

Performance-Based Scholarships: What Have We Learned?

Interim Findings from the PBS Demonstration

Supplemental Tables

**Reshma Patel
Lashawn Richburg-Hayes
Elijah de la Campa
Timothy Rudd**

August 2013



Funders of the Performance-Based Scholarship Demonstration

The launch of the Performance-Based Scholarship Demonstration was made possible by the generous support of the Bill and Melinda Gates Foundation. The operation and research for the demonstration at various sites was enabled by support from:

- The Bill and Melinda Gates Foundation
- The College Access Foundation of California
- Open Society Foundations
- The Helios Education Foundation
- The Joyce Foundation
- The Kresge Foundation
- NYC Center for Economic Opportunity
- The Ohio Department of Job and Family Services through the Ohio Board of Regents
- The Robin Hood Foundation
- Institute of Education Sciences, U.S. Department of Education
- California Student Aid Commission
- The City University of New York: Borough of Manhattan Community College and Hostos Community College
- Hillsborough Community College
- Lorain County Community College
- The Los Angeles Chamber of Commerce
- Owens Community College
- Pima Community College
- Sinclair Community College
- UNCF
- University of New Mexico

Dissemination of MDRC publications is supported by the following funders that help finance MDRC's public policy outreach and expanding efforts to communicate the results and implications of our work to policymakers, practitioners, and others: The Annie E. Casey Foundation, The George Gund Foundation, Sandler Foundation, and The Starr Foundation.

In addition, earnings from the MDRC Endowment help sustain our dissemination efforts. Contributors to the MDRC Endowment include Alcoa Foundation, The Ambrose Monell Foundation, Anheuser-Busch Foundation, Bristol-Myers Squibb Foundation, Charles Stewart Mott Foundation, Ford Foundation, The George Gund Foundation, The Grable Foundation, The Lizabeth and Frank Newman Charitable Foundation, The New York Times Company Foundation, Jan Nicholson, Paul H. O'Neill Charitable Foundation, John S. Reed, Sandler Foundation, and The Stupski Family Fund, as well as other individual contributors.

The findings and conclusions in this report do not necessarily represent the official positions or policies of the funders.

For information about MDRC and copies of our publications, see our Web site: www.mdrc.org.

Copyright © 2013 by MDRC®. All rights reserved.

Contents

Table

| | | |
|---|---|---|
| 1 | Year 1 Academic Outcomes Among Sample Members | 1 |
| 2 | Year 2 Academic Outcomes Among Sample Members | 3 |
| 3 | Credits Earned as of the End of the First Year by Five Groups, by Subgroup | 5 |
| 4 | Percentage Registered at the Beginning of the Second Year at Six Sites, by Subgroup | 7 |
| 5 | Year 1 Financial Aid Outcomes | 9 |

Figure

| | | |
|---|---|----|
| 1 | Average Scholarship Amount Received Among Program Group Members, by Site: First Two Program Terms | 10 |
|---|---|----|

The Performance-Based Scholarship Demonstration
Supplementary Table 1
Year 1 Academic Outcomes Among Sample Members

