# W.E. UPJOHN INSTITUTE FOR EMPLOYMENT RESEARCH

# Upjohn Institute Press

# Financial Aid and Older Workers: Supporting the Nontraditional Student

Bridget Terry Long Harvard Graduate School of Education



Chapter 7 (pp. 107-123) in: **Strategies for Improving Economic Mobility of Workers: Bridging Research and Practice** Maude Toussaint-Comeau, Bruce D. Meyer, eds. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 2009 DOI: 10.17848/9781441631992.ch7

Copyright ©2009. W.E. Upjohn Institute for Employment Research. All rights reserved.

# 7

# **Financial Aid and Older Workers**

## Supporting the Nontraditional Student

Bridget Terry Long Harvard University

# THE INCREASING ROLE OF NONTRADITIONAL STUDENTS IN HIGHER EDUCATION

Educational trends increasingly highlight the growing numbers of older students who are seeking postsecondary training. According to figures from the 2006 Digest of Education Statistics (NCES 2007), only 28 percent of the college population was age 25 or above in 1970. However, by 1995, this had risen to 43 percent of students; currently 39 percent of students are age 25 or above. These trends mirror an important need in the country: changes in the labor market suggest that employers are demanding more-educated workers with different types of skills. Therefore, it has become important for many older workers to "retool." Workers are increasingly expected to utilize a broad base of knowledge in their jobs, as well as handle multiple responsibilities and changing procedures (Stuart and Dahm 1999). Voorhees and Lingenfelter (2003) estimate that currently 56 percent of American workers need education beyond a high school degree to do their jobs, and this proportion will most certainly increase in the future. Voorhees and Lingenfelter highlight studies that suggest eight out of ten new jobs created over the next two decades will require some postsecondary education. For workers without these skills, the punishment is severe. As noted by Acs, Phillips, and McKenzie (2000), working full-time at a low-wage job will not lead to long-term economic well-being. They estimate that 80 percent of families who are part of the working poor would be low-income even if all able-bodied adult members worked full-time.

The potential role of education, particularly postsecondary training, to improve outcomes for families is significant, as the returns to college attendance are likely large for older workers. Leigh and Gill (1997) find that the returns to associate degree and nondegree community college programs are not only positive but, for returning adults, similar to the returns for recent high school graduates. In the same vein, Jacobson, LaLonde, and Sullivan (2005) conclude that the impact of a year of community college schooling increases long-term earnings by 7 percent for men and 10 percent for women. Carnevale and Desrochers (1999), focusing on welfare recipients with basic skills equal to a high school diploma, estimate than an additional 200 hours of education and training could lead to jobs that pay \$5,000 to \$10,000 more. This is equivalent to a semester of postsecondary courses.

Beyond trends in the labor market, demographic change related to the aging of the baby boomers also explains part of the increase in nontraditional, older students. Because this group now forms a larger cohort, even if its members were to attend college at the same rates as older students have in the past, the proportion of college students who are older would have increased. However, it is also clear that larger percentages of older workers are returning to higher education than ever before. Pent-up demand for higher education may also explain increased enrollments among older working women and racial minorities. Some suggest that opportunities for college attendance were more limited when these groups were of traditional college age, but as norms have changed, these workers are now better able to access postsecondary training (Goldin, Katz, and Kuziemko 2006). Changes in social policies such as welfare may also explain some of the fluctuation in trends.

However, the financial concerns of nontraditional students are a serious issue. Research suggests that the financial aid system, originally designed to meet the needs of traditional-age college students, does a poor job of addressing the circumstances of older, nontraditional students. Particularly with such a diverse population in terms of background, situations, and goals, a key issue is whether one set of financial aid policies can meet all students' needs. The following sections detail how the financial aid system currently works and the ways it does or does not address the needs of nontraditional students. First, however, the rest of this section gives additional background on the characteristics and enrollment patterns of nontraditional students.

