

Can We Improve Job Retention and Advancement among Low-Income Working Parents?

Harry J. Holzer
Georgetown University
Urban Institute
E-mail: hjh4@georgetown.edu

Karin Martinson
Urban Institute

September 2005

Prepared for the Working Families Roundtable, Assessing the New Federalism, Urban Institute, May 2005. We thank Gordon Berlin, Olivia Golden, Cliff Johnson, Howard Rolston, Sheila Zedlewski, and participants at the Roundtable for helpful comments.

IRP Publications (discussion papers, special reports, and the newsletter *Focus*) are available on the Internet. The IRP Web site can be accessed at the following address: <http://www.irp.wisc.edu>

Abstract

In this paper we review the evidence on four approaches to improving job retention and advancement among low-income working adults: (1) financial incentives and supports; (2) case management and service provision, often by labor market intermediaries; (3) skill development strategies; and (4) employer-focused efforts, such as sectoral strategies and career ladder development at private firms. Within each category, we find at least some evidence of positive effects on retention or advancement. Among the most promising approaches are the use of labor market intermediaries for job placements, the use of community colleges for training, and a variety of efforts that involve local employers. Mixed strategies that combine strong financial incentives and supports with labor market services and training also show promise.

Can We Improve Job Retention and Advancement among Low-Income Working Parents?

I. INTRODUCTION

In the past decade, employment rates among low-income parents have risen quite dramatically. This is particularly true for single mothers, and especially those who had previously been on welfare. Labor force participation rates among single mothers rose from about 67 percent in the early 1990s to 78 percent by the end of the decade; among those who had been on welfare in the previous year, labor force activity rose from about 30 percent to nearly 60 percent (Blank and Schmidt, 2001). These increases in employment, along with declining welfare rolls, have been widely attributed to welfare reform, the strengthening of supports for working families (such as the Earned Income Tax Credit, EITC, and child care subsidies), and the strong economy of the late 1990s.

But even though their employment rates are now fairly high, the annual earnings and income of many parents remain quite low. Acs and Loprest (2004) have found that, among those leaving welfare, average earnings remain below \$3,000 per quarter and below \$10,000 per year. More broadly, the annual earnings of parents with less than a high school diploma, weak skills, and limited or spotty work experience are similarly low (Acs and Loprest, 2005). And for single parents whose earnings capacities are weak, the prospects of providing stable incomes for their families are very limited.

At least two factors limit the annual earnings of less-skilled adults in the U.S. labor market today. First, some of these workers have high rates of job turnover, or low job *retention*; they lose or leave their jobs frequently, and sometimes experience lengthy periods of time between jobs. This joblessness directly reduces their annual earnings, and also inhibits their wage growth over time. Second, even when working steadily, their wages and benefits are very low. Prospects for earnings growth through *advancement* in their current jobs (or other jobs) are very limited.

What public policies at the federal, state, and local levels might help improve retention and advancement among low-income workers? Are there strategies that heavily involve the private sector, where the activities and interests of private employers might be better used to improve these worker

outcomes? What does the research and evaluation evidence show, in terms of effectiveness of strategies explored to date? Are there promising models that have not yet been fully evaluated, but that deserve more attention? If so, what are the appropriate next steps?

We explore these questions below. In the next section, we provide more evidence on the characteristics of workers and their employers that affect retention or advancement outcomes. Then we review a range of strategies for improving these outcomes. The strategies include (1) *financial incentives and supports*, such as earnings subsidies and tax credits; (2) *case management* strategies to link workers to services; (3) *skill development*, particularly through education and training; and (4) *employer-based* strategies. In each case, we review what we know or don't know about their effectiveness. We conclude with some suggestions for next steps by policymakers as well as researchers.

II. RETENTION AND ADVANCEMENT: THE PROBLEMS AND THEIR CAUSES

Job turnover occurs for a variety of reasons: people quit their jobs voluntarily, or are laid off or discharged involuntarily. Voluntary job changes may occur because of dissatisfaction with one's current job, or personal circumstances (such as a sick child or parent who requires care) that make holding that (or any) job difficult; but they can also be associated with workers pursuing better job opportunities with other employers. In contrast, involuntary turnover either reflects employer dissatisfaction with the individual employee's performance (in the case of discharges), or broader reductions in workplace staffing associated with plant closings or reorganizations (in the case of layoffs).

The effects of job turnover on earnings are varied. Occasional voluntary job changes in which individuals rapidly move into other jobs often have beneficial effects on earnings. But voluntary changes occurring with no other jobs lined up, and involuntary changes more generally, are associated with wage

stagnation or even declines (Bartel and Borjas, 1981; Royalty, 1998).¹ Frequent turnover, whether voluntary or involuntary, not only causes individuals to lose income while they are not employed; it also prevents them from accumulating general work experience and seniority over time (or “job tenure,” in the lingo of economists) that are often associated with wage growth in the labor market.²

In any given year, about 20 percent of the U.S. workforce begins a new job (Farber, 1999); and the median length of time on the job is 4–5 years.³ Rates of turnover are highest among young workers, who frequently work part-time and short-term for discretionary income while in school, and who often engage in “job-shopping” early in their careers.

But turnover is also relatively high among specific groups of young people or adults—such as high school dropouts, those with weak cognitive skills, women with young children, and/or minorities (Holzer and Lalonde, 2000). High school dropouts account for about 20–30 percent of the heads of low-income families where employment levels are fairly high, and about 40 percent of those where employment levels are low (Acs and Loprest, 2005); they tend to have high rates of both voluntary and involuntary job turnover, and especially turnover in which no other jobs are lined up. Low-income single mothers have high rates of turnover, even after accounting for their lower educational attainment; and the frequency of turnover rises with the number of children that they have (Holzer and Lalonde, 2000). African Americans, in particular, quit jobs somewhat less frequently than other workers but are much more likely to be discharged (Ferguson and Filer, 1986). Adults in single-parent families, and in those

¹Wage losses are often the greatest when workers are permanently laid-off, or “displaced,” from jobs that they have held for several years, due to a plant closing or reorganization (Kletzer, 1998). But these displacements do not affect disadvantaged workers more frequently or more negatively than others.

²For instance, Ballen and Freeman (1986) show that frequent and lengthy periods of nonemployment are interspersed with short periods of low-wage employment for inner-city youth. Ellwood (1982), Meyer and Wise (1982), and Gardecki and Neumark (1998) all show that limited early employment is associated with reduced employment or wages later on for young adults.

³These numbers all reflect ongoing spells of employment, rather than completed spells.

with low incomes, have average job tenure only one-half to two-thirds as high as those in two-parent or middle-income families.⁴

High turnover and low retention have also been noted as particular problems for specific groups of less-skilled workers. Among welfare recipients who entered the job market in the 1980s and early 1990s, job turnover often occurred within 9 months or less after accepting new jobs (e.g., Hershey and Pavetti, 1997). As many more recipients left welfare and entered the strong job market of the late 1990s, average job retention and tenure improved somewhat for this group—eventually averaging well over a year per job spell (Holzer, Stoll, and Wissoker, 2004). However, some of these individuals end up returning to the cash assistance rolls—in a national survey, of those who left welfare between 2000 and 2002, 25 percent were back on welfare in 2002 (Loprest 2002).

Overall, welfare recipients have had average tenure well below that of the typical U.S. worker. In the five-year National Evaluation of Welfare-to-Work Strategies (NEWWS) conducted by the U.S. Department of Health and Human Services, large majorities of former and current welfare recipients experienced some time without work even during the fifth year of the study (Hamilton, 2002). High rates of worker absenteeism, often associated with child care, health and transportation problems, frequently generate quits or discharges for this group (Holzer, Stoll, and Wissoker, 2004). Other groups, such as men with criminal records, have even worse records for job retention (e.g., Bushway, 2003).

