



PROJECT MUSE®

---

## Strategies for Improving Economic Mobility of Workers

Toussaint-Comeau, Maude, Meyer, Bruce D.

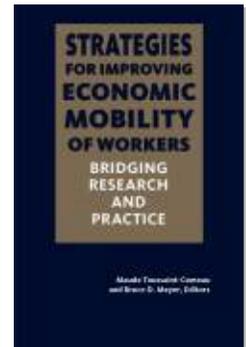
Published by W.E. Upjohn Institute

Toussaint-Comeau, Maude and Bruce D. Meyer.

Strategies for Improving Economic Mobility of Workers: Bridging Research and Practice.

First ed. W.E. Upjohn Institute, 2009.

Project MUSE.[muse.jhu.edu/book/17392](https://muse.jhu.edu/book/17392).



➔ For additional information about this book

<https://muse.jhu.edu/book/17392>

## 6

# Helping Low-Wage Workers Persist in Education Programs

## Lessons from Research on Welfare Training Programs and Two Promising Community College Strategies

Lashawn Richburg-Hayes  
*MDRC*

### THE POLICY CONTEXT

Employment has long been held to be an important deterrent against poverty, and work is at the heart of a range of federal efforts to improve the economic well-being of low-income families. However, full-time, stable work alone is not sufficient to alleviate poverty: more than half of the families, with children, that have income below 200 percent of the poverty line (a standard commonly used to define low income) do have at least one full-time, year-round worker, implying that low wages are a problem for many. One study that followed prime-age workers who earned less than \$12,000 a year for three consecutive years found that most of these low earners enjoyed earnings growth in subsequent years, but only about a fourth consistently earned more than \$15,000 a year at the end of the period—a figure that still placed them firmly in poverty (Andersson, Holzer, and Lane 2005).

While there is some debate about the relative effect on the labor market of factors such as globalization, technological change, declining union membership, and immigration, most agree that the dominant labor market trends have been quite unfavorable for less-skilled workers. One of the clearest trends is that real wages have risen much more for workers with more education, resulting in a growing disparity in

hourly wages between workers with and without postsecondary education. For example, between 1979 and 2005, real hourly wages for people with advanced degrees rose by 28 percent, wages for college graduates rose by 22 percent, wages for high school graduates remained stagnant, and wages for high school dropouts fell by 16 percent (Mishel, Bernstein, and Allegretto 2007). This is particularly damaging for low-income workers in families with children, since fewer than a third have more than a high school degree and about a third are high school dropouts (Acs and Nichols 2007).

This chapter summarizes what is known from evaluations of worker postsecondary education programs about the effectiveness of education acquisition to advance the earnings and careers of low-wage workers. The chapter then reviews several popular community college strategies intended to increase academic success among low-wage workers. Finally, the chapter presents findings from two random assignment evaluations of interventions intended to increase the success of such students and concludes with a discussion of new strategies and their implications for future studies to advance knowledge of what works for this population.

## **WHAT IS KNOWN ABOUT EDUCATION ACQUISITION AMONG LOW-WAGE WORKERS**

There is compelling evidence that additional years of schooling and advanced education credentials are associated with higher earnings. Students who complete an associate's degree or certificate program earn more than those with a high school diploma or General Educational Development (GED) certificate (Grubb 1999), and those having about a year of college study appear to reap increased earnings, although not as much as with the completion of a degree (Grubb 1999; Kane and Rouse 1995).

Yet evaluations of education and basic skills training programs have yielded mixed results concerning their ability to increase earnings. In the welfare context, the National Evaluation of Welfare to Work Strategies—a random assignment demonstration—showed that “education first” programs, which require people to initially participate in edu-

cation or training (typically, remedial reading and math, GED exam preparation, or English as a Second Language [ESL] classes), did not increase the likelihood of their becoming employed in “good” jobs or produce more earnings growth when compared with “job search–first” programs, which emphasize getting people into jobs as quickly as possible (Hamilton 2002). However, the program that had the largest effect on stable employment and earnings growth in this study was one that allowed some individuals to participate in short-term training or education before they searched for work. Nevertheless, in most cases, recipients dropped out of education programs quickly.

One site in the Employment Retention and Advancement Demonstration Project, another random assignment study, is currently testing two strategies for promoting participation in education and training among welfare recipients who are employed. Thus far, the results show that neither approach has been able to induce many people to enroll in education or training who would not have enrolled on their own (Hamilton et al. forthcoming). New Visions, a community college bridge program that sought to increase the job retention and advancement of welfare recipients in California, also had difficulty increasing college enrollment above the levels of the control group and ensuring program participation. After a two-and-a-half-year period, this program resulted in slightly higher college-going (6 percentage points) but reduced total earnings (about \$2,300) relative to a control group that attended other employment and training services (Fein and Beecroft 2006).

