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

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Redesigning Workforce Development Strategies

9
Employer Involvement in Workforce Programs

What Do We Know?

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Over the last several decades, policymakers and funders have increasingly expected local workforce systems and programs to make the engagement and involvement of employers a priority. In a field where the primary goal is to place people in jobs, one might think the engagement of the employers that will hire job-seeker customers would be a fundamental practice. However, the workforce system and workforce training programs have not always prioritized employer engagement, and workforce systems and organizations still struggle with how to effectively involve employers.

The main reason workforce organizations engage employers is to help program customers achieve success in the labor market by ensuring that job seekers possess the skills required by employers, and/or by helping them make the connections to available job opportunities through the relationships built with employers. While employers may use workforce organizations for reasons of corporate social responsibility, the most successful partnerships emerge because of the important functions that workforce organizations can serve for employers. They can help employers recruit and screen qualified applicants for available positions and provide training for potential applicants and incumbent workers. These activities can not only help employers with their human resources needs, they can also help them offset the cost of training and recruitment.

In this chapter, we explore the history of employer involvement in workforce programs in the United States, the different models of employer engagement, and what is known about the effectiveness of such efforts. We discuss why organizations and workforce systems struggle to engage employers, what can be learned from their experiences, and possible strategies for encouraging deeper connections with employers in order to improve outcomes for those who participate in workforce training programs.

WHAT DO WE MEAN BY EMPLOYER ENGAGEMENT?

Employers can play a variety of roles in the preparation of the workforce. Primarily, they provide training to the workers in their own firms or organizations either directly or through contracts with external training providers. Research has shown that the majority of employers provide training to their workers, whether through informal training, formal training, or tuition reimbursement (Lerman, McKernan, and Riegg 2004; Mikelson and Nightingale 2004). While the federal government currently does not collect data on employer investments in training, findings from several industry surveys indicate that employer investments in training dwarf public workforce system resources for job training, even in the context of projected increases under the new Workforce Innovation and Opportunity Act (WIOA), which authorizes about $3 billion for Adult, Youth, and Dislocated Worker programs for fiscal year 2016. One study estimates that employers spend between $46 and $54 billion annually on education and training (Mikelson and Nightingale 2004). When the costs of trainee wages and administrative costs are removed and only direct training costs are considered (trainer salaries, books, materials, etc.), the amount that employers spend on training is much lower: between $8 billion and $17 billion per year, but still much larger than the resources available for training through the workforce system. The Association for Talent Development (2013; formerly the American Society for Training and Development) estimates employer expenditures to be much higher—$164.2 billion in 2012.[1]

This chapter focuses on programs that are financed by government or philanthropies and aimed at serving the disadvantaged, as opposed to staff development and training efforts targeted at incumbent workers that are led and paid for by employers. We are interested in efforts by state and local workforce systems and training providers to involve employers in the management (through boards), design, and delivery of workforce programs, and in the hiring of program graduates and other entry-level workers who are served by workforce systems and programs. We are also interested in understanding the most robust forms of employer engagement where workforce organizations don't simply involve employers in training efforts, but treat them as clients, as is found in both customized and sectoral training.

While there are a variety of ways that workforce organizations engage employers, we do not review the evidence of all possible employer engagement strategies. Rather, we focus on some key examples of employer engagement to see what can be learned. For example, we do not discuss apprenticeship models, where apprentices participate in classroom-based and work-based learning programs that are designed through collaborations of employers and educational institutions. Nor do we examine the evidence for other strategies that involve other types of learning at the workplace (internships, externships, clinical experiences). We also do not explore the engagement of employers in community college programs, because evidence is limited; however, recent investments in building the capacity of community colleges to respond to employer needs may add to what we know about the effectiveness of employer engagement strategies. Finally, we do not explore the research on what is known about state-funded customized training programs.[2]

Employer Engagement in Federal Workforce Policy and Programs

The involvement of employers became more central to federal workforce policy with enactment of the Job Training Partnership Act (JTPA, 1982), which required majority participation of employers in local advisory committees called Private Industry Councils (PICs), as state and local governments were given increased discretion over the operation of federally funded workforce programs. While local advisory councils existed under the 1973 Comprehensive Employment and Training Act (CETA), the prior law governing workforce programs, they did not become part of federal policy until 1978, and even then they were perceived as weak by employers (Guttman 1983).[3] JTPA required that the majority of local councils consist of private industry representatives. Unlike CETA, in which local councils had very little power, PICs were described in the JTPA legislation as "equal partners" in the administration of local workforce programs (Guttman 1983). Despite JTPA calling for expanded involvement of employers, employer involvement was still largely limited, with the exception of efforts in a few local areas, and even those with strong linkages to employers did not demonstrate stronger performance (Bailey 1988).

WIA replaced JTPA and carved out a stronger role for employers in the workforce system by giving local boards, renamed Workforce Investment Boards (WIBs), the authority to *set* local policy. WIA was similar to JTPA in that it required majority representation from the business community, but the law for the first time recognized employers as customers of the workforce system. Despite success in some state and local areas in engaging employers in the local workforce system, evaluations have shown that employers still do not play a strong role in the administration of local workforce systems, as we discuss later in this chapter.

Most recently, the Workforce Innovation and Opportunity Act (WIOA) was signed into law in 2014, replacing WIA. The new statute leaves many of the core elements of WIA, aiming to organize multiple programs and funding streams under a single piece of legislation, but it includes an even stronger emphasis on employer involvement across these programs, including new employer engagement requirements in state and local plans, new performance metrics related to employer engagement, encouragement that states and local areas adopt sector- or industry-based strategies, higher allowable reimbursement rates for on-the-job training, and changes to employer contribution requirements for customized training programs. The extent to which the new law reflects a marked change in how the workforce system works with employers will be determined, in part, by the new regulations and how they are implemented. At the writing of this chapter, regulations related to WIOA were still being drafted with final rules slated to go into effect in 2016.