While poor education and skills and limited experience among *workers* contribute to their retention difficulties, the characteristics of their *jobs* and *employers* can be important as well. For any worker with given personal characteristics, employment in large firms, unionized firms, and/or those paying higher wages reduce job turnover (Freeman and Medoff, 1984; Holzer and Lalonde, 2000; Holzer, Stoll, and Wissoker, 2004). Higher wages generate greater incentives for workers to perform better and

⁴Tabulations of job tenure from special supplements of the Current Population Survey are available from Austin Nichols at the Urban Institute.

retain their jobs; in addition, the more professional human resources policies of larger employers and protective work rules at unionized establishments likely reduce turnover as well. Health benefits may contribute somewhat to better worker retention, while weak promotion prospects at jobs clearly limit retention.⁵ Turnover rates are also higher among lower-wage workers with part-time jobs (Blank, 1990) and among those working nonstandard shifts (Henly and Lambert, 2003).

Turning to the issue of labor market advancement, most workers make large wage gains early in their careers—sometimes by changing jobs early, and then settling in and accumulating tenure with specific employers. Wage gains moderate over time but remain positive for most workers over much of their working lives. But this is less true of workers without high school diplomas and other less-skilled workers, whose wages grow more slowly with time or work experience.⁶ As noted above, the high rates of turnover that plague many workers due to weak skills and other personal circumstances clearly limit such advancement.

A recent study by Andersson, Holzer, and Lane (2005) followed adult low earners in the labor market over the period 1993–2001.⁷ The study indicates that, while most low earners enjoyed substantial earnings growth (especially in light of the strong labor markets that characterized much of this time period), only about a fourth or fewer seemed to permanently escape their low-earnings status.⁸ Of course, the personal skills and earnings capacity of these workers strongly contributed to their wage growth over

⁵See Holzer, Stoll, and Wissoker (2004). Health benefits may limit worker movement across jobs simply because some fear that they will not be able to obtain such benefits on their new jobs; evidence of such “job lock” appears in Madrian (1994).

⁶See Gladden and Taber (2000).

⁷This study uses the new Longitudinal Employer-Household Dynamics (LEHD) data at the Census Bureau, in which Unemployment Insurance records of individuals and their employers have been merged with other Census datasets. See also Connally, Gottschalk, and Newman (2004) and Schochet and Rangarajan (2004) for results that are based on other data but are at least broadly consistent with those described here.

⁸In that study, low earners were defined as those who were consistently earning less than \$12,000 per year early in the study period. By the end of the study, roughly 27 percent of initial low earners were consistently earning above \$15,000 per year. But some of these individuals appear to be second-earners in families with income well above the poverty line. When the sample was restricted to those with poor education, low wages, or in low-income families, only 15–20 percent of initial low earners ultimately were earning above \$15,000 each year.

time, but the characteristics of their *employers* were important as well. Employment in higher-wage sectors of the economy—such as construction, manufacturing, transportation, or health services—led to higher rates of advancement for low earners than employment elsewhere. Working in large firms and those with low turnover rates also helped raise advancement prospects, as these firms generally offer more on-the-job training and opportunities for promotion (Holzer and Reaser, 1999).

But, even within detailed sectors of the economy and in particular geographic areas, firms often pay different levels of wages to workers with similar skills. Some seek to be competitive through a low-wage, low-cost strategy (e.g., the “Wal-Mart model”), while others prefer a strategy relying more on improving productivity through higher skills, higher worker retention, and higher training. The wage premium that many firms pay is highly persistent over time and does not put these firms at any competitive disadvantage over the long term; the high-wage firms are therefore not “dinosaurs” who will soon be driven out of existence by aggressive low-wage competitors.⁹ Whatever the merits of either approach from the employer’s point of view, employment in the higher-wage firms contribute importantly to advancement prospects from the worker’s perspective.

Furthermore, job changes that moved individuals from lower-wage to higher-wage employers generated not only higher earnings levels but also greater wage growth over time than did job retention over long periods at low-wage firms. This finding demonstrates an inherent weakness in strategies that emphasize job retention alone—particularly in low-wage firms and jobs that offer little hope of advancement to their workers. Instead, occasional job mobility can often lead to higher wage gains—as

⁹See also Appelbaum, Bernhardt, and Murnane (2003) for discussions of how and why employers make their choices about whether to compete through low wages v. training and higher productivity. There is no evidence in this set of industry case studies of competitive disadvantages associated with pursuing the high-performance strategy, though such strategies sometimes flourish in firms with specialized niches of their respective product markets.

long as the latter involves a move to a higher-wage employer or job, and results in some retention thereafter.¹⁰

Of course, access to higher-paying firms might be limited for many workers—even if they have the requisite skills. For example, Andersson et al. (2005) show that high-wage employers are generally located relatively far away from the geographic neighborhoods where most low earners reside. Many of the latter lack transportation to higher-wage employers located in the suburbs, especially if they do not own automobiles; others may lack information and access to informal networks that might help generate these jobs (Ionnides and Loury, 2004).

For African Americans and other minority groups, these “spatial mismatch” problems can sometimes be compounded by employer discrimination in hiring (Holzer, 2000). A criminal record in the applicant’s background might also deter an employer from considering an otherwise qualified applicant for a job, and might also diminish the potential employee’s interest in such work.¹¹

On the other hand, access of disadvantaged employees to better employers can sometimes be enhanced through third-party “intermediaries” in the labor market. One such intermediary—the temporary help agency—focuses on improving job placements for workers with limited access to employers (Autor and Houseman, 2002; Lane et al., 2003; Andersson et al., 2005). Others play a broader role, helping provide disadvantaged workers with transportation assistance, general job training, or even some paid temporary work experience.¹² These additional services should be useful in reducing various kinds of “mismatch” between employers and employees; and, by providing more information to employers about

¹⁰The largest earnings gains in Andersson et al. were observed for those workers who changed job early, gained employment with a higher-wage employer, and then accumulated job tenure and wage growth by retaining the newer and better job in subsequent years.

¹¹See Pager (2003) and Holzer, Raphael, and Stoll (2004) for evidence that employers are very reluctant to hire applicants, especially African American males, with criminal records.

¹²Autor (2001) shows that temp agencies often provide general skills training to their clients, at some expense to themselves, in order to signal the work-readiness and trainability of the client to potential employers.

the skills of applicants from certain stigmatized groups, they can potentially help overcome discrimination as well.

In sum, a range of problems limit the prospects for job retention and advancement among low-income adults. Their low levels of education and basic skills, poor work histories, low wages and benefits, child care and transportation difficulties, and the like often impede their ability to accumulate job tenure and advance; but their lack of access to higher-wage employers hurts them as well. Thus, job market strategies for disadvantaged workers should seek to:

- supplement their low wages and benefits;
- address various personal and family needs;
- improve their skills; and/or
- improve their access to and interactions with employers in the hope of generating better retention and advancement outcomes.

III. POLICY APPROACHES TO IMPROVING RETENTION AND ADVANCEMENT

A. Financial Incentives and Supports

Policymakers have used financial incentives to improve the rewards associated with low-wage work a great deal since the 1990s. The primary goal of these efforts is to raise the rewards associated with work, and thus to increase the levels and duration of employment. Evaluations of these efforts—many of which involve rigorous research designs—generally support the view that financial incentives that reward work can raise employment rates and earnings among low-wage workers. Table 1 provides examples of different approaches that use financial incentives to encourage work.