Other studies that examine voluntary education and training programs outside the welfare system have found similarly mixed results. The National Job Training Partnership Act Study found some modest earnings impacts for adult women, with on-the-job training producing larger gains than classroom training (Orr et al. 1996). Similarly, a meta-analysis of voluntary training programs found larger effects for women than for men or youth, particularly for classroom skills training, on-the-job training, and mixed classroom and workplace training (Greenberg, Michalopoulos, and Robins 2003). Another project that tested voluntary training, the Minority Female Single Parent Demonstration, found positive results at one of four sites, the Center for Employment Training (CET), which was known for integrating vocational and basic-skills instruction and maintaining tight links to employers (Burghardt et

al. 1992). However, the evaluation of a multisite replication of CET's model found few positive effects (Miller et al. 2005).

In sum, while the link between skills and wages suggests education and skills training may offer the best hope for substantial wage growth, encouraging people to enroll in education and training, to persist in it, and to complete it may be a key component. Furthermore, to enable education to lead to advancement for low-wage workers, several barriers to higher education will need to be addressed: access to postsecondary education, affordability, and academic success (Clymer, Roberts, and Strawn 2001; McSwain and Davis 2007). Of all higher education institution types, community colleges may be best situated to address the diverse barriers of low-wage workers (Kazis et al. 2007).

## **THE ROLE OF COMMUNITY COLLEGES**

Community colleges play a critical role in American higher education. According to the U.S. Department of Education, nearly half of all students who begin postsecondary education start at a community college (U.S. Department of Education 2002). Because community colleges have open admissions policies and relatively low tuition and fees, they are particularly important to the millions of adults who may lack preparation or may otherwise be unable to afford college. In addition, their flexible schedules and long history as sponsors of employment and training programs targeting both disadvantaged populations and local industries make them a key player in the development of a more skilled workforce (Melendez et al. 2004).

Despite the accessibility and relative affordability of community colleges, however, many students who begin programs at community colleges end their formal education prematurely. One study of adult undergraduates who work found that 62 percent of students who considered themselves workers first and students second had not completed a certificate or degree and were no longer enrolled, compared with 39 percent of adults who described themselves as being students first and working only to cover minor expenses (Berker, Horn, and Carroll 2003). Longitudinal studies of postsecondary student populations indicate that 46 percent of those who begin at community colleges do not

complete a degree or enroll elsewhere within a six-year time frame (U.S. Department of Education 2002). Clearly, persistence and retention are not issues isolated to low-wage workers pursuing advanced education. However, characteristics of jobs (absence of paid leave, lack of flexible work hours, unpredictability of hours or shift work), in addition to the limited financial aid for independent persons with dependents, academic underpreparedness, and family obligations, all contribute to this group's low enrollment and completion (Golonka and Matus-Grossman 2001; Levin-Epstein 2007; Matus-Grossman and Gooden 2001).

In recent years, several notable programs have been designed at community colleges to serve the unique needs of low-wage workers—with mixed success. For example, the New Visions program discussed above was codesigned and operated by Riverside (Calif.) Community College and Riverside County's Department of Public Social Services to build on earlier welfare reform approaches that had resulted in increased employment and earnings. As noted, this program did not meet its intended goals, perhaps because the intervention was less beneficial than other education and training programs available. Another example is the ACCESS Project at Hamilton College in Clinton, New York, which serves welfare-eligible single mothers. This program has reported student retention levels in excess of 90 percent and completion rates comparable to rates of the college's traditional students; moreover, ACCESS students have achieved these rates while working (Adair 2003). Findings from the Parents as Scholars program in Maine suggest that the program increased wages among TANF-eligible students who graduated (Butler, Deprez, and Smith 2003). There are similar findings from other programs in Boston and California (Polakow, Butler, Deprez, and Kahn 2004). While these findings suggest that targeted programs with wraparound services work, most programs are very small and not rigorously evaluated, so one cannot interpret the causality of these positive associations.

