

Performance-Based Scholarships: Emerging Findings from a National Demonstration

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Increasing the academic success of students in college is a national imperative. Postsecondary enrollment has increased about 300 percent from just over 5.9 million students in 1965 to about 17.5 million students in 2005,² but college graduation rates have been fairly stagnant over the same period.³ Despite the marked successes in college access since the passage of the Higher Education Act of 1965 — which extended need-based financial assistance to the general population for the first time — more work remains to be done to improve college persistence and completion rates.

Low-income students and nontraditional students are at particular risk of not persisting to complete a certificate or degree — often because of competing priorities, financial pressures, and inadequate preparation for college. Financial aid may improve access to and persistence in college for this population. Research suggests that financial aid is positively associated with increased enrollment⁴ and positively associated with increased persistence.⁵ One random assignment study that provided need-based grants to students attending public universities in Wisconsin found modest impacts on some academic measures.⁶

One emerging solution for improving academic success among low-income students is a performance-based scholarship, paid contingent on attaining academic benchmarks. A handful of

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²Snyder, Dillow, and Hoffman (2008).

³Eaton (1997); Turner (2004).

⁴St. John et al. (2002); Kane (2004); Dynarski (2000, 2003); Cornwell, Mustard, and Sridhar (2006).

⁵Leslie and Brinkman (1987); St. John et al. (1991, 1994, 2001); Cabrera, Nora, and Castaneda (1993); Choy (2002); DesJardins, Ahlburg, and McCall (2002); Bettinger (2004); Singell and Stater (2006); Scott-Clayton (2009).

⁶Goldrick-Rab, Harris, Benson, and Kelchen (2011) have experimental evidence of providing additional aid without any criteria or academic benchmarks associated. They find that recipients of the need-based grant were 28 percent more likely than other Pell grant recipients to have earned at least 60 college credits, over a two-year period.

studies have tested the effectiveness of such financial *incentives* for postsecondary students, finding modest impacts for some groups of students.⁷ Unlike merit-based aid, performance-based scholarships focus on current and future performance rather than prior accomplishments. MDRC's Opening Doors study of performance-based scholarships in Louisiana showed that such a program had a number of positive effects for students, including students' credit accumulation, grades, and persistence.⁸ The program targeted low-income parents, and, as a result, the study sample was comprised of older, unmarried, and mostly female students. Unfortunately, the devastation inflicted by Hurricane Katrina intervened partway into the study, making it difficult to confirm the program's long-term effects. Building on these promising findings, MDRC launched the Performance-Based Scholarship (PBS) Demonstration in four states in 2008, followed by an additional two states in 2010.⁹

While the programs in each state vary by target population, performance benchmarks, scholarship amounts, and the integration of student services (among other things), each study employs a random assignment research design, the "gold standard" in program evaluation. Random assignment creates two groups of students that are similar both in characteristics that can be measured, such as age and gender, and in those that are more difficult to measure, such as tenacity and motivation. As a result, subsequent differences in outcomes (for instance, enrollment rates) can be attributed with a high level of confidence to the PBS program rather than to the types of students who enroll in the program.

A number of the sites in the PBS Demonstration serve nontraditional populations, such as low-income parents in Ohio (similar to Louisiana) and older students in need of remedial education in New York. Additionally, all of the programs target low-income students, and the scholarships are paid directly to students, allowing them to use the funds for their most pressing needs, whether books, child care, or other financial obligations that may disrupt their studies. Importantly, the performance-based scholarships are paid in addition to Pell Grants — the main federal source of need-based aid — and other existing financial aid programs. In this way, students have more funds to cover academic and living expenses and can potentially reduce their dependency on loans.¹⁰

By conditioning additional financial aid on certain performance benchmarks, the programs seek to encourage students to focus more on their studies, which, in turn, should lead them to perform better in their classes in the short term. In the medium term, they should progress through their degree requirements at a quicker rate by increasing their term-to-term enrollment and their credits attempted and earned. Increases in these academic outcomes may then lead to long-term

⁷Angrist, Lang, and Oreopoulos (2009); Leuven, Oosterbeek, and van der Klauuw (2006).