Under WIOA, WIBs and American Job Centers (formerly One-Stop Career Centers) remain at the center of service delivery, with a constellation of other public and private providers playing important roles at the local level. Public agencies involved in local service delivery include the Employment Service (sometimes referred to as the Job Service), which provides labor exchange services for job seekers, including individuals receiving Unemployment Insurance benefits; state and local agencies administering the Temporary Assistance for Needy Families (TANF) program, which provides poor families with children time-limited cash benefits, workforce preparation, and job placement; and local community college systems, which offer job training through both noncredit and for-credit programs.[4] Little is known about the involvement of employers in these programs. While the Employment Service has some involvement of employers in local oversight, federal TANF law does not emphasize employer involvement, and the level of employer engagement varies in community college programs. Where these actors are strong partners in the WIB or American Job Center delivery system, they may benefit from the employer engagement activities of WIBs.

Through the evolution of federal workforce policy, delivery of education and training services has increasingly devolved from the responsibility of government agencies to an array of local providers, including faith-based and community-based organizations, community colleges, for-profit colleges, and proprietary schools. While it remains to be seen how new employer engagement requirements under WIOA will affect the way these entities do business, in recent years the federal government, many local governments, and private foundations have sought to encourage employer engagement by grantees. For example, the U.S. Department of Labor (USDOL) has issued a number of competitive grant solicitations with an emphasis on “demand-driven” strategies, which refers to the practice of workforce organizations responding to issues of employer demand as opposed to job-seeker “supply.” Other federal agencies have also placed an emphasis on employer involvement. For example, the U.S. Department of Health and Human Services requires consultations with employers as part of its Health Profession Opportunity Grants, which aim to improve opportunities for TANF recipients and other low-income individuals in accessing available jobs in the health care sector. Several foundation-funded demonstration projects and other large-scale, privately funded national initiatives have also sought to encourage workforce training providers and local systems to more effectively engage employers. Table 9.1 shows some examples of publicly and privately funded national efforts.

Table 9.1 Employer Engagement in National Initiatives

Initiative name	Funder	Grantees	Program description	Employer engagement description
High Growth Job Training Initiative (2001–2007)	USDOL	Wide range of organizations, including industry associations, community colleges, non-profit organizations, state workforce organizations, and other entities	Aimed at preparing workers for opportunities in selected sectors defined by high demand and emerging skills needs, influenced by technological change	Aimed at creating market-driven, strategic partnerships among private industry, education institutions, and the workforce investment system
Community-Based Job Training Grants (2005–2009)	USDOL	Community and technical colleges	Designed to support workforce training for high-growth/high-demand industries and capacity building for community and technical colleges	Required active engagement of employers in the project, participation in grant activities, including: Defining the program strategy and goals; identifying needed skills and competencies; designing training approaches and curricula; implementing the program; contributing financial support; and, where appropriate, hiring qualified training graduates
Workforce Innovation in Regional Economic Development (WIRED) grants (2006–2008)	USDOL	State governors overseeing regional partnerships	Regional effort to increase employment and advancement opportunities to a broad population of workers and create high-skill, high-wage jobs	Employer representation and effort to link economic development and workforce development activities

Trade Adjustment Assistance Community College Career Training Grants (2012–2015)	USDOL	Community colleges and other institutions of higher education	Provides funds to expand and improve ability to deliver education and career training programs that can be completed in two years or less and are in high demand.	Required engagement of employers, local industry associations, and/or national industry associations as partners.
Health Profession Opportunity Grants	HHS	States, local WIBs, institutions of higher education and Indian tribes and tribal organizations	Provides education and training to TANF recipients and other low-income individuals for occupations in the health care field that pay well and are expected to either experience labor shortages or be in high demand	Participants must earn employer- or industry-recognized certificates, based on consultations with employers
Casey Jobs Initiative	Annie E. Casey Foundation	Workforce intermediaries (see description in text)	Effort in six cities to connect inner-city young men and women to family-supporting jobs in the regional economy and to improve the way urban labor market systems work for low-income, low-skilled workers	Funded workforce intermediaries expected to treat employers as customers equal to job seekers
National Fund for Workforce Solutions	Multiple national and local funders	Local funding collaboratives	National funders support local communities to organize and sustain regional funding collaboratives that invest in worker skills and their key regional industries	Goal is to develop employer-driven workforce strategies to help low-wage workers and job seekers obtain career opportunities, while creating talent supply chains that close skills gaps and strengthen local economies

A third type of entity that has emerged in recent years is the "workforce intermediary" aimed at bridging the gap between employers that demand trained workers and the training organizations that "supply" them. Workforce intermediaries are defined less by organizational form—WIBs, labor unions, and nonprofit organizations can all be workforce intermediaries—than by a set of common characteristics. As described by Giloth (2004), workforce intermediaries convene local stakeholders for the purpose of creating advancement opportunities for low-wage workers. In addition, workforce intermediaries

- take a dual customer approach (workers and employers);
- go beyond job matching (supporting curriculum development, identifying appropriate training providers);
- act as integrators of workforce funding, programs, and information;
- are generators of ideas and innovations; and
- are not single-purpose or single-function organizations.

The idea is that it is difficult for training providers that are driven primarily by the mission to serve the disadvantaged to build relationships with the for-profit sector because they do not understand industry needs, do not speak the language of employers, and may not be positioned to respond to the breadth of employer needs with respect to training. Intermediaries who broker relationships with a variety of employers and providers in a local area may be able to identify the best organization to respond to a particular employer need and can help avoid the issue of single employers being approached by multiple training providers within the workforce system.

FORMS OF EMPLOYER ENGAGEMENT

Employer Engagement Strategies

Workforce organizations use a variety of strategies to engage employers for the purpose of improving job seeker outcomes. We divide these strategies into four categories to characterize the types of employer engagement: 1) program management and oversight, 2) program design, 3) delivery, and 4) hiring.

