

Engaging Employers to Register Apprenticeship Programs

Outcomes from the American Apprenticeship Initiative Evaluation Employer Engagement Demonstration



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About This Report

The U.S. Department of Labor (DOL) American Apprenticeship Initiative (AAI) funded 46 grantees across the country to expand registered apprenticeship into new sectors, such as healthcare, and to populations historically underrepresented in apprenticeships. DOL commissioned an evaluation of the AAI grants to build evidence about the effectiveness of registered apprenticeship for apprentices and employers. This report presents findings from the demonstration study that examined the impact of employer engagement efforts on employers' take-up of registered apprenticeship. The primary data source is data collected by the two grantees in the demonstration on their efforts to research, contact, and subsequently develop apprenticeship programs with employers. Other data sources include interviews conducted during site visits to and phone calls with the two grantees, and observations of technical assistance provided to grantee staff by a consultant.

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Glossary of Terms

Apprenticeship agreement: A signed written agreement between an apprentice and the apprentice’s program sponsor, or sometimes an apprenticeship committee acting as agent for the program sponsor, that contains the terms and conditions of the employment and training of the apprentice.

Competency-based program: An approach to registered apprenticeship that requires the apprentice to reach certain milestones indicating mastery of job-related subject matter and/or a task before moving on to the next step in the program, earning credentials and/or credits, or completing the apprenticeship program.

Demonstration: In evaluation terms, a demonstration is a study that tests a promising intervention that is hypothesized to generate certain desirable outcomes and results.

Grantee: The entity that received the DOL grant. AAI grantees included State government agencies, colleges, nonprofits, sub-State agencies, and sector-based organizations (i.e., labor associations or federations; joint labor-management committees; and industry, professional, or trade associations). The grantee may have used its funds to establish its own *registered apprenticeship program* or supported one or more *sponsors* to register programs.

Mentor: Provides *on-the-job learning* (OJL) opportunities for apprentices. Mentors are other employees of the hiring employer.

Occupation, occupational field: The specific job associated with an apprenticeship program. DOL’s Office of Apprenticeship or a State Apprenticeship Agency, which assigns the job a distinct occupational code, must approve occupational fields. Grantees can operate multiple apprenticeship programs within an occupational field, and *sponsors* can operate multiple programs across different fields.

On-the-job learning (OJL): Every apprenticeship program includes OJL. Apprentices get hands-on work-based learning opportunities from an experienced mentor at the job site for typically not less than one year. Structured OJL experiences are developed by mapping the skills and knowledge that the apprentice must learn over the course of the program to be fully proficient at the job.*

Partner, partner organization: Any partner of the grantee, besides an employer or a union, that provides support for grant activities. Partner organizations can include public agencies, community colleges, nonprofits, and industry associations.

Pre-apprenticeship program: Prepares individuals to enter and succeed in an apprenticeship program through an approved training curriculum based on industry standards. Can include educational and pre-occupational services (e.g., career and industry awareness workshops, job readiness courses), hands-on training in a simulated lab experience or through volunteer opportunities, and assistance in applying to apprenticeship programs. Quality pre-apprenticeship programs involve formal partnerships with at least

* For information on components of registered apprenticeship, including OJL, see https://www.doleta.gov/oa/employers/apprenticeship_toolkit.pdf.

one apprenticeship program *sponsor* that ensure pre-apprenticeship completers can compete for apprenticeship positions.

Registration Agency: The U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship, or a federally recognized State Apprenticeship Agency acts as a Registration Agency, responsible for evaluating an apprenticeship program’s apprenticeship standards and for ongoing evaluation of apprenticeship programs to determine whether they comply with federal regulations related to program design, worker protections, and other criteria. Programs in compliance are “registered.” Registered programs can access federal resources, State tax credits where available, and technical assistance.

Registered apprenticeship program: A structured program of work-based learning under mentors, providing both value to employers and formal technical instruction to workers, and culminating in an industry-recognized credential that meets standards for registration and is issued by DOL’s Office of Apprenticeship or a State Apprenticeship Agency. An apprenticeship *sponsor* for a specific occupation runs the training program. *Sponsors* are responsible for registering individual apprentices and determining whether they have successfully completed the apprenticeship program.[†]

Related technical instruction (RTI): Instruction that complements the apprentice’s *on-the-job learning*, delivering the technical concepts and workforce and academic competencies needed to succeed on the job. A community college, a technical school, an apprenticeship training school, or the employer itself can provide the instruction. Education *partners* collaborate with employers to design the curriculum to deliver the skills and knowledge needed by apprentices. All partners work together to identify how to pay for the RTI, including the cost to the employer and other funds that can be leveraged.

Sponsor: Entity responsible for the overall operation of a *registered apprenticeship program*, working in collaboration with *partner organizations*. Sponsors can be a single employer or a consortium of employers. Alternatively, the sponsor can be any of a range of workforce intermediaries including an industry association or a joint labor-management organization. Community colleges and community-based organizations can also serve as sponsors.

Standards of Apprenticeship: Document describing components of an apprenticeship program for one or more specific job roles. Its individual standards include the purpose of the proposed apprenticeship program, the term of the apprenticeship, the provision of *related technical instruction*, *wage progression* for the apprenticeship, supervision of apprentices, safety, registration of apprentices, *work process schedule*, probation period, periodic evaluation of apprentices’ performance, completion requirements, and apprentice/*mentor* ratio.

Wage progression: Apprentices are paid employees during their training and earn progressively higher wages (“wage steps”) as they develop occupational competency. The wage progression is an apprenticeship component that is formalized in the apprenticeship’s *Standards of Apprenticeship* document. Alternate term is “merit-based increases.”

[†] For more information on registered apprenticeship, see <https://www.apprenticeship.gov/>.

Work processes: The specific skills and competencies an apprentice is expected to master during their apprenticeship program.

Work process schedule: Part of the Standards of Apprenticeship, the work process schedule states the number of on-the-job-learning hours apprentices devote to learning specific skills required for the occupation.

Executive Summary

The U.S. Department of Labor (DOL) launched the American Apprenticeship Initiative (AAI) in October 2015 to expand registered apprenticeship in the United States.¹ Funded by the H-1B visa program, AAI aimed to expand apprenticeship into high-growth sectors and skilled occupations with few apprenticeships, such as healthcare, information technology (IT) and advanced manufacturing. It also aimed to make registered apprenticeship accessible to populations historically underrepresented, including women, racial and ethnic minorities, and veterans. DOL awarded \$175 million in five-year grants to 46 grantees across the country. DOL commissioned an evaluation of AAI to build evidence about the implementation and outcomes of grant activities. This report presents the findings from one AAI sub-study, an evaluation of a demonstration that tested a strategy for increasing employer engagement in registered apprenticeships.

Although apprenticeship is a common training approach in other countries, less than a half of a percent of American workers participate in registered apprenticeships.² One contributor to the small number of apprentices in the United States is that historically employer participation in apprenticeship has been concentrated in the “building trades” such as electricians and carpenters and not utilized as an education and training model for most other jobs.³ An employer’s participation is required for all apprenticeship programs; they hire apprentices and commit to developing their technical skills through *on-the-job learning* (OJL) from mentors and classroom *related technical instruction* (RTI). The primary constraint limiting apprenticeship expansion in the United States is the number of apprenticeship slots offered by employers (Lerman 2016). Thus, to expand registered apprenticeship in the United States, more employers will need to develop new apprenticeships, hire more apprentices in existing apprenticeship programs, or both.

There is limited evidence on strategies to encourage employers to adopt apprenticeship. To inform the field, the AAI evaluation includes an employer engagement demonstration that explores the impact of training staff to market apprenticeships to employers on registration of apprenticeship programs and apprentices. Specifically, the demonstration involved implementation of a *consultative sales and organizing approach* to engage employers (hereafter called the consultative sales approach) and its impact on employer adoption of registration of apprenticeship programs. This report presents results from the employer engagement demonstration implemented by two AAI grantees.

¹ The H-1B visa program allows qualified nonimmigrant workers to temporarily work in the U.S. when employers cannot otherwise obtain needed business skills and abilities from the U.S. workforce (<https://www.dol.gov/whd/immigration/h1b.htm>). The Funding Opportunity Announcement (FOA) for AAI indicated that industries and occupations proposed by grantees should be those where H-1B visas were being used by employers or that were otherwise high-growth industries. See DOL/ETA 2014.

² The evaluation team estimates that 0.39 percent of workers are apprentices, using the most recent data from DOL’s Office of Apprenticeship of 585,000 apprentices in fiscal year 2018 (“Registered Apprenticeship National Results, Fiscal Year 2018 (10/01/2017 to 9/30/2018),” https://www.doleta.gov/oa/data_statistics.cfm); and monthly non-farm employment estimates from the Current Employment Statistics establishment survey for Fiscal Year 2018 (<https://data.bls.gov/timeseries/CEU0000000001>).

³ See DOL’s Office of Apprenticeship statistics on the most prominent occupations represented in registered apprenticeship: <https://www.dol.gov/agencies/eta/apprenticeship/about/statistics/2020>.

Research Questions, Evaluation Design, and Participating Grantees

This report addresses the following research questions:

1. *To what extent does a consultative sales approach affect employers' design and implementation of registered apprenticeship program(s)?*
2. *What are perceived facilitators and challenges to implementing the consultative sales approach?*
3. *What are the implementation experiences of the two grantees? Did experiences vary by grantee or industry or occupation?*

The evaluation team conducted an impact study to answer the first research question. Specifically, the team randomly assigned employers from grantee-provided lists to a “treatment” group that staff trained in the consultative sales approach could actively pursue and a “control” group that staff could not contact for the duration of the demonstration. The impact study was designed to assess the effect of the approach on employers' registration of apprenticeship programs. The evaluation team conducted an implementation study to address the second and third research questions, using information collected during site visit interviews, site monitoring calls, and document and data review.

