

Insights From Implementation Studies of Sectoral Training Programs

Authors: Samia Amin, Phomdaen Souvanna, Dana Shaat, Tessa Riley | October 2024

Sectoral job training programs have attracted a lot of attention in recent decades, including growing governmental and philanthropic investment. These programs “focus on training people for existing jobs in high-demand sectors that pay well for workers without four-year college degrees.”¹ Federal agencies like the U.S. Departments of Health and Human Services and Labor have heavily invested in examining the impacts and implementation of these programs. In recent years, they have commissioned meta-analytic reviews and syntheses to aggregate insights across programs. From these studies, we have been able to learn at a high level which programs work, which ones don’t, and which program features might be associated with higher impacts. However, we have less insight into how programs implement specific features.

This rapid review is an exploration of how implementation studies and publicly available coding of implementation studies might be rapidly leveraged and supplemented to glean additional insights. For our exploration, we chose to focus on how sectoral programs design and execute employer engagement (one of the key building blocks of sectoral training programs). **We compared approaches to employer engagement between 10 programs that had demonstrated impacts on employment or earnings outcomes with 10 programs that did not.** (See Box 1: About This Review on page 9 for classification details.)

We chose employer engagement as a focus because there is strong consensus that effective employer engagement is critical to program success.² Program designers and implementers face hard choices about how to engage employers, at what stage of the program and how much. Most employers have very limited time and capacity for engagement. Right from the beginning, programs need to be strategic in their outreach to employers. Early experiences with the program (and with other workforce development initiatives) can shape employer willingness to engage in the future.

Our comparative scan suggests two key differentiators of successful sectoral training programs:

1. They engage more intensively with employers in program design efforts.
2. They offer greater supports in connecting program participants to job opportunities.

This brief provides more detail on these insights and lessons learned on implementation that may be helpful for strengthening future sectoral training efforts. We also suggest future areas of learning.

On what topics do programs engage employers?

Programs may choose to engage employers in a variety of ways. To guide our review of program components and implementation practices, we drew on prior literature³ and our own preliminary review of studies to develop a framework of the key components of employer engagement (see Exhibit 1). This framework identifies five clusters of activities for program–employer collaboration.

Exhibit 1. Employer Engagement Framework



When we compare the topics on which programs with impacts engage employers compared to those without impacts, some interesting patterns and lessons emerge. **In reviewing these patterns, it is important to remember these caveats about our results:**

- **Based on program and employer practices that are reported in the studies**—it may be that some programs had these elements, but the reports did not prominently mention the elements (or mention them at all). Study descriptions of two of the 20 programs examined, for example, made no mention of employer engagement practices.
- **Purely descriptive patterns, not confirming causal relationships.** In highlighting these differences, we shine a spotlight on program features that merit further attention for research. We have *not* conducted any statistical analyses to assess linkage of these features on program impacts.

Engage Employers in Program Design Decisions

Programs with impacts on employment or earning outcomes anchored their offerings on **direct intelligence from employers about their skills needs**. Twice as many programs with impacts got input from employers about labor market demand compared to those without impacts (see Exhibit 2). Less frequently, programs also engaged employers to obtain input on preferred types of applicants. Here again, programs with impacts were twice as likely to do so compared to those without. Only four programs (three with impacts and one without) did both. None of the reviewed studies reported that programs consulted with employers about skills needed for career pathways and progressions.

Exhibit 2. Areas of Employer Contribution to Sector Training Program Design

EMPLOYER CONTRIBUTIONS TO PROGRAM DESIGN	Skills Identification		Curriculum Development		
	Provide information on labor market demand	Provide input on preferred type of participants	Provide input on curriculum or program development	Curricula adapted for employers' needs	Provide information on skills needed for career pathways
Programs with impacts	●●●●●●●● (8)	●●● (3)	●●●●●●●●● (9)	●●●●●●●●● (9)	(0)
Programs without impacts	●●●●● (5)	●●● (3)	●●●●● (5)	●●●●● (5)	(0)

Sources: Developed by study team drawing on data from the U.S. Department of Labor (DOL) Career Pathways Descriptive and Analytical project’s Meta-Analysis. See Appendix A for program-level information.

