



# TRANSFORMING U.S. WORKFORCE DEVELOPMENT POLICIES FOR THE 21st CENTURY

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# **Transforming U.S. Workforce Development Policies for the 21st Century**

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## **Part 3**

# **Building Evidence-Based Policy and Practice**

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## **Improving the Effectiveness of Education and Training Programs for Low-Income Individuals**

### **Building Knowledge from Three Decades of Rigorous Experiments**

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While many low-income individuals have jobs—or eventually find them after periods of unemployment—many do not consistently earn wages that will foster upward mobility. To address this, a number of initiatives have aimed to help low-wage workers acquire “better” jobs, stay employed, and advance in the labor market. This chapter reviews a large body of rigorous evidence, accumulated over the past 30 years, on the effectiveness of dozens of different types of human capital development programs that had these goals and targeted public assistance recipients and other low-wage workers. It shows how knowledge gained from each set of multisite randomized control trials (RCTs) led to the development and testing of a subsequent results-based “next generation” of programs. The chapter explains how this progressive evidence-development process has led to a current focus on rigorously examining the effectiveness of programs emphasizing several approaches: the alignment of services with employer demand, longer-term advancement opportunities (rather than a focus on simply finding a job), and the provision of training that is tailored to the needs of particular industry sectors, in terms of both hard skills (such as how to operate certain machinery) and soft skills (such as how to adjust to the “culture” of employment in that sector).

The studies drawn upon in this chapter all used random assignment research designs (also called RCTs or experimental designs), which allow the effects of program strategies to be disentangled from the effects of other factors, such as participants' characteristics.<sup>1</sup> In this type of rigorous design, individuals who meet programs' eligibility requirements are randomly assigned to either a program group or a control group. Those in the program group are eligible for the new initiative, and those in the control group are not. Individuals in both groups are followed, and information is collected on their employment and other outcomes of interest. Random assignment eliminates systematic differences between the research groups in individuals' characteristics, measured or unmeasured (such as motivation). Thus, any statistically significant differences between the groups that emerge after random assignment—for example, in employment rates or average earnings—can be attributed to the initiatives under study.

Following an initial discussion of some broad economic trends, the next section of the chapter reviews a set of studies that first tested the effectiveness of requiring welfare recipients (recipients of Aid to Families with Dependent Children [AFDC] prior to 1996, and recipients of Temporary Assistance for Needy Families [TANF] post-1996) to engage in job search assistance, basic education, or training as a condition of receiving welfare benefits, and then tested the relative effectiveness of requiring participation in specific program components. The results of these early studies led to the testing of programs that would help people work more stably and advance in their jobs, and subsequently to examining the effects of programs that focused more on job training. The evaluation results are discussed in the next two sections. At the same time, important studies were conducted of programs using another approach—a “sectoral” strategy, the results of which are examined next. Findings from all of these rigorous studies have led to a current research focus on a hybrid program, described in detail in the following section. The final section of the chapter provides some concluding thoughts about the value of building research evidence in a systematic fashion and possible future directions.<sup>2</sup>

## THE ECONOMIC PROBLEM

Broad economic trends have reduced the availability of high-paying jobs for people who do not have a college education. Wages at the bottom of the labor market have been stagnant and declining (in real terms) due to numerous factors, including the decline of unions, changes in labor norms, increased competition, and globalization (Howell 1997). Individuals with no more than a high school education have seen their wages remain flat in real terms for decades, and their employment is often unsteady (Mishel, Bernstein, and Shierholz 2009). These trends have implications for a broad swath of the U.S. labor market. Considering all workers today, one out of four earns less than \$10 per hour (Bureau of Labor Statistics 2013; National Employment Law Project 2012). While some of these low-wage workers are teenagers, they are increasingly older workers with more education (Schmitt and Jones 2012). Moreover, the situation is particularly dire for low-wage, low-income workers with children: Only a third of them have more than a high school diploma and another third are high school dropouts (Acs and Nichols 2007).

The labor market has also restructured in fundamental ways. First, there is a proliferation of low-skill, low-wage service jobs that are often inadequate to help individuals escape poverty. Many of these jobs have little prospect for advancement, so the returns to experience can be low. Therefore, for many workers, the path to higher earnings is to work at jobs with higher skill requirements. However, middle-skill jobs that pay more are becoming harder to get. Due in part to automation, the growth rate has slowed in middle-skill job categories that employed large numbers of American workers in the early 1980s, such as “production, craft, and repair” and “operators, fabricators, and laborers.” While there is substantial debate over whether middle-skill jobs are truly disappearing or instead are largely shifting to different industries and occupation types, there is a consensus that the skill requirements of jobs are increasing (Autor 2010). More and more jobs require specialized skills and the performance of nonroutine tasks (Holzer 2010). Because of these shifts, it is becoming more difficult for workers with only a high school diploma, and particularly for those who do not even have this

credential, to access jobs that can help pull them out of poverty (Carnevale, Smith, and Strohl 2010).

In addition, there is evidence that employers in some industries are having trouble finding qualified applicants for some jobs (Morrison et al. 2011). Surveys show that employers feel the K–12 education system is not sufficiently equipping students with the range of skills needed in the workplace (Peter D. Hart Research Associates/Public Opinion Strategies 2005). Employers also appear less willing than in the past to absorb the training costs of providing workers with needed skills, particularly when they are considering hiring new employees (Hilliard 2013), possibly out of a concern that they may lose their investment when workers leave (Cappelli 2012). On the supply side, surveys reveal that, compared with employers, low-wage workers are less confident in the utility of training and education to help them advance in their careers, and many feel that their jobs have little potential for advancement. Workers also often lack awareness about training opportunities, and take-up rates of both employer- and government-sponsored training programs are low (Tompson et al. 2013). Finally, the availability of government funding for training through the Workforce Investment Act (WIA), as one example, has declined nearly 60 percent from 2000 to 2010, at a time when unemployment rates increased dramatically (Hilliard 2013). More recently, funding for the seven largest federal employment and training programs dropped 35 percent from fiscal year 2009 to 2013 (Center for Law and Social Policy 2014).