Two grantees participated in the demonstration:

- A Massachusetts Executive Office of Labor and Workforce Development sub-grantee, **MassHire Hampden County Workforce Board** (MassHire), the workforce development board of Hampden County and the surrounding area in Western Massachusetts; and
- **Philadelphia Works**, the workforce development board for the city of Philadelphia, and two of its grant partners, the Communities in Schools-Philadelphia/Urban Technology Project (UTP) and JEVS Human Services (JEVS).

Training and Technical Assistance Provided to Grantee Staff

From January 2019 to July 2020, a consultative sales approach expert from the Institute for American Apprenticeships (IAA) at Vermont Healthcare and Information Technology Education Center trained staff from two AAI grantees on the approach and provided ongoing technical assistance. The consultative sales approach has five-phases: (1) researching and prospecting of employers, (2) preparing to contact and speak with an employer, (3) making an initial sales call, (4) following-up with the employer, and (5) closing the deal with a written commitment from the employer.

IAA delivered training and technical assistance virtually via webinar and telephone to grantee staff. Over the course of the demonstration, staff from each grantee received 40 to 50 hours of technical assistance. As part of the demonstration, grantee staff collected data on their efforts to identify, contact, and assist employers in developing registered apprenticeship programs. Most of the training and grantee staff efforts occurred prior to the start of the COVID-19 pandemic in March 2020, although staff from both grantees continued to receive IAA's technical assistance and implement the sales process through July 2020.

Demonstration Findings

Findings from the impact and implementation studies include:

The evaluation detected a statistically significant impact of the consultative sales approach on MassHire employer registration of apprenticeship programs. Twelve (12) percent of employers in the treatment group registered at least one apprenticeship program, while no employers in the control group registered any apprenticeship programs. The 12 percentage point difference between the two groups is statistically significant ($p = 0.077$). Because employers were randomly assigned to receiving the consultative sales approach provided by MassHire, the difference between the outcomes of the treatment and control group provides an estimate of the causal effect of these employer engagement and recruitment strategies on the probability of registering an apprenticeship program.

Ultimately, Mass Hire staff recruited three employers that together registered five apprenticeship programs. These programs collectively registered 137 apprentices during the 17-month study period (January 2019 to July 2020), a level significantly higher than the control group employers.

The grantees had very different implementation experiences. MassHire staff implemented all five phases of the consultative process, and successfully recruited employers to provide apprenticeships. Philadelphia Works and its partners worked primarily through the first two phases only and did not recruit any employers to develop apprenticeships. Potential factors underlying these divergent experiences include:

- *MassHire recruited employers in a single industry.* MassHire focused on one industry—advanced manufacturing—and worked with a regional manufacturing trade association to identify 50 potential employers. Philadelphia Works largely focused on the IT sector; however, because many types of employers hire staff for IT occupations, not just IT-specific companies, the grantee’s employer list included over 2,000 employers in a variety of industries. The broad nature of the employer list meant staff needed to research the extent to which employers had IT positions and then locate the appropriate contact to discuss IT-related staffing.
- *Philadelphia Works focused on youth apprenticeships only.* For its AAI grant, Philadelphia Works focused exclusively on creating apprenticeships for “opportunity youth”; that is, 16- to 24-year-olds who are not enrolled in school and are not working. Thus, grant staff not only needed to identify employers in the IT sector, but had to sell employers on a youth apprenticeship program, in effect restricting the pool of potential employers. In contrast, MassHire staff did not need to sell advanced manufacturing employers on a specific age group.
- *MassHire had consistent staffing.* MassHire implemented the demonstration with two staff members who worked directly for the sub-grantee, both of whom remained in their positions for the duration of the demonstration. As a result, those staff received training on all five phases of the consultative sales approach and ultimately “closed the deal” with three employers.

Philadelphia Works engaged its own staff as well as staff from two partners. Managing staff from different organizations presented challenges. The partners had their own employer engagement processes, and Philadelphia Works had limited leverage over its partners to prioritize employer engagement using the five-phase process. One partner opted to leave the demonstration. Philadelphia Works and its remaining partner also had significant staff turnover, so IAA had to re-train staff multiple times on the fundamentals of registered apprenticeship. Philadelphia Works and its partner did not learn all five phases of the approach, thus never progressed beyond the initial sales call phase.

1. Introduction

The U.S. Department of Labor (DOL) launched the American Apprenticeship Initiative (AAI) in October 2015 to expand registered apprenticeship in the United States. Funded by the H-1B visa program, AAI focused on registering programs in nontraditional occupations new to registered apprenticeship, such as healthcare and information technology (IT), and improving access for typically underrepresented populations such as women, veterans, people with disabilities, and people of color. DOL awarded \$175 million in five-year AAI grants to 46 grantees across the country.¹

In 2016, DOL commissioned an evaluation of the AAI grants to build evidence about the effectiveness of registered apprenticeship for apprentices and employers. The AAI evaluation comprises four sub-studies (Box 1). This report presents results from the employer engagement demonstration.

Registered apprenticeships are structured work-based training programs that combine technical instruction (such as that provided in a physical or virtual classroom) with learning and mentoring experiences at an employer’s worksite (Box 2). Apprentices are paid employees during their training and earn progressively higher wages as they develop occupational competency. Apprenticeships provide training in a specific occupation and develop occupational skills that are recognized and transferable across employers.

Although apprenticeship is a common training approach in other countries, such as Germany and Austria (Lerman 2016), less than a half of a percent of American workers participate in registered apprenticeships.² One contributor to the small number of apprentices in the United States is that historically employer participation in apprenticeship has been concentrated in the “building trades” such as electricians and carpenters and not utilized as an education and training model for most other jobs.³ An employer’s participation is required for all apprenticeship programs; they hire apprentices and commit to

Box 1: AAI Evaluation Sub-studies

The AAI evaluation comprises four sub-studies (the fourth of which is the focus of this report):

- An **implementation study** of the grantee apprenticeship programs
- A study of apprentice employment and earnings **outcomes**
- A study measuring the **return on investment** to employers
- An **employer engagement demonstration** that explores the impacts of training staff to market apprenticeships to employers

¹ See the U.S. Department of Labor, Employment and Training Administration (DOL/ETA), Notice of Availability of Funds and Funding Opportunity Announcement for the American Apprenticeship Initiative (FOA-ETA-15-02): <https://www.dol.gov/sites/dolgov/files/ETA/skillstraining/FOA-ETA-15-02%20AAI.pdf>. To review its amendments: <https://www.dol.gov/agencies/eta/grants/2015>. One grant ended prior to the start of data collection for the evaluation.

² The evaluation team estimates that 0.39 percent of workers are apprentices, using the most recent data from DOL’s Office of Apprenticeship of 585,000 apprentices in fiscal year 2018 (“Registered Apprenticeship National Results, Fiscal Year 2018 (10/01/2017 to 9/30/2018),” https://www.doleta.gov/oa/data_statistics.cfm); and monthly non-farm employment estimates from the Current Employment Statistics establishment survey for Fiscal Year 2018 (<https://data.bls.gov/timeseries/CEU0000000001>).

³ See DOL’s Office of Apprenticeship statistics on the most prominent occupations represented in registered apprenticeship in “Federal Data: Active Apprentices by Industry for Fiscal Year 2020” at: <https://www.dol.gov/agencies/eta/apprenticeship/about/statistics/2020>.

developing their technical skills through *on-the-job learning* (OJL) from mentors and formal *related technical instruction* (RTI).

To expand registered apprenticeship in the United States, more employers will need to develop new apprenticeships, hire more apprentices in existing apprenticeship programs, or both.

Limited evidence exists to explain why employers do not sponsor registered apprentices or to document effective strategies to persuade employers to sponsor registered apprentices. However, several factors may influence employers' decisions (Lerman 2012). These include:

- (1) employers assume they already provide sufficient training
- (2) employers assume that paperwork and federal regulations are onerous;
- (3) employers are unaware of the benefits of apprenticeship;
- (4) employers do not know how to start a program; and
- (5) employers think of apprenticeships as specific to the building trades, and many do not have role models for their industry.

Close to two-thirds (61 percent) of AAI grantees reported in the evaluation's grantee survey that employers' reluctance to complete the necessary registration paperwork is the major obstacle to registering more apprenticeship programs with employers, followed by delays in developing RTI, and difficulty completing work process schedules (Gardiner et al. 2021).

Apprenticeship initiatives in England and the United States (South Carolina) that prioritized employer engagement succeeded in expanding apprenticeship (Stieritz 2009; Kuehn 2017; Fortwengel, Gospel, and Toner 2019). These initiatives utilized highly qualified "salespeople" to meet with individual employers to show how apprenticeships can help their businesses and to simplify the organization of apprenticeships (e.g., assisting in apprenticeship design and facilitating apprenticeship registration). Furthermore, apprenticeship expansion in England and in South Carolina suggests that these intensive consultative sales and organizing approaches may be beneficial, but there is currently no evidence base.

