

Registered Apprenticeship and Work-Based Learning Interventions Synthesis Supplement: Detailed Report List and Summary of Findings

October 2023

This supplement to the registered apprenticeship and work-based learning intervention topic area research synthesis, “What do we know about the effectiveness of registered apprenticeship and work-based learning interventions?” provides a brief description of the research findings for all reports reviewed in this topic area of the [Clearinghouse for Labor Evaluation and Research \(CLEAR\)](#). This supplement is a more detailed companion to the information provided in the concise registered apprenticeship and work-based learning interventions research synthesis, which is based on the results of CLEAR’s systematic review of causal research. This supplement includes all the studies reviewed in this topic area, regardless of whether the study received a high, moderate, or low causal evidence rating. Note that the research synthesis generally only discusses findings from studies that received high or moderate causal evidence ratings, because we have greater confidence that the impacts reported by those studies are attributable to the interventions examined.¹

For a more detailed summary of each study—including an overview of the study design, intervention, findings, and considerations for interpreting the findings—please review the study’s profile online at the CLEAR apprenticeship and work-based learning topic area ([Registered Apprenticeship and Work-Based Learning | CLEAR \(dol.gov\)](#)) or by following the study-specific profile links below.

About the Registered Apprenticeship and Work-Based Learning topic area

The registered apprenticeship and work-based learning topic area includes reviews of studies examining the effectiveness of work-based learning programs on participants’ employment and earnings outcomes, as well as public benefit receipt and education and training. The registered apprenticeship and work-based learning topic area in CLEAR focuses on training delivered in the workplace or a job-like setting, with or without additional, classroom-based study. Examples of work-based learning include sectoral training and employment, subsidized and transitional employment, and apprenticeships. CLEAR assessed the strength of causal evidence provided in each study and summarized each study’s design, methods, findings, and the program examined using the Employment and Training Review Protocol ([Employment and Training Review Protocol | CLEAR \(dol.gov\)](#)). CLEAR’s search included all reports published from 2005 to 2017.

See the CLEAR Causal Evidence Guidelines, Version 2.2 (<https://clear.dol.gov/reference-documents/causal-evidence-guidelines>) for information on the evidence guidelines used to determine the causal evidence ratings.

About the evidence base

CLEAR found 54 studies of registered apprenticeship and work-based learning interventions published from 2005 to 2017.² Of those, 17 studies received a high or moderate causal evidence rating in CLEAR, which means that we have a good degree of confidence that the impacts reported in those studies are attributable to the interventions. The remaining studies received a low causal evidence rating which means their results should be interpreted with caution.

Key findings are divided by intervention category: Sectoral training, subsidized and transitional employment, registered apprenticeship (RA) and apprenticeship, Workforce Investment Act (WIA) training services, and Other. Table 1 outlines the number of studies that are in each category. The number of studies that found at least one favorable impact in the outcome domain are green and labeled with "a". These studies had at least one statistically significant favorable impact in the outcome domain and no statistically significant unfavorable impacts. The cells that are gray and labeled "b" indicates the number of studies that found no statistically significant impacts in the outcome domain. Yellow cells labeled "c" are the number of studies with mixed impacts in the outcome domain. These studies had some statistically significant favorable and some statistically significant unfavorable impacts in the outcome domain. Red cells and labeled with "d" indicate the number of studies that found at least one unfavorable impact in the outcome domain. These studies had at least one statistically significant unfavorable impact in the outcome domain and no statistically significant favorable impacts. Empty cells indicate that no studies had findings of that type in that outcome domain.