## Defining the "Nontraditional" Student

While age captures much of what is considered to define a nontraditional student, the definition has become much more nuanced with the growth of such a diverse population. In contrast to "nontraditional" students, researchers and practitioners often refer to "traditional" students as those who earn a regular high school diploma, enroll in college full-time immediately after graduation, depend on their parents for financial support, and either do not work during the school year or only work part-time. Therefore, the definition of nontraditional has become much more inclusive of students who do not fit the traditional mold. Using a much broader definition, Choy (2002) defines a nontraditional undergraduate as one who fits any of the following criteria:

- Delays enrollment after high school
- · Attends part-time
- Works full-time while enrolled
- · Is considered financially independent
- Has dependents other than a spouse
- Does not have a regular high school diploma (i.e., has a GED or other certificate)
- · Is a displaced worker or unemployed
- Is a welfare recipient
- · Is an immigrant

By her calculations, nearly three-fourths of undergraduates are nontraditional. This would include working adults, parents, welfare recipients, immigrants, displaced workers and the unemployed, and single, financially independent students.

In terms of financial aid, this last group of financially independent students is the most relevant. Independent students are treated differently in the calculation of need for government aid sources. Students can qualify for this designation in one of several ways. First, students age 24 or above are automatically considered independent. However, students who are married, have dependents, or are veterans also qualify as independent. Students whose parents are deceased or who were wards of the court before the age of 18 are likewise automatically considered independent.

Another category of nontraditional students are those who engage in training outside of formal programs, such as individuals who take particular courses for job-related skills. In 2002–2003 approximately 68.5 million people took courses or training that was not part of a traditional degree, certificate, or apprenticeship program for reasons related to their job or career (O'Donnell 2005). These courses included seminars, training sessions, or workshops offered by businesses, unions, and government agencies, as well as classes taken at colleges or universities that were not part of a degree program. Most (90 percent) of these workers did so to maintain or improve skills they already had. Employers often required or recommended participation in the courses for those who were already employed. A fifth of participants took courses to secure a pay raise or promotion (DeBell and Mulligan 2005). Voorhees and Lingenfelter (2003) estimate that by the end of the current decade more than half of American adults will take advantage of formal learning opportunities at some point in their lives.

### A DESCRIPTION OF AID RESOURCES FOR NONTRADITIONAL STUDENTS

### Need Analysis and the Nontraditional Student

The financial aid process begins with the Free Application for Federal Student Aid (FAFSA). The FAFSA collects information on family income and assets in order to determine the Expected Family Contribution (EFC), the amount the federal government determines a family is able to contribute to higher education expenses. Other information that affects this calculation is the size of the family, the number of family members in college, and the age of the older head of household (assuming two parents in the household), as well as information on the student's earnings and assets. To calculate a student's financial need, the government subtracts the EFC from the total cost of attendance.<sup>1</sup> A student's financial need, in combination with his or her EFC, determines whether he or she is eligible for certain grants and loans. For example, students who have a low EFC and financial need are eligible for federal need-based aid, like a Pell Grant. While the FAFSA is the federal application, it is also used by most states and institutions likely to enroll nontraditional students.

Being an independent (i.e., nontraditional) student affects the aid calculation in one important way. Because independent students may have their own dependents and are not expected to rely on parental contributions, the federal system does not expect them to contribute as much as the families of dependent students. Therefore, their EFCs tend to be lower. However, the amount an independent student is expected to contribute can be substantial, and it can vary substantially with only small changes in income. A single adult with two children who made an income at the poverty threshold (\$16,242) would not be expected to contribute anything to his or her postsecondary training. However, at 150 percent of the poverty level (\$24,363), the EFC would be \$401, and at 200 percent of the poverty level (\$32,484), the amount would be \$2,116 (FinAid 2008).<sup>2</sup> Meanwhile, a married adult with two children who made an income at 150 percent of the poverty level (\$30,666) would be expected to contribute \$718; the amount would be \$2,877 at 200 percent of the poverty level (\$40,888). Therefore, as also noted by Choitz and Widom (2003), although there is not much difference between 150 and 200 percent of the federal poverty line, the difference in EFC can be large.