Program management and oversight

Employers can be engaged in the management of programs. Participation in oversight or advisory boards offers one opportunity to engage employers in the management of programs. While it is a requirement under both WIA and WIOA that employers make up the majority of state and local WIBs, training providers and intermediaries may also seek employer involvement on their oversight boards. Many vocationally focused community college departments, for example, require employer advisory boards. Employers can also participate in college or university-wide boards or councils, which are aimed at building a connection between the educational institution and the community.

Program design

Governing boards may fill general oversight functions, but they also can play a role in program design and development. Boards may give employers the opportunity to provide feedback on the types of programs that should be offered by an organization or in a local community, or feedback on the content of curricula used to train participants. Employers who are not board members can be engaged in the development of programs and curricula. The input that employers provide on the design of training programs can include information on the required technical and soft skills, the appropriate length of training, the credentials recognized by employers, and common challenges experienced by the employer with the current workforce in the targeted position. Employers can provide feedback on eligibility requirements, screening tools, curricula, assessment tools, textbooks, and other classroom materials. They can also provide advice about the value that work experience—through workplace simulations, internships, or clinical experiences—will play in the employability of program graduates. In programs that involve customized training for incumbent workers or on-the-job training, employers are more directly responsible for the oversight and development of training.

Program delivery

Employers can also be engaged in the delivery of training programs. Clymer (2003) noted that it is important to "make employers part of the woodwork" as the general approach to employer engagement. Involvement in the day-to-day operations of training programs can include the following:

- participating in decisions about who is accepted into the program;
- participating as instructors or guest presenters in training;
- hosting work experience opportunities (apprenticeships, internships, clinical experiences) at the work site;
- providing opportunities for mentorship, job shadowing, or other exposure to the workplace;
- helping students prepare for job search (resume review, mock interviews, etc.); and
- volunteering for the program in other ways.

The level of involvement by employers will likely reflect some combination of the employers' need for trained workers; their confidence in an organization's ability to give them what they need (including, perhaps, an advantage in competing for trained workers in a labor market for in-demand workers); and a sense of civic responsibility.

Hiring

Programs involve employers in hiring in a number of ways, including through the job development efforts of training organizations and through wage subsidy programs that aim to encourage employers to hire participants by offsetting all or a portion of a hired worker's wages. While there have been many attempts to get employer partners to contractually agree or commit to hire program graduates, these have not typically been successful because employers do not want to be legally bound to hire individuals who have not been screened for their qualifications and suitability for open positions. Depending on the length of a particular training, the employer's needs might change by the time an individual has completed the program. Furthermore, employers want the opportunity to consider other potential candidates so as to ensure they hire the most qualified and best-suited applicants for the job. Instead, if agreements are made, they often take the form of giving program graduates first priority in hiring decisions. Community benefit agreements are sometimes structured to require businesses locating in particular areas to hire from those communities, but the requirements are usually that a portion of hires comes from a particular community or organization (Gross 2008).

Workforce organizations seek to build relationships with employers in the management, design, and delivery of a program largely to help ensure that program graduates will meet job requirements and be hired by employers who hire workers with those skills. Workforce systems, training providers, and workforce intermediaries also seek to build relationships with employers to learn about available job opportunities and help program participants—who often lack the social and professional networks—get their "foot in the door." Relationships with employers are often built by staff members—called job developers, employment specialists, or account managers—or specialized units whose responsibility it is to broker relationships with employers and provide access to jobs. These staff can help employers manage some of the human resource functions of an employer by screening candidates for open positions. Wage subsidies can further offset some of the costs of hiring and training new workers, as is the case with on-the-job training (OJT).

Models of Employer Engagement

While many workforce organizations aim to incorporate one or more of these employer engagement practices into their programs, not all are employer-focused. Organizations vary in the degree to which they view employers as customers and the extent to which they are successful in involving them in programs. Pindus and Isbell (1996), in their review of employer involvement in workforce programs, distinguish employer-based training from employer-centered training. Employer-based training is characterized by employer involvement, whereas employer-centered training emphasizes working directly with firms and treating the firms as clients. Employer-centered training programs can be either customized for a single employer (customized training) or designed to meet the needs of a group of employers within an industry or that employ people in the same occupations (sectoral training).

Because these approaches represent the most robust forms of employer involvement, we describe them in more detail below.

Customized training

Workforce organizations may work with individual firms to provide customized training either for existing workers or to fill a set of open positions within a company or organization. Customized training can aim to provide job-specific skills for new workers or to help incumbent workers retain their jobs or advance. It also can focus on general skills, such as basic education or customer service. Under WIA, employers were required to pay for 50 percent of the costs of training tailored specifically to meet the needs of individual employers and to commit to hiring program graduates.[5] Under WIOA, states and localities are given more flexibility with respect to determining the amounts the employers have to pay, depending on such factors as the size of the employer, number of employees trained, and other factors to be determined by the state or local area. The law requires only that employers pay "a significant portion" of the training costs, while keeping in place the requirement that employers participating in WIOA-funded customized training commit to hire program graduates. In addition to the federal government, many states have implemented customized training programs as a strategy for meeting local employer needs and influencing business location decisions (Duscha and Graves 2006).

Sectoral training

Workforce organizations can also work with groups of employers to try to meet shared needs by operating sectoral programs.[6] Sector-based approaches offer the advantage of scale with more job opportunities being available for participants when working across multiple firms.

Conway et al. (2007) define sectoral strategies as a "systems approach" to workforce development that

- focuses on industry sectors or clusters of occupations;
- intervenes through a credible organization, or group of organizations;
- improves the employment-related skills of workers;
- meets the needs of employers; and

- creates changes in the labor market that sustain benefits to employers.

