

---

## Job Training That Works:

*Findings from the Sectoral Employment Impact Study*

---

By Sheila Maguire, Joshua Freely, Carol Clymer and Maureen Conway\*

### Introduction

---

In today's knowledge-based economy, where low skills generally equal low pay, many disadvantaged people face difficult odds in earning enough to support themselves and their families. Businesses also suffer when local workers lack skills. Going into the current economic downturn, many industries, including healthcare, manufacturing, logistics and energy, faced critical workforce gaps: They had trouble filling a variety of jobs requiring specific technical skills.<sup>1</sup> As we focus on rebuilding the American economy, it will be more important than ever that low-income workers have the opportunity to develop skills that they and local industries need to succeed.

Over the past three decades, however, federal expenditures on employment and training across a range of departments have dwindled; spending levels in 2004 were under \$8.5 billion, compared with a peak of \$22 billion in 1980.<sup>2</sup> In particular, US Department of Labor (DOL) spending has decreased sharply. Total DOL spending for employment and training was about \$5.5 billion in 2008, compared with about \$17 billion through the Comprehensive Employment and Training Act at its height in 1979 (both in 2007 dollars).<sup>3</sup> The US now ranks 21st among industrialized nations in total federal expenditures on job training programs.<sup>4</sup>

Aside from spending levels, other key policies that affect disadvantaged workers have also led to a decline in training opportunities. Welfare reform's emphasis on "work first" has meant many programs offer participants only short-term job readiness services, rather

than skills training.<sup>5</sup> The Workforce Investment Act (WIA) has also resulted in fewer dollars spent on training and fewer disadvantaged people being served.<sup>6</sup> On the employer side, where funding for training dwarfs government spending, resources are typically concentrated on higher-wage and management-level workers.

In recent years, though, in communities all over the United States, there has been considerable experimentation and development of alternative approaches to help low-income people build skills for particular industry sectors. This issue of *P/PV In Brief* summarizes the outcomes of a rigorous evaluation of one of these approaches—sector-focused skills training—and demonstrates the positive impact that three programs using this approach have been able to achieve.

### Background

---

In 2003, based on promising earlier findings from P/PV's implementation study of nine sectoral programs and a similar study conducted by the Aspen Institute,<sup>7</sup> P/PV launched the Sectoral Employment Impact Study with funding from the Charles Stewart Mott Foundation. Researchers set out to conduct a rigorous random assignment evaluation that would answer the question: Can well-implemented, sector-focused training programs make a difference to the earnings of low-income disadvantaged workers and job seekers? Through nominations from leaders in the workforce development field, P/PV identified organizations that had been operating workforce programs for at least three years, had well-implemented training that served more than 100 people each year and targeted an occupation or cluster of occupations with jobs paying more than \$8 an hour. Three organizations were selected: Jewish Vocational Service, a community-based nonprofit in Boston; Per Scholas,

---

\* Maureen Conway is the Director of the Workforce Strategies Initiative at The Aspen Institute.

a social venture in the Bronx in New York City; and the Wisconsin Regional Training Partnership in Milwaukee, an association of employers and unions in the region. This brief reflects P/PV's initial analysis of the employment and earnings impacts for study participants across the three sites; a more detailed report on the study will be released later this year.

## Sectoral Employment: An Evolving and Growing Field

Organizations involved in sectoral employment pursue a range of strategies that include efforts to improve the quality of low-wage jobs, organizing employers within an industry to address its workforce needs, and—as with the three programs in this study—providing training to help workers access higher-skilled jobs. Emerging in the early '90s among a small number of nonprofit, community-based agencies that were focused on improving the prospects of low-income workers, sectoral employment

was initially supported by a handful of private foundations.<sup>8</sup> Today, community colleges, workforce investment boards, labor-management partnerships, business associations and other agencies all play important and active roles, and many sectoral programs receive support from federal, state and local government sources. Some organizations are using this approach to respond to the emergence of green jobs, and several cities have established sector-based One-Stop centers. At least 32 states are now engaged in some form of sector work, and new legislation encouraging sector partnerships is pending at the federal level.<sup>9</sup> A 2007 survey of workforce development organizations garnered responses from 227 organizations using a sectoral approach, with programs that targeted approximately 20 industries.<sup>10</sup> The three programs investigated in this study are a part of this evolving field, focused on skills training as a strategy to increase the employment and earning potential of disadvantaged workers.