The clearest example of a financial incentive program is the EITC, which now provides a roughly 40 percent earnings subsidy to low-income working parents up to about \$10,000 of earned income. In addition, 14 states and the District of Columbia have implemented their own Earned Income Credits to supplement the federal program (Ross Phillips, 2004). Indeed, the research suggests that the federal EITC

Table 1
Examples of Programs Providing Financial Incentives to
Low-Wage Workers

Program/Dates of Operation	Target Group	Financial Incentive
Earned Income Tax Credit (1975-present)	Low-income tax filers with earnings	Initially, provides 40 cents per additional dollar of earnings; diminishes by up to 21 cents with each additional dollar earned. Maximum credit of about \$4,000 for family with two children.
Canadian Self-Sufficiency Program (1992–1999)	Single parents who had been on cash assistance for one year	The supplement equaled half the difference between a participant's earnings and an "earnings benchmark." Most families received an additional \$3,000 to \$7,000 per year through the program. Available to those who worked full time (30 hours per week).
Texas Employment Retention and Advancement Program (2000–2004)	Cash assistance applicants and recipients	\$200 monthly earnings supplement for those who worked 30 hours per week for up to 12 months (\$2,400 per year)
Milwaukee's New Hope Program (1994–1998)	Adults with a household income no greater than 150 percent of the poverty level	Monthly earnings supplement for full-time work (benefit averaged \$1,500 per year), subsidized health insurance and child care, and community service job if full-time employment was not available.
Minnesota Family Investment Program (1994–1998)	Cash assistance applicants and recipients	Individuals remained eligible for welfare until their income reached 140 percent of the poverty line. Typical benefit was \$1,800 per year.

has succeeded in raising employment levels among low-income single mothers (e.g., Eissa and Liebman, 1996; Meyer and Rosenbaum, 2001).

Other programs have focused on providing earnings supplements to welfare recipients after they leave cash assistance and work full time. These include the Canadian Self-Sufficiency Program (SSP) and the Texas Employment Retention and Advancement (ERA) program (the latter is part of a national evaluation of retention and advancement strategies sponsored by the U.S. Department of Health and Human Services). SSP operated outside the welfare system, while the Texas initiative was part of the local TANF welfare-to-work program. SSP showed large effects on employment, earnings, and job stability of program enrollees, and unlike most other welfare-to-work initiatives resulted in more individuals moving out of poverty (Michalopoulos and Berlin, 2001). However, although only preliminary results from the Texas ERA evaluation are available, they show relatively small effects on employment levels in only one of the three sites where the program was studied (Bloom, 2004).

Another program that provided an earnings supplement was New Hope, a pilot project in Milwaukee which in addition to the supplement offered guaranteed health benefits, child care, and community service jobs. This program was available to a broader range of low-income parents than just welfare recipients. The New Hope program produced initial gains in employment and earnings, but they faded over time, in part due to gains that were experienced by the control group (Berlin, 2000).

Financial incentives also figure prominently in the Jobs-Plus demonstration that was recently evaluated by MDRC (Bloom et al., 2005) at six public housing projects. At the experimental sites, residents were offered a drop in the rate at which their rents increased with higher earnings. This decline in the rental “tax” on earnings was also supplemented with a set of employment-related services and other efforts to build informal community supports for employment. Earnings increases in the three sites where the implementation of the program was strongest averaged an impressive 14 percent per year, and roughly 20 percent in the fourth year of the program. On the other hand, it is not clear exactly which part of the

treatment contributed most to the improvement and the extent to which these results would apply to residents outside of public housing projects.

Many states have provided financial incentives for welfare recipients to work through the TANF earned income disregard, in which some amount of earnings gets exempted from reduced TANF payments.¹³ Examples of this strategy include the Minnesota Family Independence Program (MFIP), Iowa's Family Independence Program (FIP), and the Connecticut Jobs First program. MFIP was the most successful of these efforts, which, like SSP, had large gains in employment and earnings and reductions in poverty that were attributable to the financial incentives. The other programs also had positive effects, although not at the level of MFIP, and the results could not be directly connected to the earnings disregard.

Another approach is to provide such supports as health care coverage or child care subsidies to low-income workers with children. Frank et al. (forthcoming) review some studies that suggest positive effects of these supports on employment stability, though other more rigorous studies focused on child care assistance have so far failed to support this finding (Miller, 2005; Gennetian and Michalopoulos, 2003).

The research on SSP and MFIP indicates that these programs are most successful when subsidies are tied to full-time work in the labor market, or when accompanied by other work/job search requirements.¹⁴ Unless the subsidies are permanent, their positive effects on work tend to fade out over time—though they may not completely disappear.¹⁵ And the budgetary costs of permanent financial

¹³See the Urban Institute's Welfare Rules Database.

¹⁴On the other hand, the SSP evaluation showed some evidence that take-up was reduced by the full-time work requirement.

¹⁵The fading of beneficial effects after the subsidies were discontinued has been noted not only in New Hope, but also in SSP and MFIP.

enhancements for low-wage workers can be substantial—especially in their more generous forms, such as SSP and New Hope.

The research evidence also indicates some potential limitations of these approaches. For one thing, tax credits or subsidies tied to family income—like the EITC—involve phase-outs as income rises.¹⁶ This could create incentives for those in the phase-out range—especially married couples where both parents work—to reduce their work effort rather than increase it. Similarly, the EITC can create a tax on marriage, unless the credits to two-earner families are phased out more gradually than those of single earners (Eissa and Hoynes, 2004).

Perhaps the largest question involves whether, or to what extent, financial incentives for work improve retention or advancement outcomes for those already in the labor market. The evaluation evidence on MFIP and SSP does indicate that these subsidies generated more consistent work over the course of the year (Miller et al., 2003; Michalopoulos and Berlin, 2001). But modest improvements in job retention are likely to have even more modest impacts on advancement over time—given the limited returns to work experience in the form of wage growth for low-wage workers (Gladden and Taber, 2000).

B. Case Management and Service Provision

A variety of local programs, such as those listed in Table 2, provide case management and linkages to other services to aid low-wage workers in their transition to work and to enhance their job retention and advancement prospects. This type of approach can provide a mix of pre-employment and post-employment services, case management, and skill development (use of education and training is discussed more extensively in Section C, below). *Pre-employment services* focus on initial job preparation and placement and largely cease once the worker has accepted a new job. *Post-employment*

¹⁶EITC payments are phased out for all earnings above roughly \$14,000 at the rate of 19 cents per additional dollar earned.

Table 2
Examples of Case Management and Service Provision Programs to
Promote Employment Retention and Advancement

Program/Dates of Operation	Target Group	Services
Portland NEWWS Program (1993-1996)	Cash assistance applicants and recipients	Pre-employment program providing job search, education, training, and case management. Strong employment focus, with emphasis on high-quality jobs.
Post-Employment Services Demonstration (1994-1996)	Cash assistance recipients who found jobs	Counseling and support, job search assistance, resolution of benefits issues, and service referral.
Illinois Employment Retention and Advancement Program (2002-present)	Employed cash assistance recipients (working at least 30 hours per week for six consecutive months)	Job matching, job placement assistance, career and personal counseling, and service referral.
South Carolina's Moving Up Program (2001-2005)	Former cash assistance recipients who left the rolls and did not return within a year	Case management, job placement and re-employment assistance, career counseling, and service referral.
Pennsylvania's GAPS Initiative (1997-2000)	Current and former cash assistance recipients	Counseling, child care and transportation help and referrals, job placement assistance, job-related advice, and service referral.

services start once an individual has found a job and generally focus on easing the transition to work through assistance with job-related issues, support services, and family and personal problems.

In terms of pre-employment services, there is some evidence that the effectiveness of a *mix* of services might be greater than a set of services or treatments provided separately. For instance, the Jobs-Plus demonstration described above provided public housing residents with employment services, financial incentives, and community supports. Welfare-to-work evaluations have also found that a mix of services—including job search, education and training, and case management—while maintaining pressure on most individuals to gain employment, produce the best results (Hamilton, 2002). The Portland, Oregon, site in the NEWS evaluation used this approach and generated large increases in employment, earnings, and job stability—surpassing the other sites in the NEWS evaluation as well as results from other evaluations.

