beginning Postsecondary Students survey, of all students enrolled at four-year institutions, those from low-income families were more likely to drop out and less likely to earn a degree than students from high-income families. Of students whose family incomes were in the bottom quartile, 42% had earned a BA within five years, while 35% had dropped out. In contrast, of those with family incomes in the highest quartile, 62% had earned a BA within five years, while only 21% had dropped out. A slightly different analysis showed that of students seeking bachelor's degrees, 22% of those in the bottom quartile of socioeconomic status had earned a BA within six years, while 52% had left without any degree. For those in the top socioeconomic group, the figures were reversed: 53% had earned a BA, while only 22% had left without a degree.

In his 1997 paper "The Impact of Pell Grants on Student Persistence," John B. Lee finds that of college enrollees from families with incomes below $20,000, 37% received bachelor's degrees and 43% received any degree within five years, while of students from families earning $60,000 or more, 61% had earned bachelor's degrees and 68% had earned any degrees.

Frontloading

In his 1999 book "The Price of Admission: Rethinking How Americans Pay for College," Harvard University professor and former Council of Economic Advisors staff economist Tom Kane proposes frontloading the Pell Grant program as part of his package of reforms to the student financial aid system:

"...when college freshmen are more likely than college seniors to have their decisions changed by an extra dollar in aid, there are potential gains to be had from raising the amount of aid available to a college freshmen to an amount greater than the aid available to a college senior. For instance, rather that providing grants to students for all four years in college, the same funds could be used to offer larger grants to students in their first two years of college, essentially encouraging those who are uncertain of their college prospects to learn about their college potential by enrolling. Those who discover the benefits of a college training could then be expected to borrow a larger share of the costs during their final years of college."

David Brenneman, Dean of the University of Virginia's Curry School of Education, and Fred Galloway, Director of Federal Policy Analysis for the American Council on Education, were commissioned by the College Board to write an analysis of ways to maximize the effectiveness of the Pell Grant program in the face of budgetary constraints. Their 1996 paper, "Rethinking the Allocation of Pell Grants," analyzed the cost savings associated with different forms of frontloading Pell Grants: "The rationale for frontloading is that it would provide larger grant support for entering and second year students, for whom higher education represents substantial risk and uncertainty. For those students who succeed in their first two years, much of that risk and uncertainty is diminished, and it is reasonable to expect them to borrow more heavily for the final two years. In essence, this option would reduce borrowing for first and second year students and increase it for third and fourth year students, while providing larger grant support in the first two years. Such a policy change would encourage more students to try higher education, while reducing loan defaults by students who start but do not complete a four-year degree."

In a 1995 letter report, "Restructuring Student Aid Could Reduce Low-Income Student Dropout Rate" (HEHS-95-48), GAO found that grant aid lowers the probability of low-income students' dropping out of college. A survey database sample showed that an additional $1,000 in grant aid for a low-income student reduced the dropout probability by 14% overall. GAO found that grant aid is relatively more effective during the first school year than in subsequent years: the effect of an additional $1,000 was to reduce the dropout probability by 23% in the first year and by 8% in the second year. In the third year, the additional grant aid had no statistically significant effect on dropout probabilities. GAO also studied a university program for high-need freshmen that included frontloaded grant aid. Those program participants were 39% less likely to drop out in a year than nonparticipants. For the lowest-income students, the program reduced the dropout probability by 64%. The report recommended that ED conduct a pilot program to evaluate the effects and costs of frontloading grants.

Lee states that "Researchers agree that student aid has a positive effect on student persistence to graduation" and summarizes various researchers' findings that "financial aid is effective because it helps equalize persistence across income categories." Lee's paper summarizes the findings of many researchers who have demonstrated the effectiveness of grant aid in improving persistence, especially in the early years of college. In his 1990 paper "Price Response in Persistence Decisions," E. St. John found that both grants and loans improved persistence, but that grants had a greater effect in the first year and loans were more effective in later years. In 1995, T. Murdock, L. Nix-Mayer, and P. Tsui also reported that grants in the first year were effective in promoting student retention. Lee recommends increasing the maximum Pell grant in the first year of enrollment both to improve persistence rates and to reduce the student loan default rate of students who drop out in their first year.