### Jewish Vocational Service (JVS), Boston, MA

*About the organization:* Founded to assist Eastern European immigrants in the 1930s, JVS provides an array of educational and training programs in the Boston area. In addition to operating the Work Place (a local One-Stop) and issuing individual training vouchers to eligible residents, JVS offers certifications in areas such as computerized accounting, culinary arts, and medical and basic office skills. It also offers incumbent worker training, English as a Second Language (ESL), literacy programming and micro-enterprise development.

*Sector focus:* JVS provided industry-specific training programs in medical and basic office skills and computerized accounting to participants in P/PV's study. JVS engaged its target industries through employer advisory committees and by building individual relationships with local businesses. It also created an employer account management system to identify and address employer needs and to cultivate and strengthen ties with employers. As job openings in accounting declined toward the end of the study, JVS increased its focus on medical office skills training.

*Services offered to participants:* Training was provided over 21 to 25 weeks for 20 to 25 hours per week. All students began with core classes in computer software (e.g., Windows, Excel, Power Point and Access), then participated in specialized training in medical or basic office skills or accounting, including a four- to six-week internship. Job readiness classes (e.g., writing résumés and cover letters, job interviewing and employment retention) and soft skills training (e.g., communication, decision-making, conflict resolution, workplace ethics, customer service) were also offered. And students could access instruction in basic skills or ESL if needed. JVS staff provided case management services to address attendance, behavioral issues or challenges at home; legal matters, childcare needs and transportation difficulties were handled through partnerships with other agencies and organizations. Program participants received job placement assistance and employment retention services as well. JVS leveraged resources from federal, state and local public agencies and private foundations to offer these services.

### Per Scholas, The Bronx, NY

*About the organization:* Founded in 1994, Per Scholas is a nonprofit social venture that provides information technology training and computer recycling and refurbishing in the South Bronx. Working toward the twin goals of preparing participants for work as computer technicians and providing affordable access to home computers for low-income individuals, Per Scholas operates both a computer refurbishing business and a training program. Corporations, businesses and individuals bring their old computers to Per Scholas, and trainees refurbish the salvageable computers while preparing “end-of-life” computers for environmentally safe disposal.

*Sector focus:* Per Scholas focused on the information technology industry. The business side of the Per Scholas effort helped staff foster close relationships with employers, which were then leveraged to identify internships and employment opportunities for students. Per Scholas had more than 35 employer partners, ranging from very large (Time Warner Cable) to small businesses (consulting companies). Employer partners participated in job fairs, interviewed applicants on site and provided guidance on curriculum changes and improvements.

*Services offered to participants:* Study participants entered a 15-week, 500-hour computer technician training program, which was closely aligned with the needs of the Per Scholas employer base. Training consisted of “hands-on” instruction and problem-solving related to assembly, configuration, installation, upgrade and repair of personal computers, printers and copiers, as well as the design, installation and troubleshooting of computer networks. Participants who successfully completed the training were eligible to take the A+ exam to obtain an internationally recognized certification necessary for many jobs in the industrial technology sector. Per Scholas’ program includes life-skills training, covering topics such as goal-setting, communication, interviewing for a job and time management. An array of support services, such as mentoring, counseling, employability workshops, assistance with work attire and job placement services were also available to participants. Per Scholas worked with a number of external organizations to provide these support services, and through partnerships with computer recycling and refurbishing programs, participants worked as part-time interns for part of the program, as well as at Per Scholas’ warehouse. Funding for training came from private foundations, training reimbursements from other nonprofits and training vouchers.