| Program | Sample Size | Program Group | Control Group | Difference | Percentage Change |
|---|----------------|------------------|------------------|------------|----------------------|
| <u>Registered in second program term (%)^a</u> | | | | | |
| Opening Doors Louisiana | 537 | 57.1 | 38.9 | 18.1 *** | 46.6 |
| Arizona | 1,028 | 78.6 | 74.0 | 4.6 * | 6.2 |
| California ^b | 4,642 | 87.6 | 83.9 | 3.8 *** | 4.5 |
| Florida | 1,075 | 78.6 | 77.1 | 1.6 | 2.0 |
| New Mexico | 1,081 | 91.6 | 91.2 | 0.4 | 0.5 |
| New York | 1,502 | 78.1 | 76.6 | 1.6 | 2.0 |
| Ohio | 2,285 | 79.5 | 79.1 | 0.4 | 0.5 |
| <u>Credits earned as of one year after random assignment</u> | | | | | |
| Opening Doors Louisiana | 537 | 11.0 | 7.7 | 3.3 *** | 43.7 |
| Arizona | 1,028 | 16.1 | 14.3 | 1.7 ** | 12.2 |
| Florida | 1,075 | 14.9 | 13.9 | 1.0 | 7.3 |
| New Mexico | 1,081 | 25.7 | 24.8 | 0.9 | 3.7 |
| New York | 1,502 | 16.3 | 15.5 | 0.9 * | 5.6 |
| Ohio | 2,285 | 15.6 | 13.9 | 1.7 *** | 12.1 |
| <u>Met academic benchmark in first program term (%)^c</u> | | | | | |
| Opening Doors Louisiana | 537 | 43.7 | 29.5 | 14.2 *** | 48.2 |
| Arizona | 1,028 | 37.9 | 29.4 | 8.5 *** | 28.9 |
| Florida | 1,075 | 56.9 | 47.8 | 9.1 *** | 19.0 |
| New Mexico | 1,081 | 80.2 | 78.5 | 1.7 | 2.2 |
| New York | 1,502 | 71.4 | 70.5 | 0.9 | 1.3 |
| Ohio | 2,285 | 33.2 | 26.3 | 7.0 *** | 26.4 |
| <u>Met academic benchmark in second program term (%)^d</u> | | | | | |
| Opening Doors Louisiana | 537 | 32.5 | 17.3 | 15.2 *** | 87.8 |
| Arizona | 1,028 | 28.3 | 16.9 | 11.4 *** | 67.6 |
| Florida | 1,075 | 39.5 | 34.9 | 4.6 | 13.1 |
| New Mexico | 1,081 | 49.8 | 32.3 | 17.6 *** | 54.4 |
| New York | 1,502 | 57.4 | 56.8 | 0.6 | 1.1 |
| Ohio | 2,285 | 28.8 | 18.3 | 10.5 *** | 57.5 |

(continued)

Supplementary Table 1 (continued)

SOURCES: MDRC calculations using transcript data from the National Student Clearinghouse, Delgado Community College, Louisiana Technical College, Pima Community College, Hillsborough Community College, the University of New Mexico, Borough of Manhattan Community College, Hostos Community College, and the Ohio Board of Regents.

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

Rounding may cause slight discrepancies in sums and differences.

Estimates for all sites, excluding California, are adjusted by research cohort and campus. For California, estimates are adjusted by research cohort and workshop region.

Only the first two cohorts are shown for Opening Doors Louisiana.

^aRepresents the second term during which program group students were eligible for a scholarship.

^bRepresents data pulled from the National Student Clearinghouse. Data were not found for 305 students (6.6 percent of the sample).

^cDue to the timing of scholarship-eligible terms and data limitations, some of these measures are proxies. For Louisiana, this represents the proportion of students who earned 6 or more credits with a “C” or better overall in their first term (depending on the cohort, this could be a fall, spring, or summer term). For Arizona, this represents the proportion of students who earned 12 or more credits with a “C” or better in their first term (depending on the cohort, this could be a fall or spring term). For Florida, this represents the proportion of students who earned a “C” or better in MAT 0024/0028 in their first term (depending on the cohort, this could be a fall or spring term; if a spring term, this includes students who earned the award over the summer). For New Mexico, this represents the proportion of students who earned 12 or more credits with a “C” or better overall in their first term (a fall term), and includes students who earned the award over the winter intersession. For New York, this represents the proportion of students who earned 6 or more credits with a “C” or better in their first term (depending on the cohort, this could be a fall or spring term). For Ohio, this represents the proportion of students who earned 12 or more credits in their first term (depending on the cohort, this could be a fall, winter, or spring term).