The result of these trends—increased skill requirements, employer reluctance to bear training costs, low levels of human capital, diminished government funding for training, and workers' doubts about the effectiveness of training—points toward a possible skills mismatch, in which the skills workers have do not match the skills needed by employers (Osterman and Weaver 2014). Whether or not this skills mismatch is as severe as is sometimes claimed, it is clear that workers who lack postsecondary education or training have more difficulty obtaining jobs that offer higher wages. As a result, programs that train individuals in areas that match the skills demanded by employers can be highly efficient, since they potentially benefit both workers and employers with minimal displacement.<sup>3</sup>

The lingering effects of the Great Recession are also noteworthy. In recent years, the labor market has been weak and slowly recov-

ering, a situation in which even relatively experienced and skilled workers have struggled to find work (Kolesnikova and Liu 2011).<sup>4</sup> Recent studies indicate that employers have responded to this increased supply of unemployed workers by being more selective, particularly about recent work experience. Those who have been out of the labor market for six months or longer are much less likely to receive calls for job interviews—even when they have extensive relevant experience (Kroft, Lange, and Notewidige 2012). This situation presents a special challenge for training programs that seek to place such individuals into the labor market now.

## **THE EFFECTIVENESS OF ALTERNATIVE WELFARE-TO-WORK MODELS**

Rigorous studies in the 1980s and 1990s provided the first seeds of evidence—and subsequent modification—that led to the next-generation demand-driven training model described later in this chapter. The studied programs were embedded in public benefits systems, rather than the unemployment system. Therefore, program participants were generally parents, often single parents, and usually female.

The programs studied during these two decades embodied efforts to assist applicants and recipients of AFDC into employment. The programs thus reflected the ebbs and flows in the welfare system's shifting emphases on education, training, and/or job placement alone as the best means for helping move individuals from welfare to work.

Multistate studies in the 1980s, conducted as part of the Demonstration of State Work/Welfare Initiatives, indicated that programs requiring individuals to look for jobs as a condition of receiving welfare benefits sped up the entry of individuals into the labor market, compared to imposing no requirement at all (Gueron and Pauly 1991).<sup>5</sup> These were low-cost interventions that also were found to provide a positive return on the government's investment. However, their positive effects were limited: Many people helped into work had difficulty staying employed, and the jobs they found were usually low paying. As a result, the programs did not improve welfare recipients' chances of escaping poverty.



Seeking to do better, policymakers and program operators in the late 1980s and early 1990s began to focus on the possible value of providing education and training in welfare-to-work programs. Two major multisite RCTs were subsequently launched to assess the effects of including these types of emphases in models. The first, launched in 1988, evaluated California's statewide Greater Avenues for Independence (GAIN) program, which required people to participate in a range of services, starting with education (provided in a regular classroom setting) for those who scored poorly on a literacy test, lacked a high school diploma or General Educational Development (GED), or were not proficient in English. Others received job search training and other services. The model designers hypothesized that this approach would produce better results than the lower-cost, job-search-focused approach of the earlier programs. GAIN's effects on employment and earnings were positive, in some respects more so than the earlier, more limited models, but impacts on increasing income over a five-year follow-up period were small (Freedman et al. 1996).

A second major multisite study—the National Evaluation of Welfare-to-Work Strategies (NEWS)—set out to test, beginning in 1989, “What works best?” Most significantly, this study directly compared mandatory job-search-first and mandatory education-or-training-first programs in the same sites (using, as is the case for all studies cited in this chapter, RCTs). These “head to head” tests showed that both program approaches increased employment and earnings over a five-year follow-up period, compared with having no program at all. But the job-search-first approach (often called “work first” programs) got people into jobs sooner and, while people in the education-or-training-first programs eventually caught up by the fifth follow-up year, they were not more likely to get into “good” jobs as of the five-year follow-up point and, as many as 15 years later, they did not have higher earnings growth (Hamilton 2012). An indirect comparison, however, of the above two types of programs with a third type—one where some people were urged to get a job quickly and others were initially required to enroll in work-focused short-term education or training—showed that the third type (a mixed model) had the best five-year results. Nevertheless, while all of these strategies increased people's earnings within the first few years of follow-up, none produced increases in earnings that were long lasting (effects generally faded by the end of the fifth year of

follow-up). And, while a number of these programs did allow people to participate in occupational skills training, *increases* in attendance in skills-building classes (comparing program group activity to control group activity) were primarily in the realm of basic education and not in the realm of occupational skills training, since participation rates in occupational skills training were often almost as high among control group members as among people in the program. As a result, the GAIN and NEWS studies (along with others conducted at the time) pointed to a role that occupational skills training might be able to play. But it was also apparent that knowledge was lacking regarding the types of skills-building activities that might be best and the ways in which skills building could be most beneficially structured, targeted, and encouraged. Finally, additional insight into a broader range of skills-building activities came from the Job Training Partnership Act (JTPA) study described in Box 18.1.

Notably, while the studies described in this section yielded substantial knowledge about how to help low-income individuals prepare for and find jobs, many participants in the programs that successfully boosted employment over a five-year follow-up period still ended up in unstable, low-paying jobs. Thus, the research also suggested a need to focus on ways to effectively increase employment stability and wage progression.