To inform the field on effective approaches to increase employer involvement in apprenticeship, the AAI evaluation's employer engagement demonstration assessed implementation of a *consultative sales and organizing approach* to engage employers (hereafter called the consultative sales approach) and employer

Box 2: Elements of Registered Apprenticeship

- **Approval** by DOL's Office of Apprenticeship or a State Apprenticeship Agency, or sometimes both
- **Related technical instruction** (RTI) of at least 144 hours in a physical or virtual classroom
- **On-the-job learning** (OJL) of at least 2,000 hours overseen by a mentor at the employer site
- **Wage increases** over the course of the apprenticeship (wage progression), which can be tied to time in the program or to demonstration of skill competency
- An **industry-recognized credential** upon completion of the apprenticeship
- A **Standards of Apprenticeship** document that formally describes the work process schedule (skill standards) and specifies the RTI, OJL, and wage progression for the registered apprenticeship program
- A **sponsor** to oversee the program and maintain the *Standards of Apprenticeship* and basic data on apprentices; sponsors can be employers, consortia of employers, unions, community colleges, State or local workforce agencies, or non-profit organizations
- A written **apprenticeship agreement** between an apprentice and either the program sponsor or an apprenticeship committee acting as an agent for the sponsor

Source: Gardiner et al. (2021).

adoption of apprenticeship associated with the approach. Under the consultative sales approach, trained staff actively prospect for employers likely to be good candidates for creating and offering apprenticeships; contact employers to assess their interests, as well as their skill and staffing needs; explain why registered apprenticeships are an effective way of meeting their needs; help interested employers develop Standards of Apprenticeship or identify an existing one to sign onto; and guide employers through the registration process with either a State Apprenticeship Agency or DOL’s Office of Apprenticeship, depending on the state.

The consultative sales approach focuses on tailoring recruitment messages to respond to an individual employer’s specific interests in and concerns about apprenticeship. The approach is based on the premise that because employers’ workforce needs and knowledge of apprenticeship varies, there is no “one size fits all” strategy to selling apprenticeship (Lerman 2019).

The demonstration tested the impact of the consultative sales approach on employers’ development and registration of apprenticeship programs and hiring of apprentices. Over the course of the 17-month demonstration, two AAI grantees received ongoing training and technical assistance from a consultative sales expert to implement the approach and test the impact of it on employer registration of apprenticeship programs and apprentices. Demonstration findings are important for policy and program development, given that the primary constraint limiting apprenticeship expansion in the United States is the number of apprenticeship slots offered by employers (Lerman 2016).

1.1. Research Questions, Evaluation Design, and Grantee Selection

The demonstration included implementation, impact, and outcomes research components. The following research questions guided all components of the demonstration:

1. *To what extent does a consultative sales approach affect employers’ design and implementation of registered apprenticeship program(s)?*
2. *What are perceived facilitators and challenges to implementing the consultative sales approach?*
3. *What are the implementation experiences of the two grantees? Did experiences vary by grantee or industry or occupation?*

To answer the first research question, the evaluation team designed a randomized controlled trial (RCT) to test the impact of the intervention (the consultative sales approach) on creation of apprenticeship programs. Using grantee-specific lists of employers, the team randomly assigned equal numbers of employers to one of two groups—a treatment group that employer engagement staff could actively pursue and a control group that staff could not contact for the duration of the demonstration. The difference between the number of treatment employers that register apprenticeship programs and the number of control employers that register apprenticeship programs provides an estimate of the impact of employer outreach efforts on apprenticeship program registration. The evaluation team also documented the number of employer contacts and results of those contacts.

The second and third research questions are answered in the implementation component of the study, using information collected during site visit interviews, site monitoring calls, and document and data review.

Grantee Selection

In consultation with DOL, the evaluation team selected two grantees following an extensive outreach effort. The evaluation team approached grantees with the following characteristics:

- *Registered apprentices as a proportion of grant goal.* The evaluation team contacted grantees that had a large proportion of apprentices yet to register, suggesting a need to identify more employers and apprenticeship slots.
- *Ability to create a list of employers.* Grantees needed to create a list of employers not yet approached by grant staff that could be randomly assigned for the demonstration.
- *Staff who could dedicate at least part of their time to implementing the consultative sales approach.* This included grantee staff and sub-grantee staff.
- *The ability to collect data on employer contacts and the outcomes of those efforts related to program registration.* The evaluation team needed grantee data to conduct the impact and outcomes analyses.
- *A willingness to commit to participating in the demonstration.* In return for participating, grantees would receive technical assistance and training in conducting employer outreach.

In recruiting sites, the evaluation team emphasized to grantees the benefits of participation: (1) in the short run, the training and technical assistance could help them register more apprentices to achieve their target numbers for their AAI grant; and (2) in the longer term, the consultative sales approach could improve the approach to business development in apprenticeship expansion efforts.

The evaluation team held telephone calls with 23 of the 45 AAI grantees to assess the degree to which they met the conditions needed for the demonstration. Identifying grantees that met all these conditions proved challenging. Although many grantees needed to make more substantial progress towards their apprentice targets, they were frequently reluctant to participate in a demonstration that introduced randomization to their approach to identifying prospective employers. For instance, some grantees were obligated to serve a certain set of employers because of existing partnerships and others were committed to identifying employers through referrals. Examples of additional barriers to participation included inability to identify a set of employers for random assignment; concerns about their ability to avoid working with a group of employers assigned to the control group due to staffing or other issues; no staff who could dedicate time to participate in training and technical assistance on the consultative sales approach and then implement the approach; ongoing organizational changes that precluded implementation of new processes or procedures; and lack of grantee leadership commitment to the demonstration. The team conducted site visits to the five most promising candidates.

Selected Grantees

Two grantees agreed to participate in the demonstration:

- A Massachusetts Executive Office of Labor and Workforce Development sub-grantee, **MassHire Hampden County Workforce Board**, or MassHire; and
- **Philadelphia Works** and two of its grant partners, the Communities in Schools-Philadelphia/Urban Technology Project (UTP) and JEVs Human Services (JEVS).

MassHire is the workforce development board of Hampden County and the surrounding area in Western Massachusetts, including the city of Springfield. Philadelphia Works is the workforce development board for the city of Philadelphia. MassHire operates in a fairly rural region; Philadelphia Works operates in a dense urban area. As workforce development boards, both organizations coordinate, fund, and oversee publicly funded worker training and job placement programs through their American Job Centers, provide services to employers to recruit and train workers, and undertake regional workforce initiatives.⁴

Each grantee created a list of potential employers for random assignment. As described in the subsequent chapters, the employers included on each list varied in accordance with the occupational focus of the apprenticeship. The evaluation team randomly assigned half of employers on the list to the treatment group and the control group.

Training and Technical Assistance

A consultative sales approach expert from the Institute for American Apprenticeships (IAA) at Vermont Healthcare and Information Technology Education Center trained staff from two AAI grantees on the approach and provided ongoing technical assistance.⁵ Founded in 2000, IAA develops and organizes apprenticeship programs with employers, particularly those in healthcare, information technology (IT), and other occupations outside the building trades.⁶ According to IAA's Founder and President, since its inception, IAA developed more than 50 apprenticeship programs and worked with more than 75 employers.

The Founder and President of IAA delivered training and technical assistance virtually via webinar and telephone to staff identified by the grantees' leadership to implement the consultative sales approach. As shown in the timeline in Exhibit 1-1, these activities began in January 2019 and continued until July 2020. The first virtual training combined demonstration study procedures (e.g., random assignment of employers) with the fundamentals of registered apprenticeship. The second virtual training provided an overview of the consultative sales approach to employer engagement. Each training lasted two to two and a half hours.

IAA provided weekly technical assistance virtually to MassHire and Philadelphia Works staff through summer 2020. Sessions lasted 30 minutes to an hour depending on the amount of content to cover. Over the course of the demonstration, each grantee received 40 to 50 hours of technical assistance.⁷ During this period, grantees collected data on their efforts to identify, contact, and assist employers in developing

⁴ For additional information, see MassHire HCWB at <https://masshirehcb.com/> and Philadelphia Works at <https://www.philaworks.org/>.