^dDue to the timing of scholarship-eligible terms and data limitations, some of these measures are proxies. For Louisiana, this represents the proportion of students who earned 6 or more credits with a “C” or better overall in their second term (depending on the cohort, this could be a fall, spring, or summer term). For Arizona, this represents the proportion of students who earned 12 or more credits with a “C” or better in their second term (depending on the cohort, this could be a fall or spring term). For Florida, this represents the proportion of students who earned a “C” or better in MAT 0024/0028 or MAT 1033 in their second term (depending on the cohort, this could be a fall or spring term; if a spring term, this includes students who earned the award over the summer). For New Mexico, this represents the proportion of students who earned 15 or more credits with a “C” or better overall in their second term (a spring term), and does not include students who earned the award over the summer. For New York, this represents the proportion of students who earned 6 or more credits with a “C” or better in their second term (depending on the cohort, this could be a fall or spring term). For Ohio, this represents the proportion of students who earned 12 or more credits in their second term (depending on the cohort, this could be a fall, winter, or spring term).

The Performance-Based Scholarship Demonstration
Supplementary Table 2
Year 2 Academic Outcomes Among Sample Members

| Program | Sample Size | Program Group | Control Group | Difference | Percentage Change |
|--|----------------|------------------|------------------|------------|----------------------|
| <u>Registered at the beginning of second year (%)</u> | | | | | |
| Opening Doors Louisiana | 537 | 30.1 | 22.9 | 7.2 ** | 31.6 |
| California ^a | 4,642 | 81.4 | 79.0 | 2.4 * | 3.0 |
| New Mexico | 1,081 | 77.6 | 78.5 | -0.9 | -1.2 |
| New York | 1,502 | 61.9 | 60.7 | 1.2 | 2.0 |
| Ohio | 2,285 | 63.2 | 61.6 | 1.6 | 2.5 |
| <u>Credits earned as of two years after random assignment</u> | | | | | |
| Opening Doors Louisiana | 537 | 13.7 | 10.0 | 3.7 *** | 36.9 |
| New Mexico | 1,081 | 46.5 | 44.3 | 2.2 * | 5.1 |
| New York | 1,502 | 26.7 | 25.6 | 1.1 | 4.3 |
| Ohio | 2,285 | 24.8 | 22.4 | 2.4 *** | 10.6 |
| <u>Met academic benchmark in third term (%)^b</u> | | | | | |
| Opening Doors Louisiana | 537 | 14.7 | 11.1 | 3.6 | 32.3 |
| New Mexico | 1,081 | 50.7 | 32.3 | 18.4 *** | 57.1 |
| New York | 1,502 | 44.0 | 44.2 | -0.2 | -0.4 |
| Ohio | 2,285 | 16.1 | 13.8 | 2.3 | 16.5 |
| <u>Met academic benchmark in fourth term (%)^c</u> | | | | | |
| Opening Doors Louisiana | 537 | 4.9 | 5.2 | -0.3 | -5.2 |
| New Mexico | 1,081 | 42.4 | 30.3 | 12.1 *** | 39.9 |
| New York | 1,502 | 33.4 | 34.1 | -0.7 | -1.9 |
| Ohio | 2,285 | 14.6 | 10.8 | 3.8 *** | 35.7 |

(continued)

Supplementary Table 2 (continued)

SOURCES: MDRC calculations using transcript data from the National Student Clearinghouse, Delgado Community College, Louisiana Technical College, the University of New Mexico, Borough of Manhattan Community College, Hostos Community College, and the Ohio Board of Regents.

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

Rounding may cause slight discrepancies in sums and differences.

Estimates for all sites, excluding California, are adjusted by research cohort and campus. For California, estimates are adjusted by research cohort and workshop region.

Only the first two cohorts are shown for Opening Doors Louisiana.

^aRepresents data pulled from the National Student Clearinghouse. Data were not found for 305 students (6.6 percent of the sample).