There are several major criticisms of the way federal need analysis is applied to nontraditional students. Foremost is that the system was designed with a traditional, dependent student in mind. Therefore, it assumes that the earnings of the potential student are relatively minor (i.e., the result of a summer job) and a large proportion of the student's earnings should be used to cover college expenses. Moreover, the calculation assumes that the parents' income, the main source of support for the child, will continue even while the student is in college and should be used to help cover expenses. In contrast, independent students do not have other major sources of support to rely upon. Most nontraditional students are formally engaged in the labor market when applying for financial aid, and while the government assumes this income level will remain the same even after college enrollment, the nontraditional student is actually likely to experience a reduction in earnings while pursuing a degree. Therefore, assumptions about the amount of earnings available to that person while in school are incorrect. As an extension of this, the EFC for many nontraditional students may be too high, as they are penalized for their earnings the year before starting school.

Beyond the EFC and need calculation, independence is not a major consideration in the award of financial aid. However, other criteria can disproportionally reduce aid eligibility for nontraditional students. For example, some programs require students to be enrolled at least parttime or even full-time. Because nontraditional students often attend part-time or less than half-time, this excludes them from qualifying for some aid. Nontraditional students are also less likely to be enrolled in a degree program and more likely to pursue a particular skill without the goal of completing a certificate or other credential. They are therefore excluded from programs requiring students to be enrolled in a degree program. Finally, some programs require a regular high school diploma, whereas many nontraditional students instead have a GED or other certificate (Bosworth and Choitz 2002). The next section describes several of the major financial aid programs and how they apply to nontraditional students.

### Federal Financial Aid Programs and Nontraditional Students

The Pell Grant is the largest U.S. need-based aid program and serves as the foundation for other aid. This means that if students are eligible, the Pell Grant is awarded first. The majority of Pell recipients come from families with incomes in the lowest economic quartile; families earning between \$30,000 and \$40,000 begin to be phased out of Pell eligibility. The Pell Grant has been a particularly important program for nontraditional students. In 2006–2007, 59 percent of Pell Grants went to independent students (College Board 2007). However, students are required to attend at least part-time to receive a Pell Grant, and this excludes many working adults. According to analysis by FutureWorks, few working parents who had an income of less than 200 percent of the federal poverty level received a Pell Grant (Bosworth and Choitz 2004). Additionally, students must be enrolled in an institution eligible for federal Title IV funds in order to receive aid such as the Pell Grant. Students with financial need may also be eligible for federal work-study funds, which subsidize the wages of students employed in on-campus jobs. However, these awards rarely go to nontraditional students.

Students with higher EFCs usually will not qualify for Pell Grants or work-study funds, but they are eligible for government loan programs. The federal government sponsors several major loan programs. The largest is the Federal Stafford Loan Program, which offers subsidized and unsubsidized loans. Interest on subsidized loans, available only to needy students as determined by the FAFSA, is paid by the government while the students are in college. During their first year of undergraduate education, students may receive up to \$3,500; the limit increases in subsequent years and is higher for independent students. However, many community colleges, a common destination for nontraditional students, do not participate in the federal loan program because of penalties that would be incurred if their students had high default rates. The Perkins Loan Program is another federal program, and it is distributed by campuses on the basis of financial need. Finally, the Federal PLUS Loan Program (Parent Loans for Undergraduate Students) is available to the parents of dependent college students as well as to independent students themselves. PLUS loans have no annual or aggregate limit, except that one may not borrow more than the cost of attendance, net of other financial aid. All of the federal loan programs require repayment after the student stops attending college, regardless of whether or not he or she has completed a degree.

In addition to grant, loan, and work-study programs, the federal government offers aid through the tax code. The Hope and Lifetime Learning Tax Credits provide a benefit to families who pay tuition expenses and incur tax liability (Long 2004). Relative to the Pell Grant, the higher education tax credits maintain a much higher level of income eligibility, phasing out at an adjusted gross income of \$90,000 to \$110,000 for joint filers, or \$45,000 to \$55,000 for single filers (IRS 2006). The Lifetime Learning Tax Credit (LLTC) is particularly relevant for nontraditional students. It was designed for adults in their later years of postsecondary study and for those returning to school to upgrade their skills or prepare for a new career. The student does not need to be enrolled in a particular degree program. The LLTC targets postsecondary study after the first two years of college and is equal to 20 percent of tuition expenditures up to a tax credit of \$2,000. However, the tax credits are not refundable, and therefore lower-income workers without tax liability are not eligible for a benefit. Additionally, the more generous Hope Tax Credit requires at least part-time attendance and was designed to meet the needs of more traditional-age students during their first two years of college.