Programs with employment or earnings impacts focused on engaging employers in curriculum design decisions. All programs with impact got input on curriculum or program design. Less than half of the programs without impact solicited input from employers about curriculum or program design. Similarly, all programs with impact made adaptations to their curricula based on employers’ needs, while only 40% of programs without impact did so. Results from the recent DOL Career Pathways Descriptive and Analytical project’s meta-analysis suggest that employer input on curriculum or program design may be linked to positive educational outcomes.⁴ Our review suggests that most of the employer input at this stage was concentrated on obtaining input on curriculum design. Only one program (one with impacts) obtained input on program design/components (See Appendix A).



Additional Insights From Implementation Study Narratives

Create intentional structures to get employer feedback early and often.

A hallmark of successful programs appears to be their proactive engagement of employers for feedback. Sectoral programs participating in the WorkAdvance demonstration emphasized to employers that they could shape their program to their specific needs, at no cost to their firm.⁵ Providing explicit messaging that the program is receptive to feedback may be useful. For example, one employer that worked with Per Scholas noted that “Per Scholas is always eager to get feedback to help develop the student’s skills sets and interviewing. Positive or negative, they always want to hear it.”⁶ Year Up used multiple ways to get employer feedback, both on curricula and intern readiness and performance:⁷

- Online surveys of work supervisors and interns in the middle and end of internships
- Check-in phone calls or emails (especially with supervisors new to working with Year Up)
- Site visits by Year Up staff

Build nimble training strategies responsive to input.

Implementation studies provide examples of how programs with impacts adjusted their training design and career readiness offerings in response to employer feedback. For example, Per Scholas added a customer service component to trainings based on employer input. Madison Strategies Group adjusted the length of

its manufacturing programs.⁸ Year Up sites used a variety of strategies.⁹ On the more intensive end, one Year Up site expanded from two technical tracks to four (including one built from scratch).

On the less intensive end, staff piloted ad hoc, supplemental training on a noncredit basis (such as an elective in customer service or a five-week boot camp on quality assurance).

Employers found this type of customization invaluable. An employer working with Madison Strategies Group noted in an interview that he appreciated being able to “frame the curriculum to be in line with what we are looking for” and that the provider could “tailor-make the product we need to fill the voids” in hard-to-fill positions.¹⁰ The degree to which programs can be nimble depends on the arrangements they have in place for training provision. For example, one of the PACE study reports suggests that programs that relied on existing occupational training courses provided by partners had less flexibility to alter content or structure compared to those directly providing instruction in house.¹¹

Forge tighter linkages with employers for hiring and career awareness activities.

Programs with employment or earnings impacts engaged employers in more diverse ways for hiring and recruitment activities than programs without impacts. Most programs (15 of the 20 programs examined) asked employers to inform them about job openings. However, only programs with impacts involved employers in preparing program participants for job interviews and applications. More programs with impact engaged employers in career awareness activities compared to programs without impact. They also had higher rates of obtaining agreements with employers to hire program participants compared to programs without impact (50% versus 20%). This pattern suggests the importance of involving employers in more than providing information about job openings. Engaging employers in earlier steps that help participants enter the pipeline of applicants (such as career awareness activities and preparing participants for interviews and applying for jobs) may improve participant outcomes. A more intensive deep dive on program engagement with employers to support participants’ labor market entry may be useful.

Exhibit 3. Employer Contributions to Hiring and Recruitment

EMPLOYER CONTRIBUTIONS TO HIRING AND RECRUITMENT	<i>Career awareness activities</i>	<i>Interview prep and job application mentoring</i>	<i>Job opening notification</i>	<i>Agreement to interview</i>	<i>Commitment to hire</i>
Programs with impacts	●●●● (4)	●●●● (4)	●●●●●●●● (8)	● (1)	●●●●● (5)
Programs without impacts	● (1)	● (1)	●●●●●●●● (7)	● (1)	●● (2)

Sources: Authors’ coding of implementation studies.



Additional Insights From Implementation Narratives

Be creative with leveraging employer assistance to provide career awareness activities.

While not all employers may have the time or resources to sustain active engagement, programs can seek to engage employers in activities that are less resource intensive. Across the implementation studies reviewed, we found that programs leverage employers in diverse ways to support participants with developing career awareness and exposure to potential future employers. These include:

- Hosting office visits that provide program participants with exposure to the work environment.
- Participating in regular guest speaker series. For example, at Year Up, one office held Tech Thursdays with weekly guest speakers who shared the latest developments in the tech sector and actionable career tips.
- Sending guest speakers whose personal journeys may be especially inspirational to participants.
- Creating simulated work situations with onsite participation by employers.

