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To Train or Not to Train: Is Workforce Training a Good Public Investment?

For years, policy makers have faced a dilemma. Should workforce development resources—such as Workforce Investment Act funds—be used to help the unemployed and underemployed find immediate employment? Or should the money be spent upgrading workers' job skills to help make them more employable in today's labor market?

The answer depends on the worker's background, the type of long-term prospects the worker faces in the labor market, and the quality and relevance of the job training provided.



Growing the Economy Through Workforce Training

Countries providing quality education and job-training programs that improve the skills of their workforce tend to have more economic growth and higher levels of economic development than those that do not.

According to a substantial body of research, better educated and trained workers tend to fare better in the labor market. For this reason, job-training programs can be a good investment for low-skilled workers, workers with an outdated skill set, and workers with other barriers to employment, especially in times of recession or low economic growth. Higher-skilled displaced workers, however, may not need additional training to successfully find a job that provides good earnings.

In determining whether to provide training services to the unemployed and underemployed, policy makers need to take into account the

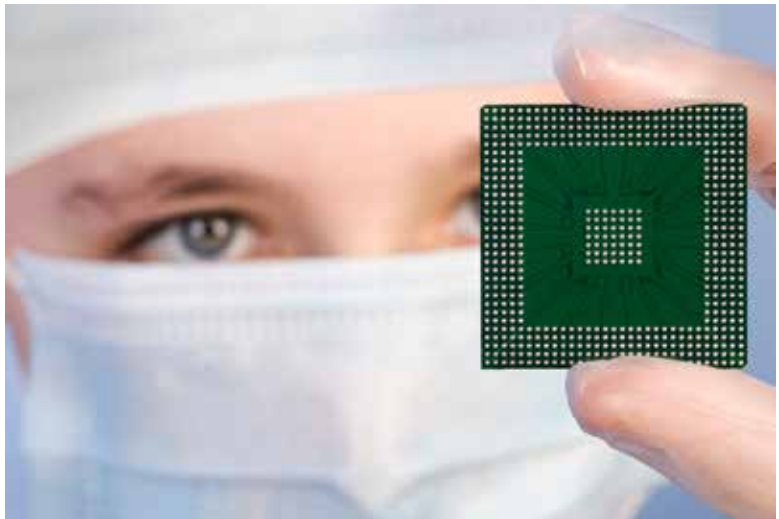
educational and occupational skill levels of those who would receive the training, the workers' prospects for medium- to long-term success in the labor market, as well as the skill needs of the employers and industries that ultimately would hire them.

What matters is whether there is a demand for the skills the workers are being taught, and whether the workers' employment prospects and income earnings are likely to improve significantly once they learn the skills. The quality of the training and labor-market relevance of the skills being taught largely determine whether those receiving services will benefit from the training. Policy makers and service providers need to weigh all of these matters to help ensure job-training programs are successful.

What Do We Know About Job Training, Education, Productivity, and Wages?

There is a general consensus that better educated and trained workers are more productive and more successful in labor markets, typically earning more over the course of their lifetime and experiencing fewer episodes of unemployment.¹ The benefits of training and education not only accrue to the individuals receiving the training, but also to the firms that employ the workers and the economies in which the workers are employed.

- > Firms that implement employee training programs increase their labor productivity and can eliminate productivity gaps with competitors.²



Recognizing Links Between High Skills, High Productivity, and High Wages

Labor-market experts agree: Better educated and trained workers are more productive and more successful in labor markets, typically earning more money over the course of their lifetime and experiencing fewer episodes of unemployment.

- > Countries that provide quality education and job-training programs that improve the skills of their workforce tend to have more economic growth and higher levels of economic development than those that do not.³

While there is general agreement that more highly trained and educated workers perform better in the job market, debate continues on whether, when, and to what extent public resources should be used to provide job training. A central issue in these debates is whether resources should be used to place job seekers in immediate employment, or whether those resources should be used to provide training services that increase workers' educational and occupational skill levels.