There are also a number of tax benefits for families who save for college, such as 529 Plans and Coverdell Savings Accounts. The government does not tax investment gains in these accounts if they are used to pay for tuition. Finally, there are several federal programs that indirectly target nontraditional students. Among them are veteran's and military benefits and job training programs, such as the Workforce Investment Act (WIA). The WIA is the primary national workforce development program, and it focuses on employment services and basic training for the unemployed. While much of the funding is targeted for job search assistance for unemployed adults, there is also a little support for the training of current workers (Bosworth and Choitz 2004).

### State Financial Aid Programs and Nontraditional Students

Most state financial aid programs have eligibility requirements similar to those of federal programs. This in turn often makes them less accessible to nontraditional students for the reasons mentioned above: EFC cutoffs and enrollment requirements, such as attending at least part-time and in a particular educational program. Additionally, many state programs are explicitly designed for students who recently graduated from high school, which means they favor traditional students. However, according to Choitz and Widom (2003), approximately 15 states have programs or policies that provide special funding to students who are enrolled less than half-time or do not exclude students at any enrollment intensity level (including less than half-time). According to Choitz and Widom's survey, for example, Illinois and Minnesota allow less-than-half-time students to participate in the state's main needbased student grant program. Georgia, Ohio, Oregon, Washington, and West Virginia also have tuition-assistance programs for less-than-halftime students. Other states such as Louisiana allow the use of Temporary Assistance for Needy Families (TANF) dollars for postsecondary training.

Golonka and Matus-Grossman (2001) note additional examples of innovative state models. California has used multiple aid sources to provide comprehensive financial support for students. The state's "75/25"

work-study program combines state work-study funds for TANF students with employer and college contributions. Employers must pay at least 25 percent of students' off-campus work-study wages while colleges pay the rest. The work-study earnings are excluded from income when calculating TANF eligibility. Unfortunately, while food stamps, Medicaid, and other federal programs do not count federal work-study income in determining eligibility, the same is not true for this state-created work-study program. Washington is an example of a state that has developed a program for working parents interested in job training. The Work-Based Learning Tuition Assistance Program gives aid to students who have one or more children and are TANF-eligible or have family income at or below 175 percent of poverty level. The aid can be applied to any job-related vocational training or continuing education program.

# The Role of Employers in Supporting the Training of Working Adults

Many question whether employers have incentives to invest in the training of their workers. Economic theory suggests that firms will not bear the costs of general training because of the risk of losing the worker without reaping the benefits of the human capital investment (Becker 1964). However, in many cases firms catering to working adults with little education do provide free skills training (Autor 2001; Autor, Levy, and Murnane 1999). Stokes (2006), citing *Training* magazine, notes that American corporations spent more than \$51 billion on training in 2004. According to other estimates, seven out of ten businesses provide some form of formal employee training, and between 35 and 65 percent of all workers participate (Lerman, McKernan, and Riegg 2001). While the authors find training to be more common among workers with higher earnings and levels of education, the training appears to be more intensive for younger, part-time, and less-experienced workers.

Although the majority of this \$51 billion in training dollars went to the salaries of internal training staff, more than \$13 billion was devoted to purchasing services from third-party providers (Stokes 2006). These include commercial training companies, government agencies, and professional associations. Colleges and universities had only a 5 percent share of these expenditures, according to estimates from Eduventures. Stokes suggests these institutions could therefore do much more to support older students by taking on this mission more seriously.