Table 1: Overview of the evidence base

Intervention Category	1	2				3				4				5				6				7			
	Number of studies by rating*	Short-term employment (<18 months)				Long-term employment (>18 months)				Short-term earnings (<18 months)				Long-term earnings (>18 months)				Public benefit receipt				Education and training			
Sectoral training and employment	6 Moderate/High	1 ^a	3 ^b			1 ^a	4 ^b				4 ^b			2 ^a	3 ^b							5 ^a			
	3 Low	2 ^a			1 ^d	3 ^a				3 ^a	1 ^b			3 ^a	1 ^b			1 ^a		2 ^c					
Subsidized and transitional employment	3 High	3 ^a								3 ^a								1 ^a		1 ^c			2 ^b		1 ^d
	0 Low																								
Registered apprenticeship	1 Moderate					1 ^a								1 ^a											
	1 Low	1 ^a				1 ^a				1 ^a				1 ^a								1 ^d			
WIA training services	6 Moderate			2 ^c	4 ^d	4 ^a	1 ^b	1 ^c				1 ^c	5 ^d	3 ^a	1 ^b	1 ^c	1 ^d								
	10 Low	8 ^a			2 ^d	6 ^a				8 ^a	1 ^b		1 ^d	6 ^a				4 ^a		1 ^c	1 ^d				
Other	1 Moderate			1 ^c																					
	23 Low	12 ^a	4 ^b	2 ^c		6 ^a			1 ^d	8 ^a	4 ^b			6 ^a				2 ^a	1 ^b	2 ^c		1 ^a	1 ^b		

* The number of studies in listed Column 1 may not equal the count of studies in a given domain in the same column. Most commonly, the sum in a domain can be lower than the study count in Column 1 if not all studies examined outcomes in that domain. Another possible cause of mismatch is

² See the CLEAR Employment and Training Review Protocol ([Employment and Training Review Protocol | CLEAR](#)) to learn more about the literature search parameters and the specific criteria used to determine which studies were eligible for inclusion in the systematic review. As of February 22, 2023, the Registered Apprenticeship and Work-Based Learning topic area included a total of 58 studies. We do not include reviews of two low-rated studies of Per Scholas and Jewish Vocational Service-Boston in Maguire (2010) because they were reviewed in collaboration with the Employment Strategies for Low-Income Adults Evidence Review (ESER) and findings were not reported by CLEAR. Four studies that did not measure the effectiveness of an intervention compared to a non-treatment condition or tested a treatment condition that overlapped with another study were excluded. For two studies that reported findings in two states, we separated the findings by state in the synthesis. This resulted in a total of 54 studies included in this research synthesis.

if the domain-specific rating differed from the overall study rating. Within a study, ratings can vary across outcome domains, and the study rating reflects the highest rating from any of the outcome domains. That can lead the domain sum to be higher than the study count in Column 1.

Key: ^a **Favorable impact:** Indicates the number of studies that found at least one statistically significant favorable impact in the outcome domain and no statistically significant unfavorable impacts.
^b **Null:** Indicates the number of studies that found no statistically significant impacts in the outcome domain.
^c **Mixed impact:** Indicates the number of studies that had some statistically significant favorable and some statistically significant unfavorable impacts in the outcome domain.
^d **Unfavorable impact:** Indicates the number of studies that found at least one statistically significant unfavorable impact in the outcome domain and no statistically significant favorable impacts.

This supplement lists each of the studies reviewed by the registered apprenticeship and work-based learning topic area, describes how the studies map to the reports, and provides links to each study's CLEAR profile summary to learn more. Note, the number of studies is larger than the number of reports because a single report may contain findings from multiple studies.

Reports and studies of Registered Apprenticeship and Work-Based Learning programs

This section of the supplement provides a complete listing of the reports and studies in this topic area. The section is organized in subsections corresponding to the six intervention categories listed in Table 1 and an additional section for other interventions:

- A. [Sectoral training and employment](#)
- B. [Subsidized and transitional employment](#)
- C. [Registered Apprenticeship \(RA\)](#)
- D. [Workforce Investment Act \(WIA\) Training Services](#)
- E. [Other](#)

In each subsection, we provide a brief description of each intervention listed in Table 1 and cite the reports examining the intervention and the studies contained in each report, with links to profiles that summarize each study. Some reports appear in more than one intervention subsection because the studies contained within them evaluated different interventions. The reference list also includes additional sources. Additional sources examine the same study as the listed study, and information from additional sources was used to complete the review of the listed study. In some cases, additional sources are the published versions of a working paper or research report. As noted below, some of these additional sources were not reviewed separately by CLEAR because they contained the same data and analyses as the reviewed study.

