Workforce Training:
What Works? Who Benefits?

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In the United States each year, private employers spend an estimated $100 billion or more on employee training, easily dwarfing whatever public funds are expended in this area (Lerman, McKernan, & Riegg, 2001). Private individuals invest many billions more in their own college education and other forms of postsecondary training. If so much of training is privately chosen and financed, then what role should the public sector play?

This chapter begins by discussing the need for a public workforce system and the current state of federal funding for workforce training. Then I turn to evaluation evidence about promising programs and who benefits from them. I conclude with some thoughts on what a state workforce development system might look like.

What Role Should the Public Sector Play in Job Training and Education?

There are two main rationales for public financing of education and job training: (1) to help the private sector meet its labor market demand for skilled workers, and (2) to provide training for the disadvantaged who less able to access it. Each is considered in turn below:

**Meet labor market demand.** Employer “demand” for skills has risen, and the premium paid for those with these skills has increased as well. The “supply” of skilled workers has not grown fast enough to keep pace with growing labor market demand. While private labor markets generate incentives for employers and workers to invest in the education and training needed to meet such demand, a variety of market imperfections (like limited liquidity and imperfect capital markets as well as limited information) prevent them from fully doing so.

In certain sectors of the labor-market, including science/engineering or information technology, health and elder care, construction, and certain parts of skilled manufacturing, too little private education and training occurs, and employers are having difficulty finding skilled or semiskilled workers. The pending retirements of millions of baby boomers might make the search for workers in these sectors even more difficult. Worker shortages are expected in jobs requiring bachelor’s degrees or higher, but also in “middle skills”—jobs that require postsecondary education or training but less than a four-year college degree (Holzer & Lerman, 2007).

Indeed, many states now see workforce training as critical to their economic development efforts. Key industries will only locate and grow when they are confident that both kinds of skilled labor will be readily available to them when needed.
Access to training. Public investment may also be needed because disadvantaged youth and adults, like racial-ethnic minorities and the poor, get too little education and training in general. At a time when the gaps in earnings between more- and less-educated American workers have risen, disadvantaged workers have less access to employers that provide on-the-job training and promotion opportunities than more advantaged workers.

The disadvantaged have less access to higher education and training for a variety of reasons. Many lack the necessary basic skills, the information about what the labor market values, and the liquid assets to pay it (Bowen, Kurzweil and Tobin, 2004). For low-income parents—especially single parents—the financial and time pressures of breadwinning and childrearing make it difficult to remain in education or training programs for very long without additional supports. Their ability to get “good jobs” that provide on-the-job training with advancement prospects is also limited by barriers such as discrimination, inadequate transportation, limited child care, poor health, and fewer informal contacts and networks (Andersson, Holzer, and Lane, 2003); Employers distrust those with criminal records and are reluctant to invest in workers with poor basic skills and weak credentials (Carneiro & Heckman, 2003). And, even when jobs are obtained, high turnover often results from low wages and other problems that cause instability in the lives of poor workers. Indeed, this expected instability is another reason that employers are reluctant to invest in training the disadvantaged where and when they are hired.

A consensus has developed among economists and policy analysts that workforce skills play an increasingly important role in explaining the inability of the disadvantaged to advance in today’s changing labor market. Therefore, an effective public workforce system can help provide access to jobs so the disadvantaged have the opportunity to earn a better living. In Wisconsin, 83% of all public employment and training dollars come from the federal government (see Chapter 1). The current state of federal funding is the topic that I turn to next.

What is the Current State of Federal Funding for Employment and Training?

At the federal level, employment and training is underfunded, overstretched, and fragmented. Overall federal funding levels for employment and training programs at the Department of Labor peaked in 1979 at about $17 billion (current dollars). In the meantime, the economy has more than doubled in size, and the work force had grown by nearly half. Employer demands for skilled workers have also grown dramatically, and so has the disadvantage of having few skills. One might have expected the resources devoted to workforce training to have risen substantially. In reality, the opposite has occurred.

Federal workforce training is underfunded. Indeed, the Department of Labor has dropped to about $5 billion annually. This is a decline of over 70% since 1979, and a decline of over 90% relative to the size of the economy. In a $14 trillion economy, such a small sum cannot be expected to have much of an impact on the economy or on the employment prospects of disadvantaged workers.
Overall, there are 40 federal programs that provide funding for employment and training (U.S. GAO, 2003); however, total U.S. expenditures are the lowest of any industrial nation in the world (O’Leary, et al., 2004, Heckman, Lalonde, & Smith, 1999). Federal spending in several key areas such as career and technical education, one-stop centers, welfare-to-work programs, and so forth have also fallen over time in real terms (Spence & Kiel, 2003). One exception is Pell grants, which provided about $14 billion in 2008 for scholarship for college attendance among the poor, primarily at community colleges, and will provide more under expansions funded under the American Recovery and Reconstruction Act (ARRA) of 2009.