### **RESEARCH ON AID AND NONTRADITIONAL STUDENTS**

### Does the Aid System Serve the Needs of Nontraditional Students?

A key question about the current financial aid system is how well it meets the needs of nontraditional students. Numerous studies point to the significant unmet financial need traditional students face after accounting for all sources of government and institutional financial aid (ACSFA 2001, 2002). Similar patterns are found for nontraditional, independent students. The total amount of unmet need was slightly lower on average for independent students, at \$4,800, than it was for dependent students, at \$5,900 (Berkner and Wei 2006). However, the incidence of unmet need was higher among nontraditional, older students. After all forms of financial aid were allocated, 54.4 percent of independent students still had financial need, in comparison to 45.6 percent of dependent students.

To summarize, nontraditional students appear to face financial hurdles to attending college that are just as high or higher than those of their younger counterparts. Such hurdles arise from several of the design elements of the aid system and programs. As noted above, the EFC calculation assumes that students will continue to make the same income while attending college as they did during the year before enrolling. Each dollar of student income greatly reduces eligibility for financial aid, with the assumption that most of the earnings can be applied to pay college costs. Additionally, by attending part-time or less than halftime and not enrolling in a particular educational program, independent students are often not eligible for financial aid. As noted by Berkner and Wei (2006), the type of institution attended can also influence the aid and need calculations because of differences in the average cost of attendance. The need for aid is highest at private for-profit and not-forprofit colleges and universities.

The differences between dependent and independent students are also reflected in how aid is distributed among students. Though a simi-

lar percentage of dependent and independent students received some kind of grant aid in 2003–2004 (50.4 and 51.0 percent, respectively), the average amount differed substantially. Dependent students averaged \$5,200 in grants, while independent students received \$2,900 on average. Once one controls for enrollment intensity by limiting the sample to full-time, full-year undergraduates, the differences are not as large but still evident—\$6,100 for dependent as opposed to \$4,600 for independent students (Berkner and Wei 2006).

It is important to note that these numbers reflect the best-case scenario in terms of unmet need. They are calculated based on those who actually make it into higher education and thus do not capture the unmet needs of adults who elected not to enroll in postsecondary study. Moreover, the unmet needs of older students are likely understated because of their less intense enrollment patterns, which reduce the costs they face. The implications of this unmet need are significant in terms of participation. According to research by Eduventures, a consulting firm for higher education, nearly a quarter of prospective adult learners who choose not to enroll cite costs as an obstacle (Stokes 2006).

### The Impact of Financial Aid on Older Students

While significant unmet need remains a major issue for independents, research suggests that nontraditional students do respond to financial aid policy. In fact, they appear to be more responsive than younger, dependent students. One study demonstrates this by focusing on the Pell Grant: Seftor and Turner (2002) examine how the introduction of the Pell Grant affected enrollment among students ages 22 to 35. They compare the trends for these students before and after the 1972 introduction of the program, using data from the October Current Population Survey. They conclude that the introduction of the Pell Grant increased the probability of attending college by 1.5 percentage points for men and 1.3 percentage points for women. Given mean enrollment rates at the time, this translates into 16 percent relative growth for men and 40 percent growth for women. In contrast, other work has found that Pell had little impact on attendance of traditional-age students, except for perhaps at community colleges (Hansen 1983; Kane 1995).

Given the family situations of nontraditional students, it may be the case that more than just grants applied to tuition could help them. Simmons and Turner (2004) instead focus on aid to help cover child care costs. They hypothesize that the need to pay for child care could impede participation in postsecondary training. To test this theory, they examine what happened when, in 1988–1989, up to \$1,000 in child care costs were allowed in the calculations used to determine Pell Grant amounts. Using the 1979 National Longitudinal Survey of Youth (NLSY79), they find that the policy change resulted in increasing the college enrollment rate of women with children. However, they did not find gains in educational attainment corresponding to the higher enrollment rates.

There are several reasons that might explain the greater responsiveness of older, nontraditional students to financial aid policy. First, as noted above, this group likely faces greater credit constraints than younger students because their families are less likely to contribute to their education. Moreover, they may have dependents of their own and so cannot forgo earnings while in school. Therefore, any amount of aid might make a large difference in their decisions. Also, because older workers have more experience with processes such as tax and government support forms, they may be more adept at and less daunted by complex aid application processes (Seftor and Turner 2002). Older students are also more likely to choose a convenient, local college, such as a community college, and so they do not have to cover major transition costs such as moving expenditures; tuition support is the main thing they need to attend college. Finally, the types of colleges many nontraditional students attend are unlikely to give aid or to respond to government policy by raising their prices. Therefore, government support may be more likely to have a substantial impact on the participation of independent rather than dependent students.