⁸Richburg-Hayes et al. (2009a); Brock and Richburg-Hayes (2006); Barrow et al. (2009).

⁹See Richburg-Hayes et al. (2009b) for an overview of the programs in each state.

¹⁰Financial aid regulations prohibit certain students from receiving financial aid in excess of their need. In these instances, federal work-study or loans may be displaced for the performance-based scholarship.

gains, including year-to-year persistence, more total cumulative credits earned, and graduation or transfer to a four-year or more selective postsecondary institution. Finally, if the effects on academic outcomes remain positive and strong, the intervention could lead to improved labor market outcomes, including higher earnings.

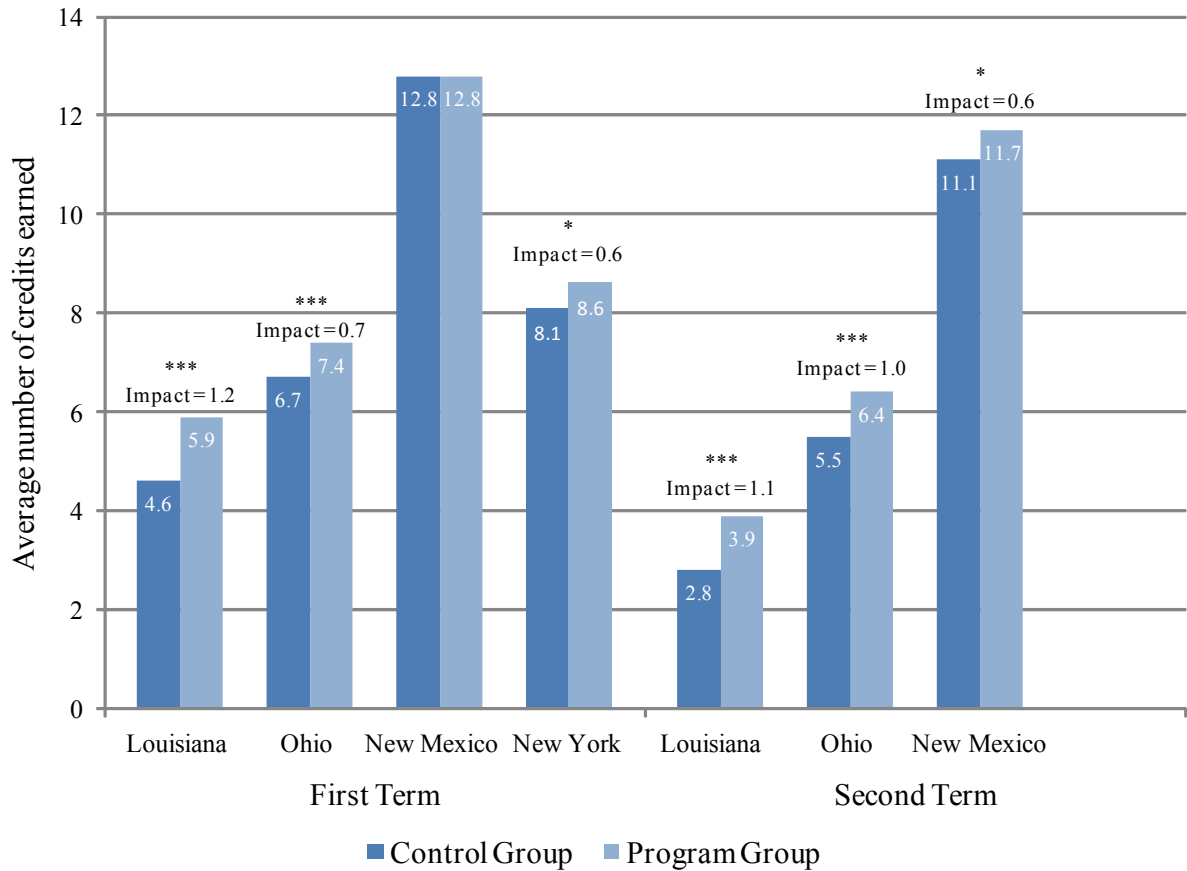
MDRC now has preliminary results from performance-based scholarship programs in New York, Ohio, and New Mexico, in addition to the original results in Louisiana.¹¹ While the effects vary across these sites, there are some commonalities in the emerging findings. All of the impacts described below are statistically significant, indicating that the differences reported are likely to be the result of the programs rather than of chance.¹²