^bDue to the timing of scholarship-eligible terms and data limitations, some of these measures are proxies. For Louisiana, this represents the proportion of students who earned 6 or more credits with a “C” or better overall in the first term of their second year (depending on the cohort, this could be a fall, spring, or summer term). Program group students were no longer eligible for a performance-based scholarship during this time. For New Mexico, this represents the proportion of students who earned 15 or more credits with a “C” or better overall in the first term of their second year (a fall term), and includes students who earned the award over the winter intersession. Program group students were still eligible for a performance-based scholarship during this time. For New York, this represents the proportion of students who earned 6 or more credits with a “C” or better in the first term of their second year (depending on the cohort, this could be a fall or spring term). Program group students were no longer eligible for a performance-based scholarship during this time. For Ohio, this represents the proportion of students who earned 12 or more credits in the first term of their second year (depending on the cohort, this could be a fall, winter, or spring term). Program group students were no longer eligible for a performance-based scholarship during this time.

^cDue to the timing of scholarship-eligible terms and data limitations, some of these measures are proxies. For Louisiana, this represents the proportion of students who earned 6 or more credits with a “C” or better overall in the second term of their second year (depending on the cohort, this could be a fall, spring, or summer term). Program group students were no longer eligible for a performance-based scholarship during this time. For New Mexico, this represents the proportion of students who earned 15 or more credits with a “C” or better overall in their second term of their second year (a spring term), and does not include students who earned the award over the summer. Program group students were still eligible for a performance-based scholarship during this time. For New York, this represents the proportion of students who earned 6 or more credits with a “C” or better in the second term of their second year (depending on the cohort, this could be a fall or spring term). Program group students were no longer eligible for a performance-based scholarship during this time. For Ohio, this represents the proportion of students who earned 12 or more credits in the second term of their second year (depending on the cohort, this could be a fall, winter, or spring term). Program group students were no longer eligible for a performance-based scholarship during this time.

The Performance-Based Scholarship Demonstration

Supplementary Table 3

Credits Earned as of the End of the First Year at Five Sites, by Subgroup

| Subgroup | Sample Size | Program Group | Control Group | Difference | Standard Error | Difference Between Subgroups |
|--|-------------|---------------|---------------|------------|----------------|------------------------------|
| <u>Gender</u> | | | | | | |
| Male | 2,588 | 17.5 | 15.7 | 1.8 *** | 0.4 | † |
| Female | 4,383 | 17.2 | 16.2 | 1.0 *** | 0.3 | |
| Sample size | 6,971 | | | | | |
| <u>Hispanic</u> | | | | | | |
| Yes | 2,845 | 17.9 | 16.8 | 1.1 *** | 0.4 | |
| No | 4,033 | 16.9 | 15.4 | 1.5 *** | 0.3 | |
| Sample size | 6,878 | | | | | |
| <u>Parent</u> | | | | | | |
| Yes | 3,721 | 15.5 | 14.1 | 1.4 *** | 0.3 | |
| No | 3,212 | 19.4 | 18.3 | 1.1 *** | 0.3 | |
| Sample size | 6,933 | | | | | |
| <u>Younger than 20 years old</u> | | | | | | |
| Yes | 1,826 | 21.6 | 20.6 | 1.0 ** | 0.5 | |
| No | 5,145 | 15.8 | 14.4 | 1.4 *** | 0.3 | |
| Sample size | 6,971 | | | | | |
| <u>First in family to attend college</u> | | | | | | |
| Yes | 2,211 | 16.9 | 15.3 | 1.6 *** | 0.4 | |
| No | 4,574 | 17.5 | 16.5 | 1.0 *** | 0.3 | |
| Sample size | 6,785 | | | | | |
| <u>Employed at the beginning of the program</u> | | | | | | |
| Yes | 3,424 | 17.2 | 15.9 | 1.3 *** | 0.3 | |
| No | 3,413 | 17.5 | 16.2 | 1.3 *** | 0.4 | |
| Sample size | 6,837 | | | | | |
| <u>In a program with a services component^a</u> | | | | | | |
| Yes | 3,184 | 19.0 | 17.7 | 1.2 *** | 0.4 | |
| No | 3,787 | 15.9 | 14.6 | 1.4 *** | 0.3 | |
| Sample size | 6,971 | | | | | |

(continued)

Supplementary Table 3 (continued)

SOURCES: MDRC calculations using Baseline Information Form (BIF) data and transcript data from Pima Community College, Hillsborough Community College, the University of New Mexico, Borough of Manhattan Community College, Hostos Community College, and the Ohio Board of Regents.