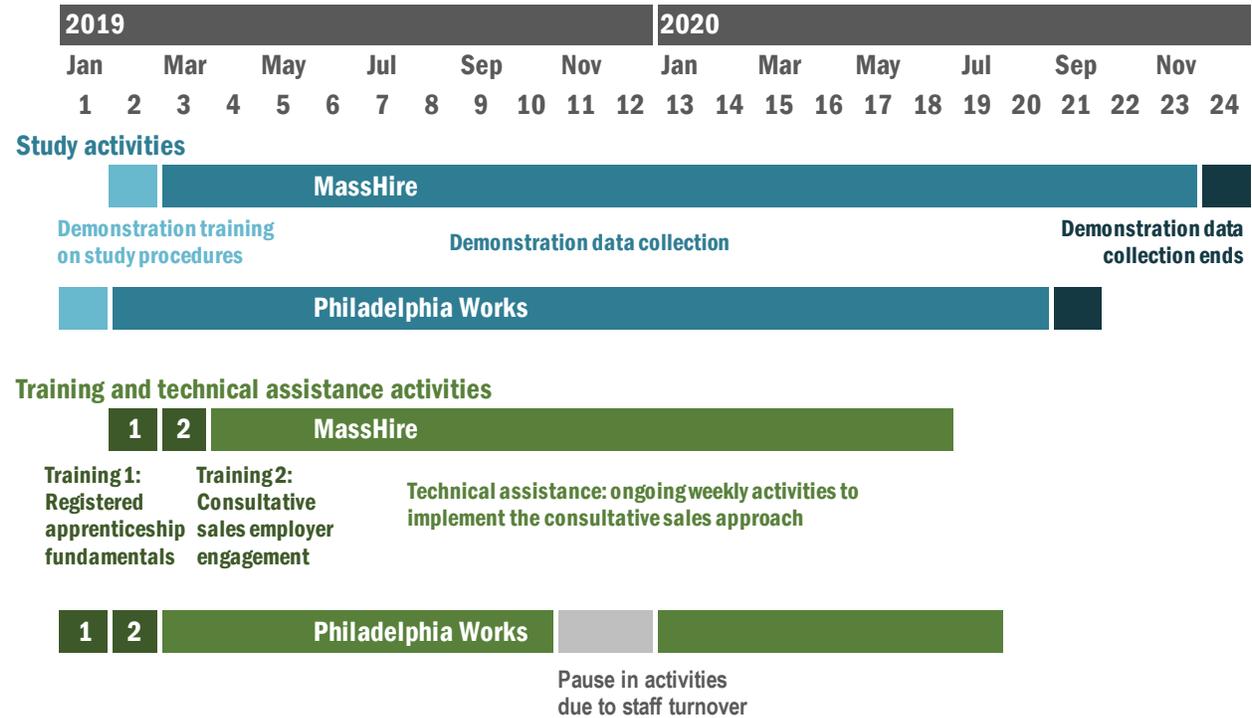
⁵ For many years, the organization operated as Vermont Healthcare and Information Technology Education Center but later changed its name to IAA as it began providing services beyond the state of Vermont. For simplicity, from this point on, this report refers to the organization as IAA.

⁶ Information on IAA is available at <https://iaahitec.org/>.

⁷ MassHire participated in 17 months of technical assistance consecutively while Philadelphia Works participated for a total of about 17 months, but with a pause for two months from mid-November 2019 to mid-January 2020 due to staff turnover.

registered apprenticeship programs.⁸ Grantee staff completed the majority of the demonstration implementation before the COVID-19 pandemic emerged in March 2020, although both grantees continued to receive IAA’s technical assistance and implement the sales process into the early months of the pandemic.

Exhibit 1-1: Demonstration Schedule



Source: Evaluation team records and interviews with MassHire and Philadelphia Works staff.

Notes: IAA did not conduct training and technical assistance for Philadelphia Works between mid-November 2019 and mid-January 2020 due to staff turnover, which caused a temporary pause in demonstration activities. New staff began work on the demonstration and started training in mid-January 2020.

1.2. Data Sources

The evaluation team used the following qualitative and quantitative data sources to assess the implementation and outcomes of the demonstration:

- **Observations of the training technical assistance sessions.** The evaluation team attended the initial training and many of the subsequent technical assistance sessions provided by IAA to MassHire and

⁸ Data collection continued after technical assistance activities ended since the evaluation team asked grantees to keep track of ongoing efforts with the employers in the sample and registration of apprenticeship programs and apprentices with those employers. Data collection ended in December 2020 for MassHire and September 2020 for Philadelphia Works.

Philadelphia Works staff.⁹ Observations focused on the content of the technical assistance, issues raised by grantee staff and the solutions offered by IAA, and the mode of delivery.

- **Interviews with key staff from MassHire and Philadelphia Works.** The evaluation team interviewed grant-funded staff who were responsible for employer engagement and in leadership roles at the two demonstration sites. Interviews occurred at two points in time: in-person visits in spring/summer 2019 and virtual sessions in fall 2020.¹⁰ These interviews documented the local context in which the demonstration operated, organizational background, staffing, partnerships, employer outreach activities, assistance provided with apprenticeship development and registration, types of technical assistance received, and implementation challenges and facilitators.
- **Interview with IAA trainer.** After the technical assistance sessions concluded in summer 2020, the evaluation team interviewed the IAA Founder and President who delivered the training and technical assistance for the demonstration. The interview topics included the structure and content of the training and technical assistance, methods of and frequency of interactions with grantee staff, and assessment of the experiences of the grantees in implementing the consultative sales approach.
- **Demonstration data.** The staff at the two demonstration sites used a spreadsheet designed by the evaluation team to record their outreach efforts to employers.¹¹ This spreadsheet collected data on employer features and outcomes of interest to the demonstration, including random assignment status (i.e., treatment or control group), number and type of consultative sales activities performed with each treatment group employer, and outcomes related to development and registration of an apprenticeship program. Some of the activities and outcomes are more refined steps within the phases of the consultative sales approach described in Chapter 2, and some are activities that occur after the employer is “sold” on apprenticeship and begins developing a program. The **Appendix** lists the data fields collected for the demonstration.

There are a few limitations to this data. Grantees and the IAA trainer did not fully record the number of technical assistance sessions and the duration of the sessions. While the exact dosage of technical assistance is not available, the evaluation team estimated the number of sessions and number of hours based on patterns in how often grantees cancelled sessions and variations in the length of each session held. With the demonstration data, the spreadsheet data collection tool captured up to 10 contacts per employer; however, as MassHire staff made headway with several employers, they exceeded that number of contacts and stopped tracking them when communication with the employer became more fluid. Therefore, the total number of contacts in excess of 10 is not known.

⁹ The evaluation team attended about 15 (about one-third) of the MassHire calls and about 30 (about three-quarters) of the Philadelphia Works technical assistance calls.

¹⁰ The evaluation team conducted interviews as part of the AAI Evaluation implementation study as well as for the recruitment demonstration. See Copson et al. 2021 regarding the implementation study.

¹¹ The Paperwork Reduction Act requires that agency information collections minimize duplication and burden on the public, have practical utility, and support the proper performance of the agency's mission. The Information Collection Review for the demonstration (OMB Control Number 1290-0017) is available at https://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201802-1290-002.

1.3. Organization of the Report

The remainder of this report is divided into five chapters. Chapter 2 describes implementation of the consultative training approach, providing background on the training and technical assistance provider and the key features of the intervention tested by MassHire and Philadelphia Works. Chapters 3 and 4 document the implementation experiences and outcomes of the demonstration effort in MassHire and Philadelphia Works, respectively. Chapter 5 summarizes the demonstration outcomes and potential implementation facilitators and challenges.

2. Implementing the Consultative Sales Approach

This chapter describes the consultative sales approach tested by the demonstration. It also discusses the training and technical assistance provided to MassHire and Philadelphia Works.

2.1. Description of the Consultative Sales Approach

IAA provided training for the consultative sales approach for this demonstration. As shown on Exhibit 2-1, the approach has five phases. Phase 1 involves **researching an employer** to identify its staffing or hiring needs, as well as the education and skill requirements for any open position. This phase is also referred to as “prospecting.” Once staff identify an employer with a hiring need, Phase 2 is **preparing for an initial conversation** with the employer by writing down questions to ask and beginning to develop a “problem statement” that describes the employer’s challenges (what IAA calls their “pain points”) in filling a vacant position. During this second phase, staff refine the sales pitch to the employer.

Phase 3 is the **initial sales call**. This phase includes a discovery of an employer’s possible need for apprenticeship. To do this, staff listen carefully to the employer’s responses to the prepared questions in order to understand what skills the employer seeks in a new worker, as well as how the employer currently identifies, onboards, trains, and promotes its workers. Using this information, the staff member makes a “value proposition” that describes the potential value of apprenticeship to develop (“build”) the qualified worker the employer seeks.

Phase 4 is conducting **follow-up** with the employer. Grantee staff communicate next steps to the employer so that all involved are clear on what needs to be done to move forward with planning an apprenticeship program. Staff also offer to meet with other decision-makers, if needed. IAA staff find that employers rarely decide to develop a registered apprenticeship program after a single meeting; often it takes multiple meetings and conversations, as well as ongoing correspondence, over an extended period of time to sell employers on the value of apprenticeship.

Phase 5 is “**closing the deal**.” This includes securing a written commitment from the employer that they plan to implement a registered apprenticeship program and register apprentices. While not binding, it helps ensure the employer understands the steps required to develop a registered apprenticeship program and stays engaged in each step. Often, to draft the written agreement, employers must engage various levels of management to ensure the necessary decision-making entities approve the plan to register an apprenticeship program.

After an employer decides to develop a registered apprenticeship program, the primary phases of the consultative sales approach are essentially concluded. However, staff continue to assist employers in developing the registered apprenticeship program. For instance, employers may need assistance building the work process schedule and the RTI curriculum, identifying training providers, and determining the wage progression. As program development progresses, the Standards of Apprenticeship is reviewed and if approved, signed by the State Apprenticeship Agency.¹² Grantee staff might offer to assist the employer

¹² Massachusetts and Pennsylvania are State Apprenticeship Agency states; that is, the State Apprenticeship Agency approves and registers apprenticeships. Other states are Office of Apprenticeship states, in which DOL’s Office of Apprenticeship approves and registers apprenticeships.

with recruiting and/or registering apprentices. Employers may not want or need assistance with certain steps, but grantee staff are available to help make program design and registration as easy and seamless as possible for the employer. The ultimate aim of the intervention is that, by providing a high level of customer service throughout the process, an employer may consider developing another registered apprenticeship program and may refer other employers to do the same.