## The Study’s Sectoral Training Programs: Common Elements

Selected according to the study’s overall criteria, each organization continued to pursue and develop its unique sectoral approach without adhering to a strictly defined common model. These programs do, however, share several key elements:

- **A sector focus:** All three organizations focus on an industry or a small set of industries and have developed industry-specific expertise and relationships that support their training programs’ design and ongoing adaptation. Among the three sites, there was a continuum of strategies to engage industries, including programs that worked with employers one-on-one to understand specific needs or with discrete sets of

employers, as well as an employer/union membership association that sought to organize employers from targeted sectors to define common needs.

- **Concern for candidates’ career match:** All three organizations had recruitment, screening and intake processes aimed at making appropriate career matches for participants. While in some cases programs needed to recruit certain kinds of participants to meet public funding guidelines, all identified candidates with an interest and aptitude for success in their target industry as well as the basic skills needed to benefit from training. Occupation-specific requirements, such as driver’s licenses for construction jobs, as well as basic skill levels were part of the screening processes. In addition, interviews to assess interest in and commitment to the sector were often an important part of the selection process.

### Wisconsin Regional Training Partnership (WRTP), Milwaukee, WI

*About the organization:* A membership organization founded in the 1990s, WRTP brings together business, organized labor and workers to identify and meet industry needs. WRTP's member services include pre-employment training, incumbent worker training and technical assistance to businesses in areas such as new technology adoption.

*Sector focus:* A WRTP industry coordinator led a committee of employers and union representatives to identify needs among member businesses, market services to current and potential member businesses, and ensure that course curriculum and content were aligned with industry needs. WRTP worked to determine that demand for trained workers was evident prior to running a training program, often assembling a particular training class only after an employer had made a firm commitment to new hiring. At the outset of the study, WRTP focused on healthcare, construction and manufacturing sectors. As the availability of traditional construction jobs began to dwindle, WRTP expanded its services to include training in road construction, lead abatement/hazardous materials and Commercial Driver's License preparation.

*Services offered to participants:* Participants received short-term technical training in the industry sector of interest. Training ranged from one to four weeks for 40 to 160 hours and included an "essential skills" component to help participants with timeliness, attendance, strategies for dealing with childcare, workplace issues and operating within the industry culture. To provide technical training, WRTP relied on a range of service providers, including member company employees who worked as trainers, community college instructors, industry experts recommended by members and others. Student supports and remedial education were offered through a network of public and community-based agencies. A combination of public funding, such as WIA training vouchers, welfare-to-work and workforce attachment and advancement resources, supported WRTP services.

- **Integrated skills training:** Programs provided training on the range of skills necessary to be successful on the job, including technical job-specific training, job-readiness workshops that were often taught through the lens of a particular industry setting, and support to strengthen basic English and math skills. All three organizations focused on making training accessible and relevant; some provided all components in a single program/package, while others contracted part of the training out to other agencies.
- **Individualized services to support training completion and success on the job:** In addition to providing a core training program to participants, the three organizations offered a range of social supports, such as childcare, transportation, housing and financial assistance, that met individuals' specific needs. This type of help included assistance to get a driver's license to reach work sites and tutoring to pass a qualifying exam. The programs either provided these services directly or in partnership with outside public or private agencies.
- **Flexibility to adjust to a changing environment:** All three organizations made changes in their programs during the study period. In some cases, their close connection to industry needs led them to shift either occupational or industry focus or to make changes to their curriculum. Programs also altered the mix of services they provided, responding to changes in partner agencies or available funding.

### The Study

P/PV used an experimental research design to bring as much rigor as possible to the question of whether these types of sector-focused training programs result in significant gains for participants. In total, 1,285 people were recruited across the three sites, all of whom went through the entire application process and met the program's criteria for eligibility. Eligible recruits were then surveyed by phone (baseline survey) about their education and work histories, additional sources of income, living situation and experiences with other training programs. Half were randomly selected to participate in the

program (the treatment group); the remaining half were assigned to the control group and could not receive services from study sites for the next 24 months but were free to receive services from other employment programs. Thirty-two percent of control group members went on to receive other training services, and 8 percent of the treatment group did not undergo the training. Both groups were surveyed by phone between the 24th and 30th months after the baseline survey to collect information about their training and employment experiences during the follow-up period. The follow-up sample included 1,014 respondents, a 79 percent response rate. Impacts were measured by comparing the progress made by people in the treatment group with that made by those in the control group. Because assignment to these groups was random, any differences between the treatments and controls can be attributed to participation in the sector-focused training program.