The Portland program is also notable because, while it stressed the need for clients to gain employment fairly quickly, it also encouraged them to find higher-wage jobs and employers, whenever possible. Other programs that provided primarily job search services and focused on finding immediate employment in NEWS and other studies have also generated strong results in the short run, although these gains were not as large as in Portland and they did not persist over time.¹⁷

A wide range of for-profit temp agencies or nonprofit groups often play some role in providing pre-employment services, particularly job search or job readiness services. From our point of view, the key question is whether or not these groups can improve the quality of the jobs to which low earners have access—in terms of starting wages and benefits, as well as growth potential—above and beyond what they obtain on their own. As noted earlier, the research evidence to date suggests some positive effects of

¹⁷While some have questioned whether or not the Portland results were driven by policy or the unique demographic characteristics of those in the study, Bloom, Hill, and Riccio (2003) cast doubt on the notion that the latter factor drove these results. But some programs that have chosen mixed strategies, such as Florida's Project Independence, have been less successful than that in Portland. The exact mix of services provided and the quality of implementation no doubt affect the success of the program to an important extent.

private temp agencies in this regard, though there is little evidence currently on a wider range of for-profit and non-profit job developers (like America Works, for example).

Case management services provided after individuals find jobs have generally not produced effects on job retention and advancement, although studies currently under way should provide more information in this area. In the Post-Employment Services Demonstration (PESD) of the late 1990s, welfare agency staff sought to contact individuals who found employment and provide them with counseling and support, job search assistance, resolution of benefits issues, and service referral. This approach generated disappointing results, in terms of promoting greater retention (Rangarajan, 1998). But the employment services rendered there were quite limited, especially since case workers managed very large caseloads; and targeting of the services to those in need of help was quite poor.¹⁸

Several sites in the national ERA evaluation are testing the effectiveness of post-employment case management services, but it is too early to draw firm conclusions about these results. One site in Illinois targets a group of TANF recipients that appear to be “stuck” in low-wage jobs and provides a range of services to help them increase their earnings in their current job or to find a better job. This program has shown early effects on increasing earnings and reducing welfare receipt. However, South Carolina’s Moving Up program, which provides similar services to a group of individuals who have been off welfare for long periods, has shown no effects at this point (Bloom, 2004).

C. Skill Development Strategies

States and localities have undertaken extensive efforts to improve the retention and advancement of low-wage individuals through increasing their skill levels and human capital. This has primarily taken

¹⁸The Pennsylvania GAPS initiative, which operated in Allegheny County, used a similar approach to PESD, although services were provided by community-based organizations. A nonexperimental study of this program found participants experienced some earnings gains, but incomes remained low and job benefits were poor (Wood and Paulsell, 2000).

the form of providing education (primarily English as a Second Language, basic education, and GED programs) and job training. Table 3 outlines several programs that use this approach.

Like other employment-related services, education and training can be provided at the pre-employment stage—often through TANF welfare-to-work efforts—or after individuals are working. A range of institutions and systems play a role in providing education to low-income individuals, including community colleges; the Workforce Investment Act (WIA) system, which provides a range of services through local one-stop centers;¹⁹ the adult education system; and nonprofit and for-profit providers. Pell grants are an increasingly important source of funding for those pursuing education and training, particularly at community colleges. (Employed-based education and training efforts are discussed in Section D below.)

It is clear that the nature and content of education and job training that are provided at least partly determine their effectiveness in promoting retention and advancement, particularly at the pre-employment stage. For instance, programs with a strong focus on basic education but only limited linkages to employment or job training—an approach that was more common before the implementation of TANF—have generated limited earnings gains, with most performing worse than mixed-service or job-search-focused interventions (Pauly, 1995; Martinson and Strawn, 2003).

Indeed, this may partly account for the lack of effect of skill development strategies at many sites in the NEWWS evaluation (outside of Portland).²⁰ It is likely that the kind of basic education provided in these programs—with a focus on building basic skills and obtaining a GED—was not conducive to labor market advancement. Indeed, much of what was provided was unrelated to specific jobs that were

¹⁹These funds are distributed by local Workforce Investment Boards (WIBs), and are supposed to reflect local labor market needs among both workers and adults. WIA funds are used to support local “one-stop” offices for workers that provide “core” or “intensive” services, like job placement and counseling, as well as training.

²⁰The strong labor market of the late 1990s might also have contributed to this finding, in that those in the control group were able to work just as much as those in the treatment group in that environment.

Table 3
Examples of Skill Development Programs to Promote Employment
Retention and Advancement among Low-Wage Individuals

Program/Dates of Operation	Target Group	Services
Riverside (CA) Employment Retention and Advancement Program (2000-present)	Newly employed welfare recipients working at least 20 hours per week	Two programs to promote participation in education and training in combination with employment are being evaluated: one requires individuals to work 20 hours per week and one has no work requirement.
New Visions Self-Sufficiency and Lifelong Learning Project, Riverside, CA (1998-present)	Individuals working at least 20 hours per week with high school diploma or GED	24 weeks of preparatory classes followed by a short sequence of regular college courses providing training for a specific job.
Center for Employment and Training, San Jose, CA, and others (initial program 1982-1988; replication program 1995-present)	Low-income youth; single-mothers on welfare	Contextualized basic skills and training provided in worklike setting; full-time commitment by participants; employer involvement in design of training; job placement assistance.
Kentucky Community and Technical College System (1997-present)	Low-wage workers	Range of systemwide adaptations to accommodate working students: rapid course and program approval, academic credit for workforce training, fractional credits, and incentives to develop and offer for-credit courses.

available in the local labor market and, as discussed above, did not generate an increase in credentials that would be recognized or rewarded by private sector employers.

In contrast, many studies have shown positive effects of job training on earnings among disadvantaged adult women. This result emerged clearly in the national evaluation of the Job Training Partnership Act (JTPA), which was the forerunner of WIA.²¹ Earnings impacts on low-income adult women were large, when measured relative to dollars spent per trainee; and on-the-job training produced larger earnings gains than more standard classroom training (Orr et al., 1996).

This finding has appeared consistently in the literature on training for this group—even though the generally modest investments in training for these women often generate correspondingly modest improvements in their annual earnings (Lalonde, 1995). A nonexperimental analysis of three sites in the NEWWS evaluation (not including Portland) found that high school nongraduates in basic education activities had substantially larger increases in longer-term earnings if they also participated in job training (Bos et al., 2001).

The evidence concerning low-income men, in JTPA and elsewhere, generally shows somewhat smaller impacts on earnings per dollar spent than occurred among women, though the impacts are often substantial relative to their cost. Improvements in earnings generally reflect increases in wages (reflecting advancement) as well as more steady employment (reflecting better retention), though impacts on the latter have often been greater than the former.

Training efforts that lead to established credentials that are recognized and valued by employers have produced particularly strong results. A number of nonexperimental evaluations have found that for those who obtain Associate degrees and other certification at community colleges, the returns have been fairly positive (Grubb, 1996; Leigh and Gill, 1997; Kane and Rouse, 1999; Mathur et al., 2004). In

²¹For instance, the costs of training per female participant averaged about \$1,300, whereas the annual increase in earnings generated was about \$850 (Orr et al., 1996).

addition, the successful Portland program in the NEWS evaluation increased the proportion of high school dropouts who obtained a high school diploma or GED and a second education or training certificate (usually a trade license or certification) (Hamilton, 2002). None of the other NEWS sites produced increases in this type of credential.²²

And efforts to ensure that the training is relevant to local employers with available jobs may be important as well. The Center for Employment Training (CET) in San Jose, CA, also used an approach that integrated basic education and job training and included strong links to employers. This program produced strong results in early studies (Burkhardt et al., 1992). Efforts to replicate this model in other sites have thus far proved disappointing, though the impact evaluations to date might be understating the benefits of this approach.²³

There have been fewer studies of education and training efforts as a post-employment strategy. Several efforts in Riverside, CA, are focusing on increasing participation in education and training among low-wage workers, and one targets welfare recipients who are working but remain on assistance (see Table 3). Early evidence from the experimental studies of these programs indicates they are not affecting labor market outcomes, although follow-up may be too short to see impacts of an education-focused intervention (Bloom, 2004; Fein et al., 2003). Other efforts to provide on-the-job training to incumbent workers fall into this category and are discussed more fully in the next section.

Of course, a major limitation of skill development approaches is that it can be difficult for low-income parents to work and go to school, given the family and work demands they face. In addition,

²²Whether the GED alone has any positive impact on the earnings of a high school dropout has been debated—see Cameron and Heckman (1993) as well as Murnane, Tyler, and Willett (1999).