## **STRATEGIES TO IMPROVE PERSISTENCE AND RETENTION**

MDRC launched the Opening Doors demonstration to learn how community colleges can implement reforms that may help greater numbers of students achieve their goals, particularly their academic and career goals, and that may lead to longer-term success in the labor market and in life for those students (Brock and LeBlanc 2005). Specifically, the demonstration is examining various programs or interventions that represent enhancements to community college teaching, student services, and financial aid to determine their effects on student persistence and other outcomes, including degree attainment, labor market experiences, and personal and social well-being. Opening Doors measured the effects of these enhancements by randomly assigning students who participate in the research either to a program group that receives the enhanced services or to a comparison group that receives the standard services offered by the college. By comparing the experiences of both groups over a period of several years, MDRC is able to measure the difference, or impact, that the interventions make in students' lives, both in the short and in the long term.

The Opening Doors project evaluates four popular strategies (two of which are widely implemented in community colleges) that are intended to increase student success and retention. These consist of 1) learning communities, 2) enhanced counseling with a small scholarship, 3) an incentive-based scholarship, and 4) enhanced student services. Table 6.1 provides a summary of the interventions and the target populations. The evaluations of the enhanced student services and the incentive scholarship are particularly relevant to the concern about low-wage workers and persistence, or success, in academic course work at community colleges.

### **Enhanced Student Services**

The Opening Doors project comprising Lorain County Community College and Owens Community College in Ohio targeted new and continuing students who had completed fewer than 13 credits.<sup>1</sup> The linchpin of the program was an adviser with whom students were expected

to meet at least once a month for two semesters to discuss academic progress and any other issues that might be affecting their schooling. Advisers carried a caseload of no more than 125 students, which stood in sharp contrast to the academic advising services available to students in the comparison group, where the ratio of counseling staff to students not enrolled in Opening Doors was about 1 to 1,000. In addition, designated staff members from other student service departments—including financial aid and career services—functioned as a team, so that at least one staff member from each department served as a point person for the Opening Doors program. While students in the comparison group could access these same departments, they generally would have had to initiate such contact on their own rather than through a direct referral. Finally, students in the Opening Doors group were given a \$150 scholarship for each of two consecutive semesters that they could use for any purpose. The scholarship payments were approved by the academic adviser and were made at the beginning and middle of the semester as a way of making sure that students stayed in contact with the adviser. Students in the comparison group did not receive these scholarships.

Even though academic guidance and counseling may arguably be the most important student service, most students receive minimal help. Nationally, the average community college employs one adviser for approximately every 1,000 students (Grubb 2001). While colleges differ in how their advisers deliver services and the topics they cover, the necessity of working with many students tends to drive them toward a traditional problem-solving approach in which a student presents an issue and the adviser offers a quick response. The National Academic Advising Association urges community colleges and four-year colleges and universities to provide sufficient staffing, so that students and advisers can have ongoing, interactive relationships. The association also urges these institutions to adopt a developmental approach whereby advisers help students clarify personal goals and objectives rather than simply approving their choice of courses (Gordon, Habley, and Associates 2000). Research suggests that this is even more important for low-wage workers, who may need more help than their younger counterparts in navigating their way to a credential (Kazis et al. 2007).

## **Incentive Scholarship**

The Opening Doors project comprising Delgado Community College and the Louisiana Technical College–West Jefferson campus in Louisiana offered a \$1,000 scholarship for each of two semesters (for a total of up to \$2,000) to parents with children under age 18 whose family incomes were below 200 percent of the federal poverty level.<sup>2</sup> The scholarship was tied to academic performance: an initial payment of \$250 was made after students enrolled at least half-time; a second payment of \$250 was made after midterms for students who remained enrolled at least half-time and earned at least a C average; and a final payment of \$500 was made after students passed all their courses. The scholarship was paid in addition to any other financial aid students received. Each student was assigned to a counselor, and counselors monitored the students' grades, arranged tutoring or other help as needed, and approved scholarship disbursements. Table 6.1 summarizes each intervention and the students targeted for the study.

This intervention developed out of focus groups with low-income parents who were attending or wanted to attend community college; it also sprang from interest among Louisiana state officials in a financial incentive plan similar to those implemented to move welfare recipients into employment (Brock and Richburg-Hayes 2006; Richburg-Hayes et al. 2009). Many of the focus-group students worried about the cost of tuition, books, and child care (Matus-Grossman and Gooden 2002). While most students may have qualified for the federal Pell Grant program (the primary need-based financial aid program for college students in the United States) and loan programs, worries about how to pay for college inevitably led some students to reduce their hours of attendance (thereby increasing the time it takes to earn a degree) or to drop out altogether. Given the high cost of attending college, many Pell Grant recipients have a significant amount of unmet need, especially those recipients who are independent and working (Mercer 2005). The incentive-based scholarship was intended to meet some of those needs while still being accessible to a large group typically missed by scholarship programs.