## SUPPORTING OLDER WORKERS: REFORMING COLLEGE FINANCIAL AID FOR THE FUTURE

There are many things that the government and other institutions could do to improve the financial support of older workers seeking postsecondary training. As noted above, many programs have been designed with the traditional-age, dependent student in mind, but in order to help older workers, aid programs need to take into account the enrollment patterns more common among older, nontraditional students. In terms of federal financial aid, Bosworth and Choitz (2002) suggest changing the eligibility criteria for aid programs to include students who attend less than half-time and those in short-term programs that do not necessarily result in a formal degree or certificate.<sup>3</sup> New financing instruments could also be especially beneficial for older workers. In his issue paper for the Secretary of Education's Commission on the Future of Higher Education, Stokes (2006) supports programs such as Lifelong Learning Accounts and Career Advancement Accounts.

The interaction with other social programs is another thing to consider in aid reform. Bosworth and Choitz (2002) encourage policymakers to consider how social programs, such as food stamps and Medicare, interact with government financial aid programs, so that one benefit does not adversely affect another. Voorhees and Lingenfelter (2003) note that states could also expand their use of TANF dollars, which often support only short-term training. Instead, they could "direct their flexible maintenance of effort funds to finance training that is longer than the 12 months designated by the federal standard. This would require collaboration between state agencies involved in higher education and those involved in implementing federal regulations" (p. 10).

Colleges and universities could also play a greater role in facilitating the enrollment of older workers in postsecondary institutions. By providing more local, accessible options with flexible schedules and programs, they would enable more participation among nontraditional students. Online options may also be a way to expand access. There is as well a need for more career-oriented programs tied to particular industries. Voorhees and Lingenfelter (2003) highlight the idea that community colleges could create employment-related programs that could be supported by the WIA's One-Stop Career Centers. These might not extend for as long a time as traditional offerings but could be more comprehensive than the brief programs typically supported through the WIA.

Beyond academic programs, colleges and universities could do more to address the particular needs of older workers. This includes providing support for child care, in terms of both finances and capacity. As suggested by Simmons and Turner (2004), subsidies for child care could significantly affect the participation of nontraditional students. The government could help with these types of initiatives by providing grants to colleges that create such programs to support older workers. In the past, Congress has supported the federal program Child Care Access Means Parents in School (Yachnin 2001).

Colleges and employers could also increase their level of partnership to support the postsecondary education of older workers. Beyond merely increasing the general amount of support, changing the timing of tuition collection and employer support could also have important benefits for nontraditional students. Currently, institutions collect tuition payments prior to enrollment, but employers often will not reimburse employees until after the course is satisfactorily completed. Introducing more flexible reimbursement policies, along with more accommodating institutional collection policies regarding tuition, could increase participation in such programs (Voorhees and Lingenfelter 2003).

### CONCLUSION

The increased demand for skilled workers has made it necessary for many nontraditional students to seek additional training, and their numbers are expected to rise in coming years. It is therefore imperative for the government, colleges and universities, and employers to consider how best to enable these investments by reevaluating the design of the aid system as well as the supports provided. The resulting benefits to individuals, their families, and society are potentially large as the labor market becomes increasingly less forgiving of the unskilled.

### Notes

- 1. Total cost of attendance, which is prorated based on the student's enrollment intensity (whether the student attends full- or part-time), includes tuition, fees, room and board, and other costs at the institution the student attends.
- 2. The calculations assume the person is a resident of Illinois and is 30 years old. A single adult with one child who made an income at the poverty threshold (\$13,896) also would not be expected to contribute anything to his or her postsecondary training. However, at 150 percent of the poverty level (\$20,844), the EFC would be \$931, and at 200 percent of the poverty level (\$27,792), the amount would be \$1,974.