A. Sectoral training and employment

Overview: These interventions provide training in specific industry sectors or occupations, as well as services such as soft skills training and case management, to prepare disadvantaged workers and workers with low income to meet the needs of employers. They may involve training that occurs in a job-like setting or opportunities for internships. They also connect these workers with employers that have job vacancies through job placement assistance and supports.

Moderate- and high-rated studies

Hendra, R., Greenberg, D. H., Hamilton, G., Oppenheim, A. Pennington, A. Schaberg, K., and Tessler, B. L. (2016). Encouraging evidence on a sector-focused advancement strategy. New York: MDRC.

- Study 1: WorkAdvance sectoral training program (Madison Strategies Group site)
 - No impacts on short-term or long-term employment outcomes
 - No impacts on short-term or long-term earnings outcomes

- Favorable impacts on education and training outcomes (these outcomes have a moderate evidence rating)
- Causal evidence rating: High
- Access profile here: <https://clear.dol.gov/Study/Encouraging-evidence-sector-focused-advancement-strategy-Hendra-et-al-2016-1>
- Study 2: WorkAdvance sectoral training program (Per Scholas site)
 - No impacts on short-term employment and favorable impacts on long-term employment
 - No impacts on short-term earnings and favorable impacts on long-term earnings
 - Favorable impacts on education and training outcomes
 - Causal evidence rating: Moderate
 - Access profile here: <https://clear.dol.gov/Study/Encouraging-evidence-sector-focused-advancement-strategy-Hendra-et-al-2016-0>
- Study 3: WorkAdvance sectoral training program (St. Nicks Alliance site)
 - Favorable impacts on short-term employment and no impacts on long-term employment
 - No impacts on short-term or long-term earnings
 - Favorable impacts on education and training outcomes (these outcomes have a moderate evidence rating)
 - Causal evidence rating: High
 - Access profile here: <https://clear.dol.gov/Study/Encouraging-evidence-sector-focused-advancement-strategy-Hendra-et-al-2016>
- Study 4: WorkAdvance sectoral training program (Towards Employment site)
 - No impacts on short-term or long-term employment outcomes
 - No impacts on short-term or long-term earnings outcomes
 - Favorable impacts on education and training outcomes
 - Causal evidence rating: High
 - Access profile here: <https://clear.dol.gov/Study/Encouraging-evidence-sector-focused-advancement-strategy-Hendra-et-al-2016-2>

Maguire, S., Freely, J., Clymer, C., Conway, M. & Schwartz, D. (2010). Tuning in to local labor markets: Findings from the Sectoral Employment impact study. Philadelphia: Public/Private Ventures.

- Study 5: Wisconsin Regional Training Partnership
 - No impacts on long-term employment outcomes
 - Favorable impacts on long-term earnings outcomes
 - Causal evidence rating: High
 - Access profile here: <https://clear.dol.gov/Study/Tuning-local-labor-markets-Findings-Sectoral-Employment-impact-study-Maguire-et-al-2010-3>
 - Additional Sources:
 - Maguire, S., Freely, J., Clymer, C., & Conway, M. (2009). Job training that works: Findings from the sectoral employment impact study. (P/PV In Brief, Issue No. 7). Philadelphia, PA: Public/Private Ventures.

Zeidenberg, M., Cho, S., & Jenkins, D. (2010). Washington State's Integrated Basic Education and Skills Training Program (I-BEST): New Evidence of Effectiveness. New York: Community College Research Center, Columbia University.