## Program Participants

All three organizations in the study shared a commitment to serving disadvantaged job seekers. On average, study participants worked about seven months in the year prior to the baseline survey, earning \$9,872. Thirty-four percent of participants were employed at the beginning of the study, and 10 percent had worked full time for the entire year; on average, participants had worked full time for just three and a half months during the year prior to the study. Nearly 40 percent had at some time received public assistance, including the 23 percent of participants who were on welfare at the time of enrollment. Programs enrolled a sizable number of young people, with more than 25 percent of the sample under the age of 24; the median participant age was 30. About one in five participants had been convicted of a crime, and 5 percent had been homeless in the year before the baseline survey was conducted. In terms of educational attainment, 8 percent had an associate's degree, 9 percent had a bachelor's or master's, 53 percent had a high school diploma only, and an additional 22 percent had obtained a GED. Although there were differences across sites, women and men were almost equally represented in the follow-up sample. Table 1 details the characteristics of the study's participants at baseline (both treatments and controls).

**Table 1:  
Baseline Characteristics of Follow-Up  
Sample (Treatments and Controls)**

<b>Gender</b>	
Male	47%
Female	53%
<b>Race/Ethnicity and Country of Birth</b>	
African American	60%
Latino	21%
White	12%
Other	6%
Foreign-Born	23%
<b>Education</b>	
More than a high school diploma	18%
High school diploma	53%
GED or high school equivalency	22%
Less than a high school diploma	7%
<b>Age</b>	
18 to 24	28%
25 to 54	70%
55 and over	2%
Median age	30
<b>Other Characteristics</b>	
Ever on public assistance	37%
Access to a vehicle	45%
Ever completed another training program	25%
Mean number of children in household	1.2
Ever convicted of a crime	22%
<b>Employment History at Baseline</b>	
Currently employed	34%
Months employed during previous year	6.8
Mean earnings during previous year	\$9,872
Hourly wage in most recent job	\$10.08
Worked a job that offered benefits during previous year	50%

Note: N = 1,014. Percentages may not add up to 100% due to rounding.

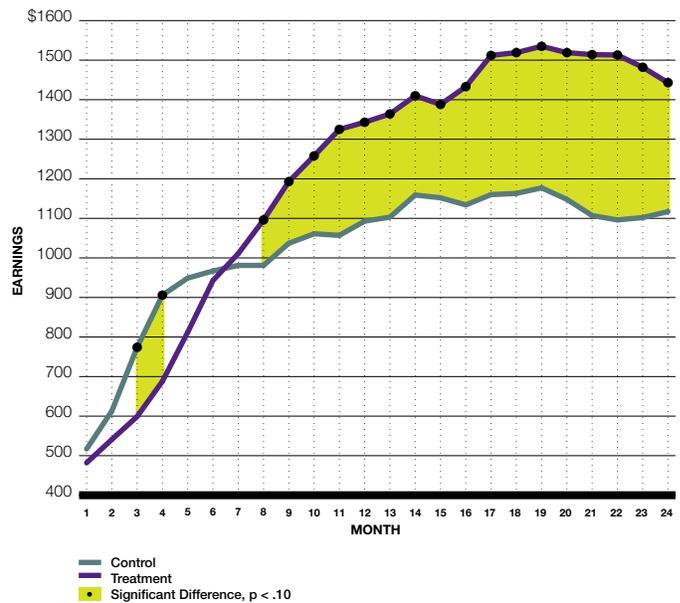
## Key Findings

This brief focuses on the average effect these programs had on five outcomes: total earnings, likelihood of employment, hours worked, hourly wages and the availability of benefits (including health insurance, paid vacation, paid sick leave or tuition reimbursement).<sup>11</sup> Because the outcomes seen during the first 12 months after enrollment reflect the opportunity costs of training (i.e., not working or at least not working full-time while in training), we present the impacts over the full 24 months but also separate out the impacts seen during the second year of follow-up (months 13 through 24). Differences between program participants and controls were analyzed using regression analysis, which controlled for characteristics such as gender, age, race and education as well as employment history in the year prior to the study (e.g., earnings and employment). While further analysis is still under way, five key findings have emerged.<sup>12</sup>

### 1. Participants in sector-focused training programs earned significantly more than the control group members, with most of the earnings gains taking place in the second year.