## **APPROACHES TO EMPLOYMENT RETENTION AND ADVANCEMENT: THE PESD AND ERA PROJECTS**

By the mid- to late 1990s, the federal government and states focused squarely on the problem of employment retention and advancement. An initial multisite RCT, the Postemployment Services Demonstration (PESD), operated in the mid-1990s. It examined the effectiveness of offering services such as counseling and support, frequent and flexible payments for work-related expenses, and other services to newly employed welfare recipients (Rangarajan and Novak 1999). The programs studied in the PESD, however, had little effect on employment or earnings.

**Box 18.1 A Concurrent Evaluation: The National JTPA Study**

Around the same time that the GAIN and NEWWS studies were examining the benefits of basic education and other types of services, another evaluation attempted to focus more squarely on the benefits of vocational training. The National JTPA Study measured the earnings and employment effects of several education and training services funded under Title II-A of the JTPA of 1982. The study attempted to learn which types of training and services were most effective by evaluating three individual service strategies: 1) classroom training in occupational skills, 2) on-the-job training, and 3) other services funded through JTPA. Study participants were randomly assigned after being recommended for one of these three strategies, allowing researchers to measure effects relative to a control group within each strategy. The study design, however, did not allow a direct comparison of one service strategy to another. Overall, the results indicated that adults in the evaluation experienced modest earnings gains throughout the 30-month follow-up period, with more pronounced effects seen for women than men, and substantial variability by site. For adult women, both “other” services and on-the-job training produced earnings impacts. For adult men, on-the-job training appeared to work best, but no statistically significant impacts by service strategy were found (Bloom et al. 1997). Despite these somewhat positive 30-month findings, effects on earnings had faded for both adult women and men by follow-up year five (U.S. General Accounting Office 1996). The JTPA results showed that training could work, in some places, using some strategies, and for some populations, but they also revealed that training programs were by no means a sure investment and had to be carefully designed, a theme that would reemerge several times in the years that followed (D’Amico 2006).

The next set of RCTs exploring this issue, operated in the late 1990s to mid-2000s, examined a wide variety of retention and advancement strategies, reflecting the paucity of positive results in the past. These studies, part of the Employment Retention and Advancement (ERA) project, examined programs different from the ones studied under the PESD: ERA programs, compared with the PESD ones, had

greater customization of services, worked with individuals who were not employed, had more services and additional features, had greater diversity of primary service providers, and had more variation in service delivery methods (Hendra et al. 2010). ERA investigated programs that served populations at risk of needing to access welfare benefits as well as individuals already receiving them. The strategies studied under ERA, however, did not attempt to address labor market, or demand-side, issues. Rather, they all tried to address supply-side, or “worker-based,” obstacles to economic success.

The results of the ERA trials highlighted the difficulty of achieving upward mobility through simple strategic placement of people into jobs and generic on-the-job coaching alone. Of the 12 programs studied in the ERA project (those that did not target “harder to employ” enrollees, such as individuals with substance abuse issues), only 3 were found to be effective at increasing earnings for participants. The 9 unsuccessful programs offered guidance and advice after people found jobs (i.e., post-employment), but little else. All 12 programs were built upon a variety of hypotheses about what might be advantageous, for example, maintaining small caseloads; offering services at individuals’ workplaces; collaborating between welfare, WIA, and community college staff to offer services; and continuing counseling relationships from pre- to post job placement. None of these features produced sustained positive impacts on earnings, in and of themselves. (While the counseling and coaching produced a low yield on their own, researchers concluded that it was possible that these services could be very valuable when combined with other, more concrete services.) These findings suggested that more needed to be done than simply helping participants navigate the labor market better (Hendra et al. 2010).

Lessons from the three ERA tests that *did* produce positive effects also provided ideas for ways programs could move forward. A studied program in Texas, for example, provided former welfare recipients with wage supplements of \$200 per month for working full time. The supplement provided a strong incentive to work and also gave participants some extra cash to better handle work-related financial issues, such as emergency car repairs. When combined with high-quality post-employment services (as was the case in one Texas site), the program produced long-term effects on earnings and employment that were sustained through the fourth year of follow-up, the last year when data

were available. The Texas findings were consistent with those found for many other wage supplement programs (Martinson and Hamilton 2011). One implication of these results is that when effective take-home pay is higher, participants may work more stably. However, apart from using wage supplements, few job placement programs have been able to increase participants' wage rates.

An ERA test in Chicago also suggested ideas to pursue. In this studied program, a for-profit employer intermediary provided job matching services, which enabled participants to move from very low-paying informal jobs to jobs in the higher-paying security and health care sectors. The Chicago results suggested that organizations that have close relationships with local employers in high-growth sectors can foster positive effects, even for program participants already employed. These findings also provided experimental evidence that proactive job change—taking the initiative to move from one employer to another, prompted by a desire for higher wages and/or a more suitable work arrangement and not by a negative event—can increase earnings.