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

A two-tailed t-test was applied to differences in impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Rounding may cause slight discrepancies in sums and differences.

Estimates are adjusted by research cohort and campus.

^aThe programs with service components, such as advising or tutoring, were located in Arizona, Florida, and New Mexico.

The Performance-Based Scholarship Demonstration

Supplementary Table 4

Percentage Registered at the Beginning of the Second Year at Six Sites, by Subgroup

| Subgroup | Sample Size | Program Group | Control Group | Difference | Standard Error | Difference Between Subgroups |
|--|-------------|---------------|---------------|------------|----------------|------------------------------|
| <u>Gender</u> | | | | | | |
| Male | 3,956 | 71.3 | 68.5 | 2.8 * | 1.5 | |
| Female | 6,903 | 72.0 | 71.2 | 0.8 | 1.1 | |
| Sample size | 10,859 | | | | | |
| <u>Hispanic</u> | | | | | | |
| Yes | 5,170 | 74.3 | 71.7 | 2.6 ** | 1.3 | |
| No | 5,562 | 69.4 | 68.9 | 0.5 | 1.3 | |
| Sample size | 10,732 | | | | | |
| <u>Parent^a</u> | | | | | | |
| Yes | 3,484 | 61.4 | 60.8 | 0.6 | 1.7 | |
| No | 2,701 | 68.6 | 68.0 | 0.5 | 1.8 | |
| Sample size | 6,185 | | | | | |
| <u>Younger than 20 years old</u> | | | | | | |
| Yes | 6,173 | 79.3 | 77.5 | 1.9 * | 1.1 | |
| No | 4,687 | 61.7 | 60.8 | 0.9 | 1.4 | |
| Sample size | 10,860 | | | | | |
| <u>First in family to attend college</u> | | | | | | |
| Yes | 4,442 | 72.8 | 70.5 | 2.3 * | 1.4 | |
| No | 6,215 | 71.0 | 70.3 | 0.8 | 1.2 | |
| Sample size | 10,657 | | | | | |
| <u>Employed at the beginning of the program^a</u> | | | | | | |
| Yes | 3,100 | 65.8 | 65.5 | 0.4 | 1.7 | |
| No | 3,003 | 63.7 | 62.3 | 1.4 | 1.8 | |
| Sample size | 6,103 | | | | | |
| <u>In a program with a services component^b</u> | | | | | | |
| Yes | 2,431 | 67.7 | 67.7 | 0.0 | 1.9 | |
| No | 8,429 | 72.9 | 71.0 | 1.9 * | 1.0 | |
| Sample size | 10,860 | | | | | |

(continued)

Supplementary Table 4 (continued)

SOURCES: MDRC calculations using Baseline Information Form (BIF) data and transcript data from the National Student Clearinghouse, Pima Community College, Hillsborough Community College, the University of New Mexico, Borough of Manhattan Community College, Hostos Community College, and the Ohio Board of Regents.

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

A two-tailed t-test was applied to differences in impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Rounding may cause slight discrepancies in sums and differences.

Estimates for all sites, excluding California, are adjusted by research cohort and campus. For California, estimates are adjusted by research cohort and workshop region.

Results shown include the first two of three cohorts in Arizona and Florida.

^aData on parental status and employment were not collected for California students.

^bThe programs with service components, such as advising or tutoring, were located in Arizona, Florida, and New Mexico.