Exhibit 2-1: Phases in the Consultative Sales Approach

Phase	Activities and Approaches	Rationale
1. Research and “prospecting”	<ul style="list-style-type: none"> • Research employer’s website to learn details about employer’s business • Research an employer’s job postings on its website to identify open positions • Write down minimum education level and credentials required • Write down the education and job competencies stated in the job announcement • Identify the wage or salary range 	<ul style="list-style-type: none"> • Doing background research can later help establish a rapport with employer • Identifying open positions indicates the labor needs of the employer, for instance positions that have been open or vacant for extended periods of time could be hard to recruit for, indicating a role for apprenticeship to train a worker • Understanding the education requirements and competencies/skills needed for the job informs the nature of the RTI and OJL for an apprenticeship • Noting the salary range helps to set the wage progression and wage rates at each step
2. Preparation	<ul style="list-style-type: none"> • Develop questions to ask the employer, particularly around its hiring and training strategies • Develop a statement of the employer’s workforce development challenge (“problem statement”) based on information gathered • Understand federal and state regulations around registered apprenticeship • Be knowledgeable about tax credits and other subsidies to offset costs to employers (e.g., WIOA Individual Training Accounts that can be applied to apprentice training) 	<ul style="list-style-type: none"> • Asking questions of the employer leads to better understanding its needs, then this information can be used to define the benefits of apprenticeship in terms that resonate with the employer • Defining the problem statement shows that the grantee staff member understands the employer’s needs, giving the employer confidence that the staff member and apprenticeship can help address them • Being informed about regulations and financial incentives enables grantee staff to advise on developing programs that meet federal/state standards and help employer take advantage of financial offsets
3. Initial sales call	<ul style="list-style-type: none"> • Ask questions developed during the preparation step, listen carefully to response, and ask follow-up questions • Use language that employers understand, and avoid apprenticeship jargon (e.g., say “job description” and “position responsibilities” rather than “work processes” and “competencies”; talk about “training” rather than “RTI” and “mentoring” rather than “OJL”; discuss “merit-based increases” rather than “wage progression”) • Relate registered apprenticeship to what the employer already does (e.g., onboarding new staff to fill knowledge gaps equates to RTI; 	<ul style="list-style-type: none"> • Listening to the employer’s responses helps grantee staff understand the employer’s “pain points” and the problem the employer needs to solve with apprenticeship • Tailoring the language and relating apprenticeship components to worker development the employer already does helps employers see how apprenticeship can seamlessly integrate with their current operations • Selling the employer on the value of apprenticeship so it can see how investing in developing a program can help it in the long run, both to retain workers and to develop new

Phase	Activities and Approaches	Rationale
	<p>mentoring staff equates to OJL; performance reviews and merit increases relate to structured wage steps)</p> <ul style="list-style-type: none"> • Discuss the value of apprenticeship with the employer, including “building” a worker to the employer’s specifications, paying them stepped wages commensurate with their level as they learn, increasing retention, and providing a repeatable and organized framework for hiring and advancing workers 	workers for particular positions
4. Follow-up	<ul style="list-style-type: none"> • Set up the next meeting or conversation before leaving the first one • Communicate next steps with the employer • Offer to meet with other decision-makers and, if needed, suggest who else might need to be involved • Create an incentive for meeting again, such as offering to research RTI curriculum or providers and presenting the information to other staff and stakeholders 	<ul style="list-style-type: none"> • Scheduling the next meeting is often easier while the staff member still has the employer’s attention than to reach the employer later • Being clear about next steps helps all parties know what to do to keep the opportunity moving forward • Regular follow-up reminds employers grantee staff are available to assist in apprenticeship program development and registration
5. Close the deal	<ul style="list-style-type: none"> • Get a commitment in writing that the employer wants to participate in registered apprenticeship (e.g., a letter of intent to proceed with the process of developing standards) • Work with the employer to develop the work process schedule and outline the RTI curriculum • If the employer is hesitant to register on its own, offer alternatives such as signing on to an existing group program or working with an intermediary (an organization that aids in registering or administering apprenticeship programs) 	<ul style="list-style-type: none"> • Confirming the employer’s commitment and willingness to transition from sales phase to implementation phase • Assisting employers in the areas where they need help facilitates development of the apprenticeship • Making the registration as easy as possible for the employer helps to remove a barrier to establishing the apprenticeship program

Source: Materials developed by IAA and observations of IAA technical assistance sessions.

Key: OJL=on-the-job learning. RTI=related technical instruction. WIOA=Workforce Innovation and Opportunity Act.

2.2. Training and Technical Assistance

This section describes the content of the training and technical assistance IAA provided to MassHire and Philadelphia Works employer engagement staff so they could learn implement the consultative sales approach.

Foundational Webinar Training

In early 2019, IAA delivered two webinar trainings. The first, which lasted about two and a half hours, covered the fundamentals of registered apprenticeship, including its five core components,¹³ roles of key

¹³ Employer involvement, related technical instruction, structured on-the-job learning, wage increases, and a national occupational credential. Box 2 in Chapter 1 lists the elements.

entities in developing and registering apprenticeship programs (e.g., employers, sponsors, DOL’s Office of Apprenticeship or State Apprenticeship Agency), different registered apprenticeship program structures (e.g., time-based versus competency-based, all RTI before OJL versus integrating both throughout the program). The session also included several in-class exercises prompting participants to think about and discuss the content delivered. The second session, which lasted about two hours, focused on how to listen to the workforce needs of the employer and how its existing training and worker development practices could be transformed into an apprenticeship program. This webinar walked through the five phases in the consultative sales approach shown in Exhibit 2-1 above.¹⁴ IAA used these five phases to organize ongoing technical assistance to grantee staff.

Ongoing Technical Assistance

After laying the groundwork with webinars, IAA’s ongoing technical assistance sessions were more interactive (Box 3). The sessions focused on helping staff with tasks to engage employers and address challenges in each of the phases in the consultative sales approach (Box 4). The following examples are illustrative of the content but are not comprehensive in detailing every topic covered during the sessions.

Reviewing job postings. IAA showed grantee staff how to review and parse a job posting for indicators that the employer had already implemented certain components of apprenticeship (e.g., “training” referenced in a job posting could become part of RTI for an apprenticeship, “mentoring” or “job-shadowing” could become OJL) (Phase 1). Grantee staff also wrote down the education and skills requirements for the job since those would be relevant to showing the employer how they could be achieved during an apprenticeship.

Developing a sales pitch. After demonstrating during a webinar how to research an employer’s website to inform an initial sales call, IAA asked staff to pick a candidate employer then complete a worksheet on its job postings, noting the education and job competencies mentioned and the minimum education level and credentials required (Phase 1). Staff then used the information gathered to develop the “problem statement” (Phase 2). The assignment also asked staff to write a set of questions they would ask the employer to learn about its hiring and training strategies. The objective of this exercise was to show staff how to arrive at a sales pitch that would show the employer the grantee staff member understood its hiring needs and how a registered apprenticeship could meet those needs.

Box 3: Technical Assistance Delivery Methods

IAA used the following methods and instructional strategies to deliver technical assistance:

- Role-playing as employer engagement staff responsible for employer recruitment and employer staff
- Reviewing and providing feedback on flyers and presentations created by the grantee for employers
- Coaching on vocabulary and messaging to use in meetings with employers so that staff framed apprenticeship in a way that resonated with employers
- Assigning homework to complete in preparation for the next session’s content or to expand further on a task started during a session

Source: Evaluation team observations of technical assistance sessions.

¹⁴ Webinar resources included those provided on DOL’s Office of Apprenticeship’s Apprenticeship USA website: <https://apprenticeshipusa.workforcegps.org/resources/2018/05/11/17/01/Apprenticeship-Business-Engagement-Tools>.

Using incentives. IAA also described how to use available incentives to encourage an employer to develop an apprenticeship program (Phases 3 and 4). For instance, Philadelphia Works could offer AAI grant funds to offset employer costs for RTI and mentor wages. MassHire offered to minimize the administrative burden for employers by operating as the *sponsor* (the entity responsible for the overall operation of the registered apprenticeships) and helped identify state and other federal grants to help the employer offset RTI and OJL costs. As workforce development agencies, both Philadelphia Works and MassHire could use Individual Training Accounts provided through the Workforce Innovation and Opportunity Act to fund RTI for eligible apprentices.

Box 4: Examples of Technical Assistance Topics

Once staff had acquired foundational knowledge in the webinars, technical assistance focused primarily on challenges staff experienced with the sales process or their questions:

- Organizing multi-employer information sessions (Phase 2)
- Setting up apprenticeship programs for specific occupations (Phases 4 and 5)
- Identifying RTI providers suited to the needs of the apprenticeship and the specifications of the employer (Phases 4 and 5)
- Taking a competency-based apprenticeship program as a model and developing a similar program that is hours-based (Phase 5)
- Mapping skills between pre-apprenticeship programs and apprenticeship programs (Phase 5)
- Using best practices for keeping employers engaged through the sales process (e.g., hold weekly check-in calls) (Phases 4 and 5)
- Structuring the Standards of Apprenticeship when an employer wants to recruit/hire workers through a staffing agency (Phase 5)
- Developing a wage schedule, including how to structure it when the apprenticeship does not include many steps to tie wage increases to (Phase 5)
- Identifying strategies to continue training apprentices during the COVID-19 pandemic (Phase 5)
- Engaging with the state agency to get Standards of Apprenticeship approved and the program registered (Phase 5)

Source: Evaluation team observations of technical assistance sessions and interviews with IAA and grantee staff.

Getting familiar with regulations. IAA staff utilized the state regulations during technical assistance sessions to teach grantee staff to refer to the regulations to address apprenticeship program design questions (Phase 4). For example, a staff member inquired whether apprenticeships could only be used for full-time jobs and IAA directed them to pull up the state regulations to search whether they specified full-time anywhere, which they did not. This exercise underscored the importance of referring to the regulations rather than assumptions or rumors to avoid misleading employers.