## Findings

Table 6.2 presents some background characteristics of the students in each community college sample. The table shows that the samples consist largely of women and older adults, an outcome that mirrors the community college population more than the target criteria, since adults over the age of 24 make up close to 45 percent of all undergraduate enrollments (Berker, Horn, and Carroll 2003). A large proportion of the sample were parents and low-wage workers at the point of random assignment, and more than half of the students who worked earned about \$8 an hour—in fact, more than 80 percent worked at least half-time in the preceding 12 months (not shown). Again, this mirrors the population of community college students nationally, as close to 80 percent balance their studies with full-time or part-time work (Phillippe and Patton 2000). Most of the students in the samples are financially independent, and more than half received their high school diploma or GED five or more years prior to the study. In short, the sample may be representative of the pool of low-wage workers discussed at the beginning of this chapter.

Table 6.3 shows selected impacts for each intervention during the first three semesters since random assignment. Each entry shows the difference in outcomes, or the impact, between the treatment group and the control group (which represents what would have happened in the absence of the intervention). The asterisks show the statistical significance of the differences between the two groups—in other words, whether the difference was a result of the program.

The first panel (Panel A) shows outcomes in the first Opening Doors semester. The first row shows no difference in registration rates in any of the samples. This result was expected given that random assignment was conducted for those students who had already matriculated at the college or showed considerable interest in enrolling. While there are no differences in the remaining outcomes for the enhanced student services intervention, the performance-based scholarship intervention resulted in treatment-group students passing slightly more courses (0.4 of a course more), earning more total credits (1.1 more), and withdrawing from courses at lower rates (6.9 percentage points lower).

The second panel (Panel B) shows academic performance for the second Opening Doors semester. Encouragingly, the Opening Doors

program had a positive effect on student retention at two of the three sites. While the proportion registering for college courses dropped somewhat among both Opening Doors students and the control group (not shown), the Opening Doors program resulted in a 5.6-percentage-point increase (over a control-group base of 57.2 percent) in registrants at Owens Community College and an 18.2-percentage-point increase (over a control-group base of 57.5 percent) at the two community colleges in Louisiana. This latter result is quite large, and effects of this magnitude are seldom seen in program evaluations that use rigorous random assignment designs. In addition to registration gains, Opening Doors students are more likely than their control group counterparts to attempt more courses (and thus register for more credits) and earn more developmental credits at one Ohio site and at both of the Louisiana sites. In Louisiana, Opening Doors students also passed more courses and earned more regular credits (latter outcome not shown in table).

The third panel (Panel C) shows a few results from the first post-program semester, or the first semester that the intervention was not in place. The first two columns show small, insignificant impacts, which indicate that the outcomes for the treatment group largely mirror those for the control group. In contrast, the last column shows continued effects for the incentive scholarship intervention.

Overall, the interventions seem to have affected outcomes related to academic success in the semesters in which they operated. With the exception of the performance-based scholarship, the impacts appear to fade after the program ends. Nevertheless, there may still be delayed effects in subsequent semesters, and future work will examine these in addition to other outcomes that may be affected by education acquisition in the longer term, such as social and psychological outcomes, health behaviors, and labor market outcomes.

## **IMPLICATIONS FOR FUTURE WORK**

In light of the long-term labor market trends that have resulted in stagnant wage growth for those in the lowest quintile of the income distribution because of global competition, declining union membership, and increased immigration, it appears that most low-wage workers will

need to increase their skill levels in order to raise their earnings substantially. While results from previous studies of education and training programs for adults have been mixed at best, several new strategies emerging in the field offer the possibility of better results. For example, there are several promising efforts to provide employer-focused training to low earners that, in some cases, operate on a large scale (Martinson 2007). These include incumbent worker training programs (state grants to businesses for collaborating with training providers on training existing workers) and sectoral initiatives (providing training to a cluster of employers in one segment of the labor market).

While it is far too early to conclude that the Opening Doors program in Louisiana is an unequivocal success, the early results are large and compelling. For example, the third-semester retention impact of 11.2 percentage points is larger than most nonexperimental analyses of other scholarship programs would have predicted.<sup>3</sup> Clearly, the Louisiana results suggest that a performance-based scholarship can have a large positive effect on academic achievement among a predominantly female, single-parent student population that faces multiple barriers to completing college.