Two Schools of Thought: Work First vs. Human Capital Development

Proponents of the Work First school of thought encourage policies that lead to

immediate employment for job seekers and spending on employment services, such as job search-and-placement assistance, which are the types of services provided at One-Stop Career Centers under the federal Workforce Investment Act (WIA). (A California Senate Office of Research report shows the bulk of WIA formula funds distributed to Local Workforce Investment Boards in California is spent on exactly these types of employment services, with far less money being invested in job training.)⁴

In contrast, proponents of the Human Capital Development school of thought question whether One-Stop Career Center services and immediate job placements are receiving too much emphasis, given that additional investment in occupational skills training might provide a better economic return for workers over the medium to long term. According to policy advocates who support this view, job training improves the earnings capacity and employability of individuals to a greater extent and for a longer duration than policies that encourage workers to take a job, any job, to secure immediate income.

What Does the Research Say?

Studies support both the Work First model and Human Capital Development approach to workforce investment; however, the balance of current research suggests job training may lead to greater impacts on income and employability over the medium to long term for certain groups of workers, primarily low-skilled workers, workers with an outdated skill set, and workers with other barriers to employment. Moreover, recent evidence on labor-market operations indicates that

workers who take and keep jobs with low-paying employers in stagnant sectors fail to advance, and earn less over time than those who secure jobs with better-paying employers in growth sectors.⁵

The Case for Work First

Research from the late 1990s and early 2000s suggested that publicly sponsored job-training programs—such as the Comprehensive Employment Training Act (CETA, 1973 to 1982), Job Training Partnership Act (JTPA, 1983 to 1998), and Workforce Investment Act (WIA, 1999 to present)—had only modest positive impacts on the employability and earnings of those enrolled in these programs.⁶

For example, a review of research on CETA job-training programs (1973 to 1982) found positive yet modest wage impacts for adult women participating in training programs, *but also found there was little or no impact on adult men or youth of either sex.*⁷

Other studies on the impacts of the JTPA (1983 to 1998) conducted during the 1990s found that job-training results varied by demographic group with “more positive impacts . . . observed for adult women than men and for adults than for out-of-school youth.”⁸ Researchers also found that income gains *were largely accounted for by increases in employment*, and faded over time.⁹

Similarly, a recent study of various employment services and job-training programs in a large California urban area examined income impacts on workers who received these services in the second and

third quarters after they exited the program; the researchers found that “relatively longer-term and more expensive training services . . . [were] not uniformly superior to shorter-term, less costly interventions, such as job-search assistance and one-on-one coaching and counseling.”¹⁰

Partially in response to these types of findings, some policy advocates and workforce professionals have argued that “less costly strategies emphasizing work over training . . . [are] more effective than those stressing more traditional human capital development.”¹¹ According to proponents of this perspective, immediate job placement results in more immediate income gains because workers can avoid lost earnings associated with the time spent in training while also building on-the-job work experience.

The Case for Human Capital Development

The balance of recent research suggests that skill-training programs—especially sector training programs—outperform Work First policies over the medium to long term, at least for some groups of workers.¹² This research also indicates that earlier studies may have underestimated the beneficial impacts of publicly sponsored workforce training programs through faulty control-group design and the use of improper follow-up periods when comparing outcomes across service strategies.

For instance, earlier studies allegedly constructed control and treatment groups in ways that did not preclude members of the

control group from receiving training, and did not ensure that members of the treatment group received the training. Moreover, these studies evaluated policy impacts over short follow-up periods, inherently giving greater comparative weight to immediate employment and earnings gains because workers serviced under Work First approaches did not forgo short-term income gains to enroll in training, while those who enrolled in training did. According to more recent research, these types of methodological problems can lead to downwardly biased estimates of the effect of training on earnings and employment, especially in the short term.¹³

Studies Find Bigger Impacts for Job Training Than Other Employment Services

Researchers from the University of Texas at Austin recently examined programs in Texas and found significant rates of return on public investments for both Work First and job-training strategies, but they also found that the latter outperformed the former. Specifically, their study, published in the *Texas Business Review* in June 2010, shows that participation in high-intensity services, such as workforce training programs, resulted in annual earnings increases of \$1,848 over and above earnings gains realized by recipients of low-intensity services, such as job search-and-placement assistance. The researchers concluded:

Public investments in high-intensity services [those that enhance knowledge and skills] produce more lasting returns and should receive greater emphasis in the policy mix. Workforce investments

are dominated by low-intensity services [primarily job search assistance], which tend to produce short-lived impacts because they often do not improve an individual's earnings capacity in any substantive way.¹⁴