For employers who do not have the capacity or are hesitant to become heavily involved, these lighter touch, low intensity activities can provide an avenue for employers and participants to create connections.

Carefully choose the aspects of program delivery in which you engage employers.

Programs with employment or earnings impacts tapped employers for service delivery assistance at half the rates that programs without impacts did. We examined whether programs asked employers for help in delivery of instruction, offers of paid work-based learning, unpaid work-based learning, providing mentors to participants or providing financial assistance. Only a third of programs with impacts tapped employers for these types of supports compared to over two-thirds of programs without impacts. Programs with impacts that did tap employers typically sought provision of financial assistance or paid work-based learning opportunities.

For programs without impacts, the most frequent domain of employer engagement for service delivery was securing unpaid work-based learning opportunities. Six programs without impacts engaged employers in arranging unpaid work-based learning opportunities, in contrast to only one among programs with impacts.

Exhibit 4. Employer Contribution to Program Delivery

EMPLOYER CONTRIBUTION TO PROGRAM DELIVERY	Engaged in at least one activity	Deliver instruction or provide instructors	Offer paid work-based learning	Offer unpaid work-based learning	Provide mentors to participants	Provide financial assistance*	Provide resources**
Programs with impacts	●●●●● (5)	●● (2)	●● (2)	● (1)	● (1)	●●● (3)	(0)
Programs without impacts	●●●●●●● (7)	● (1)	●●● (3)	●●●●●●● (6)	(0)	(0)	(0)

Sources: Developed by study team drawing on data from the U.S. Department of Labor Career Pathways Descriptive and Analytical Project Meta-Analysis.

* Our coding of this variable differs from that of the CP D&A project. We examined whether employers provided funding assistance to the programs, whether as scholarships for students or directly.

** Provide resources either as donation or as a fee for services.

Relatively few programs offer paid work-based learning. Only five of the 21 programs examined had a paid work-based component reported in studies. With the growing emphasis on apprenticeship and preapprenticeship programs, it is worth exploring whether there is now a stronger integration of work-based learning in sectoral training programs.

Make job search and placement assistance a key part of comprehensive supports.

All the programs with impacts offer some job search assistance or placement support, compared with less than half of the programs without impacts. We looked at three types of assistance:

- 1. Job search assistance: helping participants with resume/cover letter writing, and interview skills
- 2. Job lead assistance: sending participants job openings and cueing on where to look for openings
- 3. Job placement: making personalized matches of participants with jobs offered by employers

Programs without impacts typically only offer job search assistance, whereas programs with impacts supplemented job-search assistance with job lead assistance. Most of the programs with impacts (90%) offer job lead assistance, while few programs without impacts (20%) offer the same.

Few programs incorporate direct job placement for participants.¹² Only five of the 21 programs examined offered one-to-one matching between jobs and program participants. Programs in the WorkAdvance evaluation, including Per Scholas, St. Nicks Alliance, Towards Employment, and Madison Strategies Group, make up the majority of such programs, along with Health Careers for All.

Exhibit 5. Job Search and Placement Assistance

Job search and placement assistance	Job search assistance	Job lead assistance	Job placement assistance
Programs with impacts	●●●●●●●● (8)	●●●●●●●● (8)	●●● (3)
Programs without impacts	●●●●● (5)	●● (2)	●● (2)

Sources: Authors’ coding of implementation studies.



Additional Insights From Implementation Narratives

Position partnerships as a solution to employer talent pipeline needs instead of a philanthropic activity.

One pathway that sectoral training programs may be tempted to take is engaging with employers under their Corporate Social Responsibility (CSR) initiatives. CSR efforts are designed to improve a company’s contributions to the communities in which they operate. Typically, these are considered a part of the organization’s philanthropic efforts (for which there may be limited budget) rather than a core part of operating the business effectively. Our review suggests it is better to avoid this route and instead focus on employers’ business needs.

Year Up, which includes a 6-month internship placement as part of its program, learned that CSR collaborations were limited in scope.¹³ CSR partners could only afford to offer internships for a few individuals. To scale up its program, Year Up required partnerships with lots of employers. Year Up pivoted to adopting a customer solutions pitch that focused on its contributions in helping employers meet their talent pipelines needs through the program. Specifically, Year Up pitched to employers the idea that the program could prepare large numbers of entry-level hires trained to meet the employer’s specific needs, thus, reducing the employer’s costs related to recruiting and training new employees. This allowed Year Up to:

- Partner at scale with fewer employers, reducing burden on their sales and relationship management teams and allowing greater customization.
- Secure access to hiring managers who gave them closer and more ongoing insight into current skill needs and hiring pain points and tailor training efforts to those needs.