Nonexperimental research has also associated student aid programs with higher enrollment in postsecondary education (Abraham and Clark 2003; Turner 2007). However, the existing research is far from definitive, and more tests are needed. Several states have developed innovative financial assistance programs for nontraditional students (such as those without a high school diploma or those attending part-time) who pursue postsecondary education or skills training (Martinson and Holcomb 2007).

The research to date clearly shows that the success of employer training programs or community college-based programs largely depends on addressing the barriers to education acquisition faced by low-wage adults. The current system of instruction and financial aid is largely based on “traditional” students—those entering postsecondary education out of high school, for whom work is of secondary importance. Future research in this area will need to examine the implications of relaxing some of the barriers the current system imposes.

## Notes

I would like to thank Thomas Brock for reviewing an early draft of this chapter. I would also like to acknowledge the work of the Employment and Self-Sufficiency Strategies team for background on the evaluation of education initiatives. All errors and omissions remain my own.

1. See Scrivener and Au (2007) and Scrivener and Pih (2007), respectively, for more detail on the study at Lorain County Community College and Owens Community College.
2. They did not need to be on welfare.
3. While his results are not directly comparable to this retention estimate, Bettinger (2004) finds that a \$1,000 increase in Pell Grant eligibility increases persistence between the first and second year of college attendance by 2 to 4 percentage points. Dynarski (2005) finds that merit aid of about \$3,000 increases the probability of persistence by 5 to 11 percentage points among those who would still have gone to college in the absence of the financial aid.

## References

- Abraham, Katharine G., and Melissa A. Clark. 2003. "Financial Aid and Students' College Decisions: Evidence from the District of Columbia's Tuition Assistance Grant Program," Working Paper No. 2. Princeton, NJ: Princeton University, Education Research Section.
- Acs, Gregory, and Austin Nichols. 2007. *Low-Income Workers and Their Employers: Characteristics and Challenges*. Washington, DC: Urban Institute.
- Adair, Vivyan C. 2003. *The ACCESS Project at Hamilton College: Year End Report, 2003*. Clinton, NY: Hamilton College. <http://my.hamilton.edu/college/access/2003Report.pdf> (accessed December 4, 2008).
- Andersson, Fredrik, Harry J. Holzer, and Julia I. Lane. 2005. *Moving Up or Moving On: Who Advances in the Low-Wage Labor Market*. New York: Russell Sage Foundation.
- Berker, Ali, Laura Horn, and C. Dennis Carroll. 2003. *Work First, Study Second: Adult Undergraduates Who Combine Employment and Postsecondary Enrollment*. Postsecondary Education Descriptive Analysis Reports. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Bettinger, Eric. 2004. "How Financial Aid Affects Persistence." In *College Choices: The Economics of Where to Go, When to Go, and How to Pay*

- for It*, Caroline M. Hoxby, ed. Chicago: University of Chicago Press, pp. 207–238.
- Bloom, Dan, Cecilia Elena Rouse, Christina Paxson, Susan Scrivener, Mary Visher, and Susan Yeh. Forthcoming. *Learning Communities: 12-Month Findings from the Opening Doors Demonstration at Kingsborough Community College*. New York: MDRC.
- Bloom, Dan, and Colleen Sommo. 2005. *Building Learning Communities: Early Results from the Opening Doors Demonstration at Kingsborough Community College*. New York: MDRC.
- Brock, Thomas, and Allen LeBlanc. 2005. *Promoting Student Success in Community College and Beyond: The Opening Doors Demonstration*. New York: MDRC.
- Brock, Thomas, and Lashawn Richburg-Hayes. 2006. *Paying for Persistence: Early Results of a Louisiana Scholarship Program for Low-Income Parents Attending Community College*. New York: MDRC.
- Burghardt, John, Anu Rangarajan, Anne Gordon, and Ellen Kisker. 1992. *Evaluation of the Minority Female Single Parent Demonstration: Vol. 1, Summary Report*. Princeton, NJ: Mathematica Policy Research.
- Butler, Sandra S., Luisa Stormer Deprez, and Rebekah J. Smith. 2003. “Parents as Scholars: A Model Post-Secondary Education Program for Low-Income Women in the New Welfare Landscape.” Paper presented at IWPR’s Seventh International Women’s Policy Research Conference, “Women Working to Make a Difference,” held in Washington, DC, June 22–24. [http://www.iwpr.org/pdf/Butler\\_Deprez\\_Smith.pdf](http://www.iwpr.org/pdf/Butler_Deprez_Smith.pdf) (accessed December 3, 2008).
- Clymer, Carol, Brandon Roberts, and Julie Strawn. 2001. *States of Change: Policies and Programs to Promote Low-Wage Workers’ Steady Employment and Advancement*. Field Report Series. New York: Public/Private Ventures.
- Dynarski, Susan. 2005. “Finishing College: The Role of State Policy in Degree Attainment.” Working paper. Cambridge, MA: Harvard University, John F. Kennedy School of Government.
- Employment and Training Administration (ETA). *Adult Learners in Higher Education: Barriers to Success and Strategies to Improve Results*. ETA Occasional Paper 2007-03. Washington, DC: Employment and Training Administration.
- Fein, David J., and Erik Beecroft. 2006. *College as a Job Advancement Strategy: Final Report on the New Visions Self-Sufficiency and Lifelong Learning Project*. Bethesda, MD: Abt Associates.
- Golonka, Susan, and Lisa Matus-Grossman. 2001. *Opening Doors: Expanding Educational Opportunities for Low-Income Workers*. New York: MDRC.