- Study 6: I-BEST
 - No impacts on short-term or long-term earnings outcomes (these outcomes have a low evidence rating)
 - Favorable impacts on education and training outcomes
 - Causal evidence rating: Moderate
 - Access profile here: <https://clear.dol.gov/Study/Washington-State%E2%80%99s-Integrated-Basic-Education-and-Skills-Training-Program-I-BEST-New-evidence>
 - Additional Sources
 - Jenkins, D., Zeidenberg, M., & Kienzl, G. S. (2009). Educational outcomes of I-BEST, Washington State Community and Technical College System's Integrated Basic Education and Skills Training Program: Findings from a multivariate analysis (CCRC Working Paper No.16). New York, NY: Columbia University, Teachers College, Community College Research Center.

Low-rated studies

Hollenbeck, K., & Huang, W.-J. (2006). Net impact and benefit-cost estimates of the workforce development system in Washington State. Upjohn Institute technical report no. TR06-020). Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

- Study 7: Private Career School programs.
 - Access profile here: <https://clear.dol.gov/Study/Net-impact-and-benefit-cost-estimates-workforce-development-system-Washington-State-Upjohn-12>
- Study 8: Community and Technical College Job Prep training.
 - Access profile here: <https://clear.dol.gov/Study/Net-impact-and-benefit-cost-estimates-workforce-development-system-Washington-State-Upjohn-9>

Hollenbeck, K., & Huang, W.-J. (2014). Net impact and benefit-cost estimates of the workforce development system in Washington state. (Upjohn Institute Technical Report No. 13-029). Retrieved from W.E. Upjohn Institute for Employment Research website: <http://dx.doi.org/10.17848/tr13-029>

- Study 9: Private Career School programs.
 - Access profile here: <https://clear.dol.gov/Study/Net-impact-and-benefit-cost-estimates-workforce-development-system-Washington-state-Upjohn-4>

B. Subsidized and transitional employment

Overview: Subsidized employment provides wage subsidies to employers who hire workers facing challenges to employment, usually with the expectation that the employer eventually hires the worker at a competitive wage. Transitional employment interventions often involve creating temporary jobs or work-like experiences, or providing job placements, for workers facing challenges to employment.

High-rated studies

Glosser, A., Barden, B., Williams, S., & Anderson, C. (2016). Testing two subsidized employment approaches for recipients of Temporary Assistance for Needy Families: Implementation and early impacts of the Los Angeles County Transitional Subsidized Employment Program. (OPRE Report 2016-77). Washington, DC: Office of Planning, Research, and Evaluation.

- Study 1: LA Subsidized and Transitional Employment Demonstration (paid work experience study arm)
 - Favorable impacts on short-term employment outcomes
 - Favorable impacts on short-term earnings outcomes
 - Favorable impacts on public benefit receipt outcomes
 - No impacts on education and training outcomes
 - Causal evidence rating: High
 - Access profile here: <https://clear.dol.gov/Study/Testing-two-subsidized-employment-approaches-recipients-Temporary-Assistance-Needy-Families>
- Study 2: LA Subsidized and Transitional Employment Demonstration (on-the-job training study arm)
 - Favorable impacts on short-term employment outcomes
 - Favorable impacts on short-term earnings outcomes
 - Mixed impacts on public benefit receipt outcomes
 - Unfavorable impacts on education and training outcomes
 - Causal evidence rating: High
 - Access profile here: <https://clear.dol.gov/Study/Testing-two-subsidized-employment-approaches-recipients-Temporary-Assistance-Needy-Families-0>

Walter, J., Navarro, D., Anderson, C., & Tso, A. (2017). Testing Rapid Connections to Subsidized Private Sector Jobs for Low-Income Individuals in San Francisco: Implementation and Early Impacts of the STEP Forward Program. OPRE Report 2017-103. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

