

Policy Highlights from

“Is job training justified?”

An Analysis of Job Training Services as Administered by Utah's Department of Workforce Services



Introduction

DWS is committed to assessing the quality of programs administered and proactively reviewing its services in order to ensure maximum value is provided to the public.

A circular icon containing a lowercase letter 'i', representing information or a key point.

Budget shortfalls stemming from the recessionary economy have brought forth the need to examine federal funding of existing social programs, including those designed to provide training for unemployed and underemployed workers across the nation.

While the need to train and retrain workers for the dynamic skill sets required by the in-demand occupations of present-day labor markets is a widely accepted proposition and a high-priority issue for the Obama White House, the effectiveness of current training programs has been brought into question. (See for example The Government Accountability Office's report entitled: *“Multiple Employment and Training Programs: Providing Information on Colocating Services and Consolidating Administrative Structures Could Promote Efficiencies,”* published January, 2011.)

This policy brief summarizes the essential conclusions of an extensive job training analysis conducted by Utah's Department of Workforce Services (DWS) for the purpose of guiding policy-makers in decisions pertaining to training services. DWS is committed to assessing the quality of programs administered and proactively

reviewing its services in order to ensure maximum value is provided to the public.

Job training services offered by DWS and evaluated in this research include classroom training, employment and wage subsidies, and job readiness training. It is important to realize that the research did not seek to evaluate the merits of training workers. Training and education are human capital investments that have measurably profound effects on an individual's labor market outcomes and extensive data from various sources proves this.

What the research does attempt to evaluate however, is the effectiveness of state agencies that administer the programs aimed at leveraging public funds to invest in human capital via training programs. As a state agency charged with administering some of the largest public assistance programs under scrutiny due to current budget deficits, the effectiveness of job training programs—specifically the effectiveness of the manner in which the services are rendered at the state level—is an issue of great concern to stakeholders. The full research report is available on the web at <http://jobs.utah.gov/wi/trainingstudy>.

is job training justified?

How can we tell if publicly funded training services make a difference?

While it may seem that the answer lies in simply looking at whether trainees obtain good jobs, this approach overlooks some complicating factors. Because individuals are not randomly assigned to training and non-training groups, those individuals who choose to undertake training may also have innate qualities that lead to improved labor market outcomes, which makes separating the effects of training and these innate qualities difficult. The method used in this analysis is to separate the effects was propensity score matching, a technique developed primarily to address this difficulty. In simplest terms, the method matches individuals from the training group and the non-training group so that both groups have the same overall probability of receiving training, which effectually randomizes the assignment of training between the groups. Over 85 factors were used in this research to find statistical matches for about 32,500 treatment individuals, drawing from a pool of roughly 300,000 control individuals.

Factors used to match treatment and control individuals include:

Propensity score matching was used on administrative data to estimate the employment and earnings differences between individuals assigned to training services and individuals who were not.

Demographic Factors

- Age
- Educational attainment
- Gender
- Race/Ethnicity
- English language proficiency
- Disability
- Geography

Economic Factors

- Employment history
- Earnings history
- Unemployment insurance claims history
- Industry of prior employment
- Participation in other assistance programs

Comparing Matched and Unmatched Data

	Training Group	Unmatched Control Group	Matched Control Group
Limited English Proficiency	3.3%	1.8%	3.1%
Disability	9.4%	6.0%	9.6%
TANF Recipient	49.8%	4.7%	47.8%
Food Stamp Recipient	74.6%	21.5%	76.8%
UI (Prior 6 quarters)	\$109	\$58	\$112
Wages (Prior 6 quarters)	\$8,253	\$11,564	\$8,396

When matching is performed on all of these socioeconomic factors, the control and treatment groups are essentially equal but for the treatment factor. The matched groups are then compared by observing employment and wage patterns over the four years beyond the point of contact with DWS. (For the training group, this is the day training is initiated. For the control group it is the day they make contact with DWS.) By equalizing characteristics across both groups, any differences in employment and earnings between the two groups can be attributed to the effect of training.

By equalizing characteristics across both groups, any differences in employment and earnings between the two groups can be attributed to the effect of training.

is job training justified?

The Results

Does DWS administered job training make a difference? The results from the study show that it depends on the service. Following federal guidelines for allowable training activities, six training service categories were evaluated in this study: degree programs, occupational training, HS/ GED, paid internships, unpaid internships, and life skills. Generally speaking, study results show that DWS renders training services effectively. However, results also suggest that some policy and service delivery enhancements would considerably improve future employment and earnings outcomes.