Participants in sector-focused training earned 18.3 percent—about \$4,500—more than controls over the 24-month study period. The impact on earnings began around the eighth month and continued through the end of the two years (see Figure 1). Not surprisingly, given that program participants were in training for a significant part of the first year, most of the increase in earnings was seen during the second year. The participants earned 29.3 percent more than the controls during months 13 through 24 (about \$4,000).

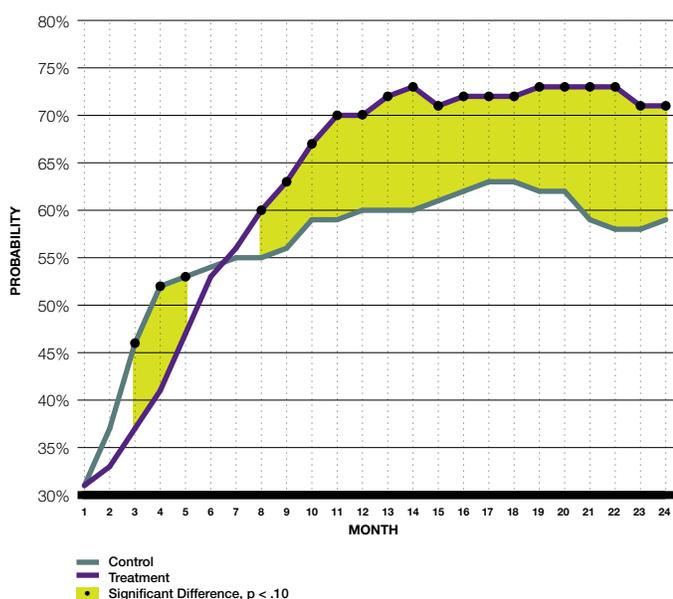
**Figure 1: Total Earnings by Month**



## 2. Participants in sector-focused training programs were more likely to work and, in the second year, worked more consistently than control group members.

Part of the observed earnings gains can be attributed to the fact that participants were more likely to find work and worked more consistently. Over the study's 24-month period, program participants were significantly more likely to be employed, working on average 1.3 more months than controls. In the first months of the follow-up period, while most treatments were still in training, controls were more likely to be employed. However, by month eight of the follow-up period, after most study participants had finished training, this relationship was reversed and treatments were more likely to be employed than controls in each month of the remainder of the follow-up period. Employment rates hovered around 70 percent for treatments in the second year, compared with the controls' 60 percent. Program participants were also significantly more likely to work all 12 months in the second year (52 percent versus 41 percent)—an indication that training helped participants find steadier employment.

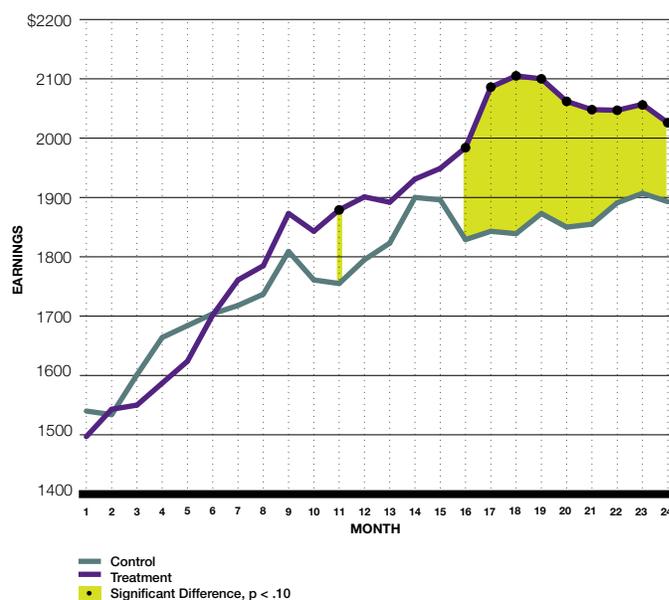
**Figure 2: Probability of Employment by Month**