- Study 3: STEP Forward (subsidized employment)
 - Favorable impacts on short-term employment outcomes
 - Favorable impacts on short-term earnings outcomes
 - No impacts on education and training outcomes
 - Causal evidence rating: High
 - Access profile here: <https://clear.dol.gov/Study/Testing-rapid-connections-subsidized-private-sector-jobs-low-income-individuals-San-Francisco>

Not included in the synthesis

Glosser, A., Barden, B., Williams, S., & Anderson, C. (2016). Testing two subsidized employment approaches for recipients of Temporary Assistance for Needy Families: Implementation and early impacts of the Los Angeles County Transitional Subsidized Employment Program. (OPRE Report 2016-77). Washington, DC: Office of Planning, Research, and Evaluation.

- Study 4: LA Subsidized and Transitional Employment Demonstration (paid work experience compared to on-the-job training). *This study was excluded from the synthesis because it did not test the effectiveness of an*

intervention against a control group. The two interventions were tested separately and findings were reported in Study 1 and Study 2 above.

- Favorable impacts on short-term employment outcomes
- Favorable impacts on short-term earnings outcomes
- Favorable impacts on public benefit receipt outcomes
- No impacts on education and training outcomes
- Causal evidence rating: High
- Access profile here: <https://clear.dol.gov/Study/Testing-two-subsidized-employment-approaches-recipients-Temporary-Assistance-Needy-Families-1>

C. Registered Apprenticeship (RA)

Overview: RA, administered by the U.S. Department of Labor (DOL) or a state apprenticeship agency, is a career training program that offers individuals paid on-the-job learning, job-related technical instruction, and mentorship and supervision, culminating in a nationally recognized certification upon completion. Employers and other sponsors register with DOL or a state agency to deliver specific programs that meet quality standards and often last from one to six years.

Moderate-rated study

Reed, D., Liu, A., Kleinman, R., Mastri, A., Reed, D., Sattar, S., & Ziegler, J. (2012). An effectiveness assessment and cost-benefit analysis of Registered Apprenticeship in 10 states. Oakland, CA: Mathematica Policy Research.

- Study 1: Registered apprenticeships
 - Favorable impacts on long-term employment outcomes
 - Favorable impacts on long-term earnings outcomes
 - Causal evidence rating: Moderate
 - Access profile here: <https://clear.dol.gov/study/effectiveness-assessment-and-cost-benefit-analysis-registered-apprenticeship-10-states-reed-et>

Low-rated study

Hollenbeck, K. & Huang, W-J. (2014). Net impact and benefit-cost estimates of the workforce development system in Washington state. (Upjohn Institute Technical Report No. 13-029). Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

- Study 2: Registered apprenticeships.
 - Access profile here: <https://clear.dol.gov/Study/Net-impact-and-benefit-cost-estimates-workforce-development-system-Washington-state-Upjohn>

Not included in the synthesis

Glover, R. W., & Bilginsoy, C. (2005). Registered apprenticeship training in the U.S. construction industry. *Education + Training*, 47(4-5), 337-349.

- Study 3: Registered apprenticeships. *This study was excluded from the synthesis because it did not test the effectiveness of an intervention against a control group.*
 - Access profile here: <https://clear.dol.gov/Study/Registered-apprenticeship-training-US-construction-industry-Glover-Bilginsoy-2005>

D. Workforce Investment Act (WIA) training services

Overview: WIA programs offered vouchers to individuals to apply to costs of training in locally in-demand occupations, which could include work-based training such as on-the-job training, as well as classroom training that in some cases may have been in a job-like setting. Programs also provided some supportive services to help individuals complete training. The Adult Program served people aged 18 years and older, often giving priority access to recipients of public assistance and other low-income customers, particularly if funds are limited. The Dislocated Worker Program served people who had been laid off from employment.