Researchers from the Ray Marshall Center at the Lyndon B. Johnson School for Public Affairs at the University of Texas at Austin reached similar conclusions. They examined the performance of seven city and county programs in and around Austin, Texas, and concluded that longer-term, higher-intensity programs involving a significant focus on upgrading skills were more effective than short-term programs emphasizing Work First policies. Among their key findings:

- > Programs with a short-term focus emphasizing short-term training and job search assistance resulted in an increase in employment and earnings, but impacts were short-lived.
- > In contrast, those who enrolled in programs with a longer-term focus, in particular those with an emphasis on occupational skills training for “high-wage, high-demand occupations in growth sectors . . . not only gain[ed] access to higher-paying employment initially, over time their earnings continue[d] to increase.”¹⁵
- > Workers who trained and completed the Capital Investing in Development and Employment of Adults (IDEA) program, which focuses on long-term training for high-wage, high-demand occupations, often in community college programs that confer a degree or certificate, earned almost \$1,700 more quarterly than members of the comparison group, who received only short-term job search-and-placement assistance.¹⁶



Mapping and Building Career Pathways

Job-training programs can be a good investment for low-skilled workers, workers with an outdated skill set, and workers with other barriers to employment, especially in times of recession or low economic growth.

Multistate Evaluations of Workforce Investment Act Programs

Authors of other multistate studies examined the impact of Workforce Investment Act (WIA) programs and came to somewhat similar conclusions. Their research also helps explain the disparate findings of studies that support both Work First and job-training services.

For example, a study of WIA services in 12 states found that in adult WIA formula fund programs that targeted disadvantaged workers, “short-term effects . . . [were] greatest for individuals who . . . [did] not receive training services, although the benefits that accrue to them tend to degrade over time. *Those who obtained training services . . . [had] lower initial returns, but they [caught] up to others within ten quarters, ultimately registering larger total gains.*”¹⁷

The researchers also found that adult females in training ultimately earned \$800 more per quarter (\$3,200 per year) than those who received no training, while adult males who received training earned \$500 to \$600 more per quarter (\$2,000 to \$2,400 per year) than their counterparts who received no training.¹⁸ Similarly, the researchers found some evidence suggesting that typical earnings and employment impacts for workers in states that enrolled more workers in training were longer lasting, and ultimately produced larger gains for service recipients in these states than in those states that placed less emphasis on training.

These findings showing positive impacts from WIA services and training for disadvantaged workers are consistent with an earlier multistate study where researchers evaluated the impacts of WIA services and training for disadvantaged workers in seven states.¹⁹ That study also showed that individuals who received training were more likely to be employed, and those who were employed earned approximately \$660 more per quarter than their counterparts who did not receive training services.

Nevertheless, the 12-state study also showed that job training does not always outperform Work First strategies. Findings from the study suggest that newly unemployed workers, referred to in the WIA program as “dislocated workers,” may be more likely to benefit from immediate job-placement services than from additional job training, depending on whether or not they have a marketable skill set. Along these lines, the data suggest that an unemployed worker’s skill level will likely determine which service strategies would be the most effective for that worker.



Gaining Technical Know-How

Technically oriented training programs—such as those in the fields of engineering and health care—generally yield larger labor-market returns than other programs, including those focused on the service sector.

The data from the 12-state study also suggest the following:

- > On average, opportunity costs from lost earnings associated with time spent in training appeared to be higher—and lasted longer—for recently unemployed workers than for other recipients of training services in the WIA program.
- > Dislocated workers tended to have higher income levels (than their counterparts in the control group) for four years prior to the time they received services, demonstrating that these individuals had prior labor-market success, and suggesting that they

potentially have greater prospects for immediate employment.

- > Dislocated workers who earned more during the comparison period as a result of job search-and-placement assistance may have performed better than the dislocated workers who received training because the former had an immediately marketable skill set, while the latter did not.
- > Dislocated workers who enrolled in WIA services may have faced the problem of “permanent” displacement. The fact that some of these workers received training and were not capable of securing income through job search-and-placement services suggests that changes in the economy and labor market somehow may have rendered their skill set obsolete.

Similar findings concerning dislocated workers also were reported in research by the W. E. Upjohn Institute for Employment Research.²⁰ Taken together, the findings from both studies suggest dislocated workers may face greater short-term trade-offs if they forgo immediate employment to enter training if these workers have an immediately marketable skill set.