**Federal workforce training is overstretched.** Existing programs now fund a wider range of services for a broader set of participants than they used to. This means that, while all workforce funding is lower, the decline in spending on the disadvantaged, especially for direct employment or training, has been even greater.

**Federal workforce training is fragmented in several ways.** Federal expenditures on employment and training are scattered among many agencies with different agendas. The supports available to disadvantaged workers who need help are often lodged in “silos” that are disconnected from one another. For instance, workers visiting one-stop centers funded by the Department of Labor will likely have incomplete access to resources available for child care (from the Department of Health and Human Services), Pell grants (from the Department of Education), or employment tax credits (from the Department of the Treasury).

The delivery of workforce services is also fragmented geographically. Within any large metropolitan area, multiple local workforce boards (WIBs), at the county or municipal level, might be providing different services to their respective populations. What’s more, the capacity of one-stop centers to provide information and services about available jobs and training opportunities across these boundaries remain unclear. It makes little sense for workers in one part of the region to have no access to job training or employment options in another part. Yet it is hard to build regional entities given the different local jurisdictions in which schools and other institutions are located. Differences between state and local WIBs, especially over control of funds, can also limit the ability of states to fashion coherent workforce strategies.

Most important, the employers, service providers, and other key players at the local labor market level are often fragmented and fail to form a coherent workforce system (Osterman, 2007). Low-income workers are often disconnected from service providers, employers, and other available sources of support; they lack access to jobs and training providers, because of transportation difficulties, inadequate child care, or limited time and information.
What Are Some Promising Programs and Whom Do They Benefit?

The evidence on what works in employment and training programs is mixed (Heckman, Lalonde, & Smith, 1999; Holzer, 2007). In general, for adults, modest training and work experience programs can generate modest impacts that are cost-effective even though they do not dramatically improve the lives of the poor. A small number of more intensive efforts, like the National Supported Work program, have been quite effective for hard-to-serve women (and for somewhat older men).

One study of welfare recipients compared the effectiveness of two workforce approaches—“human capital” (training programs) versus “labor market attachment” (job first) strategies. Training programs were less effective than job experience, though impacts from both faded over time. However, in one site (Portland OR), large and lasting impacts were obtained using a combination based on both strategies. Participants were pressured to seek work and to search for higher-paying jobs, rather than taking the first job that came along. Case managers offered access to job training at community colleges for those that might benefit from it. Occupational training appears to be more effective than general adult education (Bos et al., 2001), and earnings supplements have proven beneficial.

The impacts of these programs on workers’ later earnings vary considerably by demographic group. Generally, more positive impacts are observed for adult women than men. Also impacts tend to be stronger for adults than for out-of-school youth. The impact of specific programs on specific groups are described below.

Programs for Disadvantaged Adults

One consistent finding is that training programs that lead to secondary or postsecondary credentials, along with work experience in key economic sectors, are effective for disadvantaged workers. More intensive efforts that emphasize work experience plus supports and services for the “hard to employ” also show positive results (Holzer, 2007).

Pell grants. Pell grants do expand access to (community) college for poor adults, who likely benefit when they can attend for at least a year and when they attain a certificate or degree (Lerman, 2007). The grants raise college attendance of poor adults, but not necessarily youth.

Work experience programs. Evaluations of specific programs have mixed results. Some programs have increased employment rates (e.g., the mandatory GAIN program in Riverside, CA; Riccio, et al., 1994) and fairly large impacts per dollar spent (the Saturation Work Initiative Model and Community Work Experience Program in San Diego; Lalonde, 2003). However, work experience programs with fewer supports and training services were less effective in generating lasting employment increases.

Job Training for the Disadvantaged. Some evaluations have demonstrated the cost effectiveness of training programs. The evaluation of the National Job Training Partnership Act in the 1990s showed a positive impact per dollar spent for disadvantaged
adults, although the total dollar impact on earnings was modest and faded with time. However, the returns per net dollar spent were quite impressive; even with the fading impacts, the program paid for itself over 5 years.

**Intensive Efforts for the Hard-to-Employ.** In the National Supported Work (NSW) demonstration, participants were given 12-18 months of paid work experience plus additional supports. This generated sizable returns per dollar spent for adult women (Lalonde, 2003), but not for adult men with criminal records and disadvantaged youth. Yet, when adult men with criminal records were divided by age, those in their late 20s and 30s did benefit from NSW, in terms of reduced incarceration over time.

**Promising newer approaches.** A new generation of programs for the working poor appears promising, but most have not been scaled up or rigorously evaluated. These approaches combine: 1) education and training that give workers a postsecondary credential; 2) direct ties to employers or industries that provide well-paying jobs in key sectors; and 3) a range of support and services such as child care and transportation during the training period and beyond. In addition, labor market “intermediaries” help ensure that workers are hired once trained, and also arrange for supportive services, such as child care and transportation, when needed (Holzer, 2007). The approaches that combine some or all of these elements include sectoral training, incumbent worker training, and the building of career ladders or career pathways.