 On the other hand, the likelihood of successfully completing an educational program increases with enrollment intensity, and so it is important for the government to provide enough aid to enable students to take larger course loads and complete programs faster.

### References

- Acs, Gregory, Katherin Ross Phillips, and Daniel McKenzie. 2000. On the Bottom Rung: A Profile of Americans in Low-Income Working Families. New Federalism: Issues and Options for the States No. A-42. Washington, DC: Urban Institute.
- Advisory Committee on Student Financial Assistance (ACSFA). 2001. Access Denied: Restoring the Nation's Commitment to Equal Educational Opportunity. Washington, DC: Advisory Committee on Student Financial Assistance.
- -------. 2002. *Empty Promises: The Myth of College Access in America*. Washington, DC: Advisory Committee on Student Financial Assistance.
- Autor, David H. 2001. "Why Do Temporary Help Firms Provide Free General Skills Training?" *Quarterly Journal of Economics* 116(4): 1409–1448.
- Autor, David H., Frank Levy, and Richard J. Murnane. 1999. "Skills Training in the Temporary Help Sector: Employer Motivations and Worker Impacts." A Report to the Department of Labor, Education and Training Administration. Cambridge, MA: Massachusetts Institute of Technology.
- Becker, Gary. 1964. *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. Chicago: University of Chicago Press.
- Berkner, Lutz, and Christina Chang Wei. 2006. Student Financing of Undergraduate Education: 2003–04, with a Special Analysis of the Net Price of Attendance and Federal Education Tax Benefits. NCES 2006-186. Washington, DC: National Center for Education Statistics.
- Bosworth, Brian, and Victoria Choitz. 2002. *Held Back: How Student Aid Programs Fail Working Adults*. Belmont, MA: FutureWorks.
- ——. 2004. *Title X: A New Federal-State Partnership in Higher Education for Working Adults in the 21st Century*. Belmont, MA: FutureWorks.
- Carnevale, Anthony P., and Donna M. Desrochers. 1999. "Getting Down to Business: Matching Welfare Recipients' Skills to Jobs That Train." *Policy and Practice of Public Human Services* 57(1): 18–24.
- Choitz, Victoria, and Rebecca Widom. 2003. *Money Matters: How Financial Aid Affects Nontraditional Students in Community Colleges*. New York: MDRC.
- Choy, Susan. 2002. Nontraditional Undergraduates: Findings from The Con-

*dition of Education, 2002.* Report No. NCES-2002-012. Washington, DC: National Center for Education Statistics.

- College Board. 2007. *Trends in Student Aid, 2007.* Trends in Higher Education Series. Washington, DC: College Board.
- DeBell, Matthew, and Gail Mulligan. 2005. *Reasons for Adults' Participation in Work-Related Courses, 2002–03.* NCES Issue Brief 2005-088. Washington, DC: National Center for Education Statistics.
- FinAid. 2008. Streamlined Expected Family Contribution (EFC) Calculator. Cranberry Township, PA: FinAid. http://www.finaid.org/calculators/faaefc .phtml (accessed November 2, 2008).
- Goldin, Claudia, Lawrence F. Katz, and Ilyana Kuziemko. 2006. "The Homecoming of American College Women: The Reversal of the College Gender Gap." *Journal of Economic Perspectives* 20(4): 133–156.
- Golonka, Susan, and Lisa Matus-Grossman. 2001. Opening Doors: Expanding Educational Opportunities for Low-Income Workers. New York: Manpower Demonstration Research Corporation (MDRC); and Washington, DC: National Governors Association Center for Best Practices.
- Hansen, W. Lee. 1983. "Impact of Student Financial Aid on Access." In *The Crisis in Higher Education*, Joseph Fromkin, ed. New York: Academy of Political Science, pp. 84–96.
- Internal Revenue Service (IRS). 2006. *Tax Benefits for Education*. Publication 970. Washington, DC: Department of the Treasury, Internal Revenue Service.
- Jacobson, Louis, Robert J. LaLonde, and Daniel Sullivan. 2005. "The Impact of Community College Retraining on Older Displaced Workers: Should We Teach Old Dogs New Tricks?" *Industrial and Labor Relations Review* 58(3): 398–415.
- Kane, Thomas J. 1995. "Rising Public College Tuition and College Entry: How Well Do Public Subsidies Promote Access to College?" NBER Working Paper No. 5164. Cambridge, MA: National Bureau of Economic Research.
- Leigh, Duane E., and Andrew M. Gill. 1997. "Labor Market Returns to Community Colleges: Evidence for Returning Adults." *Journal of Human Resources* 32(2): 334–353.
- Lerman, Robert I., Signe-Mary McKernan, and Stephanie Riegg. 2001. *Employer-Provided Training and Public Policy*. Washington, DC: Urban Institute. Paper presented at America's Workforce Network Research Conference, held in Washington, DC, June 26–27.
- Long, Bridget Terry. 2004. "The Impact of Federal Tax Credits for Higher Education Expenses." 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. 101–168.