Finally, positive effects in an ERA test of a program in Riverside, California, suggested the worth of providing assistance to rapidly reemploy individuals who lose their jobs. These findings suggested that it might be more effective to focus on helping people to quickly replace lost employment, that is, assist people to retain overall employment, as opposed to concentrating on helping people retain particular jobs.<sup>6</sup>

The ERA project also provided important insight into employment dynamics. Analyses of the ERA data set revealed that employment spells for low-income populations are highly unstable. Importantly, there is negative duration dependence of spells, meaning that the probability of job loss is highest in the period soon after a job start. Intensive intervention during this critical period thus could be cost effective (Dorsett et al. 2013). While rapid intervention seems critical here, other analyses pointed to the need to provide long-run follow-up as well, as rates of job loss stay high well past the six-month period that most performance measures capture (Riccio et al. 2008). The ERA results also implied that strategies should focus on *employment* stability rather than *job* stability, that is, on developing multiple job placements over an extended time frame as opposed to solely on the initial job placement. Finally, the analyses showed that proactive job change was associated with advancement among low-wage workers, particularly among

those who held jobs with smaller employers and had little prospect for advancement (Miller, Deitch, and Hill 2009).<sup>7</sup>

### **A REFOCUS ON VOCATIONAL TRAINING AND SKILLS: THE UK ERA AND WASC STUDIES**

As results from the PESD and ERA evaluations unfolded, some programs moved to incorporate more job training, acknowledging that some kind of vocational skills building was needed in order to increase wages for low-wage workers. One initiative that attempted this was studied as part of the United Kingdom's Employment Retention and Advancement project (UK ERA). This UK program was similar in many ways to the Texas program studied within the United States' ERA project, but it added tuition assistance while individuals remain engaged in training and financial incentives for training completion.

The UK ERA results supported a long-standing lesson in the field of employment and training: training does not work if it is not aligned with employer demand.<sup>8</sup> The UK ERA program boosted training engagement, but labor market benefits attributable to training were not found, suggesting that there was a mismatch between the training undertaken and the labor market demand for individuals with that training (Hendra et al. 2011).<sup>9</sup> The leading explanation for this result related to the program staff's capacity. The UK ERA advisory staff functioned as employment "generalists"—they offered participants general advice and guidance on adapting to work, encouraged them to consider seeking full-time work, helped them address issues of balancing work and family life, advised them on seeking promotions and finding better jobs, and urged them to enroll in training courses in whatever areas interested them. However, UK ERA advisory staff did not have in-depth knowledge of particular occupations or industries or expertise on the career ladders and training requirements for jobs in those areas. Nor did they steer participants assertively toward particular occupations known to offer real advancement opportunities. They were also not positioned to connect participants who had trained in particular occupational areas with relevant employers who were hiring people with the new skills those participants had acquired. These limitations likely undermined

the benefits of the extra participation in training that UK ERA caused. The findings point toward providing career advice that is sector-specific and more narrowly focused on opportunities available in the local labor market.

A subsequent test of an approach with a more deliberate demand-driven focus occurred in the late 2000s, in the Work Advancement and Support Center (WASC) Demonstration. The programs examined in WASC aimed to increase the incomes of low-wage workers by stabilizing employment, building skills, increasing earnings, and easing access to work supports. One of the central hypotheses of WASC was that providing training through WIA One-Stops would result in better alignment between training and work. Two of the WASC programs increased (relative to control groups) participation in education and training and also increased earnings in the third follow-up year (Miller et al. 2012). In one program, these effects faded somewhat in the subsequent follow-up year; in the other, longer-term follow-up was not available. In both programs, the level of staff capacity to provide employer-informed advice was lower than anticipated. Still, because funding for training was mainly through WIA, there were conditions in place to try to assure that training was in high-demand fields. In particular, in one of the programs, many of the training vouchers were used to pay for training in the rapidly growing health care field. These results suggested the promise of focusing training in high-demand areas, a central aspect of the sector-based programs discussed in the next section.<sup>10</sup>

## **PROMISING EVIDENCE FROM SECTOR INITIATIVES: THE SECTORAL EMPLOYMENT IMPACT STUDY**

The idea that increases in skills lead to increases in earnings is one of the most established ideas in labor economics (Mincer 1974). But many programs for low-income individuals have been designed with an apparent optimism that any kinds of skill increases will reliably lead to earnings increases, a view that does not fully consider local labor market demand. In particular, the capacity of most social services programs to work effectively with employers and properly read the labor market is an open question.

“Sector strategies” approaches in workforce development programs, pioneered by community-based organizations across the United States beginning in the late 1980s, attempt to keep local labor markets in focus (Magnat 2007). Although programs employing sector strategies vary widely, the Aspen Workforce Strategies Institute defines a sector-based strategy for workforce development as one that

- targets a specific industry or cluster of organizations;
- intervenes through a credible organization, or set of organizations, crafting workforce solutions tailored to that industry and its region;
- supports workers in improving their range of employment-related skills;
- meets the needs of employers; and
- creates lasting change in the labor market system to the benefit of both workers and employers (Conway 2007).

Importantly, sector-based strategies go well beyond simply specializing in one area of training. By Aspen’s widely accepted definition, a training provider that trains in a specific field, but does not have strong relationships with employers and/or industry associations in that field, would not be considered a sector-based provider. To qualify as a sector-based program, an initiative must bring together multiple employers in a given field to collaborate on developing a qualified workforce (Woolsey and Groves 2013).