Over the course of the demonstration, IAA delivered technical assistance on the consultative sales approach to both grantees over a period of about 17 months. Sessions were approximately weekly.¹⁵ The exact number of technical assistance sessions varied by grantee, totaling approximately 40 to 50 hours for each grantee. As discussed in the next two chapters, the extent to which MassHire and Philadelphia Works were able to put the strategies into practice differed considerably.

¹⁵ Later in the demonstration period, MassHire shifted to biweekly sessions once staff felt confident implementing the consultative sales approach. While sessions for both grantees were scheduled for an hour, sometimes they lasted a half hour if content, questions, and assistance could be provided within that timeframe. Also, due to occasional scheduling conflicts, both grantees occasionally canceled sessions.

3. Employer Engagement Demonstration Findings: MassHire Hampden County Workforce Board

MassHire Hampden County Workforce Board staff began implementing the first phase of the consultative sales approach—employer prospecting—in February 2019, and implemented the demonstration largely as designed, ending in December 2020. As discussed, staff prospected for the most promising employers, conducted targeted outreach to strong candidates, and ultimately worked with three employers to establish apprenticeship programs.

3.1. Background

A sub-grantee of the Massachusetts Executive Office of Labor and Workforce, MassHire focused on a single industry: advanced manufacturing. It has a long-standing partnership with the Western Massachusetts Chapter of the National Tooling and Machining Association (WMNTMA).¹⁶ Through this partnership, MassHire obtained a list of 50 advanced manufacturing employers in its region.

The evaluation team randomly assigned the 50 employers equally to treatment and control groups. The 25 treatment group employers represented a range of employer sizes: the largest share had 24 or fewer employees (36 percent), followed by 25 to 99 employees (28 percent), 100 to 249 employees (28 percent), and 250 or more employees (8 percent). In adherence to the original random assignment design, MassHire staff did not contact the 25 control group employers for the duration of the demonstration (through December 30, 2020).¹⁷

Initial training occurred in February 2019. MassHire’s Director of Workforce Development Programs attended in the role of Project Manager for the demonstration, as did its Executive Director, who provided oversight and guidance but was not directly involved in employer outreach. MassHire engaged an Employer Engagement Specialist in summer 2019 to assist the Project Manager. Both the Project Manager and Employment Engagement Specialist remained through the end of the demonstration effort.

While conducting employer outreach and engagement with employers, MassHire staff continued regular one-hour virtual technical assistance meetings with IAA. Sessions were weekly initially, but once staff had adopted the outreach techniques, sessions moved to biweekly. During these sessions, IAA staff provided additional information on methods for successful outreach and helped grantee staff troubleshoot problems they experienced. Technical assistance ended in June 2020. Over the course of the demonstration, MassHire reported receiving about 50 hours of training and technical assistance.

¹⁶ WMNTMA is an affiliate of the National Tooling and Machining Association (NTMA) which works on issues related to policy, workforce development, and industry development to promote the interests of its member companies. For more see <http://wmntma.org/>.

¹⁷ If contacted by a control group employer, grantee staff could refer the employer to another local workforce provider if feasible but could not directly provide services. During the demonstration’s period of performance, no control group employer contacted MassHire for services related to apprenticeships.

3.2. Implementation Practices

Shortly after completing the initial IAA webinar trainings, MassHire launched the research and preparation phases of the consultative sales approach. The Director of Workforce Development Programs conducted all activities for the first four months of the demonstration, at which time the Employer Engagement Specialist joined the effort.¹⁸

The Director of Workforce Development Programs identified seven employers among the 25 in the treatment group that appeared to be the most promising prospects based on initial research. Later, after prioritizing this initial group of employers, MassHire went back to the list and reached out to the remaining employers on the prospecting list, ultimately contacting all but one.

The Director of Workforce Development Programs and Employer Engagement Specialist started by contacting employers with phone calls and emails to introduce apprenticeship generally, its potential value for employers, and the process for learning more about establishing a program. They also approached targeted employers at industry association events to describe apprenticeship and gauge the employer's interest in further discussions. Following these initial contacts, they continued to contact unresponsive employers via emails and phone calls, and at events.

If an employer responded to a phone or email contact, the Director of Workforce Development Programs and Employer Engagement Specialist scheduled an initial conversation, or "sales call." During this meeting, most often conducted in person, they discussed with the employer the occupational focus of the apprenticeship, steps to register an apprenticeship program, and what is involved in ongoing program operation. If an employer expressed interest in moving forward with an apprenticeship, they worked with the employer to develop a workplan to lay out the steps and decisions to develop the program and the entities responsible.

As part of apprenticeship program development, grantee staff assisted employers to ease the burden employers experienced developing and registering a program. These included:

- Helping employers identify RTI providers, investigate work process schedules from existing registered apprenticeship programs to use as examples, and identify available funding sources that could support costs associated with RTI and OJL (e.g., Individual Training Accounts available through the American Job Centers to support training for Workforce Innovation and Opportunity Act-eligible individuals).
- Addressing employer questions around union involvement in apprenticeships, possible intermediaries or sponsors to register the program, how to structure wage increases, and potential sources for recruiting apprentices.
- Assisting with paperwork to register the program with the State Apprenticeship Agency, which registers programs in Massachusetts, including helping employers complete and submit the paperwork.

¹⁸ The Employer Engagement Specialist was primarily trained by the Project Manager and attended the regular IAA technical assistance sessions throughout the demonstration period.

- Using professional contacts within the State Apprenticeship Agency to help track the status of a submitted apprenticeship program’s application in the review process.

In the latter stages of the demonstration (late October and early November 2020), MassHire staff attempted to contact non-responsive employers with two emails. The first invited employers to an open house hosted by an employer that had created an apprenticeship program as part of a pathway from vocational schools to work-based learning opportunities. The second email provided information about tax credits available to employers operating apprenticeship programs and invited employers to attend an event hosted by MassHire to learn more.¹⁹ Staff reported that employers seemed to appreciate events with other employers. In particular, staff noted that having an employer talk about its successful registered apprenticeship experience was effective in convincing other employers to consider apprenticeship.

Finally, although not part of the demonstration, MassHire staff helped employers recruit apprentices once programs launched, if requested. For example, MassHire’s American Job Centers (referred to as MassHire Career Centers) held job fairs and referred customers, including those using Workforce Innovation and Opportunity Act services.

3.3. Outcomes and Impacts

This section documents MassHire employer engagement staff employer contacts, outcomes of those contacts, and the impact of the consultative sales approach on employer implementation of apprenticeships.

Number of Employer Contacts

The employer engagement staff maintained a record of the first 10 outreach attempts per employer on the prospecting (treatment group) list. Data recorded included date of contact, mode of outreach, and type of service delivered (e.g., information/encouragement to establish an apprenticeship program, help with apprenticeship program design, help with apprenticeship registration, other types of help). As shown in Exhibit 3-1, of the 25 employers in the treatment group, MassHire ultimately contacted 24.²⁰ Of them, 14 employers (56 percent) received 2 contacts, 6 employers (24 percent) had between 4 and 7 contacts, 1 employer (4 percent) received 9 contacts, and 3 (12 percent) had at least 10 contacts.

¹⁹ The Registered Apprentice Tax Credit (RATC) is offered through the Massachusetts Executive Office of Labor and Workforce Development to help businesses offset the costs of hiring and training apprentices in industries where apprenticeship has not traditionally been used (e.g., healthcare and manufacturing). RATC provides employers with a credit for up to the lesser of \$4,800 or 50 percent of wages paid for each qualifying apprentice. Businesses can qualify for up to \$100,000 in total tax credits each calendar year. For more see <https://www.mass.gov/how-to/apply-for-a-registered-apprentice-tax-credit-ratc>.

²⁰ Grantee staff inadvertently left one employer off the email distribution list.

Exhibit 3-1: MassHire Frequency of Contacts with Treatment Group Employers



Source: MassHire spreadsheet recording services and outcomes. N=25 employers.
Note: MassHire did not track more than 10 contacts with single employers.

In sum, staff made 89 contacts with employers. The majority (70 percent, or 62 contacts) were email contacts (Exhibit 3-2). Fifteen percent (13 contacts) were in-person either in a group or one-on-one setting. Among the 14 employers shown that received two contacts only (Exhibit 3-1), both contacts were email (not shown below). Of the other 10 employers, five received at least one telephone call and eight attended an in-person meeting with MassHire staff.