Estimates of fourth year employment and earnings differences show exactly which training services garner the most significant outcomes for trainees once enough time has passed for potential training benefits to be fully realized. While estimates of years one, two, and three show some disparity in the outcomes patterns for males and females, by the fourth year the patterns are essentially the same. Both male and female trainees realize better employment

outcomes than their control group counterparts in nearly every type of training service. For earnings, however, only three of the six training services rendered the trainees better off on average than the control group. Those receiving degree program, occupational training, or paid internship services were better off because of their interactions with DWS, experiencing substantial employment and earnings outcome advancements. Degree program training service participants experienced the largest employment and earnings differences.

The only notable dissimilarities between male and female outcomes in year four are the magnitudes of the differences in earnings (males benefitting more), and this phenomenon holds consistently throughout all the estimates in the study.

For a detailed discussion of the full set of results estimated in this research study, including outcomes measures on a quarterly basis and by geographical region, please refer to the full report.

Results Measured in Fourth Year After Treatment

	Males		Females	
	Employment Differences (percentage points)	Earnings Differences (annual average)	Employment Differences (percentage points)	Earnings Differences (annual average)
Degree Programs	9.0	\$4,744	9.3	\$3,409
Occupational Training	6.2	\$2,075	8.3	\$1,209
GED/HS Diplomas	7.5	-\$212	6.3	-\$161
Paid Internships	6.6	\$1,528	3.6	\$437
Unpaid Internships	2.6	-\$959	0.0	-\$1,045
Life Skills (Other)	1.2	-\$1,052	1.5	-\$860

Those receiving degree program, occupational training, or paid internship services were better off because of their interactions with DWS.

The Issue of Completion

The positive outcomes from degree programs, paid internships, and occupational training affirm that DWS administration of these services supports the realization of positive labor market outcomes from human capital accumulation. In contrast however, results from other training services show negative earnings differences for those who receive the service in comparison to the control group. What is the explanation for these contradictory results? Presuming that GED/HS Diploma, unpaid internships, and life skills training all potentially add to a trainee's skill set, the reasonable expectation is that earnings will be higher in relation to those who don't receive the training. Negative earnings effects are counterintuitive and therefore led to further investigation into their causes. It was found that the explanation for these negative earnings was attributable, in part, to completion rates.

Completion rates overall for training service recipients was somewhat low. For all trainees, the average completion rate was 41.0 percent. Occupational training and paid internships had some of the highest completion rates and some of the best earnings and employment outcomes. Conversely, both males and females showed the lowest completion rates for GED/HS Diplomas. Individuals in this training service also exhibited some of the most disappointing labor market outcomes measured in this study.

Completion Rates by Service Groups

	Females		
	Completed	Did Not Complete	Other Outcomes
Degree Programs	22.9%	62.1%	15.1%
Occupational Training	52.5%	39.6%	8.2%
GED/HS Diplomas	15.5%	76.4%	8.0%
Paid Internships	47.8%	49.7%	2.5%
Unpaid Internships	28.5%	71.0%	0.5%
Life Skills (Other)	47.7%	52.3%	0.0%

	Males		
	Completed	Did Not Complete	Other Outcomes
Degree Programs	41.6%	49.6%	8.8%
Occupational Training	69.8%	26.0%	4.2%
GED/HS Diplomas	12.9%	77.0%	10.0%
Paid Internships	41.8%	57.6%	0.6%
Unpaid Internships	23.6%	75.5%	1.0%
Life Skills (Other)	46.1%	53.9%	0.0%

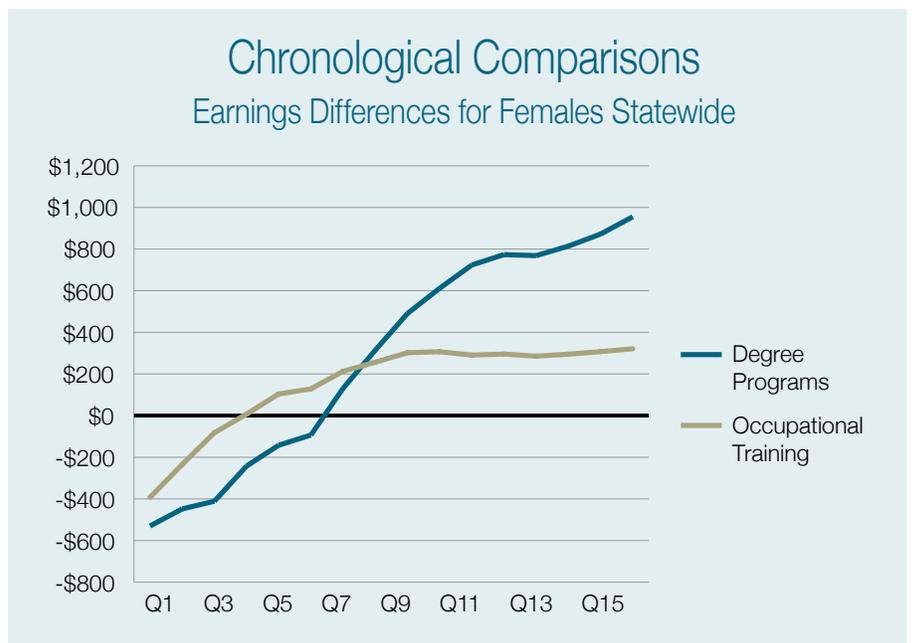
is job training justified?