In several respects, sectoral strategies bear resemblance to the concept of workforce intermediaries, which organize local actors within workforce systems in order to advance low-wage workers.[7] While many sectoral strategies are focused on access to jobs for low-income populations, others simultaneously focus on improving job quality; for example, the Paraprofessional Healthcare Institute in the Bronx operates a training program, social purpose business, and policy center aimed at making improvements for the direct care workforce.

Many workforce organizations—whether they are community-based organizations, community colleges, proprietary schools, or other for-profit or nonprofit service providers—seek to engage employers without offering customized services or managing sectoral initiatives. However, they may play important roles in sector-based programs, offering job readiness, preparation for the General Educational Development (GED) test or other high school equivalency tests, programs to improve English language skills, vocational skills training leading to certificates or degrees, or support services for those enrolled in training. Any of these organizations may see a value in engaging employers in their programs and can play important roles in broader sectoral efforts.

THE EFFECTIVENESS OF EMPLOYER INVOLVEMENT

As we have seen, employer involvement in workforce investment programs can take many forms and can vary in the degree to which employers are the focus of training efforts and the strategies that are used to engage employers. In this section, we review the literature on what is known about the effects of employer involvement. We focus on some key examples of employer engagement that reflect the strategies and models of employer engagement described above. We provide an analysis of what is known about the involvement of employers in governance boards as an example of efforts to engage employers in the management of programs. To explore the evidence around the engagement of employers in the design and delivery of programs and employer-centered models, we look at two evaluations of sector-based programs. Finally, as an example of employer engagement in hiring, we examine what is known about OJT.

Employer Engagement through Workforce Investment Boards

As already discussed, WIA, like JTPA before it, required state and local boards to include employer representatives as a majority of the membership. Although states and local workforce investment areas complied with the rules, evaluations have shown that employers have typically not played a major role in administering the boards. There were two major evaluations of the implementation of WIA, and both concluded that employers generally do not play a major role in developing policies for local workforce boards. D'Amico et al. (2004, pp. 1–17) conclude, "Local workforce areas are embracing business engagement in principle, but in practice they are lagging in their ability to engage business seriously in strategic planning or serve them as customers with high-quality services." Similarly, Barnow and King (2005, p. 14) conclude, "It is difficult to measure business involvement in the workforce development system. The impression is that WIA has not yet achieved the strong employer role envisioned by the statute or promoted by the U.S. Department of Labor, although some states and areas have accomplished more in this respect than others." Barnow and King cite a number of explanations for the failure of boards to play a major role, including the overly large size of the boards, their lack of influence over workforce issues in their areas, the bureaucratic nature of the boards and the programs they administer, and employers' perceived lack of value added from their involvement. It may be that this perceived failure is one of the factors that led to a stronger focus on employer engagement under WIOA.

D'Amico et al. (2004) and Dunham, Salzman, and Koller (2004) develop lists of successful strategies to engage business in local workforce program planning activities, such as making sure that meetings are short and well organized, arranging for mutual appointments on partner organizations' boards, and developing sectoral initiatives where economic development and workforce development needs will overlap.

Quantitative evaluations of sectoral training programs

Sectoral training programs are currently highly regarded because they not only get substantial employer input for workforce investment programs, they also help regions and communities focus their activities on sectors of interest. In this section, we review findings from two quantitative evaluations of sectoral programs, the Sectoral Employment Impact Study and Capital IDEA.

The Sectoral Employment Impact Study.[8] Although sectoral programs have been popular for a number of years, the first evidence from a large-scale randomized controlled trial came from Maguire et al. (2010) with the release of the Sectoral Employment Impact Study. In this demonstration, three mature sectoral programs were selected by the researchers to implement their programs with randomly selected control groups so that the impact of the programs could be determined. The programs differed significantly in the characteristics of customers served, the industries covered, and the location of the sites.

- **The Wisconsin Regional Training Partnership (WRTP)** is an association of employers and unions, described as a workforce intermediary, that develops short-term training programs (typically two to eight weeks long) to meet the needs of specific employers. For the demonstration, their training programs in the construction, manufacturing, and health care sectors were included.
- **Jewish Vocational Service (JVS)-Boston** is a nonprofit organization. It operates one of Boston's American Job Centers for Workforce Investment Act customers and serves a range of disadvantaged customers, including refugees, immigrants, and welfare recipients. JVS-Boston's training programs in medical billing and accounting were included in the demonstration.
- **Per Scholas** is a New York City organization that combines vocational training with a program to recycle computers and distribute them to low-income individuals. Per Scholas's computer technician training program, which included training for repair and maintenance of computers, printers, and copiers, was included in the demonstration.

All three organizations were described as involving employers in the design of programs by providing input into program offerings or curricula. They also involved employers in the delivery of programs by offering opportunities for participants to gain work experience or asking employers to participate in program activities, such as mock interviews for participants and job fairs.

The participants served in the three programs were screened to make sure they met the programs' normal entry requirements, which included having reading and/or math levels at the 6th to 10th grade or higher. Participants were roughly evenly split between men and women (47 percent men), and most were African American (60 percent) or Latino (21 percent). A majority of the participants were over 24 (70 percent), and roughly one in five (22 percent) had been convicted of a felony. A majority of the participants had a high school diploma (53 percent) or a GED (22 percent), with 18 percent having more than a high school education and 7 percent having less. The participants had not been very successful in the labor market when they applied to the programs. About one-third (34 percent) were employed full or part time at entry, and only 10 percent worked full time for the 12 months prior to entry. Total earnings in the year prior to entry averaged $9,872.

The programs varied significantly in length and composition. The WRTP program was the shortest, with training lasting between two and eight weeks. Training at Per Scholas was for 15 weeks, and JVS-Boston programs lasted 20–22 weeks. In addition to vocational training, all three programs provided services to improve employability and supportive services. WRTP offered essential skills training, and Per Scholas offered life skills training; these components dealt with issues such as timeliness, attendance, dealing with child care, goal setting, and communication. JVS-Boston and Per Scholas both offered internship programs to give participants work experiences prior to obtaining an actual job.