While nonexperimental work by the Aspen Institute (Zandniapour and Conway 2002) and others (Henderson, MacAllum, and Karakus 2010) have produced some encouraging evidence on the benefits of the sector-based approach, the most powerful evidence to date comes from the Sectoral Employment Impact Study, an RCT of four sector-focused training programs conducted by Public/Private Ventures (P/PV) (Maguire et al. 2010). The study finds that the programs, targeted to low-income workers and job seekers, increased earnings, employment, job stability, and access to benefits for participants over the two-year period for which follow-up was available. Participants’ earnings over two years were \$4,500 (or 18 percent) higher than earnings for the control group. Earnings in the year after training were 29 percent higher than the control group average. In addition, there was evidence



of increases in wage rates, which rarely had been found in prior RCTs. The effects of prior programs were generally much more modest than these, which led to enthusiasm about sector-based programs (National Network of Sector Partners 2010) and several attempts to promote the strategy in Congress.<sup>11</sup>

Key elements of the sector-based programs studied by P/PV included the maturity of the service providers, their strong relationships with local employers, the provision of job readiness training in addition to occupational skills training, a stringent screening and intake process, and the provision of individualized services. Although the programs aimed to place workers in “good” jobs—jobs that are higher paying and more stable, there was no “advancement” component. Some of these same elements, however, particularly the small size of the programs, the heavily screened participants, and the experienced and community-rooted nature of the program providers, caused some policymakers to view the results as having limited generalizability. Therefore, while the P/PV results are encouraging, it is critical to test sector-based programs with a more representative set of providers, larger and more disadvantaged samples, and in a broader range of sectors and economic conditions (and some of that testing is under way, as discussed below).

Thus, a “next stage” of research—one part of which is described below—is attempting to understand sector-based programs better, confirm whether they are effective, and determine how they perform at a larger scale and under different conditions, for example, when operated by a more typical range of providers, in weaker economic demand conditions, and for a different sample of workers. Longer-term follow-up is also investigating whether participants in sector-based programs stay in the sector in which they were trained and whether they are able to advance over time, beyond their initial placement. Finally, this next stage of research will consider whether it appears possible to embed sector-based approaches in national training systems and community colleges without losing the local/focal emphasis that is so critical to the strategy.

## **WORKADVANCE: A “CURRENT GENERATION” MODEL INFLUENCED BY PRIOR RESEARCH FINDINGS**

One of the consequences of the above research findings and open questions has been the development of the WorkAdvance model, a sector-based training program. First and foremost, the model reflects a belief, informed by several studies mentioned above, that only through deep knowledge of and relationships with employers in a particular sector can staff in programs serving low-income individuals provide the required level of specialized guidance needed for participants to succeed in their jobs and advance in their careers while also meeting employers' demand for specific skills. The model also reflects a reading of the evidence that, while required job search and required attendance at classes in basic reading and math skills instruction can produce earnings gains, more is needed to truly produce long-term impacts on employment advancement. Finally, the model is an effort to address matching problems in the labor market, in which many individuals are having trouble meeting the skill and experience requirements of middle-skill jobs, and employers are having trouble filling those positions with qualified workers.

A fundamental focus on employer input and long-term career advancement is reflected in each of the five WorkAdvance program elements:

- 1) Intensive screening of program applicants prior to enrollment—a practice not common in training programs offered to low-income individuals—is intended to assure that program providers select participants who are appropriate for the sector and the particular training programs offered. From one perspective, the brokering and screening role played by sector-based programs might seem duplicative of what happens in a normal, well-functioning labor market. These are tasks typically performed by employers, but disadvantaged workers often have difficulty competing for jobs with advancement potential. Sector-based programs can help workers who would ordinarily not make it through employer screening to obtain the hard and soft skills needed to gain access to better positions (after they receive training at the provider). Providers seek to

identify low-income applicants who have the ability to complete the program services and be attractive to employers, but who are not so qualified that they will likely find high-quality jobs in the sector on their own. This was identified as one of the key elements of success in the P/PV sector study.

- 2) Sector-focused *preemployment and career readiness services* include an orientation to the sector, career readiness training, individualized career coaching, and wrap-around services that sustain engagement and assist participants to complete their training and find employment.
- 3) Sector-specific *occupational skills training* seeks to impart skills and lead to credentials that substantially enhance workers' employment opportunities. Providers offer training only in particular sectors and for occupations that the providers, in ongoing consultation with employers, have identified as being in high demand with the potential for career advancement.<sup>12</sup>
- 4) Sector-specific *job development and placement* facilitate entry into positions for which the participants have been trained and for which there are genuine opportunities for continued skills development and career advancement. To ensure that job development and placement are linked with the occupational skills training, the providers' job developers (or "account managers") maintain strong relationships with employers who hire individuals with the kinds of skills the program has imparted.
- 5) Postemployment *retention and advancement services* assist participants to advance in and retain their jobs. Providers maintain close contact with workers and employers to assess performance, offer coaching to address any "life issues" that might arise for workers, help identify next-step job opportunities and skills training that could help participants move up career ladders over time, and help with rapid reemployment if workers lose their jobs.

The WorkAdvance model is currently being implemented via four programs, operated in three cities by four local organizations that focus on a range of sectors and bring differing backgrounds to the project. Sectors of focus include transportation, information technol-

ogy, environmental remediation and related occupations, health, and manufacturing.<sup>13</sup>

Reflecting a continuing need for clear evidence about the best ways to promote the upward mobility of low-income individuals, MDRC is evaluating the WorkAdvance model using an RCT. Through rigorous testing, the study will determine whether a strategy that integrates the most promising features of sector-based and retention/advancement strategies can produce larger and longer-lasting effects on employment, earnings, and career paths than either strategy might produce on its own. The RCT is following individuals who qualified for the WorkAdvance programs between mid-2011 and mid-2013. Program participants will receive program services for up to two years after enrollment.

The WorkAdvance demonstration seeks to assess whether providing sector-based training will lead to advancement by establishing a pipeline from training into work. Several pieces must fall into place for that to happen, however. First, the programs have to find the right participants, those who—*with the benefit of the training*—are within reach of the targeted jobs. Then, participants, many of whom are low-income and disadvantaged, have to finish training and earn a credential. At the same time, job developers have to build relationships with employers who will recognize the earned credentials and hire employees into jobs with future advancement opportunities. Once on the job, participants have to apply both their soft and hard skills training in order to excel in their jobs and pursue advancement opportunities. While the economic effects of the WorkAdvance programs will not be known until late 2015, the WorkAdvance implementation analysis is currently examining the extent to which all of these conditions for advancement are being put into place.