Hire leaders from industry and focus them on employer engagement to speed employer recruitment.

Several studies mentioned the benefits of hiring leaders from industry, who can position the value of the program in terms that resonate with employers and can engage with them efficiently to understand their needs. Year Up, when recruiting senior leadership for field offices, tended to hire individuals from the target industry with extensive corporate experience and connections.¹⁴ Towards Employment described a commitment to hiring staff members with rich experiences and relationships with employers in the targeted industry.¹⁵

The studies also suggest that program teams need not just individuals who work well with industry but also those who are adept at working and managing training providers, other partners, and program participants. Programs like Year Up learned the value of pairing business managers who focus on fundraising and corporate partnerships with site directors who work with local staff to maintain high-quality service delivery.

Conclusion

Our rapid review suggests that forging effective employer relationships, and using employer input strategically may be important ways of enhancing program success. We find that employer input at the time of curriculum design and when participants prepare to connect back into jobs may be the most important areas of employer engagement. Systematic experimentation on whether this is the case more broadly across industries and communities will be valuable. We also recognize that sectoral training programs and the contexts in which they operate continue to evolve. This includes the rise of virtual work, incorporation of virtual instruction and hybrid models, the expansion of apprenticeship models and, increasingly, the use of artificial intelligence. Ongoing research on how programs can effectively engage employers in adapting to these changes is critical for efforts to support economically prosperous futures for all.

Exhibit 6. Programs With and Without Impacts on Employment or Earning Outcomes

Programs With Impacts	
✓ Accelerated Training for Illinois Manufacturing	✓ Project Quest
✓ Clean Energy Center (not in CLEAR)	✓ St Nicks Alliance
✓ JVS-Boston	✓ Towards Employment
✓ Madison Strategies Group	✓ Wisconsin Regional Training Partnership
✓ Per Scholas*	✓ Year Up*

Programs Without Impacts	
⊗ Bridge to Employment in the Healthcare Industry	⊗ Patient Care Pathway Program
⊗ Carreras en Salud	⊗ American Indian Opportunities Soil to Sky
⊗ Health Careers for All	⊗ Health Matrix Grant Scholarship
⊗ Pathways to Healthcare	⊗ Valley Initiative for Development and Advancement
⊗ Pathways to Prosperity	⊗ Workforce Training Academy Connect Program

* Per Scholas and Year Up have each been part of two separate experimental studies at different times.

Box 1: About This Review

About this review: This review was conducted with investments from AIR's PROMISE Center, funded by the AIR Opportunity Fund. Its goal was to glean greater insights on what it takes to make sectoral programs successful. While the evidence findings from sectoral training evaluations have received a fair amount of attention and been the focus of or included in several syntheses, there has not been an analogous effort to systematically glean and collate insights from across all implementation studies. Our study team conducted a rapid implementation study review to bridge this gap.

Identifying sectoral training programs: For this review, we identified 20 sectoral training programs for which rigorous experimental evaluations had been conducted. We identified programs that fit the description of a sectoral training program as defined by Katz et al. (2022). It is worth noting that there is definitional ambiguity about what counts as a sectoral training program. DOL's meta-analysis groups all these programs under a broader umbrella of career pathways programs. HHS' Pathways Clearinghouse designates some programs as career pathways and others as sectoral training programs and omits others altogether. (Year Up and Bridge to Employment are two programs where we classify the program as a sectoral training program while the Pathways Clearinghouse considers them career pathways programs).

Classifying programs with and without impacts: We classified programs as having impacts if they showed positive impacts, either in the short term or the long term, on employment or earnings. Among the 20 programs we analyzed, we found that 10 programs had impacts on employment and/or earnings outcomes and 10 programs did not. We designate the program as having impacts if they had impacts on either of these two domains of outcomes either in the short term or the long term. Note that our only check in this rapid review was whether or not an experimental study was conducted, we did not validate the quality of the causal evidence since this is a rapid review of implementation and not a systematic meta-analytic review.