The study used an experimental design to determine impacts on employment, earnings, and other outcomes of interest. A total of 1,296 individuals who applied to the programs and met the standards set by the programs were randomly assigned to treatment and control groups. Telephone follow-up interviews were conducted between the twenty-fourth and thirtieth month after the baseline survey. The follow-up survey had a 79 percent response rate, with 75 percent for the control group and 82 percent for the treatment group, yielding 1,014 individuals for the impact analysis.[9]

All three programs in the study were successful at increasing employment and earnings over the 24 months following the baseline survey. Impacts are presented for the entire 24-month follow-up period and for months 13–24. In Table 9.2, we present findings for months 13–24, as this period does not include the in-program period and thus is more likely to reflect gains from the program. For the three sites combined, there are positive, statistically significant gains in employment and earnings for participants. Control group earnings in months 13–24 after random assignment averaged \$13,662, compared to \$17,673 for the treatment group. The gain in earnings of \$4,011 is much larger than is typically observed in evaluations of training programs. The gains result from both increased hours of work and an increase in the wage rate. During months 13–24, the treatment group worked 1,380 hours on average, compared to 1,130 for the control group, for a gain of 250 hours.

All three sites exhibited statistically significant earnings gains for the whole follow-up period, as well as for months 13–24, and the range for those months was fairly narrow. Hours worked also had a consis-

Table 9.2 Selected Impacts on Annual Earnings for the Sectoral Employment Impact Study for Months 13–24

Outcome	All sites	Wisconsin Regional Training Partnership	Jewish Vocational Service-Boston	Per Scholas
Total earnings, 24 months (\$)	4,509***	6,255***	4,339**	3,827
Total earnings, months 13–24 (\$)	4,011***	3,735***	4,237***	4,663***
Hours worked, 24 months	245***	241	298*	225
Hours worked, months 13–24	250***	191*	335***	249**
Sample size	985	335	313	337

NOTE: *p < 0.10, **p < 0.05, ***p < 0.01.
SOURCE: Maguire et al. (2010).

tently positive impact, but the site impacts ranged from 191 hours in WRTP to 335 in JVS-Boston for months 13–24. The researchers also estimated impacts for 10 subgroups, and although the magnitudes varied somewhat by subgroup, the earnings impacts for months 13–24 were all statistically significant. Subgroups analyzed include both sexes, youth (defined two ways), African Americans, formerly incarcerated individuals, individuals who had received welfare, foreign born, and Latinos.

The Sectoral Employment Impact Study (Maguire et al. 2010) provides the strongest evidence currently available that sectoral programs can have a large impact on employment and earnings. The study includes three diverse programs operating in different areas and used rigorous methods. The only aspect of the evaluation that is of concern is that it is not clear how much the strong outcomes stem from the sectoral nature of the programs rather than the fact the programs might simply be exceptional programs. The report does not provide much detail on the sectoral aspects of the programs, although at several points the report notes that the programs have strong ties to employers. Thus, the Sectoral Employment Impact Study shows that good sectoral programs can generate large earnings and employment impacts, but it does not provide a good guide to others for implementing a strong sectoral program.

Capital IDEA. Operated by Travis County, Texas, Capital IDEA is a long-term sectoral training program that offers occupational training and extensive support services to low-income residents of the county. It takes a sectoral approach and focuses on occupations with high demand, typically with starting wages of $16 per hour or higher in health care, information and electronic technologies, utilities, and skilled trades (Smith and King 2011). The program's major focus is nursing and allied health careers, with three-quarters of the participants training in these occupations. It was founded in 1998 by Austin Interfaith to help move Texans stuck in dead-end jobs to higher-paying skilled positions.[10] The Ray Marshall Center at the LBJ School has been evaluating the program since 2006.

The most recent evaluation of Capital IDEA covers 879 individuals who enrolled in Capital IDEA in 2003 and 2004 and were no longer in the program by 2008 (Smith, King, and Schroeder 2011). Outcome variables in the study are quarterly employment, quarterly earnings, qualifying for unemployment insurance benefits, and whether the person filed an unemployment insurance claim.[11] Program impacts were estimated using a quasi-experimental method using matching (Smith, King, and Schroeder 2011). The comparison group was drawn from individuals from two sources: those who registered to search for work in the state's Working Texas program and those who received "core" services under WIA. Thus, the counterfactual is not individuals who received no services but rather individuals who received low-intensity services. Matching was performed using weighted multivariate matching, where variables with greater preservice differences between the treatment and comparison groups received greater weight. Matching was done without replacement (i.e., each comparison group member could be included only once), and no calipers were applied to assure that matches were reasonably close.[12] Matching variables included age, race/ethnicity, time elapsed since first earnings, employment status at entry, average quarterly earnings over the four years prior to earnings, percent of time in a workforce development service in the year prior to program entry, prior enrollment in another workforce program (Project RIO), and whether the person was qualified for unemployment insurance at the time of entry. Exact matches were carried out on county of residence, year of program entry, and whether or not the person experienced a dip in earnings of 20 percent or more in the year of program entry.

Impact estimates for employment, earnings, and qualifying for unemployment insurance benefits (which is based on employment and earnings) were large compared to typical training program impact estimates and were statistically significant (see Table 9.3). Quarterly employment was 10.9 percentage points higher for Capital IDEA participants, average quarterly earnings increased by $1,223, and the proportion qualifying for unemployment insurance benefits increased

Table 9.3 Impact Estimates for Capital IDEA

Impact measure	Estimated impact
Quarterly employment (%)	10.9***
Average quarterly earnings ($)	1,223***
Qualified for unemployment insurance benefits (%)	10.8***

NOTE: ***$p < 0.01$.
SOURCE: Smith, King, and Schroeder (2011).

by 10.8 percentage points. Ray Marshall Center researchers also conducted a cost-benefit analysis for Capital IDEA. They found that for participants, the annual rate of return was 73 percent for the first 10 years after enrollment and 74 percent annually for the first 20 years after enrollment. For all of society, they estimated the annual rate of return to be 39 percent for the first 10 years and 43 percent for the first 20 years.