### **Finding the Right Participants**

As was the case with the P/PV Sectoral Employment Impact Study, marketing and outreach to potential WorkAdvance enrollees has required a substantial investment of time and resources in all four of the WorkAdvance programs. This is not surprising, since one of the key contributions of sector-based programs (from the perspectives of businesses) is to reduce screening and acquisition costs by identifying

job applicants who (with some training) are qualified for the positions that they are seeking to fill. On average, only one in five program applicants have been found to be eligible and qualified for WorkAdvance. Program providers are using both objective selection criteria (such as income guidelines and test scores) and subjective criteria (such as staff assessments of potential barriers to employment) to screen applicants.<sup>14</sup> Most commonly, however, individuals who do not eventually enroll in the program either withdraw on their own accord during the screening process or fail to achieve a required score on assessments of their academic level; the screening out of applicants as a result of staff discretion has been rare.

Reflecting the minimum level of education required in some of the targeted sectors, almost all applicants who have actually enrolled in WorkAdvance programs have at least a high school diploma or GED, and over half have at least some college education. Thus, the population being served in WorkAdvance, though still disadvantaged, is different from that served in many of the above-discussed studied programs. Among those training in the information technology sector, for example, less than 1 percent lack a high school diploma or GED. Almost all enrollees also have preenrollment work experience, although only one in five were working as of enrollment. At the same time, over a third of enrollees were unemployed for at least seven months prior to enrollment—a likely indication of the lingering (and damaging) effects of the Great Recession. Another possible barrier to finding work posttraining is enrollees' past involvement with the criminal justice system: One quarter of all enrollees have had a previous criminal conviction, and the rate is even higher (40 percent or above) among enrollees training in the transportation and manufacturing industries.

### **Implementation of Various Components of WorkAdvance**

As mentioned above, past research has suggested that programs need to address several issues in order to convert training into advancement. One concern is whether individual programs can handle all of these components (versus a networked approach where several programs coordinate). Thus far, the findings from the implementation analysis suggest that WorkAdvance program providers have been able to implement all of the major elements of the WorkAdvance model, includ-

ing preemployment and career readiness services, occupational skills training, job development and placement, and retention and advancement services, but the last-listed services have taken the most time to develop, particularly in a robust way, and are still being strengthened.

The preemployment coaching has sought to help enrollees set and follow through on career advancement goals, while the career readiness classes are teaching enrollees about their sector of focus and helping them acquire “soft skills.” The structure and manner of delivering these services differ across program providers, but the content is similar: introductions to the sector, advice on resumes and cover letters, job interview preparation, and development of individualized career plans. These services are demand driven: two of the programs use employer advisory groups to help develop the curricula for these classes, another program receives help from existing business intermediary groups, and the fourth program relies on input from individual employers to serve this function. In many cases, these employer partners come to the program offices to conduct mock job interviews, and they also host work-site visits to give program enrollees firsthand exposure to the type of environment in which they can expect to work.

In WorkAdvance, occupational skills training varies across providers and sectors in terms of its duration, whether it is on-site at the provider or contracted with an off-site provider, and the breadth of training offerings. Examples of occupations for which trainings are being provided include help desk technician, environmental remediation technician, pest control technician, aviation manufacturing assistant, computer numerical control operator, diesel maintenance technician, and patient care assistant. Depending on the material and certification requirements, training course duration ranges from two weeks (for example, for patient care assistant training) to eight months (for example, for diesel mechanic training). All programs offer training in cohorts, but the programs differ in terms of whether WorkAdvance enrollees are in training with or without non-WorkAdvance students. Combined with the career readiness classes, the skills training classes usually require full-time involvement, and training takes place during regular business hours or, in two of the programs, optionally during evenings. In previous programs, getting occupational training aligned with ever-changing employer demands has been a struggle. Thus far, the implementation research suggests that WorkAdvance providers have been responsive to

demand fluctuations and have adapted the training offerings as the local economy changes.

The Sectoral Employment Impact Study identified “brokering” on the part of job developers as a critical element of sectoral programs. For the most part, in WorkAdvance, job developers appear to have the understanding of local labor markets and of the specific needs of employers necessary in order to prepare enrollees for the best jobs in particular sectors that are available in the localities. The job developers have been able to maintain close relationships with employers and to provide program management with timely feedback on employer needs. Job developers use a mix of networking and cold calls to make initial contact with employers, pitching the value that WorkAdvance programs offer: prescreening of job applicants, career readiness training, and, in some cases, supplying job applicants who already have certifications that employers might otherwise have to arrange and pay for (such as Occupational Safety and Health Administration certification). This raises a potential concern that this type of intervention is simply subsidizing employers by enabling them to shed legitimate training costs. One possible justification for public or private investment in these services is that programs such as WorkAdvance provide disadvantaged workers with an opportunity to enter better-paying jobs than they typically have access to. By providing these individuals with assistance to obtain important certifications, the program makes them more marketable to employers. There are also benefits to employers and the local economy if these investments promote a better-trained workforce.

Most of the previous studies described above find that labor market programs often have short-term effects. The goal of postemployment services is to extend these effects into long-term career trajectories. This is currently the weakest link in the implementation of WorkAdvance. While postemployment services are being delivered, they are currently focused mostly on job retention (for example, addressing relationships with supervisors by coaching workers while they are encountering on-the-job conflicts or issues) and much less on advancement (for example, identifying each participant’s next career goals and establishing the steps the worker needs to take to reach those goals). To strengthen this component, the programs are currently focusing on the following: establishing an intentional follow-up plan to contact and communicate with enrollees at strategic points after they start employment, updat-

ing career plans periodically to focus on advancement, and maintaining regular contact with enrollees' employers.