## 3. Employed participants had significantly higher earnings than employed control group members.

To understand whether the participants' earnings gains were solely a reflection of their working more than controls, researchers compared outcomes of just the treatment and control group members who were employed for at least one month during the follow-up period.<sup>13</sup> Earnings for employed program participants were significantly higher (by \$3,300) than those of employed controls over the 24-month follow-up period. The earnings of these two groups differed significantly starting around month 16 (Figure 3) and continued to differ through the end of the two years.

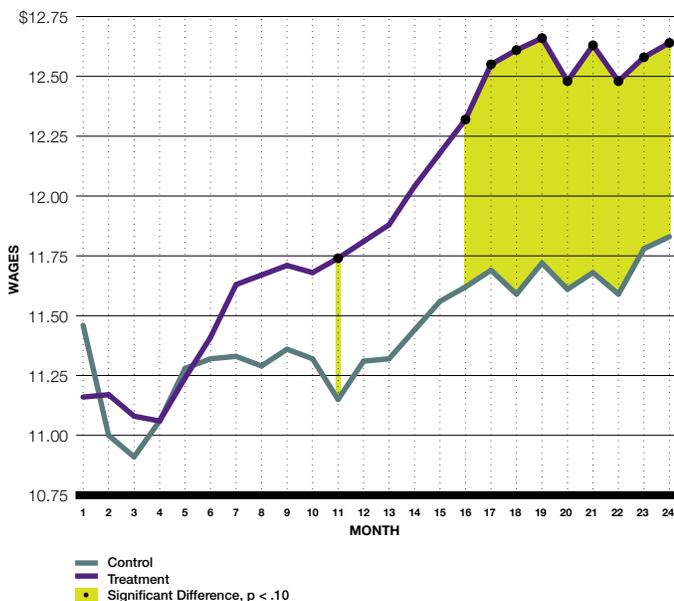
**Figure 3: Earnings by Month for Employed Treatments and Controls**



#### 4. By the second year, employed program participants were working more hours and were earning higher hourly wages than employed controls.

By the 16th month of the follow-up period, the gap between the wages of employed treatments and employed controls was large enough to be statistically significant. Wages averaged above \$12.50 an hour for treatments, while controls averaged \$11.75 an hour (see Figure 4). In their most recent job, program participants earned about 79 cents per hour more than controls. These higher wages, combined with employed participants working 200 hours more than employed controls in the second year, resulted in higher overall earnings for program participants.

**Figure 4: Hourly Wage in Primary Job by Month for Employed Treatments and Controls**



#### 5. Program participants were significantly more likely to work in jobs that offered benefits.

During the 24-month follow-up period, treatments spent an average of 11 months working in jobs that offered benefits (such as health insurance, paid vacation, paid sick leave and tuition reimbursement)—about a month and a half longer than controls.

These impacts for participants in sector-focused training programs, particularly the strong effect in the second year, suggest that participants found better jobs—ones in which they were able to work more consistently, receive benefits and earn higher wages. While it is impossible to know if the effects will fade or grow beyond the two years of the study, participating in well-implemented sectoral training programs may give workers a significant advantage that could have lasting effects on their future employment.

### Recommendations

These findings—and the experiences of the programs in this study—suggest several important lessons for federal, state and local policymakers. The forthcoming full report will explore the findings in depth for each organization, providing an analysis of the impact for different populations served, such as young adults, people with a criminal history or those who have been on welfare. The report will also examine more closely the ways in which each organization operated its program and the specific services participants received. However, as officials make policy decisions related to economic recovery, the following recommendations, based on the findings outlined above, should be considered:

1. **Invest in job training that is industry-focused or employer-linked:** Initial findings from the study suggest that training programs focused on industry-specific needs—with employers who are substantively involved in the program’s design and implementation—can produce positive outcomes for participants. In reviewing federal, state and local workforce

approaches (including the reauthorization of TANF and WIA), policymakers should ensure that industry-linked training opportunities are available for low-income and low-skilled individuals—and that these opportunities are developed in partnership with employers.