Because the evaluation of Capital IDEA relied on a quasi-experimental design, it necessarily must make fairly strong assumptions. The key issue in most matching-based evaluations is whether the treatment and comparison groups are matched on all relevant variables. Although the researchers matched on a substantial number of variables (at least 16), they did not eliminate matches where the match was not close. Moreover, Capital IDEA is a highly selective program, and a large number of applicants are rejected.[13] It is impossible to know if the comparison group members would have been accepted to the program had they applied. Thus, although the Capital IDEA program appears to have a strong conceptual model and seems successful, we give the specific evaluation results less weight than the findings from the Sectoral Employment Impact Study.

OJT in national training programs

Employer-based training through OJT has been an option in national training programs since the 1960s. In OJT in federally sponsored training, employers hire eligible workers and are reimbursed for the costs of formal and informal training for the new worker during the initial work period. Under WIA, reimbursement was up to 50 percent of the salary and could last for a maximum of six months. WIOA maintains language allowing for reimbursement of up to 50 percent of wages but allows the state or local areas to reimburse employers as much as 75 percent if the training meets certain conditions elaborated in the law. Evaluations of OJT programs typically find OJT to be at least as effective as classroom training and other options. Unfortunately, none of the major evaluations are based on randomized controlled trials where OJT is randomly assigned, so we provide evidence from evaluations of CETA and the JTPA.[14]

The CETA program was the nation's major employment and training program from 1975 through 1983, when it was replaced by JTPA.

Although the CETA program operated over 40 years ago, OJT has not changed significantly since then. The most common approach to developing comparison groups, propensity score matching, had not yet been developed when the CETA evaluations were carried out, so impact estimates used matching on individual variables and regression analysis to estimate treatment impacts. The USDOL made the data gathered for evaluating the program widely available and supported several evaluations; some researchers obtained research support from other sources. As explained below, the more recent program, JTPA, did not estimate the impact of receiving OJT, so the CETA estimates are the most recent estimates of OJT impacts from a national impact study.

USDOL created the Continuous Longitudinal Manpower Survey (CLMS) to evaluate CETA. Each quarter beginning in 1975, a nationally representative sample of CETA participants was selected and interviewed, and Social Security earnings data for subsequent years was linked to the CETA data. A comparison group database was created by linking Social Security earnings data to data from the March Current Population Survey (CPS) sample. The USDOL evaluation contractor, Westat, then selected comparison groups by matching individuals in the CPS sample to the CETA database. USDOL later made the CLMS data available to other researchers, including several groups who responded to a request for proposals asking for alternative approaches for evaluating CETA. Barnow (1987) summarizes the findings from 11 studies by activity and demographic group. Table 9.4 lists the estimates of OJT impacts from the various studies. Although there are a few negative impact estimates for some specific demographic groups, they are never statistically significant. Most of the impact estimates are in the \$500–\$1,000 range, and most are statistically significant. In 2014 dollars, these are roughly equivalent to \$1,800–\$3,600 impacts.[15] OJT and public service employment most commonly had the largest impacts on earnings, with somewhat smaller impacts for classroom training, and impacts close to zero for work experience programs.

The National JTPA Study used random assignment in 16 local programs across the nation to evaluate the JTPA program, and the study is summarized in Bloom et al. (1997). The National JTPA Study researchers conducted random assignment after the local programs had decided whom they wished to serve and the appropriate service strategy for them. The researchers found that program officials identified applicants

Table 9.4 The Impact of CETA On-the-Job Training on Annual Earnings for Various Groups

	Overall	White women	White men	Minority women	Minority men	Women	Men
Westat (1981)	850*	550*	750*	1,200*	1,150*	—	—
Westat (1984) FY 76	531*	—	—	—	—	—	—
Westat (1984) FY 77	1,091*	—	—	—	—	—	—
Bassi (1983)	—	805-382*	—	1,368*-1,549*	2,053*-2,057*	—	—
Bassi et al. (1984) non-welfare disadvantaged adults	—	701*-724*	616*-756*	223-244	772*-812*	—	—
Bassi et al. (1984) welfare	—	190-318	995-1,231*	564-587	454-750	—	—
Bassi et al. (1984) youth	—	(127)-12	452-463	861*-877*	(260)-(58)	—	—
Bloom and McLaughlin (1982)	—	1,200*	(200)	800*	1,500*	700*-1,100*	300
Dickinson, Johnson, West (1984) adults	—	—	—	—	—	35	(363)
Dickinson, Johnson, West (1984) youth	—	—	—	—	—	996*	(348)
Geraci (1984)	—	—	—	—	—	882*	612*

NOTE: *p < 0.05. — = authors did not estimate impacts for that group.
SOURCE: Barnow (1987).

who were relatively job ready and suitable for either OJT or job search assistance (JSA) if no OJT slots could be identified. Thus, individuals recommended for OJT and JSA were combined into a single service strategy group. Estimates were developed for three groups based on recommended service strategy—classroom training, OJT/JSA, and "other." The report included estimates for each service recommended strategy group, but it should be kept in mind that individuals in a particular group may have received no service or some service other than the recommended service or services. Impact estimates per person assigned were first estimated, and estimates per person who enrolled were developed using the procedure suggested by Bloom (1984).