**Sectoral programs.** Many new programs use a sectoral approach, in which workers receive education or training targeted toward local growing economic sectors, where labor demand is strong and well-paying jobs are available for those without four-year college degrees. Several studies claim that sectoral training raises the earnings of disadvantaged workers, but the evidence is mixed. Some well-known sectoral programs are the Quest program in San Antonio, the 1199C training for health care jobs in Philadelphia, the Extended Care Career Ladder Initiative in Massachusetts, and the Wisconsin Regional Training Partnership. Among sectoral programs, the Wisconsin Regional Training Partnership and the Center for Employment Training originating in San Jose, California, are perhaps the only two to be rigorously evaluated.

Wisconsin Regional Training Partnership (WRTP) is a non-profit association of businesses and unions that has served employers, employees, job seekers, and unions in the Milwaukee area since 1996. WRTP works in several industries including manufacturing, health care, construction, and hospitality. Firms that join WRTP agree to develop education and training programs on-site or at community colleges, and provide a payroll contribution. In return, they receive technical assistance to strengthen technology and workplace practices, improve the skills of incumbent workers, and recruit and train new workers. Nearly 100 employers with about 60,000 workers participate. In a rigorous experimental study of three sectoral programs including WRTP, participants in sector-focused training earned more, worked more, had higher hourly wages, and were more likely to work in jobs with benefits (Maguire, Freely, Clymer, & Conway, 2009).
In the Center for Employment Training, the services were closely aligned with the needs of local employers, with whom the training providers were in close touch (Melendez, 1996). An evaluation of the original program yielded strong evidence of positive impact and program cost-effectiveness, but the national replication effort did not (Miller et al., 2005). Promising outcomes from less rigorous evaluations in Project Quest and other sectoral programs have also been observed.

**Career ladders or career pathways.** Career ladder or career pathway initiatives help train workers through a progression of jobs within one or more companies that ultimately provide workers with credentials that ensure higher earnings. Citywide or statewide career pathway programs in various industries can be found in Arkansas, Kentucky, and Portland, Oregon, which combine community college education with other supports to prepare the poor for jobs in key industries (Holzer, 2007).

**Incumbent worker programs.** Incumbent worker training targets entry-level workers in existing jobs and supports efforts to train them for higher-level jobs in the same company. Major incumbent worker training programs have been developed in California, New Jersey, and Pennsylvania. In studies, career ladders and incumbent worker programs can improve the quality of jobs available within firms, thus benefiting both employers and workers.

**Programs for Disadvantaged Youth**

Training programs for disadvantaged youth have overall been disappointing, particularly those for out-of-school youth. For example, the short-term training provided by the National Job Training Partnership Act was ineffective (Bloom et al., 1997). However, evaluations show some success for in-school youth enrolled in high-quality career and technical education programs (like Career Academies), and also for programs that provide paid work experience. Results do not yet exist for some promising programs.

**Career Academies.** Career Academies are each a “school within a school,” providing occupational training and work experience to at-risk high school students. Career Academies have been shown to raise earnings by 11%, and the impacts persist for as much as eight years after high school. Importantly, youth who participate in Career Academies are not deterred from postsecondary education (Kemple, 2008; Kemple & Willner, 2008). These gains are larger for disadvantaged young men than for other young men; moreover, results are stronger for young men than women—a rare finding. Nonexperimental evaluations of other school-to-work programs like Tech-Prep (Lerman, 2007) also indicate similar positive impacts on earnings and on high school graduation.

**Job Corps.** The Job Corps provides year-long education and training to over 60,000 disadvantaged youth each year in residential settings nationwide. Experimental evaluations of the Job Corps showed positive impacts on youth wages and hours of work for up to 30 months after enrollment; there were also significant increases in the acquisition of GEDs and vocational certificates, and reductions in crime and incarceration. Program costs per participant (roughly $20,000 currently) were more than offset by social
gains; however, the positive impacts did appear to fade away by the fourth year, with the exception of results that persist (somewhat) for those aged 20-24 (Schochet et al., 2003).

**National Guard ChalleNGe.** This residential program for young high school dropouts is based on a military model, and aims to get each participant a high school diploma or GED. Recent evaluations show large impacts on these outcomes.