The Performance-Based Scholarship Demonstration

Supplementary Table 5

Year 1 Financial Aid Outcomes

| Program | Sample Size | Program Group | Control Group | Difference | Percentage Change |
|---|-------------|---------------|---------------|------------|-------------------|
| Total financial aid received (\$) | | | | | |
| New Mexico | 1,081 | 11,098 | 10,167 | 932 *** | 9.2 |
| New York | 1,502 | 8,048 | 5,839 | 2,209 *** | 37.8 |
| Ohio | 2,285 | 7,947 | 7,445 | 502 *** | 6.7 |
| Total performance-based scholarship received (\$) | | | | | |
| New Mexico | 1,081 | 1,440 | 0 | 1,440 *** | - |
| New York | 1,502 | 2,050 | 0 | 2,050 *** | - |
| Ohio | 2,285 | 765 | 0 | 765 *** | - |
| Total loans received (\$) | | | | | |
| New Mexico | 1,081 | 1,179 | 1,525 | -347 ** | -22.7 |
| New York | 1,502 | 1,042 | 1,033 | 10 | 0.9 |
| Ohio | 2,285 | 2,853 | 3,187 | -334 *** | -10.5 |

SOURCES: MDRC calculations using financial aid data from the CUNY Institutional Research Database, the University of New Mexico, Lorain County Community College, Owens Community College, and Sinclair Community College.

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

Rounding may cause slight discrepancies in sums and differences.

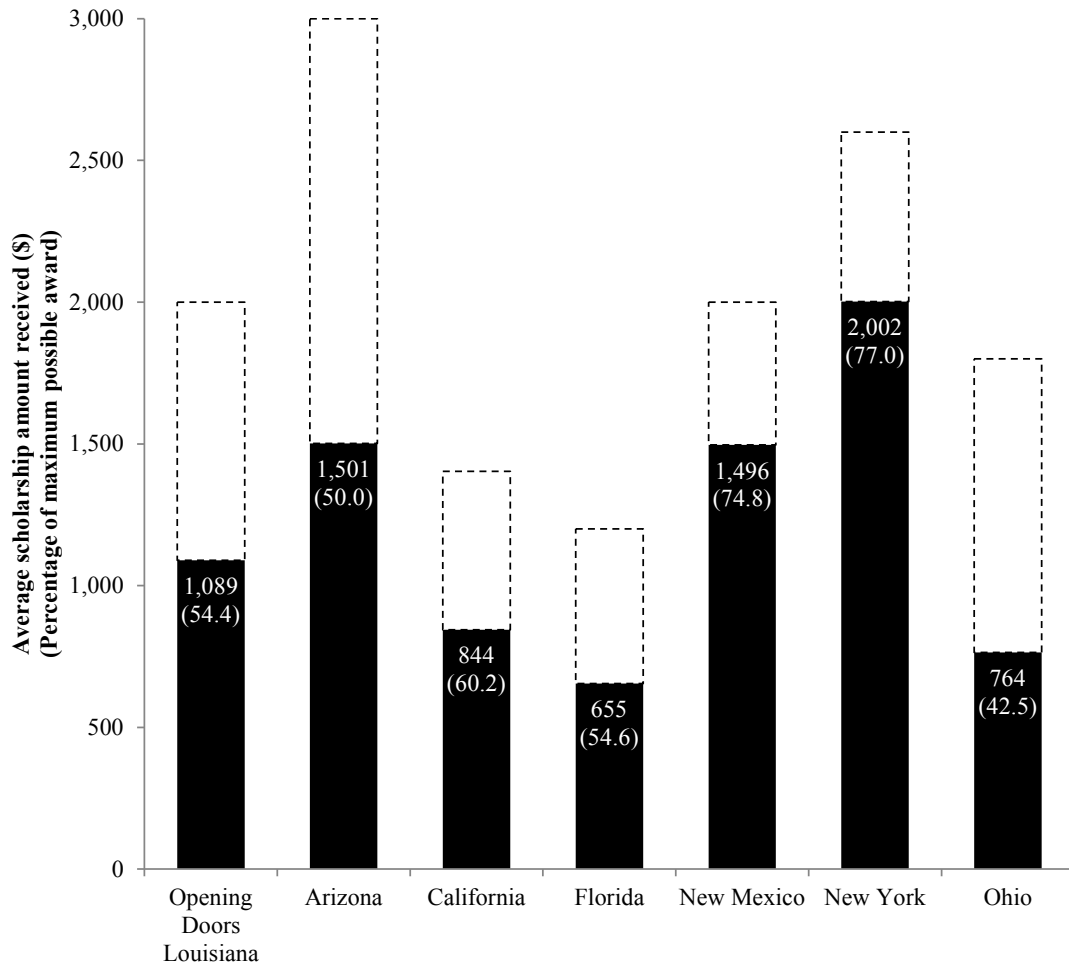
Estimates are adjusted by research cohort and campus.