JTPA Impact estimates for the 30 months following random assignment for adult women and men are shown in Table 9.5.[16] Estimates for both adult women and adult men were over $2,000 annually, but only the estimates for women were statistically significant. In comparison, classroom training had impacts of $630 and $1,287 for women and men, respectively. The impact for "other" services was higher than for OJT/JSA and statistically significant for women ($3,949) but smaller and not statistically significant for men ($941). It is important to stress that these estimates were for people where either OJT or JSA was recommended, and the actual service received need not have been OJT or JSA.

After reviewing the literature, we were surprised about how little is known about the effectiveness of OJT. The program is widely perceived to be a highly effective strategy, but the evidence is more anecdotal than statistical. The estimates from CETA were generally positive, but they were based on relatively weak statistical designs and are over 25 years old. The JTPA findings are based on randomized controlled trials, but the estimates are for OJT and JSA combined, so it is impossible to identify the effects of OJT alone. Unfortunately, the dearth of information on the effectiveness of OJT likely will not change anytime soon.

Table 9.5 The Impact of JTPA on Earnings of Adult Enrollees Assigned to On-the-Job Training or Job Search Assistance for the 30 Months Following Random Assignment

Group	Impact
Adult women	2,292**
Adult men	2,109

NOTE: **$p < 0.05$.

Although USDOL funded a randomized controlled trial impact evaluation of WIA, that evaluation will not include estimates of the impact of OJT.

WHY EMPLOYER-BASED TRAINING IS NOT COMMONLY USED

Although there is limited evidence from rigorous impact evaluations documenting the impact of employer-based training initiatives, there are many examples of the success of customized training and sectoral programs, indicating that when they can be implemented, all parties find them to be beneficial.[17] There are, however, a number of barriers that inhibit wider use of employer-based training in all its forms.[18]

- **High costs to recruit and engage employers combined with small number of trainees needed by individual employers**. Employer-based training requires up-front marketing to interest employers in OJT, customized training, or sectoral training. Moreover, for individual firms, the number of openings they may have is likely to be small. Finally, both WIA and WIOA require employers to pay a portion of the costs of customized and sectoral training, although under WIA waivers were granted to some states to reduce the employer contribution for employers with 250 or fewer employees. With limits on how much they can spend on marketing and an uncertain payoff, local programs are likely to be wary of such endeavors. Sectoral programs offer an important way around some of these issues. Although each hospital in a metropolitan area may require a small number of nursing assistants, if they can combine their efforts, the number may no longer be small.
- **Difficulty in financing curriculum development**. Although WIOA funds can be used to pay for the training itself, funding must also be obtained to develop the curriculum. In the case studies described in Isbell, Trutko, and Barnow (2000), community colleges often paid for the course development when they delivered the training. Recent competitive grants administrated

by USDOL allow for resources to be used for curriculum development and other forms of capacity building.

- **Institutional barriers to being responsive to employer needs**. Workforce programs are often subject to state and local regulations, as well as the regulations set at the federal level. Community colleges may also have requirements on the development of new programs and curricular changes. Many businesses are accustomed to swiftly implementing strategies and can be put off by too much regulation. Some local workforce programs establish employer units that are tuned in to the needs and wants of employers. Sectoral programs often make use of specialized intermediaries that attempt to isolate business from the problems of dealing with government. Workforce intermediaries may be better positioned to respond quickly, but they are still subject to local regulations and contracting requirements of partners.
- **Training programs may not know how to communicate with employers**. Public sector organizations may not be able to speak the same language as employers because of their different views of the world. For example, employers view their workers as a means to producing their goods and services, but government agencies and other workforce organizations may see it as their mission to help the less fortunate escape from poverty. They may find it difficult to recognize employers as a primary customer. Approaches to dealing with this type of issue include specialized employer units within the workforce program and using workforce intermediaries.
- **Firms are often wary of working with the government**. Although workforce development agencies are rarely a threat to employers, firms may not readily distinguish levels and components of government and lump them all together. Overcoming these problems requires communication and a great deal of time. Once again, the use of specialized units in agencies and intermediaries can help assure that employers are dealing with people who "speak their language."
- **Firms are often wary of working with other firms**. Sectoral programs require cooperation of the participating industries so that a uniform training program can be developed and offered. Firms that compete with each other may believe that having their

own training program enables them to beat the competition, and they may be reluctant to share decisions about curricula with their rivals. Once again, sometimes a neutral intermediary may be needed to bring the parties together.

CONCLUSIONS AND LESSONS

Employer engagement in workforce development programs has been increasingly recognized as an important feature for the success of these programs. Although progress has been made in this area, there is still a long way to go in learning how best to get meaningful employer involvement on a wide scale. Key lessons from our review include the following:

- **Although WIA required that employers compose a majority of the local Workforce Investment Boards, two national evaluations of the implementation of WIA find that employer involvement in these boards was generally insufficient**. Both the D'Amico et al. (2004) and Barnow and King (2005) studies of WIA implementation find that although employers constituted a majority on local WIBs, they generally did not play a major role in directing the local programs. Studies of local boards that have been more successful in actively involving employers would be useful in shedding light on how to engage employers more effectively in workforce system oversight, particularly in the context of the passage of WIOA, which places new emphasis on employer engagement. Although efforts should continue to increase the role of employers on these boards, perhaps greater gains are likely to accrue from getting employers to participate more actively in the training programs themselves. Workforce organizations may seek employers to serve on boards as an initial step toward eliciting their deeper involvement in training programs.
- **Although the evaluations of employer-based training generally show it to be more effective than training focusing solely on the supply side of the market, there is a need for addi-**

tional rigorous evaluations of all forms of employer-based training, including OJT, customized training, and sectoral training. Both qualitative and quantitative evaluations show that approaches that include more employer involvement are effective in increasing employment and earnings. However, the evidence is not as strong as is needed to be in the top tier. For example, the major evidence on the effectiveness of OJT itself stems from studies over 30 years old before modern approaches such as propensity score matching were developed. The only major evaluation of sectoral programs making use of randomized controlled trials deliberately selected three strong programs, so it is not clear if the findings apply more broadly to sectoral programs. To remedy this situation, USDOL and other interested organizations should, to the extent possible, support demonstrations with rigorous evaluations to learn more about how effective employer-based strategies are and which aspects of such programs make the greatest contributions. Key to the usefulness of these evaluations will be the inclusion of strong implementation studies so that policymakers, funders, and practitioners can learn not only about the effectiveness of these approaches but also how they work.