**Other programs.** The Youth Services and Conservation Corps has shown strong positive impacts on such outcomes as youth employment and behavioral outcomes in a small and short-term evaluation during the 1990s (Jastrzab, et al., 1997); while YouthBuild has also generated impressive outcomes in nonexperimental studies (Cohen & Piquero, 2008). Additional evaluations suggest that paid work experience tends to successfully motivate disadvantaged youth to participate in schooling or training. Positive impacts have also been documented for mentoring and youth development programs like Big Brothers/Big Sisters (Herrera, 1999) and Quantum Opportunities. Other programs that seek to “reconnect” high school dropouts to educational opportunities at community colleges, like Gateways, look very promising as well.

**Programs for Ex-offenders**
One new approach which is particularly important for the ex-offender population is called transitional jobs (TJ). This provides adults, who have little formal work history, roughly 6-12 months of paid experience, either in a non-profit or for-profit setting (Holzer, 2003). In one case, the Center for Employment Opportunity (CEO) in New York provides every ex-offender leaving Rikers’ Island the opportunity for TJ. CEO has been evaluated and results suggest a sizable drop in recidivism for those entering TJ soon after release (Bloom et al., 2007). Other versions of TJ are being evaluated in a large study currently underway that is being funded by the Joyce Foundation. Other programs for ex-offenders (like the Safer Foundation in Chicago) provide training and job placement services without the guarantee of a TJ; these programs are considerably less expensive, though we do not know how cost-effective they are, or whether they improve employment outcomes.

**What Are Some Good Strategies for a New Workforce System?**

States can meld economic and workforce development policies by building systems that target good jobs in growing sectors for the disadvantaged with demand-oriented training plus support services. Some guiding principles for policy design, implementation, and funding follow.

**Policy Design**

- States should create an “inventory” of targets and opportunities on both the demand and supply side of the market. On the demand side, the state would use available labor-market information to identify the key sectors with likely unmet demands for skilled or semiskilled labor that are not likely to be filled by employers on their own. On the supply side, it would identify the various sources of education and training for these jobs and potential funding sources available
(federal workforce funds; Pell grants; TANF or Perkins funding; and funds from state, local, and private sources). Several states, including Pennsylvania and Washington, have systematically built the analysis of labor demand in key growing industries into their workforce development plans (Holzer, 2007).

- It is important to recognize that “one size does not fit all.” What works for in-school youth might differ from that for out-of-school youth, and what works for adults with some labor force attachment is quite different than for the hard-to-employ. Those most at risk and with the greatest educational and employment deficits need more intensive remediation.

- State systems should seek to enhance the workings of the private-sector labor market, but not replace them.

- For any given sector, a range of pathways should be developed that would enable employed and unemployed workers of different education levels to obtain jobs, including adults with or without diplomas, with stronger or weaker basic skills, and with two-year or four-year college degrees.

- For low-income parents—especially single parents—supports such as stipends, child care, and transportation are needed to make it possible to enter and remain in training programs.

- Performance measures should ensure cost-effectiveness.

- Even the best education and training programs will leave many workers facing only low-wage opportunities. A generous package of publicly-funded supports (including tax credits, child care and parental/sick leave) will still be needed to supplement private sector earnings for many.

Policy Implementation

- The states would develop these plans, but they would be implemented locally by existing workforce boards.

- Systems should promote partnerships among education providers, employers in key industries, and financial supports that improve access to education and training for less-educated workers.

- State and regional workforce systems should be built that are less fragmented and more coherent, enabling intermediaries to pull together the many strands of funding for education and training.

- Representatives of industry associations would help develop the pathways for their respective industries.
• One-stop offices and other intermediaries would screen applicants; thus, core and intensive services would still be available.

Policy Funding

• State policymakers should be mindful that money be used for new training and not to create windfalls for firms who would be paying for this training anyway. One way to avoid such windfalls is to focus funding on the poor, since employers on their own are reluctant to invest much training in the poor. However, if training is focused too narrowly on the poor alone, industry interest in participating may be more limited, and political support may be weaker as well.

• With significant new funding now available for “green jobs” and infrastructure repair, job creation could be supported through funding for apprenticeships and other forms of training.

• If the Obama Administration’s American Graduation Initiative is funded by Congress, it will generate opportunities for states and local community colleges to develop curricula and supports that better serve disadvantaged youth and adults, and to better link community colleges with the workforce system and other sources of supports to workers. Reauthorization of the Workforce Investment Act in 2010 might also generate some new opportunities in this regard.

Conclusion

Many states are seeking to integrate their economic and workforce development policies in order to prepare their workforces for jobs in industrial sectors that are likely to be in high demand over the next few decades. Despite the lack of rigorous research evidence to date on the cost-effectiveness of such integration, this is a promising trend that deserves consideration.

Perhaps workforce development is best seen as an important component of a broader strategy that also includes tax credits for the poor that encourage labor force participation; additional supports and benefits that make work and additional training feasible; as well as a range of education approaches that begin (but do not end) with high-quality early childhood and pre-K programs.

This article was adapted from the following three articles available from the Wisconsin Family Impact Seminar in their entirety:


References