Given that many reliable economic data sources show that those who earn a GED or HS Diploma receive higher wages and experience lower unemployment than those with lower educational attainment, the poor completion rate among DWS customers who receive the HS Diploma/GED training service is the most likely explanation for the weak results. The negative outcomes associated with other training services, namely unpaid internships and life skills, are also largely explained by low completion rates. Furthermore, this argument could reasonably be expanded into the training services that exhibited positive returns and could therefore be assumed to have even greater potential for earnings and employment effects with higher completion rates.

What does this mean for policy?

Findings from the training research do not in any way lead to the conclusion that funding for training programs is a waste of taxpayer dollars. Nor, however, can the conclusion be drawn that the administration of these services is completely optimized under the current delivery system. What the results do show is that improvements can be made to how training services are rendered, that macroeconomic circumstances affect when some training services are more appropriate than others, and that additional services may be needed in order to realize the full potential of labor market outcomes for the participants in these programs.

Improvements can be made to how training services are rendered, macroeconomic circumstances affect when some training services are more appropriate than others, and additional services may be needed in order to realize the full potential of labor market outcomes for the participants in these programs.



With the full results of the study in mind, the following policy recommendations are offered:

1 Evaluate the macroeconomic conditions and emphasize training services accordingly—while there are multiple training services that show positive outcomes in the fourth year, the trajectory of results manifested by these services over time varies. For example, results for both occupational training and degree programs generally tended to be strong and significantly positive. However, trainees in degree programs on average experienced negative differences in the first two years. From the third year onward, earnings and employment differences were consistently positive such that the negative differences offset by the positive differences, yielding a net positive sum of earnings difference for the four-year period. Moreover, the trend indicates that the differences can be expected to increase into the future. Occupational training results did in some cases begin negative, but the period of negative outcomes is very short. The employment and earnings differences for this training group became positive more quickly than what is measured for degree

program trainees. In other words, measurably positive results will manifest much more quickly with occupational training than with degree programs. However, where earnings for degree programs show a continued positive trend, the trend for outcomes in the occupational training group is comparatively flat.

The economic situation matters in this case because it will likely dictate whether or not it is feasible to wait for positive outcomes to come to fruition in order to guarantee the trainee positive outcomes that grow over the long run, as is the case with degree programs, or if it is necessary to sacrifice longevity for more immediate returns, as is the case with occupational training. In times of economic strife, it simply isn't as feasible to expect that on average an individual will have the resources available to forgo earnings and employment opportunities for long periods of time. And from the perspective of the broader economy, the need for immediate economic stimulus makes the opportunity costs of human capital accumulation too dear.

2 Support training service completion—Funding for training programs is justified by the fact that the accumulation of education, experience, and skills lead to better employment and earnings outcomes. Federal money is spent on these programs with the belief that it will better the economy when more people find jobs and receive higher earnings as a result of their training. Some of these benefits are realized under the current policies that direct the administration of the programs at the state level. However, to realize the full potential of benefits, encouraging completion is a must. As the results from the research show, it isn't enough to simply register an individual for a service. An additional measure should be added to the rendering of services that in some way supports completion. Possible options include incentives, requirements for continued eligibility, and support counseling.

Recommendations cont.

3 **Not all training is the same**—Life skills (“Life Skills (other)” in DWS systems) is considered an allowable training activity under federal guidelines. However, it is questionable whether the content of some life skills courses is expected to assist a trainee in gaining immediate employment or earning higher wages. The profile of life skills training recipients shows that on average the trainee is facing numerous barriers to employment, and the life skills courses are simply one step in moving the trainee past the barriers and eventually into gainful employment. Successful completion of a life skill course may be a necessary step for an individual to eventually be an active member of the labor force, but is certainly not designed to be a sufficient step unto itself. Therefore, evaluating life skills services based solely on employment and earnings outcomes is interesting in the context of comparing all allowable training services, however, it is an unfair yardstick for which to judge the merits of some life skills training.



To view the full report, go to
<http://jobs.utah.gov/wi/trainingstudy>
or contact the report authors:
John Krantz, email: jkrantz@utah.gov
Carrie Mayne, email: cjmayne@utah.gov