- **Because of the barriers that limit the use of employer-based training, strategies should be explored to promote employer-based training, including the following:**
    - Financial incentives can encourage programs to make investments in setting up these programs. For example, financial incentives can be used by states to promote buy-in from employers on the expansion of certain types of employer-centered models, such as sectoral programs or registered apprenticeship. WIOA makes an important first step in reducing barriers to participation by eliminating the WIA requirement that employers contribute half of customized training costs and allowing reimbursement of up to 75 of wages for on-the-job training. However, depending on WIOA's regulations and how they are implemented, required employer contributions might still create a barrier to participation. Nonfinancial incen-

tives can be used to award higher scores in competitive demonstration programs to applicants who use employer-based training approaches. Applicants for publicly funded workforce development programs should be evaluated not only on whether they have a partner, but on the strength and purpose of that partnership. For example, the decision could be based in part on how long the partnership has been in existence prior to application and the level of engagement that is planned.

- Some sectoral programs make use of intermediaries to connect employers who often do not trust government agencies or other employers. By supporting the use of intermediaries along with rigorous evaluation of such activities, more organizations can be encouraged to use sectoral training strategies, and we can learn more about the effectiveness of intermediaries.
- Given the challenges of employer engagement, workforce organizations may also benefit from technical assistance on how to most effectively engage employers in programs. Practitioners need more information about the key components of effective employer-centered models and effective employer engagement strategies, which can be drawn, in part, from high-quality implementation studies. In addition, the staffs of workforce organizations need the skills and knowledge base to work effectively with employers.

In sum, involving employers more in training programs makes good sense from a theoretical perspective, and the evaluations to date indicate that a variety of approaches appear to provide substantial gains for participants and employers. But, clearly we need to learn more about the effectiveness of these programs, as well as the costs and benefits of various approaches relative to each other and more traditional training programs.

Notes

1. See http://www.astd.org/Publications/Blogs/ASTD-Blog/2013/12/ASTD-Releases-2013-State-of-the-Industry-Report (accessed June 21, 2014).
2. For research on the effectiveness of apprenticeship as an employer-centered strategy, see Hollenbeck and Huang (2013) and Reed et al. (2011). For research on state-funded customized training programs, see Duscha and Graves (2006).
3. For a description of the introduction of private industry councils (PICs) in the CETA program in 1978, see U.S. General Accounting Office (1983).
4. The local Employment Service business advisory groups are generally referred to as Job Service Employer Committees, or JSECs.
5. Roughly one-half of the states have received waivers under WIA to reduce the match requirement for small businesses.
6. Under WIA and WIOWA, working with groups of employers is considered a form of customized training, as long as other requirements are met, as defined under each law.
7. A number of foundations, through the National Fund for Workforce Solutions, have supported the key elements of sectoral and intermediary-driven strategies through what has been termed "workforce partnerships," which are defined as employer-driven strategies that organize multiple institutions and funding streams around the common goal of career advancement for low-wage, low-skilled workers in specific industry-sectors. See http://www.nfwsolutions.org/ (accessed June 21, 2014).
8. Material in this section is based on Maguire et al. (2010).
9. Sample attrition is analyzed in Appendix B of Maguire et al. (2010). The analysis indicated that in the follow-up sample, treatment group members were more likely to be married and to be immigrants and less likely to have ever been incarcerated. Tests for attrition bias using a regression of treatment status on characteristics produced an F statistic that was not statistically significant. Similar tests were conducted at each site. The most notable difference in samples occurred at JVS-Boston, where 80 percent of the treatment group participated in the follow-up survey compared to 73 percent of the control group; the two groups differed little on baseline characteristics and the regression of treatment status on characteristics produced an insignificant F statistic. Thus, there is no evidence of serious attrition bias in the overall sample, and it does not appear to be a problem in the individual sites.
10. See http://www.capitalidea.org/about/# (accessed April 19, 2014).
11. It is not obvious how to interpret the variable capturing filing for a UI claim. A training program that is effective should reduce unemployment and thus the need to file a claim; on the other hand, among job losers, being qualified to file a claim is a positive outcome. We do not discuss results for this outcome.
12. Smith, King, and Schroeder (2011) note that applying calipers might have led to

some treatment group members being eliminated from the analysis.
13. In personal communication, Tara Smith, one of the Ray Marshall Center Capital IDEA evaluators, stated that Capital IDEA staff have told her that less than 14 percent of applicants to the program are accepted.
14. Some models of OJT focus on creating employment opportunities for certain disadvantaged populations, such as individuals with criminal records and welfare recipients. While not the focus of this chapter, there is some evidence that such interventions may have an impact on employment outcomes in the short term. (See Redcross et al. [2012] and Roder and Elliott [2013]).
15. The translation to today's dollars were made using the Bureau of Labor Statistics' inflation calculator, assuming that the impacts occurred in 1978. Http://www.bls.gov/data/inflation_calculator.htm (accessed June 21, 2014).
16. None of the reported impacts for out-of-school youth were statistically significant, and for males they varied a great deal depending on the source of data used for the estimation. OJT impacts were negative for women and for male youth who had not been arrested.
17. See, for example, Martinson (2010) and Woolsey and Groves (n.d.) for examples of current successful sectoral programs.
18. For a discussion of barriers to employer participation in customized and sectoral training programs, see Isbell, Trutko, and Barnow (2000).

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