## 2. Create flexible guidelines that enable programs to

**build on local knowledge and experience:** Organizations in this study were selected on the basis of experience operating sector-focused training programs and indications that they'd attained strong placement and retention outcomes. Throughout the study, they further refined and honed their strategies, adapting to changes in the labor market, government regulations and funding, and partners' abilities to provide needed services to participants. This flexibility was essential to their success. While it is important for policymakers to ensure that common elements—such as those implemented by the sites in this study—are in place, it is also important that programs be built on local organizations' knowledge and expertise and that funding requirements do not create disincentives to changing service strategies in response to evolving local conditions and needs.

## 3. Invest in programs that integrate a range of trainings and supports:

In addition to providing training focused on specific industry needs, programs in this study integrated technical, work readiness and basic skills training and offered individual case management services when needed. Funding for these types of services currently flows through many different government departments and agencies, making it difficult for organizations to offer comprehensive support—and difficult for individuals to access the help they might need to complete the training that will qualify them for higher-skilled jobs. Officials at federal, state and local levels should find ways to make more flexible funding available to organizations that offer this range of services and/or make it easier for individuals and organizations to navigate existing systems and funding streams.

## 4. Streamline funding regulations to support programs that serve people based on common career interests:

Programs in this study served a range of job seekers—for example, people on welfare, those with a criminal record, young adults and immigrants. Candidates were selected because of an interest in a career in the targeted sector, and people from a variety of backgrounds, with different kinds of labor market experience, were trained together. Although findings for specific subpopulations are not presented here (they will be included in the detailed report mentioned above), our initial analysis indicates that well-implemented sector-focused training programs are successful across populations. Policymakers should make it easier for organizations to operate such programs with funding from a range of population-specific government contracts by adopting common performance measures and funding regulations.

## 5. Measure longer-term outcomes and reward programs that achieve longer-term success for participants:

Although there were differences across sites in the study, the impact on earnings and wages frequently did not occur until the second year of the follow-up period. Current measures of success for workforce programs often focus on shorter-term outcomes, such as immediate employment or employment retention. Under pay-for-performance contracts common to workforce programs, the attainment of these outcomes often triggers the release of funds—meaning programs' financial stability can hinge on their ability to deliver immediate results. As the findings from this study show, it can take time for participants to complete—and experience the full benefits of—sector-focused training programs. It is critical that policymakers at all levels of government consider alternative ways to measure and reward skills-training programs that focus on longer-term results, such as wage progression and career advancement.

## Conclusion

For decades, low-income individuals have experienced escalating difficulty earning enough to support themselves and their families. Gaps in wages between skilled and unskilled workers have increased steadily—those most in need of skills training and education are the least likely to have access to it. A consensus among policymakers and economists about the importance of education to develop workplace skills has led to a focus on early childhood programming, K-12 school reform and access to higher education, but a similar consensus on the importance of workforce development or job training has not emerged.<sup>14</sup> Public policy has increasingly promoted rapid attachment to the labor market, leaving low-income individuals with few opportunities to gain the skills needed for higher-paying jobs. The initial findings from this study provide an alternative to this view and suggest that it is time to recognize the viability of well-implemented, sector-focused training programs to support the advancement of low-skilled workers. The recommendations outlined here suggest ways in which public policy could support such programs.