²³The 30-month evaluation of nationwide CET sites (Miller et al., 2003) showed modest impacts on earnings for women only. But this might be partly attributable to the strong labor markets that generated employment opportunities for controls as well as the treatment group. Also, the control group in this study had unusually higher levels of educational attainment on their own, especially at community colleges. The earnings of those who received CET training compared favorably to those in the control group that received no other kinds of education or training. A 54-month follow-up report is currently being prepared by MDRC.

many individuals with low skills and/or limited English have restricted access to existing training programs due to entry requirements. Some efforts are under way to address these issues and make skill development programs more accessible to low-income working families, particularly at community colleges (Leibowitz and Taylor, 2004; Purnell and Blank, 2004; Biswas, Mills, and Prince, 2005; Strawn and Martinson, 2000). These include:

- Curricula and instructional reforms, such as “bridge” programs to prepare low-skilled workers for training. These efforts also focus on creating easier transitions from noncredit to credit programs and allowing for multiple entry and exit points from degree programs.
- Accelerating learning to allow for more rapid progress. This includes compressing programs so they can be completed quickly and dividing programs into “chunks” that can be completed at different points in time.
- Providing greater student supports, such as counseling, tutoring, child care, and transportation.

A few of these efforts are taking place at the state level. For example, between 1997 and 2000, Kentucky launched a series of reforms designed to make the community college system more responsive to the skills and needs of working adults (see Table 3). Others are initiatives of individual institutions. For example, Tacoma (WA) Community College recently integrated its basic skills and training programs in early childhood education and health areas to create direct pathways from low-literacy into degree programs. Portland (OR) Community College created similar pathways by breaking degree programs into manageable pieces that are based on employer skill needs. Most of these efforts have not been evaluated thus far.

A very different variant of such training, aimed primarily at those with multiple barriers to work who are considered “hard-to-serve” (i.e., Danziger et al., 2000; Zedlewski and Loprest, 2001), is the “transitional jobs” approach that combines training and support services along with paid work experience for some period of time, usually less than a year. Prominent examples of this approach include the Transitional Work Corporation efforts in Philadelphia (Greenwald, 2002), as well as the Center for Employment Opportunities (CEO) program in Manhattan for ex-offenders.

As for programs that provide transitional work experience along with some training and supports for the “hard-to-serve,” the best evidence available comes from the National Supported Work Demonstration project from the 1970s. In this project, the post-program earnings of welfare recipients increased quite substantially for participants relative to those in the control group. No overall impact was observed for adult men or youth, though a recent reexamination of these data suggests more positive results for adult men with criminal records in their late twenties or older (Uggen, 2002). Rigorous evaluation evidence is not yet available for many of the more recent “transitional work” efforts, though preliminary data on outcomes have been fairly encouraging (e.g., Hill et al., 2002). A new evaluation of a variety of efforts to improve outcomes for the “hard-to-serve” population—including CEO for ex-offenders—is now under way (funded by U.S. Department of Health and Human Services) and will hopefully generate impact estimates within the next few years.

D. Employer-Focused Efforts

As we indicated above, the research evidence on advancement suggests that the characteristics of employers can be quite important in generating advancement prospects for their employees. Furthermore, the research literature on temp agencies and on skill development both show that efforts to tie the disadvantaged more closely to employers can have important payoffs. This likely occurs because the temp agencies improve the access of less-skilled individuals to better employers; and because the training provided in these situations is relevant for the needs of employers on existing jobs, and thus provides a better “match” between employers/jobs and potential employees than might otherwise be obtained through general training.²⁴

²⁴As we note below, it remains important for the training provided to be at least partly general in nature, so that they do not diminish the worker’s mobility prospects across employers. Training that provides a well-recognized occupational credential seems to meet that requirement.

Table 4 describes a range of efforts that can be called “employer-focused” in nature, discussed below. Broadly speaking, we might think of two categories of employer-focused efforts: (1) those that provide services and/or training to employees for jobs with specific employers; and (2) those that also try to influence employer human resource policies—including their recruitment, training, and compensation practices, as well as job restructuring.

The efforts of temp agencies, and training programs like CET, clearly fit into the first of these two categories. Another approach is to provide *post-employment services*, addressing employee needs and supports at the workplace. For example, in the Cleveland Achieve program—which is being evaluated as part of the national ERA evaluation—an intermediary provides on-site case management and assistance on job-related issues to low-wage workers in the long-term nursing care industry (see Table 4). Preliminary results from the evaluation of this program show that these efforts have increased retention rates within the first 30 days after enrolling in the program, but retention gains appear to get smaller over time, particularly after six months (Hamilton, 2004).

A range of approaches fit into the second category. For instance, *incumbent worker training*, in which employers are encouraged to provide more training for those who have already been hired into jobs, is a type of post-employment training that targets training to specific jobs and employers (Regional Technology Strategies, Inc., 1999). Originating more than 30 years ago, these programs are typically operated by states and provide employers with grants to partner with training providers and to offer specific training to their incumbent and, in some cases, new workers. The training is generally designed to provide opportunities for career advancement and potentially higher wages within the employer or industry. Many are funded directly by employer tax revenues.

Although some vary significantly in terms of scale and design, few incumbent worker training programs focus specifically on low-wage workers. A handful of states, including New Jersey and Massachusetts, have set aside funds to provide basic skills and English literacy training (Duke, Martinson, and Strawn, forthcoming). Studies of state-level programs that provided incumbent-worker training

Table 4
Examples of Employer-Based Strategies to Promote Employment
Retention and Advancement among Low-Wage Individuals

Program/Dates of Operation	Target Group	Services
Cleveland ACHIEVE Program (2002-present)	Entry-level workers under 200 percent of the poverty line in nursing homes who have been in their current jobs less than 6 months	Regular on-site office hours for counseling, case management and support services, lunch meetings for social support and life skills, supervisory training for supervisors,
New Jersey Customized Worker Training Program (1992-present)	Incumbent workers	Provides grants to employers to offer customized training to incumbent workers. Includes basic skills grants for employers or individuals to increase job-related literacy skills.
Project QUEST, San Antonio, TX (1992-present)	Low-income individuals	Provides training tracks for numerous occupations within several industries, including health, business systems, and maintenance. Occupations are targeted based on demand by local firms.
Massachusetts Extended Care Career Ladder Initiative (ECCLI) (1999-present)	Certified Nursing Assistants employed by nursing homes	Provides grants to nursing homes and home health agencies, who may partner with other long-term care facilities, community colleges, community based organizations, workforce investment boards, and others to create new career ladders for direct care staff and to address staff training, work environment, and quality of care issues.
Kentucky Career Pathways (2004-present)	Low-wage workers in targeted industries	Grants provided to partnerships of businesses and community colleges to develop and implement career pathways in a range of occupations.

funding for employers have generated clear evidence of benefits to employers in terms of higher productivity and lower costs (Holzer et al., 1993; Ahlstrand, Bassi, and McMurrer, 2003; Moore et al., 2003); it is less clear in these studies that these benefits have been shared with low-wage workers, though it is certainly plausible to assume that they have.

Apprenticeships and internships, which traditionally are thought of as “school-to-career” programs for youth, broadly fit into this category as well. Their potential effectiveness as a means of raising skill development among youth has been stressed by Lerman (2002) and by Bassi and Ludwig (2000). More broadly, many studies find strong returns to privately provided training, and to occupational training in vocational schools or community colleges (Lynch, 1992; Bishop, 1994; Loewenstein and Spletzer, 1999). That these approaches might be beneficial for some low-income adults seems at least plausible to us.

Another approach that tries to affect both employee and employer behavior involves *sectoral* strategies, in which a few large and growing sectors of a region are targeted for job placements and training (e.g., Pindus et al., 2004). They seek to directly improve the matching of low-income or other targeted job seekers to employment opportunities in local and regional economies. Some well-known local examples of these approaches include Focus: Hope in Detroit (which trains disadvantaged workers for jobs in the auto industry) and QUEST in San Antonio (which targets employers in health care and financial services, among other sectors).