Exhibit 3-2: MassHire Employer Outreach Methods

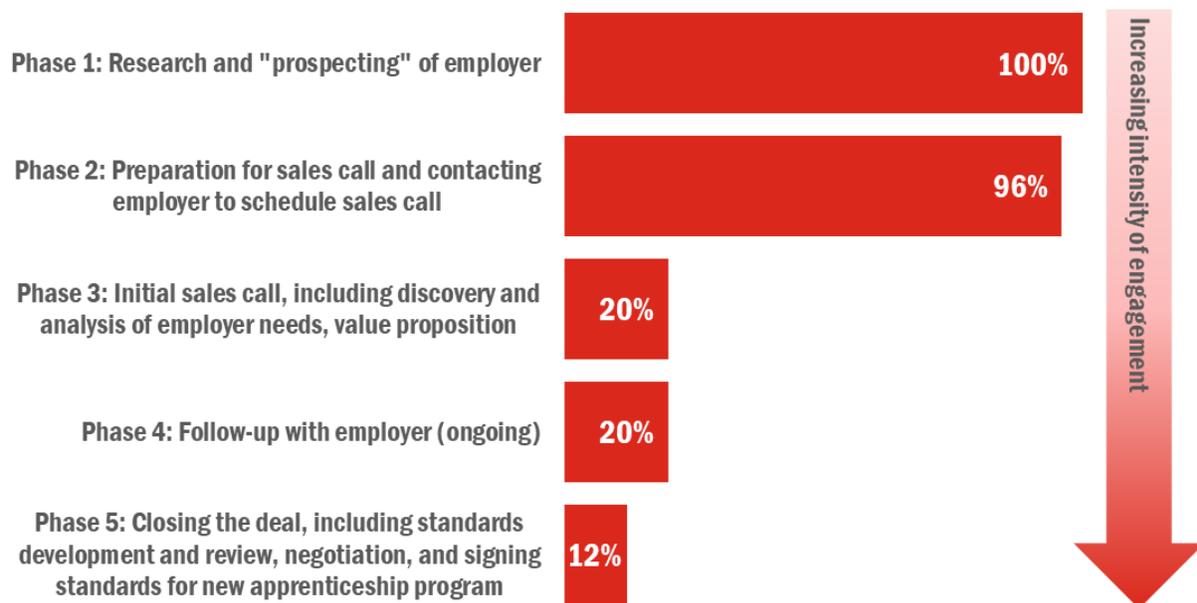


Source: MassHire spreadsheet recording services and outcomes. N=89 contacts and 25 employers.
Notes: A total of 24 of the 25 employers in the treatment group received at least one contact. On average, MassHire made 2.7 contacts per employer among the 24 employers that were contacted.

Apprenticeship Outcomes

Exhibit 3-3 shows the steps MassHire staff took with treatment group employers to sell and implement apprenticeship programs. As shown, MassHire staff researched and prospected all 25 treatment group employers (100 percent) and over the course of the demonstration contacted all but one (96 percent). They prioritized seven employers that had job openings posted on their website (not shown below). Grantee staff prepared for initial sales calls with these seven employers, constructing a sales pitch based on information from the job announcements. Of the seven employers, grantee staff assessed employers' needs for registered apprenticeship and made a value proposition to five of them (20 percent of all employers). Of these five employers, three (12 percent of all employers) moved to the final phase of standards development and review, negotiation, and a signed Standards of Apprenticeship to register new apprenticeship programs with the State Apprenticeship Agency.

Exhibit 3-3: MassHire Progression of Treatment Group Employers through the Consultative Sales Approach and Apprenticeship Program Registration



Source: MassHire spreadsheet recording services and outcomes. N=25 employers.

Notes: After conducting employer prospecting, MassHire concentrated engagement activities on the seven most promising employers of the 25 in the treatment group sample; of these employers, five moved to Phases 3 and 4 and three moved to Phase 5.

The three employers collectively established five new apprenticeship programs. One employer established three new programs, and two each established one program. The five new apprenticeship programs focused on the following occupations: machinist, grinder, welder, mechanical assembler, and computer numerical control (CNC) horizontal machinist. Data collection ended in December 2020, at which time there were 137 apprentices registered across the five new apprenticeship programs. Their starting wages ranged from \$18 to \$32 per hour (Exhibit 3-4).

Exhibit 3-4: MassHire Number of Apprentices and Hourly Wages in Apprenticeship Programs Formed during the Demonstration

Employer and Occupation	Number of Apprentices Registered	Wages (\$ per hour)
Employer 1		
Machinist	7	\$22
Grinder	6	\$22
Welder	1	\$32
Employer 2		
Mechanical assembler	76	\$18
Employer 3		
CNC horizontal machinist	47	\$22
Total	137 apprentices	\$20 mean hourly wage

Source: MassHire spreadsheet recording services and outcomes. N=3 employers.

Notes: Data reported is as of December 2020. The mean hourly wage is calculated for the 137 apprentices.

MassHire staff cited several reasons employers gave for not continuing discussions about apprenticeship programs: employers believed they were too small to support an apprenticeship program, they did not complete necessary paperwork, they were not hiring, or it was not a good time to start a program.

Impact of Employer Outreach

The evaluation team randomly assigned MassHire’s 50 employers to equally sized treatment and control groups. There was no attrition from the sample for either group.

As shown on Exhibit 3-5, 12 percent of employers in the treatment group registered at least one apprenticeship program, while no employers in the control group registered any apprenticeship programs.²¹ The difference between the two groups, 12 percentage points, was statistically significant ($p = 0.077$).²² Because employers are randomly assigned to receiving the intensive employer engagement provided by MassHire staff, the difference between the outcomes of the treatment and control group provides an estimate of the causal effect of these employer engagement strategies on the probability of registering an apprenticeship program. A larger sample size for the demonstration could have generated a more precise impact estimate. Smaller sample sizes also raise the possibility that the treatment and control group, while randomly assigned, are systematically different from each other. The study did not collect data to confirm employers on the treatment group and control group list were balanced in terms of

²¹ The evaluation team used several sources to investigate whether any control group employers had registered apprenticeship programs: (1) MassHire employer engagement staff checked databases and other sources available to them; (2) evaluation team members checked Registered Apprenticeship Partners Information Management Data System (RAPIDS) data; and (3) evaluation team members reviewed all control group employer websites to see whether the employer listed an apprenticeship program among their current job openings. None of these sources revealed any apprenticeship programs among the control group. Given that apprenticeship is less common in the U.S. than other countries, the evaluation team believed it unlikely that employers would have learned about apprenticeship and registered a program in the demonstration timeframe.

²² Since no control group employers registered an apprenticeship program, impacts could not be estimated using odds ratios from a logit model. For the same reason, the impact of treatment cannot be expressed in percent change from a baseline level of program registration.

characteristics (e.g., size). However, the differences in outcomes between the treatment and control group employers appear plausible. Nationally, employers or other sponsors registered 3,143 new apprenticeship programs in 2020 out of over six million companies with employees.²³ This implies a baseline probability of registering a program of approximately 0.05 percent. Control group members did not register any apprenticeship programs, which is consistent with the expected baseline rate. In contrast, the treatment group’s program registration rate (12 percent), is 240 times the national baseline rate of apprenticeship program registration.

Exhibit 3-5: MassHire Estimated Impacts of Employer Outreach

	Treatment Group	Control Group	Difference in Means	Standard Error of Difference in Means	p-value
Employers registering any apprenticeship programs					
Number	3	0	--	--	--
Percent of all employers	12%	0%	12%*	0.066	0.077
Apprenticeship programs registered across employers					
Number	5	0	--	--	--
Average for all employers	0.2	0	0.2	0.129	0.128

Source: MassHire spreadsheet recording services and outcomes. N=25 employers in the treatment group and 25 employers in the control group.

Note: * = $p < 0.10$.

As discussed, one of the three employers registering apprenticeship programs as a part of the demonstration registered three programs, while the other two employers registering programs registered one each. The average number of programs registered by employers assigned to the treatment group was therefore 0.2 programs, compared to zero programs for the control group. This difference was not statistically significant at the study sample sizes.²⁴

In sum, this study identified a positive impact of MassHire staff’s outreach on employer registration of apprenticeship programs, even with a small sample size. This impact may not generalize to all regions, industries, or occupations but it suggests that IAA’s employer engagement process, if implemented with fidelity, can contribute to apprenticeship expansion.

3.4. Conclusion

MassHire staff implemented the consultative sales approach as designed. Overall, about a third of employers in the treatment group expressed interest in learning more about apprenticeship, and 12 percent ultimately established one or more apprenticeship programs. In total, these employers registered more than 130 apprentices during the 18-month demonstration period.

²³ New apprenticeship programs are provided by DOL’s Office of Apprenticeship, <https://www.dol.gov/agencies/eta/apprenticeship/about/statistics/2020>. Estimate of number of companies with employees is provided by the Census Bureau, <https://www.census.gov/data/tables/2018/econ/susb/2018-susb-annual.html>.

²⁴ The average number of programs registered had a higher standard deviation than the probability of registering any program, which raised the standard error of the difference in means.

3. EMPLOYER ENGAGEMENT DEMONSTRATION FINDINGS: MASSHIRE HAMPDEN COUNTY WORKFORCE BOARD

MassHire continued using consultative sales strategies after the conclusion of the demonstration period (December 30, 2020) as well as after the AAI grant ended (September 30, 2021). MassHire also hoped to fund staff outreach activities to encourage employers to establish new apprenticeship programs (and expand existing ones) through other DOL grants, state apprenticeship grant funding, and tax credits. Additionally, MassHire planned to continue using Workforce Innovation and Opportunity Act funding for ITAs that could help to fund some portion of the training component of apprenticeship programs for individual apprentices in the local workforce area.

4. Employer Engagement Demonstration Findings: Philadelphia Works

The workforce development board, Philadelphia Works, engaged two of its AAI grant partners in its consultative sales approach demonstration: Communities in Schools-Philadelphia/Urban Technology Project (UTP) and JEVS Human Services (JEVS). At the outset, all three organizations expressed enthusiasm for participating in the demonstration; however, because of staff turnover and a variety of other factors discussed in the following sections, the grantee did not implement the approach as planned. Staff in all three organizations prospected employers, but one partner (UTP) stopped participating during that phase. Staff from the three organizations reached the step of discussing apprenticeship with few employers on their target list (Phase 3). This chapter begins with background, specifically Philadelphia Works' focal industries and demonstration staffing, and the employer list. It then describes implementation of the consultative sales approach, which began in January 2019 and continued until July 2020, followed by outcomes of the process.