- Gordon, Virginia N., and Wesley R. Habley, eds. 2000. *Academic Advising: A Comprehensive Handbook*. San Francisco: Jossey-Bass.
- Greenberg, David H., Charles Michalopoulos, and Philip K. Robins. 2003. "A Meta-Analysis of Government-Sponsored Training Programs." *Industrial and Labor Relations Review* 57(1): 31–53.
- Grubb, W. Norton. 1999. *Honored But Invisible: An Inside Look at Teaching in Community Colleges*. New York: Routledge.
- . 2001. "'Getting into the World': Guidance and Counseling in Community Colleges." Working Paper No. 1. New York: Community College Research Center.
- Hamilton, Gayle. 2002. *Moving People from Welfare to Work: Lessons from the National Evaluation of Welfare-to-Work Strategies*. Submitted to the U.S. Department of Health and Human Services and the U.S. Department of Education. New York: MDRC.
- Kane, Thomas J., and Cecilia Elena Rouse. 1995. "Labor Market Returns to Two- and Four-Year Colleges: Is a Credit a Credit and Do Degrees Matter?" *American Economic Review* 85(3): 600–614.
- Levin-Epstein, Jodie. 2007. "Responsive Workplaces: The Business Case for Employment that Values Fairness and Families." Special Report: Work and Family. *American Prospect* 18(3): A16–A17.
- Martinson, Karin. 2007. *Building Skills and Promoting Job Advancement: The Promise of Employer-Focused Strategies*. Washington, DC: Urban Institute.
- Martinson, Karin, and Pamela Holcomb. 2007. *Innovative Employment Approaches and Programs for Low-Income Families*. Washington, DC: Urban Institute.
- Matus-Grossman, Lisa, and Susan Tinsley Gooden. 2001. *Opening Doors to Earning Credentials: Impressions of Community College Access and Retention from Low-Wage Workers*. New York: MDRC.
- . 2002. *Opening Doors: Students' Perspectives on Juggling Work, Family, and College*. New York: MDRC.
- McSwain, Courtney, and Ryan Davis. 2007. *College Access for the Working Poor: Overcoming Burdens to Succeed In Higher Education*. Washington, DC: Institute for Higher Education Policy.
- Meléndez, Edwin, Luis M. Falcón, Carlos Suárez-Boulangger, Lynn McCormick, and Alexandra de Montrichard. 2004. "Community Colleges, Welfare Reform, and Workforce Development." In *Communities and Workforce Development*, Edwin Meléndez, ed. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Mercer, Charmaine. 2005. *Federal Pell Grants: Implications of Increasing the*