A central focus of many such efforts is to restructure recruitment, hiring, training, promotion, and compensation practices in selected industries—to improve the access of low-income populations in regional labor markets to existing jobs, and also to increase the quantity and quality of jobs available within those industries to the low-income population. While no sectoral initiatives have yet been rigorously evaluated, longitudinal studies of participants in several sectoral initiatives found that they experienced improvements in employment rates and wages (Conway and Rademacher, 2004; Elliott et al., 2001).

A subset of sectoral initiatives seeks to build *career ladders* in low-wage occupational categories. These initiatives seek to lay out a sequence of connected skill upgrading and job opportunities, with each education step on the ladder leading to a job and/or to further education or training. They generally focus on private sector workplaces, so that employees have more advancement potential on their jobs and more incentive to retain their employment. Unlike incumbent worker training programs, career ladder efforts are generally not geared toward a specific employer, but typically cover a certain sector or industry, such as health care.

Several states have recently embarked on statewide efforts to promote regional career ladder initiatives (Duke et al., forthcoming). For example, in 2004 Kentucky enacted the Career Pathways program, which provides grants to develop and implement career pathways that assist low-income individuals in job advancement in occupations that meet employer needs. The grants are awarded to local partnerships of businesses and community colleges. A range of industries are involved, although health and manufacturing are the most common. Attempts to build career ladders in nursing homes have been undertaken in Massachusetts (see Table 4), the Bronx (by the Cooperative Home Care Associates program), and Chicago (by the Council on Adult and Experiential Learning), among other places.

All of these efforts involved the use of third-party intermediaries. The intermediaries often work closely with employers as well, helping them to develop better human resource policies and even career ladders, as we detail below (Giloith, 2004). They thus attempt to bridge some of the “mismatches” that separate employers and potential employees, and to improve the work environment of potential employees. Some intermediaries work with particular groups, such as ex-offenders, and develop specific strategies for overcoming employer reluctance to hire them. Others focus on particular sectors of the

economy, such as those that promise employment growth and higher wages, in particular local labor markets or nationally.²⁵

In all of these cases, the intermediaries become more acquainted with the human resources needs and problems facing employers, and can sometimes craft interventions for disadvantaged workers that help meet these needs. Critical to these efforts, of course, is the credibility that the intermediary maintains with the employer—i.e., they must be perceived as being balanced brokers who try to meet the needs of both sides in the employment relationship, and not only advocates for the workers.

Decisions made by local job developers and intermediaries should also be informed by good local labor market information (LMI) about where job openings are likely to occur, and at what wages for different groups of workers. The recent development of local workforce summaries from the Longitudinal Employer Household Dynamics (LEHD) data at the Census Bureau provides potentially important tools to local decision-makers about where to target their efforts for low earners.²⁶

Of course, it is also important that the workers, and the training provided to them, not become too tightly tied to any one employer. The evidence above (Andersson et. al., 2005) clearly showed that mobility across employers can sometimes be very productive for low earners. The intermediaries might therefore plan for sequential work opportunities for these earners, even while providing benefits to the employers with whom they deal.²⁷

Overall, rigorous evaluation evidence to date on publicly supported employer-focused strategies or intermediaries for the disadvantaged has been limited; and few efforts have been made to bring these

²⁵The Center for Employment Opportunities in New York and the Safer Foundation in Chicago are examples of intermediaries that specialize in the ex-offender population. In contrast, Focus: Hope in Detroit focuses primarily on training machinists and other skilled workers for the auto industry, while the Paraprofessional Health Institute in New York specializes in the long-term care sector.

²⁶See lehd.dsd.census.gov. Quarterly data on employment, hiring, turnover, and earnings are now available for very detailed demographic groups at the county or metropolitan level among participating states.

²⁷Basic labor market theory in economics (Becker, 1975) suggests that more general training will require greater investments by the worker or by the public sector, as employers will be less willing to pay for training that might ultimately benefit other employers.

intermediaries to a scale sufficient to really affect local labor markets.²⁸ Nonetheless, what evidence does exist to date suggests that a range of employer-focused strategies can have quite positive effects on disadvantaged workers who are or become their employees. While more evidence is clearly needed, the potential benefits of linking training and other services for low-wage workers to the needs of employers in local labor markets seems well-established.

IV. CONCLUSION

The evidence we summarize above documents the difficulties that frequently impede the retention and advancement prospects of low-wage workers. These difficulties include poor skills and work histories; low wages and benefits, which provide little incentive to remain on the job and little hope of advancement; difficulties with child care, transportation, and other family issues; and limited access to better employers.

Our review of the policy evaluation literature left us with no “magic bullets” and relatively few programs or efforts that solve these problems and improve retention and advancement with certainty. Many promising efforts have not yet been rigorously evaluated; others have, but their success rate is mixed, and our ability to replicate successes and implement them on a large scale remains uncertain.

Nevertheless, the evidence is strong enough to warrant some conclusions, which could form the basis of some innovative policy activity in this area. These conclusions are as follows:

- Financial incentives and supports seem to generate more steady employment for low earners, especially if they are tied to full-time work; but these supports must be permanent, and their effects on advancement are likely very limited.
- Temporary agencies (and perhaps other intermediaries) can improve the access of low earners to higher-wage employers, where their retention and advancement are both strengthened. Some kinds of post-employment services provided at the workplace seem to strengthen retention as well.

²⁸The Annie E. Casey Foundation’s “Jobs Initiative” in six large cities is one example of an effort to bring the work of these intermediaries to scale.

- Education and job training for low earners are most successful when they provide workers with credentials (such as Associate degrees, and perhaps other training certificates) that employers value, and when the training provides skills that match private sector demands in local labor markets.
- The returns to privately provided training by employers are high.
- Some programs based on mixed strategies—especially those that provide some training, a range of services and supports, financial incentives and/or access to better employers—have worked well, especially when implemented in an environment where pressures to gain employment are strong.

A variety of approaches that have not yet been formally evaluated look quite promising, nonetheless; these include sectoral strategies, as well as efforts to build career ladders and improve employer human resource policies (including their recruitment, training, and compensation of employees) in low-wage labor markets. Effective local intermediaries, informed by strong labor market data, may be critical to these efforts as well; though bringing them to sufficient scale to have broad impacts in these labor markets would be challenging. Also, “transitional jobs” for the hard-to-serve, like the National Supported Work Demonstration for welfare recipients in the 1970s, look somewhat promising as well. It is very important that we continue to evaluate many of these innovative efforts to gain a better sense of if/when they are effective. In the meantime, states and local areas should continue to experiment with what appear to be the most promising examples of these kinds of programs.

A range of supportive public policies—including higher minimum wages, greater support for (or less opposition to) collective bargaining, tax credits for companies that provide more training or advancement opportunities to low earners, and TANF or WIA performance bonuses for states that improve retention and advancement outcomes—could also be implemented at the federal or state levels to encourage these better outcomes. These could be part of comprehensive efforts to broadly *encourage the formation of more jobs at firms that offer higher wages and advancement opportunities for less-educated workers*—rather than merely trying to ration a fixed number of better jobs across a larger number of deserving applicants.

These efforts should proceed with caution, so as not to squander energy or public resources on policy efforts that may not yield strong results. At the same time, the costs of the current lack of success in retention and advancement—to low earners, their families and the nation more broadly—are also huge. Doing nothing has its own price tag. Therefore, the expenditures of greater effort and resources by public officials and private employers on promising efforts to improve these outcomes seem warranted.