The foregoing findings do not, however, imply that training is an inappropriate service strategy for all dislocated workers.²¹ For instance, a dislocated-worker study in the state of Washington showed significant returns for displaced workers who returned to school by attending the state’s community colleges.²²

What likely matters most: whether there is a demand for the skill set of dislocated workers receiving services, and whether their expected employment prospects and income

earnings are likely to improve significantly if they were to receive job training services. For example, a recently laid-off software engineer may need little or no job retraining, while a recently laid-off assembly-line worker may be unable to secure employment without additional training.

Important Considerations: Labor-Market Relevance, Quality, and Intensity of Training

While the multistate evaluations of WIA have shown that job training outperforms other lower-intensity services for some groups of workers, these studies may understate the labor-market impact of high-quality training programs because they do not typically control for the quality, intensity, or labor-market relevance of the training programs in the analyses.

Research shows occupational-training and educational programs are not of equal quality and do not always provide a good return on investment. For example, some research on private postsecondary colleges has shown that students spend more money on occupational-certificate and associate-degree programs than their counterparts who take courses from public-sector educational institutions and private nonprofit educational institutions.²³ Students at private postsecondary colleges also tend to take on substantial debt, face a high likelihood of defaulting on their loans, and have low completion and graduation rates.²⁴

In determining whether a training program is a good investment, policy makers should carefully consider a training program’s characteristics to help ensure the program will

have the desired policy impact; in particular, policy makers and workforce professionals should consider the following:

- > **How long or intense is the program? Is the program’s duration long enough or is the instruction intense enough for workers or students to develop an increased level of human capital, demonstrated by the acquisition of new skill competencies? What will the trainees be able to accomplish after receiving the training? What is their likelihood of success in the labor market after the training?**

The research on workforce education and training suggests that, other things being equal, the longer or more intense a training program is, the greater the earnings and employment prospects of the trainees.²⁵ Researchers estimate that workers can expect earnings gains of about 5 percent to 10 percent for every year of postsecondary college credit they complete, with some variation depending on the study cited, the demographic group in question, and the type of educational institution providing the training or education.²⁶

This research also suggests the equivalent of one year of postsecondary credit is typically necessary for workers to experience significant wage gains.²⁷ This means shorter-term or less-intensive training and education programs may have a limited impact on worker earnings and employability unless the programs build on the skill sets of workers who already have sufficient education and training to parlay their newly acquired skills into labor-market success. It also may imply that training programs targeting workers with

limited basic skills may need to combine occupational training with educational efforts to improve the literacy and numeracy of workers with limited basic skills.²⁸

- > **What is the goal of the training? What is the curriculum? Are the skills taught by the program in demand in relevant labor markets? Does the training prepare the student/worker for an occupation in growing or emerging sectors of the economy?**

Much of the education research on both baccalaureate and sub-baccalaureate certificate and degree programs has shown that the program of study matters. In general, programs that provide technical skills, such as engineering and health care programs, tend to yield greater labor-market returns than other programs, such as occupational programs focused on the service sector.²⁹ Policy research also indicates “sector training” programs that link workforce training opportunities to in-demand occupations in growth industry sectors can have substantial impacts on the employment prospects and earnings of the program participants.

A recent experimental evaluation of sector training programs in three sites conducted by Public/Private Ventures and the Aspen Institute found that participants experienced employment and earnings impacts over several years.³⁰ Some significant findings:

- > Program participants earned significantly more (\$4,500 or 18.3 percent) than control-group members over two years, and almost 30 percent more than control-group members during the second year after training.

- > Participants in sector training programs had a higher likelihood of being employed, and in the second year were more consistently employed than control-group members.
- > Employed participants worked more hours and earned higher wages than their control-group counterparts.
- > Participants were more likely to be employed in jobs with employee benefits than their control-group counterparts.

Program completion and certification of skills attainment may be an important factor in determining whether training programs will increase the labor-market outcomes of those who received training.