- Maximum Award*. CRS Report for Congress. Washington, DC: Congressional Research Service, Library of Congress.
- Miller, Cynthia, Johannes M. Bos, Kristin E. Porter, Fannie M. Tseng, and Yasuyo Abe. 2005. *The Challenge of Repeating Success in a Changing World: Final Report on the Center for Employment Training Replication Sites*. New York: MDRC.
- Mishel, Lawrence, Jared Bernstein, and Sylvia Allegretto. 2007. *The State of Working America, 2006/2007*. An Economic Policy Institute Book. Ithaca, NY: Cornell University Press.
- Navarro, David, Stephen Freedman, and Gayle Hamilton. 2007. *The Employment Retention and Advancement Project: Results from Two Education and Training Models for Employed Welfare Recipients in Riverside, California*. New York: MDRC.
- Orr, Larry L., Howard S. Bloom, Stephen H. Bell, Fred Doolittle, Winston Lin, and George Cave. 1996. *Does Training for the Disadvantaged Work? Evidence from the National JTPA Study*. Washington, DC: Urban Institute.
- Phillippe, Kent A., and Madeline Patton. 2000. *National Profile of Community Colleges: Trends and Statistics*. 3rd ed. Washington, DC: American Association of Community Colleges.
- Polakow, Valerie, Sandra S. Butler, Luisa Stormer Deprez, and Peggy Kahn, eds. 2004. *Shut Out: Low-Income Mothers and Higher Education in Post-Welfare America*. Albany, NY: State University of New York Press.
- Richburg-Hayes, Lashawn, Thomas Brock, Allen LeBlanc, Christina Paxson, Cecilia Elena Rouse, and Lisa Barrow. 2009. *Rewarding Persistence: Effects of a Performance-Based Scholarship Program for Low-Income Parents*. New York: MDRC.
- Richburg-Hayes, Lashawn, Mary G. Visher, and Dan Bloom. 2008. "Do Learning Communities Effect Academic Outcomes? Evidence from an Experiment in a Community College." *Journal of Research on Educational Effectiveness* 1(1): 33–65.
- Scrivener, Susan, and Jenny Au. 2007. *Enhancing Student Services at Lorain County Community College: Early Results from the Opening Doors Demonstration in Ohio*. New York: MDRC.
- Scrivener, Susan, and Michael Pih. 2007. *Enhancing Student Services at Owens Community College: Early Results from the Opening Doors Demonstration in Ohio*. New York: MDRC.
- Scrivener, Susan, and Colleen Sommo. Forthcoming. *Back on Track: Effects of a Program for Probationary Students at Chaffey College*. New York: MDRC.
- Turner, Sarah E. 2007. "Higher Education: Policies Generating the 21st Century Workforce." In *Reshaping the American Workforce in a Changing*

*Economy*, Harry J. Holzer and Demetra Smith Nightingale, eds. Washington, DC: Urban Institute, pp. 91–116.

U.S. Department of Education. 2002. *Descriptive Summary of 1995–96 Beginning Postsecondary Students: Six Years Later*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

**Table 6.1 Opening Doors Interventions and Students' Eligibility Determinants, by Community College**

	Kingsborough (N.Y.)	Lorain County and Owens (Ohio)	Delgado and Louisiana Tech–West Jefferson (La.)	Chaffey College (Calif.)
Intervention	Learning communities and a book voucher: groups of students were assigned to take three linked credit courses together; students received enhanced advising and tutoring and vouchers to pay for textbooks.	Enhanced student services and a modest scholarship: students assigned to a dedicated adviser with whom they had to meet frequently; students eligible for \$150 scholarship for each of two semesters after meetings with adviser.	Incentive scholarship: students were eligible for a \$1,000 scholarship for each of two semesters; scholarship tied to maintaining at least half-time enrollment and a grade point average of 2.0 (a “C” average).	College survival skills and enhanced student services: students assigned to a two-semester guidance course that provided instructional support as well as advising; students required to visit the college’s success centers for extra academic support.
Criteria				
Age	17–34	18–34	18–34	18–34
Household income	Not screened. <sup>a</sup>	Below 250 percent of federal poverty level.	Below 200 percent of federal poverty level.	Below 250 percent of federal poverty level.
Other	Only new freshmen. English as a Second Language (ESL) students are excluded.	Continuing students must not have completed more than 12 credits; must have shown indications of academic difficulty (as determined by low grades or withdrawal from courses).	Must be a parent of at least one dependent under age 19. Must have a high school diploma or GED and have passed a college entrance exam. Must not have an occupational certificate or college degree.	Only continuing students. Students must be on probation for having a grade point average below 2.0 or completing less than half of their attempted credits.

NOTE: See Bloom and Sommo (2005), Richburg-Hayes, Visher, and Bloom (forthcoming), and Bloom et al. (forthcoming) for more information on the Opening Doors program at Kingsborough Community College. See Brock and Pih (forthcoming) for more information about the Opening Doors program at Chaffey College.

<sup>a</sup>The majority of students enrolled at Kingsborough were low-income, so the Opening Doors study did not impose additional income screening.