References

- Acs, Greg, and Pamela Loprest. 2004. "Leaving Welfare: Employment and Well-Being of Families that Left Welfare in the Post-Entitlement Era." Kalamazoo MI: Upjohn Institute for Employment Research.
- Acs, Greg, and Pamela Loprest. 2005. "Who Are Low-Income Working Families?" Paper prepared for the Working Families Roundtable. Washington, DC: The Urban Institute.
- Ahlstrand, Amanda; Laurie Bassi, and Daniel McMurrer. 2003. "Workplace Education for Low-Wage Workers." Kalamazoo MI: Upjohn Institute for Employment Research.
- Andersson, Fredrik, Harry Holzer, and Julia Lane. 2005. *Moving Up or Moving On: Who Advances in the Low-Wage Labor Market?* New York: Russell Sage Foundation.
- Appelbaum, Eileen, Annette Bernhardt, and Richard Murnane. 2003. *Low-Wage America*. New York: Russell Sage Foundation.
- Autor, David. 2001. "Why Do Temporary Help Firms Provide Free General Skills Training?" *Quarterly Journal of Economics* 115: 1408–1448.
- Autor, David, and Susan Houseman. 2002. "Do Temporary Help Agencies Improve Labor Market Outcomes?" Department of Economics, MIT, mimeo.
- Ballen, John, and Richard Freeman. 1986. "Transitions between Employment and Nonemployment." In *The Black Youth Employment Crisis*, edited by R. Freeman and H. Holzer. Chicago: University of Chicago Press.
- Bartel, Ann, and George Borjas. 1981. "Wage Growth and Job Turnover: An Empirical Analysis." In *Studies in Labor Markets*, edited by S. Rosen. Chicago: University of Chicago Press.
- Bassi, Laurie, and Jens Ludwig. 2000. "School-to-Work Programs in the United States: A Multi-Firm Case Study of Training, Benefits and Costs." *Industrial and Labor Relations Review* 53: 219–239.
- Becker, Gary. 1975. *Human Capital*. Chicago: University of Chicago Press.
- Berlin, Gordon. 2000. *Encouraging Work, Reducing Poverty: The Impact of Work Incentive Programs*. New York: MDRC.
- Bishop, John. 1994. "What Do We Know about Employer-Provided Training? A Review of the Literature." Working Paper, Industrial and Labor Relations, Cornell University.
- Biswas, Radha Roy, Jack Mills, and Heath Prince. 2005. *Building Skills, Increasing Economic Vitality: Innovative State Policies*. Boston, MA: Jobs for the Future.
- Blank, Rebecca. 1990. "Understanding Part-Time Work." In *Labor Economics and Public Policy*. Research in Labor Economics, Volume 11, edited by L. Bassi and D. Crawford. Greenwich, CT: JAI Press.

- Blank, Rebecca, and Lucie Schmidt. 2001. "Work, Wages and Welfare." In *The New World of Welfare*, edited by R. Blank and R. Haskins. Washington, DC: Brookings Institution.
- Bloom, Dan. 2004. "The Employment Retention and Advancement (ERA) Project: Early Results from Four Sites." Presentation at the Annual Research Conference of the Administration for Children and Families, May 2004. New York: MDRC.
- Bloom, Howard S., Carolyn J. Hill, and James A. Riccio. 2003. "Linking Program Implementation and Effectiveness: Lessons from a Pooled Sample of Welfare-to-Work Experiments." *Journal of Policy Analysis and Management* 22: 551–575.
- Bloom, Howard, James Riccio, and Nandita Verma, with Johanna Walter. 2005. "Promoting Work in Public Housing: The Effectiveness of Jobs-Plus." New York: MDRC.
- Bos, Hans et al. 2001. "Improving Basic Skills: The Effects of Adult Education in Welfare-to-Work Programs." New York: MDRC.
- Burkhardt, John, Anu Rangarajan, Anne Gordon, and Ellen Kisker. 1992. *Evaluation of the Minority Female Single Parent Demonstration*. Volume 1, Summary Report. Princeton, NJ: Mathematica Policy Research.
- Bushway, Shawn. 2003. "Reentry and Prison Work Programs." Paper presented at the Urban Institute Roundtable on Reentry and Employment. New York University, May 21.
- Cameron, Stephen, and James Heckman. 1993. "The Nonequivalence of High School Equivalents." *Journal of Labor Economics* 11: 1–47.
- Connally, Helen, Peter Gottschalk, and Katherine Newman. 2004. "Wage Trajectories of Workers in Poor Households: The National Experience." Department of Economics, Boston College, mimeo.
- Conway, Maureen, and Ida Rademacher. 2004. "Sectoral Strategies: A Synthesis of Findings from the Aspen Institute's Sectoral Employment Development Learning Project." Washington, DC: Aspen Institute.
- Danziger, Sandra, et al. 2000. "Barriers to Employment of Welfare Recipients." In *Prosperity for All? The Economic Boom and African Americans*, edited by R. Cherry and W. Rodgers. New York: Russell Sage Foundation.
- Duke, Amy-Ellen, Karin Martinson, and Julie Strawn. Forthcoming. "Wising Up: State-Business Partnerships to Boost Skills and Economic Growth." Washington, DC: Center for Law and Social Policy.
- Eissa, Nada, and Hilary Hoynes. 2004. "Tax-Based Cash Transfers and Labor Market Participation of Married Couples." *Journal of Public Economics* 88: 1931–1958.
- Eissa, Nada, and Jeffrey Liebman. 1996. "Labor Supply Response to the Earned Income Tax Credit." *Quarterly Journal of Economics* 111: 605–637.
- Elliott, Mark, et al. 2001. "Gearing Up: An Interim Report on the Sectoral Employment Initiative." Philadelphia, PA: Public Private Ventures.

- Ellwood, David. 1982. "Teenage Unemployment: Temporary Scars or Permanent Blemishes?" In *The Youth Labor Market Problem*, edited by R. Freeman and D. Wise. Chicago: University of Chicago Press.
- Farber, Henry. 1999. "Mobility and Stability: The Dynamics of Job Change in the Labor Market." In *The Handbook of Labor Economics*, Volume 3B, edited by O. Ashenfelter and D. Card. Amsterdam: North Holland.
- Fein, David J., et al. 2003. "College as a Job Advancement Strategy: An Interim Report on the New Visions Self-Sufficiency and Lifelong Learning Project." Cambridge, MA: Abt Associates.
- Ferguson, Ronald, and Randall Filer. 1986. "Do Better Jobs Make Better Workers? Absenteeism and Inner City Black Youth." In *The Black Youth Employment Crisis*, edited by R. Freeman and H. Holzer. Chicago: University of Chicago Press.
- Frank, Abbey, et al. Forthcoming. "Getting Connected: Increasing Job Retention among Low-Skilled Workers through Work Supports." Washington, DC: Center on Law and Social Policy.
- Freeman, Richard, and James Medoff. 1984. *What Do Unions Do?* New York: Basic Books.
- Gardecki, Rosella, and David Neumark. 1998. "Order from Chaos? Youth Labor Market Experience and Adult Labor Market Outcomes." *Industrial and Labor Relations Review* 51: 299–327.
- Gennetian, Lisa, and Charles Michalopoulos. 2003. "Child Care and Employment: Evidence from Random Assignment Studies of Welfare and Work Programs." Next Generation Working Paper No. 17. New York, NY: MDRC.
- Giloth, Robert. 2004. *Workforce Intermediaries for the Twenty-First Century*. Philadelphia: Temple University Press.
- Gladden, Tricia, and Chris Taber. 2000. "Wage Progression among Less-Skilled Workers." In *Finding Jobs: Work and Welfare Reform*, edited by D. Card and R. Blank. New York: Russell Sage Foundation.
- Greenwald, Richard. 2002. "Transitional Jobs: The Philadelphia Story." Washington, DC: Brookings Institution.
- Grubb, Norton. 1996. *Working in the Middle: Strengthening Education and Training for the Mid-Skilled Labor Force*. San Francisco: Jossey-Bass.
- Hamilton, Gayle. 2002. "Moving People from Welfare to Work: Lessons from the National Evaluation of Welfare-to-Work Strategies." Final Report to the U.S. Department of Health and Human Services. Washington, DC: The Department.
- Hamilton, Gayle. 2004. "The ACHIEVE Program: A Unique Model for Promoting Retention at the Workplace." Presentation at the Annual Research Conference of the Association for Public Policy Analysis and Management, New York, October.
- Henly, Julie, and Susan Lambert. 2003. "Linking Workplace Practices to Child Care Requirements: Lower-Level Workers in Lower-Skilled Jobs." Paper presented at the Conference on Work, Family, Health and Well-Being, National Institutes of Health, Washington, DC.