### **Early Training Participation and Completion Rates**

In previous programs, getting participants to complete training and other services has been a struggle. Given all of the components of WorkAdvance, and the fact that participants are often in poverty and have little economic support, an open first-order question has been the extent to which participants will complete program services. Results at this point indicate that all of the WorkAdvance providers have been able to engage a substantial share of enrollees in program services, particularly in career readiness activities and occupational skills training: More than 93 percent of enrollees have participated in career readiness activities, and about 70 percent of enrollees have started occupational skills training—all within six months of enrolling. Dropout rates from the training programs have also been low: Only about one in eight of those who started training have dropped out within six months of program enrollment. These high rates may be attributable, at least in part, to the screening done at the beginning of the program.

Finally, and perhaps most critically, most enrollees who have completed training have obtained an industry-recognized credential. (Given the length of the training, statistics on six-month training completion rates are not reliable.) In three of the four programs, over 90 percent of individuals who completed the program have earned a license or certificate. In the fourth program, focused on the health and manufacturing sectors, about half of those who completed training have earned such credentials. Two of the programs have worked with local employers and/or training providers to abbreviate and adapt some formal certifications in the manufacturing sector that normally require years of training. These new credentials are unique to the local employers in the specified industries and have created a certified and viable way for program enrollees to enter that sector's workforce.

Variations in the WorkAdvance model have also suggested an early lesson, one that echoes some of the findings from earlier studies. Two of the WorkAdvance programs initially implemented the program model with two separate tracks: one track emphasized gaining skills first through training (similar to most other sector-based programs), and the



other sought to place people into jobs first. The placement-first track was intended to be less expensive than the training-first track, but one that would still impart skills, albeit through work experience and on-the-job training. However, both of these programs eventually shifted mostly to the training-first approach, since the job-placement-first track often resulted in participants' entering low-wage jobs that in practice did not lead to on-the-job acquisition of skills. These shifts were made before a robust set of postemployment services was in place, and it is possible that the placement-first track could have been more effective with the underpinning of those types of services.

## CONCLUSIONS AND FUTURE DIRECTIONS

As discussed in this chapter, evidence suggests that skills building can be a means of increasing earnings in the long run for disadvantaged workers, as long as it is well aligned with the needs of employers. Several generations of experiments have also made it clear, however, that there are limits as to what can be done on the worker side of the equation. Sector-based programs, in contrast to many programs from the past, are heavily demand-driven and bring workers and employers together in ways that solve local and regional economic challenges. The evidence suggests that future programs and evaluations thus should continue to include and examine this potentially promising demand-side focus.

WorkAdvance is not the only program under evaluation that is designed to use more of a demand-driven skills acquisition approach as a means toward advancement for low-income individuals. Several programs in the Innovative Strategies for Increasing Self-Sufficiency demonstration use a broadly similar strategy (Martinson and Gardiner 2014).<sup>15</sup> In addition, evaluations are under way of some programs funded through Health Programs Opportunities Grants that also use a demand-driven training approach to help TANF recipients advance in the health care sector (Lower-Basch and Ridley 2013). Finally, some programs undergoing evaluation in the U.S. Department of Labor's Social Innovation Fund portfolio use a similar strategy.<sup>16</sup> The fact that so many agencies and foundations are operating or supporting pro-

grams that have evolved in this direction suggests that the interpretation of the evidence presented in this chapter reflects a commonly held view. Therefore, in coming years there should be much more evidence available on the reliability and scalability of this demand-driven skills-building approach. These projects have a strong potential to inform workforce policy.

Even if the results of these studies are positive, however, the difficulty of implementing successful sector-based interventions, coupled with the small size and specific focus of some of the models, raises questions about scalability. WorkAdvance in particular is a difficult model because individual providers have to implement several components on their own. An alternative approach, which might aid scalability, would be to have different organizations coordinate to implement different components of the model. For example, a key way to scale the model may be to take advantage of the ability of the community college system to provide some program components, as some of the WorkAdvance providers have done.

Another challenge with scaling this strategy is that sector-based programs are inherently small and local, owing to the specialization that is necessary to truly understand the high-demand niches of the local labor market and to match appropriate individuals to job openings. While programs may need to stay small to maintain this specialization, it is possible to view them as being part of broader sectoral systems (or “career pathways” systems). In some cities and some labor markets, sector-based programs have been embedded in much broader initiatives (which also take advantage of feeder systems from “bridge” programs to enable a broad segment of disadvantaged workers to enter the initiative). Project Quest (Osterman and Lautsch 1996), or the initiatives implemented by the Instituto del Progreso Latino in Chicago (Martinson and Gardiner 2014), are some programs that apply some of the sector-based strategies on a larger scale and/or for a more disadvantaged set of workers. So, while these programs can seem “boutique,” they can be parts of larger systems.

Future directions should explore incorporating the involvement of employers even more centrally into program operations and research. A recent study, for example, has shown the promise of paying employees more or providing better benefits (so-called high-road employment practices), not only for workers but also for the bottom lines of employ-

ers (Ton 2012). This is an example of work where employers are central to the intervention and the evaluation. While past experience has made it clear that it can be difficult to engage employers in programs and research (Schultz and Seith 2011), the results of recent studies have indicated that it is possible to work with employers quite directly to implement innovative advancement strategies and determine their effectiveness (SRDC 2013). One challenge of implementing advancement programs at employers, however, is that the goals of employers do not always align with the needs of employees. For example, in some settings an employer's goal may be retention, but the best way for employees to advance is to change employers (Miller, Martin, and Hamilton 2008). It can also be challenging to study programs within employers, particularly using random assignment designs, which might give one segment of employees an unfair advantage. Despite all of these challenges, it seems critical that future advancement programs work closely with employers, who ultimately have the resources and pathways in place to help provide for meaningful advancement in the labor market.