## Endnotes

- 1 See Holzer, Harry J. and Robert I. Lerman. 2007. *America's Forgotten Middle Skill Jobs: Education and Training Requirements for the Next Decade and Beyond*. Washington, DC: The Workforce Alliance. Retrieved April 14, 2009, from <http://www.skills2compete.org/atf/cf/%7B8E9806BF-4669-4217-AF74-26F62108EA68%7D/ForgottenJobsReport%20Final.pdf>.
- 2 See King, Christopher. 2004. "The Effectiveness of Publicly Financed Training in the United States: Implications for WIA and Related Programs." In O'Leary, C., R. Straits and S. Wandner (eds.). *Job Training Policy in the United States*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- 3 See Holzer, Harry J. 2008. *Workforce Development as an Antipoverty Strategy: What Do We Know? What Should We Do?* Washington, DC: Urban Institute. Figures are expressed in constant 2007 dollars.
- 4 See O'Leary, Christopher, Robert Straits and Stephen Wandner. 2004. "U.S. Job Training: Types, Participants and History." In *Job Training Policy* (see note 2).
- 5 See Frank, Abbey and Elisa Minoff. 2005. "Declining Shares of Adults Receiving Training Under WIA Are Low-Income or Disadvantaged." Washington, DC: Center for Law and Social Policy. See also King, Christopher. 2004.
- 6 See Frank and Minoff 2005; Holzer 2008.
- 7 For Public/Private Ventures' study, see Roder, Anne with Carol Clymer and Laura Wyckoff. 2008. *Targeting Industries, Training Workers, Improving Opportunities: The Final Report from the Sectoral Employment Initiative*. Philadelphia, PA: Public/Private Ventures. For The Aspen Institute's study, see Zandniapour, Lily and Maureen Conway. 2002. *Gaining Ground: The Labor Market Progress of Participants of Sectoral Employment Development Programs*. Washington, DC: The Aspen Institute.
- 8 See Clark, Peggy and Steven L. Dawson. 1995. *Jobs and the Urban Poor: Privately Initiated Sectoral Strategies*. Washington, DC: The Aspen Institute.
- 9 On April 1, 2009, Senators Sherrod Brown (D-OH), Olympia Snowe (R-ME), and Patty Murray (D-WA) and Congressmen Dave Loebsack (D-IA) and Todd Platts (R-PA) introduced the Strengthening Employment Clusters to Organize Regional Success (SECTORS) Act, which is intended to support sector strategies and industry partnerships. Read more about the SECTORS Act at the Workforce Alliance website, [http://www.workforcealliance.org/atf/cf/%7B93353952-1DF1-473A-B105-7713F4529EBB%7D/SECTORS\\_ACT\\_PRESSRELEASE\\_%20APRIL2009FINAL.PDF](http://www.workforcealliance.org/atf/cf/%7B93353952-1DF1-473A-B105-7713F4529EBB%7D/SECTORS_ACT_PRESSRELEASE_%20APRIL2009FINAL.PDF).

- 10 See Conway, Maureen, Amy Blair, Steven L. Dawson and Linda Dworak-Muñoz. 2007. *Sectoral Strategies for Low Income Workers: Lessons from the Field*. Washington, DC: The Aspen Institute.
- 11 Site-by-site results will be available in the forthcoming full report.
- 12 All of these findings are based on comparisons of the outcomes for all the treatment group members (whom we call “participants in sector-focused training programs”) with those of all the control group members. Note that 8.3 percent of the “participants in sector-focused training programs” never actually enrolled in the programs.
- 13 As these findings reflect outcomes among only employed study participants, they do not take advantage of the study’s experimental design; thus they are not program impacts.
- 14 See Holzer 2008.

# PPV *In Brief*

---

P/PV tackles critical challenges facing low-income communities—by seeking out and designing innovative programs, rigorously testing them and promoting solutions proven to work.

---

## **Editor**

Chelsea Farley,  
*Vice President for  
Communications*

## **Design**

Malish & Pagonis

## **Public/Private Ventures**

2000 Market Street, Suite 600  
Philadelphia, PA 19103

Tel: (215) 557-4400

Fax: (215) 557-4469

## **New York Office**

The Chanin Building  
122 East 42nd Street, 42nd Floor  
New York, NY 10168

Tel: (212) 822-2400

Fax: (212) 949-0439

## **California Office**

Lake Merritt Plaza, Suite 1550  
1999 Harrison Street  
Oakland, CA 94612

Tel: (510) 273-4600

Fax: (510) 273-4619

[www.ppv.org](http://www.ppv.org)

---

Non-Profit Org  
U.S. Postage  
PAID  
Trenton, NJ  
Permit No. 696

Public/Private Ventures  
2000 Market Street, Suite 600  
Philadelphia, PA 19103

---