- Hershey, Alan, and LaDonna Pavetti. 1997. "Turning Job Finders into Job Keepers." *The Future of Children* 7(1) 74–86.
- Hill, Heather, et al. 2002. "Transitional Jobs Programs: Stepping Stones to Unsubsidized Employment." Washington, DC: Mathematica Policy Research.
- Holzer, Harry. 2000. "Racial Differences in Labor Market Outcomes Among Men." In *America Becoming: Racial Trends and their Consequences*, edited by N. Smelser et al. Washington, DC: National Academy Press.
- Holzer, Harry, Richard Block, Marcus Cheatham, and Jack Knott. 1993. "Are Training Subsidies for Firms Effective? The Michigan Experience." *Industrial and Labor Relations Review* 46: 625–636.
- Holzer, Harry, and Robert Lalonde. 2000. "Job Stability and Change among Less-Educated Young Workers." In *Finding Jobs, Work and Welfare Reform*, edited by D. Card and R. Blank. New York: Russell Sage Foundation.
- Holzer, Harry, Steven Raphael, and Michael Stoll. 2004. "Employer Demand for Ex-Offenders: New Evidence from Los Angeles." Department of Public Policy, UCLA, mimeo.
- Holzer, Harry, and Jess Reaser. 1999. "Firm-Level Training for Newly Hired Workers: Its Determinants and Effects." *Research in Labor Economics* 18: 377–402.
- Holzer, Harry, Michael Stoll, and Doug Wissoker. 2004. "Job Performance and Retention among Welfare Recipients." *Social Service Review* 78: 343–369.
- Ionnides, Yannis, and Linda Datcher Loury. 2004. "Job Information Networks, Neighborhood Effects, and Inequality." *Journal of Economic Literature* 42: 1056–1093.
- Kane, Thomas, and Cecelia Rouse. 1999. "The Community College: Educating Students at the Margin Between College and Work." *Journal of Economic Perspectives* 13: 63–84.
- Kletzer, Lori, 1998. "Job Displacement." *Journal of Economic Perspectives* 12: 115–136.
- Lalonde, Robert. 1995. "The Promise of Public Sector Training Programs." *Journal of Economic Perspectives* 9: 149–168.
- Lane, Julia, Kelly Mikelson, Pat Sharkey, and Doug Wissoker. 2003. "Pathways to Work for Low-Income Workers: The Effect of Work in the Temporary Help Industry." *Journal of Policy Analysis and Management* 22: 581–598.
- Leibowitz, Marty and Judith Taylor. 2004. "Breaking Through: Helping Low-Skilled Adults Enter and Success in College and Careers." Boston, MA: Jobs for the Future.
- Leigh, Duane and Andrew Gill. 1997. "Labor Market Returns to Community College: Evidence from Returning Adults." *Journal of Human Resources* 32: 334–353.
- Lerman, Robert. 2002. "Helping Out of School Youth Attain Labor Market Success: What We Know and How To Learn More." Washington, DC: Urban Institute.

- Loewenstein, George, and James Spletzer. 1999. "General and Specific Training: Evidence and Implications." *Journal of Human Resources* 34: 710–733.
- Loprest, Pamela. 2002. "Who Returns to Welfare?" Policy Brief, Assessing the New Federalism, Urban Institute, Washington, DC.
- Lynch, Lisa. 1992. "Private Sector Training and the Training of Young Workers." *American Economic Review* 82: 299–312.
- Madrian, Brigitte. 1994. "Employer-Based Health Insurance and Job Mobility: Is There Evidence of Job Lock?" *Quarterly Journal of Economics* 109: 27–54.
- Martinson, Karin, and Julie Strawn. 2003. "Built to Last: Why Skills Matter for Long-Term Success in Welfare Reform." Washington, DC: Center for Law and Social Policy.
- Meyer, Bruce, and Daniel Rosenbaum. 2001. "Making Single Mothers Work: Recent Tax and Welfare Policy and its Effects." *Quarterly Journal of Economics* 116: 1063–1113.
- Meyer, Robert, and David Wise. 1982. "High School Preparation and Early Labor Force Experience." In *The Youth Labor Market Problem*, edited by R. Freeman and D. Wise. Chicago: University of Chicago Press.
- Mathur, Anita, et al. 2004. "From Jobs to Careers: How California Community College Credentials Pay Off for Welfare Participants." Washington, DC: Center for Law and Social Policy.
- Michalopoulos, Charles, and Gordon Berlin. 2001. "Financial Incentives for Low-Wageworkers." In *The New World of Welfare*, edited by R. Blank and R. Haskins. Washington, DC: Brookings Institution.
- Miller, Cynthia. 2005. "Stability and Change in Child Care and Employment: Evidence from Three States." Next Generation Working Paper No. 17. New York: MDRC.
- Miller, Cynthia, et al. 2003. "Working with Disadvantaged Youth: Thirty-Month Findings from the Evaluation of the Center for Employment Training Replication Sites." New York: MDRC.
- Moore, Richard, et al. 2003. "Training That Works: Lessons from California's Employment Training Panel Program." Kalamazoo MI: Upjohn Institute for Employment Research.
- Murnane, Richard, John Tyler, and John Willett. 1999. "Who Benefits from Obtaining a GED?" National Bureau of Economic Research, Working Paper No. 7172, Cambridge, MA.
- Orr, Larry, et al. 1996. *Does Training for the Disadvantaged Work? Evidence from the National JTPA Study*. Washington, DC: Urban Institute.
- Pager, Devah. 2003. "The Mark of a Criminal Record." *American Journal of Sociology* 108: 937–975.
- Pauly, Edward. 1995. "Adult Education for People on AFDC: A Synthesis of the Research." Washington, DC: U.S. Department of Health and Human Services, and U.S. Department of Education.
- Pindus, Nancy, et al. 2004. "Evaluation of the Sectoral Employment Demonstration Program." Washington, DC: Urban Institute.

- Purnell, Rogear, and Susan Blank. 2004. "Support Success: Services that Help Low-Income Students Succeed in Community College." New York: MDRC.
- Rangarajan, Anu. 1998. *Keeping Welfare Recipients Employed: A Guide for States Designing Job Retention Services*. Princeton, NJ: Mathematica Policy Research.
- Regional Technology Strategies, Inc. 1999. "A Comprehensive Look at State-Funded, Employer-Focused Job Training Programs." Washington, DC: National Governors Association.
- Ross Phillips, Katherin. 2004. "State Policies that Affect Working Families." Washington, DC: Urban Institute.
- Royalty, Ann. 1998. "Job-to-Job and Job-to-Nonemployment Turnover by Gender and Education Level." *Journal of Labor Economics* 16: 392–443.
- Schochet, Peter, and Anu Rangarajan. 2004. "Characteristics and Experiences of Low-Wage Workers in the Mid-to-Late 1990's." Princeton, NJ: Mathematica Policy Research.
- Strawn, Julie, and Karin Martinson. 2000. "Steady Work and Better Jobs: How to Help Low-Income Parents Sustain Employment and Advance in the Workforce" New York: MDRC.
- Uggen, Christopher. 2002. "Work as a Turning Point in the Life Course of Criminals: A Duration Model of Age, Employment, and Recidivism." *American Sociological Review* 65: 529–546.
- Wood, Robert, and Diane Paulsell. 2000. "Promoting Employment Retention among TANF Recipients: Lessons from the GAPS Initiative." Princeton, NJ: Mathematica Policy Research.
- Zedlewski, Sheila, and Pamela Loprest. 2001. "Will TANF Work for the Most Disadvantaged Families?" In *The New World of Welfare*, edited by R. Blank and R. Haskins. Washington, DC: Brookings Institution.