While the research literature is not conclusive, a growing body of evidence suggests that those who complete occupational training programs, and receive a certificate, degree, or diploma, outperform those who merely enroll and attend the relevant programs.³¹ Moreover, industry recognition and certification of the skill competencies conferred by a degree or certificate can be an important determinant of whether the conferred credential will lead to employment.³² For this reason, some policy advocates in the workforce and education policy arenas are making efforts to steer resources toward programs that issue industry-recognized degrees and certificates.³³

Five Policy Issues to Consider When Making Training Investments

Policy makers should consider the following five issues when determining when, how, and for whom to invest in workforce training:



Responding to Labor-Market Signals

Policy research shows that “sector training” programs—which link workforce training opportunities to in-demand occupations in growth-industry sectors—can have substantial impacts on the employment prospects and earnings of those who participate in training.

1. Education and training are associated with labor-market success.
2. A worker’s need for training depends on his or her education and skill level.
3. Consider the expected medium- and long-term impact on a worker’s income when deciding whether to provide training to a worker.
4. The length or intensity and the quality and labor-market relevance of training programs are important considerations when determining where to invest resources.
5. Trade-offs and opportunity costs associated with training vary with the business cycle.

First, economic data consistently show that workers with more education and training typically perform better in labor markets than their lesser educated and trained counterparts. The issue is not whether

training and education work; rather, the issue is whether training and education are appropriate for a particular client.

Second, whether training or job-placement services are more appropriate for any given client will depend on the client's existing skill level and the marketability of the skills the client will gain from training.

This second point is illustrated in the apparent contradictory findings regarding the WIA adult and dislocated-worker program trainings in the 12-state study. The adult WIA funding stream targets disadvantaged workers, often low-income adults with barriers to employment such as lower levels of educational attainment, and, sometimes, limited basic skills. The 12-state study's findings suggest these types of individuals are likely to benefit more from having their skills upgraded by job-training programs than from immediate job-placement services. In contrast, the dislocated-worker WIA funding stream targets recently unemployed workers



Competing in the Global Economy

Firms that implement employee training programs typically increase their labor productivity and often eliminate productivity gaps with competitors.

who have, by definition, already experienced some labor-market success, given that they have held a job. The degree to which these types of clients receive and benefit from training programs depends on whether their current skill set is marketable.

The third issue policy makers should consider is whether the services provided to clients will maximize the clients' income and employment prospects over the medium to long term.

Considered collectively, the sector strategy studies and multistate WIA evaluations suggest that job-training programs may reduce income in the short term, but ultimately may provide greater economic benefits over the medium to long term, especially for low-skilled workers, workers with an outdated skill set, and workers with other barriers to employment.

In contrast, job search-and-placement assistance may provide larger and more immediate benefits in the short term, but these gains could fade over time, depending on the skill level of the workers involved. For workers with an immediately marketable skill set, such as dislocated workers in an industry or sector that is hiring, job-placement services could be more appropriate than training or retraining services.

The benefits of training take time to materialize, but the costs of entering training can be immediate. As a result, service providers and clients must confront the potential trade-offs associated with choosing which strategy to pursue. This requires a solid understanding of a client's skill set and



Training and Studying for Greater Success

Workers can expect earnings gains of about 5 percent to 10 percent for the equivalent of every year of postsecondary college credit they complete, with some variation depending on the program of study, the demographic group, and the type of educational institution providing the training.

the labor market in which he or she is seeking employment.

The fourth point: ensure the quality of training programs and the labor-market relevance. Programs should offer a sufficient investment in workers so they may acquire the skills and competencies necessary to meet the key workforce needs of employers, industries, and sectors conducting business in the relevant labor market.

Assessing whether a worker needs training to find a job with suitable returns over the medium to long term also requires an assessment of industry needs. Do the industry sectors in a given labor market face critical skills gaps or workforce supply problems? If so, how are workforce professionals working to meet those needs? Could workers who seek training services receive the skills

training needed to meet industry needs? If so, specific targeted training investment could improve not only workers' incomes, but also the competitiveness of the industries hiring those workers.

Lastly, trade-offs associated with training vis-à-vis other services, such as job search-and-placement assistance, are not only contingent on a worker's skill set or the needs of industry, they also are shaped by the business cycle. For example, when unemployment is high and few employers are hiring, the short-term costs associated with training go down because the prospects for immediate employment and associated income also fall. At the same time, the relative returns from upgrading a worker's skill set increase by improving the worker's productivity and attractiveness to employers, especially when the training provides competencies for in-demand occupations. During these times, the return on training investments is likely to increase.

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