Rapid review of program design: We did a rapid review of all available studies (impact or implementation) for the 20 programs included in our review. We reviewed study reports to map out, in greater depth, the design features of the program's core building blocks and noted any differences between programs with impacts and programs without. Notably, we focused on understanding program features at the time when impacts were measured (We know programs and contexts have continued to evolve over time, and both may be substantially different now). Midway during our deep dive, the U.S. Department of Labor Career Pathways Descriptive and Analytical (CP D&A) project released its meta-analysis report and public use data set, which included several programs in our review. We adapted our effort by validating and aligning our coding of programs against theirs. Where the coding of their project was more detailed than ours, we adopted their data set, aligned our categories with theirs, and validated our findings. Where the reverse was true, we kept our coding but validated findings in areas of overlap. We identified two areas where programs with impacts made different design and implementation choices: employer engagement and select comprehensive supports.

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Citations

¹ Holzer (2022)

² Barnow and Spaulding (2015)

³ Spaulding and Martin-Caughey (2015); Peck et al. (2021)

⁴ Peck et al. (2021)

⁵ Hendra et al. (2016)

⁶ Hendra et al. (2016), p. 50

⁷ Fein and Hamadyk (2018)

⁸ Hendra et al. (2016)

⁹ Fein and Hamadyk (2018)

¹⁰ Hendra et al. (2016), p. 50

¹¹ Gardiner and Juras (2019)

¹² Some programs using the term job placement services were instead classified as offering job search and/or job lead assistance based on the research team's definitions.

¹³ Fein and Hamadyk (2018); Fein (2016)

¹⁴ Fein (2016)

¹⁵ Hendra et al. (2016)

¹⁶ Sources for coding: Betesh et al. (2015); Elliott and Roder (2017); Farrell and Martinson (2017); Glosser et al. (2017); Kazis and Molina (2016); Martinson et al. (2018); Roder and Elliott (2018); Roder and Elliott (2019); Rolston et al. (2017); Tessler et al. (2014)

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Appendix A. Employer Involvement Activities, by Program¹⁶

	Per Scholas ^{a,c}	Project Quest	Year Up ^d	Wisconsin Regional Training ^a	Jewish Vocational Services ^a	Accelerated Training for Illinois Manufacturing	Clean Energy Center ^b	I-BEST	Madison Strategies Group ^c	St. Nicks Alliance ^c	Towards Employment ^c	Workforce Training Academy ^d	Carreras en Salud ^d	Pathways to Healthcare ^d	Bridge to Employment in Health Care Industry ^d	Patient Care Pathway ^d	Valley Initiative for Development and Advancement ^d	Health Careers for All ^d	Pathways to Prosperity ^b	American Indian Opportunities Soil to Sky ^b	Health Matrix Grant Scholarship ^b
Skills Identification	•	•	•	•		•	•	•	•		•		•	•	•					•	
Provide information on labor market demand, including specific job openings	•	•	•	•		•	•	•	•	•	•	•	•	•	•					•	
Provide input on preferred type of applicants	•					•			•		•									•	•
Curriculum and Program Design	•	•	•	•	•	•	•		•	•	•	•	•				•		•	•	•
Provide input on curriculum or program development	•	•	•	•	•	•	•		•	•	•	•	•						•	•	
Curricula adapted for employers' needs	•	•	•	•	•	•	•		•	•	•	•					•		•		•
Program Delivery	•		•			•	•	•				•	•	•	•				•	•	•
Deliver instruction or provide instructors			•					•											•		
Deliver career awareness services	•		•			•	•								•						
Offer paid work-based learning			•			•						•	•	•							
Offer unpaid work-based learning								•				•	•	•	•					•	•
Provide mentors to participants			•																		
Provide financial aid to students																					
Provide resources (funding, equipment, instructors) either as donation or as fee for service																					

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Hiring and Recruitment	●	●	●	●		●	●		●	●	●	●	●	●	●				●	●	●
Interview prep and job application mentoring	●	●							●	●	●										
Job opening notification	●	●	●	●		●	●		●	●	●	●	●	●	●					●	●
Agreement to interview							●													●	
Agreement to hire	●		●	●		●	●												●	●	
Job Search and Placement Assistance	●	●	●	●	●	●			●	●	●		●		●			●	●		
Job search assistance	●	●	●	●	●	●			●	●	●		●		●			●	●		
Job lead assistance	●	●	●	●	●	●			●	●	●							●			
Job placement assistance	●								●	●	●							●			

^a Sectoral Employment ^b Green Jobs ^c WorkAdvance ^d PACE