- **Increases in credits earned.** All of the sites have found impacts on credits earned in one or more semesters or terms (see Figure 1). The Louisiana study saw an increase in credits earned, averaging 3.5 credits over four terms. In the Ohio program, which has a target population similar to that of Louisiana, the program group students earned an average of two full credits more than the control group students over two terms of study. The New York site, which targets independent students in need of developmental education, had an increase of 0.6 credits earned in the first term (results from later terms are not yet available). The New Mexico study, which is the only one housed at a four-year institution, found no impact on credits earned over the first academic year, but showed an increase of 0.6 credits in the second term. While these impacts seem fairly modest, the increase in credits can sometimes account for one full course toward a student's degree requirements, essentially shortening the time to degree completion by that amount.
- **Greater impacts in the second term.** All sites, including the original Louisiana study, showed an increase in credits attempted and/or full-time enrollment in the second term. In Louisiana, there was an increase of 1.2 credits attempted in the second term, and a 15.3 percentage point increase in full-time enrollment. Similarly, in Ohio, program participants showed an increase of 0.6 credits attempted in the second term, and a 6.3 percentage point increase in full-time enrollment. In New Mexico, students in the program attempted almost one full credit more than control group members in the second term. There was no increase in full-time enrollment (12 credits per term) in New Mexico, but the scholarship requires that students enroll in 15 credits in their second term — which is what they consistently need to complete in order to graduate on-time in four years. Looking at the 15-credit benchmark, the program in New Mexico had a 25.6 percentage point impact on second-term enrollment. Lastly, while there was no increase on credits attempted in the second term in New York, the program did have a 7.4 percentage point increase in full-time enrollment.

¹¹Richburg-Hayes, Sommo, and Welbeck (2011); Miller et al. (2011); Cha and Patel (2010).

¹²Using a two-tailed t-test applied to differences between research groups, all p-values are less than or equal to 0.10.

Figure 1
Impact on Credits Earned Across All Sites
in MDRC’s Evaluations of Performance-Based Scholarship Programs



SOURCE: MDRC calculations from Delgado Community College, Louisiana Technical College, Ohio Board of Regents, University of New Mexico, Borough of Manhattan Community College, and Hostos Community College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by cohort and campus.

- Varied effects on term-to-term persistence.** While the Louisiana program saw sizeable impacts on rates of registration in virtually every term after random assignment, the early findings in Ohio, New Mexico, and New York have not found similar effects. In part, this is due to high rates of persistence for the control group students in the newer sites, providing a bar that is difficult to improve upon. In addition, while the Louisiana program took place during an economic boom (2004 to 2005), the PBS sites commenced during a period of economic downturn (2008 to 2010). Ohio, New Mexico, and New York also have more generous financial aid options for the average low-income student than did Louisiana at the time of the Opening Doors study, meaning that the control group

students in those states were more likely to have other forms of aid. Additionally, it may be that the target group in Louisiana was particularly well-suited to the intervention. Despite finding no program effects yet on persistence in the PBS Demonstration sites, impacts on academic outcomes continue to exist.

- **Debt reduction.** Both the studies of the Ohio and New Mexico programs found evidence of debt reduction as a result of the performance-based scholarships. Loans made up a smaller proportion of total financial aid for program group students in Ohio and New Mexico than for control group students.

These mostly short-term results suggest that performance-based scholarships can move the dial on some important markers of academic success. If the programs can show lasting effects after the scholarships are no longer available to the students — and impacts on persistence emerge in later terms — these performance-based scholarships could lead to higher graduation rates and translate into higher earnings. MDRC will follow these longer-range outcomes closely in Ohio, New Mexico and New York in the coming terms. In addition, forthcoming results from three more states in the PBS Demonstration — Arizona, California, and Florida — will add to the body of knowledge on the effectiveness of these scholarships on improving academic success for low-income students.

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