The financial aid outcomes for the New York study represent financial aid awarded, which is distinct from financial aid received. The financial aid outcomes for the New Mexico and Ohio studies represent financial aid received.

The Performance-Based Scholarship Demonstration

Supplementary Figure 1

Average Scholarship Amount Received Among Program Group Members, by Site:
First Two Program Terms



(continued)

Supplementary Figure 1 (continued)

SOURCES: MDRC calculations using scholarship payment data from Delgado Community College, Louisiana Technical College, Pima Community College, the California Student Aid Commission, Hillsborough Community College, Lorain County Community College, Owens Community College, Sinclair Community College, the University of New Mexico, Borough of Manhattan Community College, and Hostos Community College.

NOTES: Dotted lines above the bars represent the maximum amount of money for which students were eligible over the first year of the program.

Results for California exclude scholarship type 1, which is not performance-based. The dotted line representing the maximum amount available is the average scholarship amount for which students were eligible across all scholarship types, excluding type 1.

Results for Florida include a fall and spring term, plus an additional summer term during which students could earn a scholarship. For the last cohort, fall 2011, the summer-term scholarship amounts may change slightly when additional data are processed.

About MDRC

MDRC is a nonprofit, nonpartisan social and education policy research organization dedicated to learning what works to improve the well-being of low-income people. Through its research and the active communication of its findings, MDRC seeks to enhance the effectiveness of social and education policies and programs.

Founded in 1974 and located in New York City and Oakland, California, MDRC is best known for mounting rigorous, large-scale, real-world tests of new and existing policies and programs. Its projects are a mix of demonstrations (field tests of promising new program approaches) and evaluations of ongoing government and community initiatives. MDRC's staff bring an unusual combination of research and organizational experience to their work, providing expertise on the latest in qualitative and quantitative methods and on program design, development, implementation, and management. MDRC seeks to learn not just whether a program is effective but also how and why the program's effects occur. In addition, it tries to place each project's findings in the broader context of related research — in order to build knowledge about what works across the social and education policy fields. MDRC's findings, lessons, and best practices are proactively shared with a broad audience in the policy and practitioner community as well as with the general public and the media.

Over the years, MDRC has brought its unique approach to an ever-growing range of policy areas and target populations. Once known primarily for evaluations of state welfare-to-work programs, today MDRC is also studying public school reforms, employment programs for ex-offenders and people with disabilities, and programs to help low-income students succeed in college. MDRC's projects are organized into five areas:

- Promoting Family Well-Being and Children's Development
- Improving Public Education
- Raising Academic Achievement and Persistence in College
- Supporting Low-Wage Workers and Communities
- Overcoming Barriers to Employment

Working in almost every state, all of the nation's largest cities, and Canada and the United Kingdom, MDRC conducts its projects in partnership with national, state, and local governments, public school systems, community organizations, and numerous private philanthropies.