Moderate-rated studies

Andersson, F., Holzer, H. J., Lane, J. I., Rosenblum, D., & Smith, J. (2013). Does federally-funded job training work? Nonexperimental estimates of WIA training impacts using longitudinal data on workers and firms (Discussion paper no. 7621). Bonn, Germany: IZA.

- Studies 1 and 2: WIA Adult Program training services
 - Study 1 (State "A")
 - Unfavorable impacts on short-term employment and favorable impacts on long-term employment outcomes
 - Unfavorable impacts on short-term earnings and favorable impacts on long-term earnings outcomes
 - Study 2 (State "B"):
 - Mixed impacts on short-term employment and favorable impacts on long-term employment outcomes
 - Unfavorable impacts on short-term earnings outcomes and favorable impacts on long-term earnings outcomes
 - Causal evidence rating: Moderate
 - Access profile here: <https://clear.dol.gov/Study/Does-federally-funded-job-training-work-Nonexperimental-estimates-WIA-training-impacts-1>
- Studies 3 and 4: WIA Dislocated Worker Program training services
 - Study 3 (State "A"):
 - Unfavorable impacts on short-term employment and favorable impacts on long-term employment outcomes
 - Unfavorable impacts on short-term and long-term employment outcomes
 - Study 4 (State "B"):
 - Unfavorable impacts on short-term employment and mixed impacts on long-term employment outcomes
 - Unfavorable impacts on short-term earnings and mixed impacts on long-term earnings outcomes
 - Causal evidence rating: Moderate
 - Access profile here: <https://clear.dol.gov/Study/Does-federally-funded-job-training-work-Nonexperimental-estimates-WIA-training-impacts-0>
- Heinrich, C., Mueser, P., & Troske, K. (2008). Workforce Investment Act non-experimental net impact evaluation. Columbia, MD: IMPAQ International.
- Study 5: WIA Adult Program training services
 - Mixed impacts on short-term employment and favorable impacts on long-term employment outcomes
 - Mixed impacts on short-term earnings and favorable impacts on long-term earnings outcomes

- Causal evidence rating: Moderate
- Access profile here: <https://clear.dol.gov/Study/Workforce-Investment-Act-non-experimental-net-impact-evaluation-Adult-sample-Heinrich-et-al>
- Study 6: WIA Dislocated Worker Program training services
 - Unfavorable impacts on short-term employment and no impacts on long-term employment outcomes
 - Unfavorable impacts on short-term earnings and no impacts on long-term earnings outcomes
 - Causal evidence rating: Moderate
 - Access profile here: <https://clear.dol.gov/Study/Workforce-Investment-Act-non-experimental-net-impact-evaluation-Dislocated-worker-sample>

Low-rated studies

Hollenbeck, K., Schroeder, D., King, C., & Huang, W. (2005). Net impact estimates for services provided through the Workforce Investment Act. ETA Occasional Paper 2005-06. Washington, DC: U.S. Department of Labor, Employment and Training Administration.

- Study 7: WIA Adult Program any, training, and intensive or training services. *This study was excluded from the synthesis because it received a low causal evidence rating.*
 - Access profile here: <https://clear.dol.gov/Study/Net-impact-estimates-services-provided-through-Workforce-Investment-Act-ETA-Occasional-0>
- Study 8: WIA Dislocated Worker Program any, training, and intensive or training services.
 - Access profile here: <https://clear.dol.gov/Study/Net-impact-estimates-services-provided-through-Workforce-Investment-Act-ETA-Occasional-Paper>

Hollenbeck, K., & Huang, W-J. (2006). *Net impact and benefit-cost estimates of the workforce development system in Washington State*. (Upjohn Institute technical report no. TR06-020). Kalamazoo, MI: W. E. Upjohn Institute for Employment Research.