This chapter is an effort to demonstrate what has been learned from the rich, diverse, and many rigorous past studies that have tackled the long-standing problem of lack of upward mobility among disadvantaged workers. Though the context has changed, the studies provide several salient lessons that should inform future program designs and trials. This chapter has presented one reading of the body of evidence that has accumulated regarding the effectiveness of dozens of different types of human capital programs, and has tried to illustrate how the evidence and lessons have been used to develop a recent initiative, called WorkAdvance.

Therefore, to conclude, we would like to emphasize the need to systematically build evidence and draw upon it when designing new programs. The economic problems discussed in this chapter have evolved, but they are essentially old problems. Thus, the findings from well-designed evaluations, accumulated over time, can inform future policy designs. As an example, when one of the authors of this chapter was recently asked to help develop a new model that combines sector-based training with subsidized employment, it quickly became apparent that this was essentially the same model that had been rigorously researched (and found to be promising) in the 1980s Homemaker-Home Health Aide Demonstration (Bell, Burstein, and Orr 1987). Without closely

considering what we have learned in the past, we risk relearning old lessons and not realizing the vision of policy *evolution* put forth by Donald Campbell (1973) and other pioneers of the “experimenting society” approach to policy making.

## Notes

1. Many of the studies were also conducted by MDRC, the nonprofit, nonpartisan social policy research organization that employs the authors.
2. Some aspects of this chapter, particularly the description of the economic problem and the section on the WorkAdvance program, draw from an MDRC report on WorkAdvance (Tessler et al. 2014).
3. Displacement in employment programs occurs if programs have effects only by favoring some workers over others who would have gotten the job without the program. In a general equilibrium sense, there is no improvement. However, if programs help fill vacancies with better-trained employees, then there would be positive effects that go beyond simply switching workers in the employment queue.
4. It is also very important to recognize that the previous recovery was notable for the lack of job creation and earnings growth. The period up to 2007 was sometimes called the *jobless recovery*. Thus, low-wage workers have confronted an extended period of labor market stagnation.
5. See Gueron and Rolston (2013), which also discusses these early studies, but importantly, in addition, provides a comprehensive history of RCTs in the welfare reform field.
6. It also may be relevant that the program providers in this particular Riverside test were mostly well-rooted community-based organizations, whereas the program providers in several other tested ERA programs were local government offices.
7. This finding is also consistent with the earlier work of Holzer, Lane, and Vilhuber (2004).
8. For example, this was a central argument regarding the effectiveness of the Center for Employment and Training program in San Jose, California, which was evaluated as part of the JobStart evaluation (see Meléndez 1996).
9. The UK ERA program did have labor market effects, but the effects do not appear to be attributable to training. It is more likely that the effects were due to the combination of a wage supplement and retention and advancement services (similar to the ERA Texas program). For the long-term unemployed, the UK ERA program had long-term impacts on employment (similar to the effects found for the Corpus Christi, Texas, program).
10. Another finding from the WASC study was that increasing access to work supports (such as food stamps and child care subsidies) does not necessarily lead to advancement. Part of the theory of change in WASC was that by providing more access to work supports in the short-term, the program would give participants the

financial stability to help support longer-term labor market advancement. However, although the intervention increased work support take-up and earnings in some sites, no association was found between the two effects. Put differently, in some sites and for some subgroups, the intervention increased earnings, but these were not necessarily the same sites or subgroups in which work support take-up was increased.

11. The National Network of Sector Partners (2010) found that 47 percent of sector initiatives profiled were less than five years old. The Strengthening Employment Clusters to Organize Regional Success (SECTORS) Act, which proposed to amend WIA to include additional funding for sector initiatives, was introduced in Congress in 2008, 2009, 2011, and 2013 without ever moving out of committee (*SECTORS Act of 2013*). The Workforce Innovation and Opportunity Act was passed with bipartisan support in July 2014, reauthorizing WIA from 2015 to 2020. The bill promotes sector strategies, specifically requiring states to implement industry or sector partnerships and career pathways (*Workforce Innovation and Opportunity Act 2014*).
12. During the program design phase, providers were asked to provide career advancement “maps” that outlined the necessary steps for advancement in targeted occupations and to justify that targeted positions had a reasonable prospect for advancement. Providers were discouraged from placing participants in “dead-end” jobs. There was also a goal to place participants in “better” paying jobs (for this population, wages beyond \$12–15/hour are a reasonable goal, depending on the local labor market) and jobs that provided benefits such as health insurance. Some targeted jobs initially offered low pay, but were deemed to have strong advancement potential.
13. Some of these sectors overlap with ones in the programs studied in P/PV’s Sectoral Employment Impact Study. In the P/PV-studied programs, sectors included construction, manufacturing, health care, medical billing and accounting, and information technology.
14. For WorkAdvance, applicants needed to be adults who had a monthly family income below 200 percent of the federal poverty level and earned less than \$15 per hour at the time they entered the study.
15. This evaluation has been renamed “Pathways to Advance Career Education.”
16. See [http://www.doleta.gov/workforce\\_innovation/](http://www.doleta.gov/workforce_innovation/) (accessed October 9, 2014).

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