**Table 6.2 Characteristics of Community College Sample Members at Baseline in the Opening Doors Project**

	Owens Community College (Ohio)	Lorain County Community College (Ohio)	Delgado Community College (La.)	Louisiana Technical–West Jefferson (La.)
Male <sup>a</sup>	28.1	20.5	5.5	15.8
Age				
18–20 years old	38.0	16.1	19.8	10.4
21–25 years old	32.4	39.6	37.6	28.2
26–30 years old	19.5	27.9	29.1	35.1
31 and older	10.2	16.4	13.5	26.2
Average age (years)	23.3	25.4	24.9	27.0
Number of children				
None	48.7	17.8	—	—
One	24.4	36.7	53.9	38.8
Two	15.3	24.1	26.3	30.8
Three or more	11.6	21.4	19.8	30.3
Among sample members with children:				
Age of youngest child (years)	3.0	3.3	3.0	3.6
Financially dependent on parents	23.4	10.3	17.9	14.4
Currently employed	57.1	54.0	51.4	52.5
Among those currently employed: <sup>b</sup>				
Number of hours worked per week in current job				
1–10 hours	5.1	4.6	4.8	4.9
11–20 hours	22.7	21.9	16.8	15.5
21–30 hours	29.4	26.9	25.6	20.4

31–40 hours	32.6	33.1	47.0	51.5
More than 40 hours	10.2	13.6	5.8	7.8
Average hourly wage at current job (\$)	8.10	8.60	8.00	7.10
Highest grade completed				
8th grade or lower	1.3	1.1	0.6	1.5
9th grade	3.3	4.6	3.2	1.5
10th grade	5.0	6.7	4.9	4.5
11th grade	6.6	12.2	7.6	5.5
12th grade	83.8	75.5	83.7	87.1
Date of high school graduation/GED receipt				
During the past year	27.8	13.5	11.7	6.8
Between one and five years ago	32.8	30.8	33.7	23.4
Between five and ten years ago	23.9	29.5	33.7	31.3
More than ten years ago	15.5	26.2	20.9	38.5
Main reason for enrolling in college <sup>c</sup>				
To complete a certificate program	8.9	11.1	10.8	24.5
To obtain an associate's degree	44.0	55.7	60.4	39.5
To transfer to a 4-year college/university	27.5	20.7	17.9	6.0
To obtain/update job skills	14.3	9.8	9.7	28.0
Other	8.4	4.8	5.7	7.5
Sample size	1,214	477	817	7.5

NOTE: Distributions may not add to 100 percent because of rounding or because subcategories are not mutually exclusive. — = data not available.

<sup>a</sup>All categories, including this one, are in percentages unless otherwise noted.

<sup>b</sup>Figures for this category are calculated for a proportion of the full sample.

<sup>c</sup>Distributions may not add to 100 percent because categories are not mutually exclusive.

SOURCE: MDRC calculations using data from a baseline information survey.

**Table 6.3 Impacts on Academic Performance during the First Three Semesters since Random Assignment in Selected Opening Doors Sites**

	Owens Community College (Ohio)	Lorain County C.C. (Ohio)	Delgado C.C. & Louisiana Technical–West Jefferson
Panel A			
First Opening Doors semester			
Registered for any courses (%)	0.7	1.7	4.5
Number of courses attempted	0.1	0.0	0.2
Number of courses passed	0.1	0.1	0.4***
Total credits registered for (regular + developmental)	0.3	0.2	0.4
Total credits earned (regular + developmental)	0.3	0.2	1.1***
Developmental credits earned	0.2	0.3	0.2
Withdrew from one or more courses (%)	3.5	6.4	6.9*
Panel B			
Second Opening Doors semester			
Registered for any courses (%)	5.6***	10.5	18.2***
Number of courses attempted	0.2**	0.4	0.5***
Number of courses passed	0.1	0.2	0.4***
Total credits registered for (regular + developmental)	0.7***	1.4	1.4***
Total credits earned (regular + developmental)	0.4	0.7	1.2***
Developmental credits earned	0.2*	0.3	0.4***
Withdrew from one or more courses (%)	3.8***	5.3	4.3

Panel C

First postprogram semester			
Registered for any courses (%)	3.2	3.6	11.2***
Number of courses attempted	0.2	0.1	0.5***
Total credits registered for (regular + developmental)	0.5	0.4	1.4***
Summary outcomes			
Total number of semesters enrolled	0.1	0.3***	0.3***
Total credits earned (regular + developmental)	0.7	1.1	3.3***
Sample size	1,241	478	537

NOTE: Data from the Ohio sites use all observations. Data from the Louisiana sites consist of the two earliest cohorts, which represent 53 percent of the full sample of 1,019 students. Each column entry represents the regression-adjusted difference in treatment and control means for the specified outcome. A two-tailed *t*-test was applied to differences between the research groups. Statistical significance levels are indicated as follows: \*significant at the 0.10 level; \*\*significant at the 0.05 level; \*\*\*significant at the 0.01 level.

SOURCE: MDRC calculations from college transcript data.