- Study 9: WIA Adult Program services.
 - Access profile here: <https://clear.dol.gov/Study/Net-impact-and-benefit-cost-estimates-workforce-development-system-Washington-State-Upjohn-14>
- Study 10: WIA Dislocated Worker Program services.
 - Access profile here: <https://clear.dol.gov/Study/Net-impact-and-benefit-cost-estimates-workforce-development-system-Washington-State-Upjohn-15>
- Study 11: WIA Youth Program services.
 - Access profile here: <https://clear.dol.gov/Study/Net-impact-and-benefit-cost-estimates-workforce-development-system-Washington-State-Upjohn-13>

Hollenbeck, K., & Huang, W-J. (2014). *Net impact and benefit-cost estimates of the workforce development system in Washington State*. Upjohn Institute technical report no. 13-029. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research. <http://dx.doi.org/10.17848/tr13-029>

- Study 12: WIA Adult Program services.
 - Access profile here: <https://clear.dol.gov/Study/Net-impact-and-benefit-cost-estimates-workforce-development-system-Washington-state-Upjohn-3>
- Study 13: WIA Dislocated Worker Program services.
 - Access profile here: <https://clear.dol.gov/Study/Net-impact-and-benefit-cost-estimates-workforce-development-system-Washington-state-Upjohn-0>

- Study 14: WIA Youth Program services.
 - Access profile here: <https://clear.dol.gov/Study/Net-impact-and-benefit-cost-estimates-workforce-development-system-Washington-State-Upjohn-5>

McEntaffer, M. J. (2015). The promise of worker training: New insights into the effects of government funded training programs. (Doctoral dissertation). Retrieved from <http://digitalcommons.unl.edu/businessdiss/51>.

- Study 15: WIA training services.
 - Access profile here: <https://clear.dol.gov/Study/promise-worker-training-New-insights-effects-government-funded-training-programs-McEntaffer>

Walker, M. A. (2006). Workforce investment act services: Effect on dislocated worker reemployment (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses. Accession No. UMI 3244857.

- Study 16: WIA Dislocated Worker Program employment services (Study 2: Contrast: WIA employment and training services vs. no service).
 - Access profile here: <https://clear.dol.gov/Study/Workforce-investment-act-services-Effect-dislocated-worker-reemployment-Walker-2006-0>

Not included in the synthesis

Walker, M. A. (2006). Workforce investment act services: Effect on dislocated worker reemployment (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses. Accession No. UMI 3244857.

- Study 17: WIA Dislocated Worker Program employment and training services (Study 1: Contrast: WIA employment services vs. no service). *This study was excluded from the synthesis because it tested a treatment that overlaps with Study 14 above, which examined training, thus making it more relevant for this topic area.*
 - Causal evidence rating: Low
 - Access profile here: <https://clear.dol.gov/Study/Workforce-investment-act-services-Effect-dislocated-worker-reemployment-Walker-2006>

E. Other

Overview: In addition to the work-based learning interventions discussed above, the literature that CLEAR reviewed included numerous other types of interventions in 24 studies (in 14 citations). These include mentoring, training provided through the Trade Adjustment Assistance program, and a variety of others. Most of these types of interventions were examined in only one or two studies. The single moderate-rated study in this category of interventions examined workers' participation in a set of "high-involvement work practices" that reflect employee engagement (and potentially the receipt of on-the-job informal and formal training) and their expectations for promotion. Such practices may include, for example, working in self-managed teams and rotating jobs to learn additional skills. The study found mixed impacts on expected promotion in the short term. The rest of the studies in this category received a low evidence rating. Because the studies were rated low and examined interventions in a variety of categories, there is insufficient evidence to draw meaningful conclusions and the Research Synthesis does not describe their findings.

Moderate-rated studies

Bonet, R. (2014). High-involvement work practices and the opportunities for promotion in the organization. *Industrial Relations*, 53(2), 295-324. doi:10.1111/irel.12057

- Study 1: High-Involvement Work Practices.
 - Mixed impacts on short-term employment outcomes
 - Causal evidence rating: Moderate
 - Access profile here: <https://clear.dol.gov/Study/High-involvement-work-practices-and-opportunities-promotion-organization-Bonet-2014>

Low-rated studies

Adams, G. (2013). A comparison of student outcomes and overall retention between a 10-week accelerated and a 15-week traditional curriculum in a postsecondary apprenticeship training program (Doctoral dissertation). Available from ProQuest Dissertations & Theses A&I. (Accession No. 3575536).