- National Center for Education Statistics (NCES). 2007. *Digest of Education Statistics, 2006.* Washington, DC: National Center for Education Statistics. http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2007017 (accessed November 11, 2008).
- O'Donnell, Kevin. 2005. National Household Education Surveys Program of 2003: Tabular Summary of Adult Education for Work-Related Reasons: 2002–2003. NCES 2005-044. Washington, DC: National Center for Education Statistics.
- Seftor, Neil S., and Sarah E. Turner. 2002. "Back to School: Federal Student Aid Policy and Adult College Enrollment." *Journal of Human Resources* 37(2): 336–352.
- Simmons, Sarah M., and Sarah E. Turner. 2004. "Taking Classes and Taking Care of the Kids: Do Childcare Benefits Increase Collegiate Attainment?" Paper presented at Southern Economic Association Annual Meeting, held in New Orleans, LA, November 21–23.
- Stokes, Peter J. 2006. "Hidden in Plain Sight: Adult Learners Forge a New Tradition in Higher Education." Issue paper for the Secretary of Education's Commission on the Future of Higher Education. Boston: Eduventures.
- Stuart, Lisa, and Emily Dahm. 1999. 21st Century Skills for 21st Century Jobs. Washington, DC: U.S. Government Printing Office. Ithaca, NY: Cornell University, ILR School.
- Voorhees, Richard A., and Paul E. Lingenfelter. 2003. *Adult Learners and State Policy*. Denver: State Higher Education Executive Officers (SHEEO); and Chicago: Council for Adult and Experiential Learning (CAEL).
- Yachnin, Jennifer. 2001. "Congress Puts More Money into Aid for Child-Care Centers on Campuses." Chronicle of Higher Education, February 2, A: 22.

# Strategies for Improving Economic Mobility of Workers Bridging Research and Practice

Maude Toussaint-Comeau Bruce D. Meyer *Editors* 

2009

W.E. Upjohn Institute for Employment Research Kalamazoo, Michigan

#### Library of Congress Cataloging-in-Publication Data

Strategies for improving economic mobility of workers : bridging research and practice / Maude Toussaint-Comeau and Bruce D. Meyer, editors.
p. cm.
Includes bibliographical references and index.
ISBN-13: 978-0-88099-352-4 (pbk : alk. paper)
ISBN-10: 0-88099-352-9 (pbk : alk. paper)
ISBN-13: 978-0-88099-353-1 (hardcover : alk. paper)
ISBN-10: 0-88099-353-7 (hardcover : alk. paper)
I. Migration, Internal—United States. 2. Occupational retraining—United States. 3.
Housing subsidies—United States. I. Toussaint-Comeau, Maude. II. Meyer, Bruce D.

HB1965.S76 2009 331.12'70973—dc22

#### 2009022482

© 2009 W.E. Upjohn Institute for Employment Research 300 S. Westnedge Avenue Kalamazoo, Michigan 49007-4686

The facts presented in this study and the observations and viewpoints expressed are the sole responsibility of the authors. They do not necessarily represent positions of the W.E. Upjohn Institute for Employment Research.

Cover design by Alcorn Publication Design. Index prepared by Diane Worden. Printed in the United States of America. Printed on recycled paper.