- Study 2: Accelerated Schedule for Registered Apprenticeships.
 - Access profile here: <https://clear.dol.gov/Study/comparison-student-outcomes-and-overall-retention-between-10-week-accelerated-and-15-week>

Benson, G.S. (2006). Employee development, commitment, and intention to turnover: A test of “employability” policies in action. *Human Resource Management Journal*, 16(2), 173–192.

- Study 3: On-the-job training.
 - Access profile here: <https://clear.dol.gov/study/employee-development-commitment-and-intention-turnover-test-%E2%80%9CEmployability%E2%80%9D-policies-action>

Craig, C. A., Allen, M. W., Reid, M. F., Riemenschneider, C. K., & Armstrong, D. J. (2013). The impact of career mentoring and psychosocial mentoring on affective organizational commitment, job involvement, and turnover intention. *Administration & Society*, 45(8), 949–973. doi:10.1177/0095399712451885

- Study 4: Mentoring.
 - Access profile here: <https://clear.dol.gov/Study/impact-career-mentoring-and-psychosocial-mentoring-affective-organizational-commitment-job>

Dougherty, T. W., Dreher, G. F., Arunachalam, V., & Wilbanks, J. E. (2013). Mentor status, occupational context, and protégé career outcomes: Differential returns for males and females. *Journal of Vocational Behavior*, 83(3), 514-527.

- Study 5: Mentoring (Study 1, Contrast 1: senior male mentor versus no mentor).
 - Access profile here: <https://clear.dol.gov/Study/Mentor-status-occupational-context-and-prot%C3%A9g%C3%A9-career-outcomes-Differential-returns-males-and>

- Study 6: Mentoring (Study 1, Contrast 2: other mentor versus no mentor).
 - Access profile here: <https://clear.dol.gov/Study/Mentor-status-occupational-context-and-prot%C3%A9g%C3%A9-career-outcomes-Differential-returns-males-0>

- Study 7: Mentoring (Study 2, Contrast 1: senior mentor versus no mentor).
 - Access profile here: <https://clear.dol.gov/Study/Mentor-status-occupational-context-and-prot%C3%A9g%C3%A9-career-outcomes-Differential-returns-males-1>

- Study 8: Mentoring (Study 2, Contrast 2: non-senior mentor versus no mentor).
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- Study 12: The Community and Technical Colleges Adult Basic Education (ABE) Program.
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- Study 13: Community and Technical College (CTC) Job Preparatory Training Program.
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 - Access profile here: <https://clear.dol.gov/Study/Net-impact-and-benefit-cost-estimates-workforce-development-system-Washington-State-Upjohn-6>
- Study 15: Community and Technical College Worker Retraining (CTC WR) Program.
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- Study 16: The Adult Basic Education (ABE) Program.
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 - Access profile here: <https://clear.dol.gov/Study/impact-training-frequency-internal-promotion-employees-and-managers-West-2010>
 - Study 24: Formal training (Manager sample).
 - Access profile here: <https://clear.dol.gov/Study/impact-training-frequency-internal-promotion-employees-and-managers-West-2010-0>

Not included in the synthesis

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- Study 25: Trade Adjustment Assistance (TAA)-Funded Training (TAA versus no TAA). *This study was excluded from the synthesis because it tested a treatment that overlaps with Study 20 above, which isolates the effect of training, while this one does not.*
 - Access profile here: <https://clear.dol.gov/Study/Does-trade-adjustment-assistance-make-difference-TAA-versus-no-TAA-Reynolds-Palatucci-2012>