4.1. Background

Philadelphia Works and its partners focused on establishing apprenticeships in two industries—behavioral healthcare and IT—for opportunity youth, defined as young people between the ages of 16 and 24 who are not enrolled in school and are not working.²⁵ Philadelphia Works primarily pursued behavioral health apprenticeships; UTP and JEVS pursued IT apprenticeships.

Philadelphia Works extracted a list of 2,216 employers from its customer relationship management system, a database that numerous Philadelphia city agencies use to track their business development efforts. The database was primarily a repository for contact information and did not contain information on employers, such as available job openings or occupations that could have filtered the list further for the demonstration. In some cases, Philadelphia Works had information on the employer's size, which staff used to filter the list before randomization. The list, extracted in February 2019, initially included approximately 2,700 employers; grantee staff removed employers with fewer than 10 employees and those already participating in other Philadelphia Works initiatives, for a final list of 2,216. For the impact evaluation, the large sample size was desirable for generating a more precise impact estimate. The evaluation team randomly assigned 50 percent—1,108 employers—to each of the treatment and control groups.

Initially, the evaluation team released blocks of 50 to 100 treatment group employers to Philadelphia Works; IAA worked with the grantee to assign responsibility for prospecting to each of the three organizations. After grantee staff prospected all employers in the block, the evaluation team released another block. However, in June 2019, the team released all remaining treatment group employers at the request of the grantee, which wanted the flexibility to identify the most promising candidates from the entire treatment group list, and then focus the prospecting activities accordingly.

²⁵ For more on opportunity youth, see <https://youth.gov/youth-topics/opportunity-youth>.

The first foundational training occurred in January 2019 and included an orientation to study procedures by the evaluation team in addition to the initial IAA training. Of the five grantee staff trained to conduct employer outreach, Philadelphia Works directly supervised two: a Senior Apprenticeship Specialist and an Apprenticeship Specialist. JEVS supported an Apprenticeship Navigator and later added and sponsored an Apprenticeship Navigator apprentice. UTP had a Program Supervisor and Project Manager. As noted above, the organizations experienced staff turnover during the demonstration, such that all five trainees departed midway through the demonstration period, and only two staff replaced them (one each at Philadelphia Works and JEVS). The degree of staff turnover made implementing the consultative sales approach difficult, which led to a several-month pause in the demonstration. Technical assistance ended in July 2020. Over the course of the demonstration, the evaluation team estimated Philadelphia Works received about 40 hours of training and technical assistance.

4.2. Implementation Practices

In February 2019, Philadelphia Works received the first list of 50 treatment group employers, which staff then organized by industry and researched their websites and job postings to learn more about each, per IAA instruction. In late March 2019, grantee staff conducted mock sales calls with IAA to prepare for outreach to employers, with IAA providing constructive feedback on their efforts.

The Philadelphia Works and JEVS staff members reported early difficulties gaining traction with employers. (As described further below, UTP staff helped prospect employers but did not move beyond this phase.) For example, JEVS staff reported that only 12 of the first 100 treatment group employers prospected were promising candidates for direct outreach. When staff attempted calls, employers rarely answered or returned the call. In instances where they did make contact, employers often did not view apprenticeship as a viable solution for their hiring and training needs, particularly smaller employers. Philadelphia Works staff used the IAA technical assistance calls to discuss how to adapt their pitch and present information more persuasively to employers who were skeptical about apprenticeship.

JEVS staff had a few promising leads, but no new apprenticeship programs under the demonstration study resulted. For example, a welding company that already had an apprenticeship program expressed interest in expanding its apprenticeship offerings to IT positions, but the program was not ultimately expanded. Another employer expressed interest in launching a Direct Support Professionals apprenticeship program by signing onto an existing program, but ultimately did not do so.

In addition to calls, the grantee planned outreach events, but not all events occurred due to key staff departures at Philadelphia Works. JEVS hosted a happy hour for employers, with Philadelphia Works supporting the event, and employers assigned to the treatment group attended this event, along with other employers in the city. The Philadelphia Works staff intended to plan a National Apprenticeship Week event for November 2019, as well as a virtual employer information session for December 2019, but cancelled them due to staff departures.

Finally, IAA also helped Philadelphia Works staff tailor outreach for different types of interventions. The initial JEVS staff pursued pre-apprenticeship opportunities with employers and IAA provided advice on how to effectively engage employers through pre-apprenticeship opportunities. A new JEVS staff person had experience working in the IT sector, including connecting training program graduates to employer partners. IAA advised JEVS on structuring an internship-to-apprenticeship hiring arrangement.

Staff turnover complicated the employer engagement efforts of all three partners. As Exhibit 4-1 below shows, no original staff remained for the duration of the demonstration. Philadelphia Works lost both of its staff in fall 2019 and only one was replaced, and not until February 2020. JEVS lost its key staff person in January 2020, who was not replaced; instead, JEVS relied solely on an apprentice in the position, who started a month before the staff member departed and was supposed to have been mentored by him. UTP ended its participation in the demonstration in September 2019 because of limited staff capacity. In addition, because UTP prioritized apprenticeships in the school district, it was not possible to work from the list of randomly selected employers.²⁶

Exhibit 4-1: Philadelphia Works Demonstration Staff Turnover

Organization	Staff Person	Start Date	Departure Date	Replacement's Start Date
Philadelphia Works	Senior Apprenticeship Specialist	Jan 2019	Sep 2019	Not replaced
	Apprenticeship Specialist	Jan 2019	Nov 2019	Feb 2020
JEVS	Apprenticeship Navigator	Jan 2019	Jan 2020	Not replaced
	Apprenticeship Navigator Apprentice	Dec 2019	Jul 2020	Not replaced; JEVS ended participation
UTP	Project Manager	Jan 2019	Sep 2019	Not replaced; UTP ended participation

Source: Observations of IAA training and technical assistance sessions and correspondence with Philadelphia Works.

Staff departures necessitated that Philadelphia Works pause implementation of the demonstration from mid-November 2019 through mid-January 2020 while they hired and trained new staff. In January and February 2020, IAA's sessions focused on orienting the JEVS Apprenticeship Navigator apprentice to their apprenticeship and gathering information to inform future technical assistance activities. Then, in March 2020, the evaluation team redelivered the initial study procedures training to Philadelphia Works's replacement Apprenticeship Specialist (who did not have prior experience with apprenticeship) and the JEVS Apprenticeship Navigator apprentice, and IAA worked with them through summer 2020. These new staff, however, never advanced to Phase 3—conducting direct outreach to demonstration employers. The demonstration ended in September 2020.

4.3. Outcomes

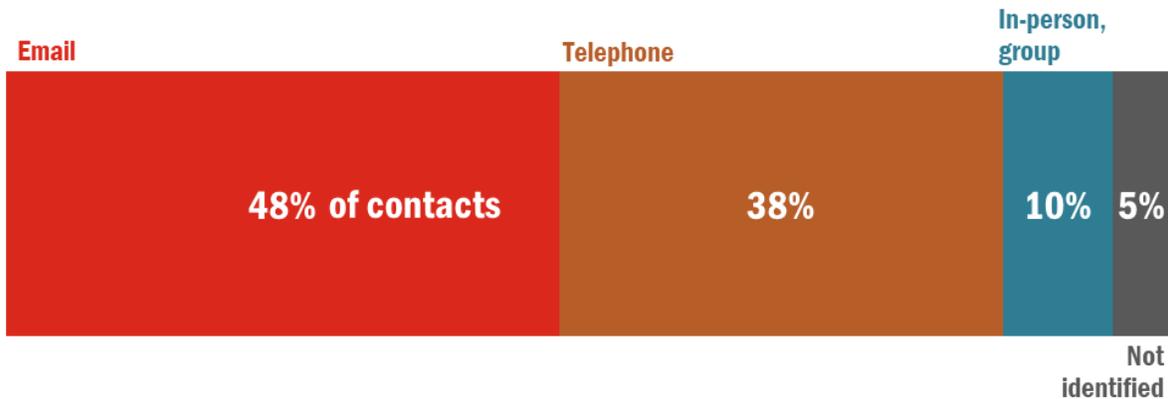
Philadelphia Works and JEVS staff had minimal contact with employers in the treatment group. Employer engagement staff prospected 500 of the 1,108 treatment group employers on the list, or approximately half. As discussed, staff turnover and limited staff capacity prevented the full prospecting of the list. Moreover, many employers were ruled out during the prospecting step because they were too small and had not been identified initially as being too small (e.g., fewer than 10 employees) or because they were not hiring workers in the target IT or healthcare industry sectors.

After prospecting, grantee staff reported contacting 21 employers, or two percent of the total treatment group. Almost half (48 percent) of these contacts were via email and more than a third (38 percent) by phone (Exhibit 4-2). Staff reported difficulty in directly reaching employers and that voice messages

²⁶ UTP initially agreed to participate to expand its employer outreach to the private sector. Its existing program model had apprentices employed only in Philadelphia public schools. Ultimately, UTP had difficulty implementing the demonstration's intervention in conjunction with outreach to schools.

generally were not returned. Staff held meetings with two employers (10 percent). Simultaneously, staff monitored the control group list for any referrals of employers on this list or contacts made with employers that were members of the control group.²⁷ Only one referral was determined to be a member of the control group during the demonstration, but that employer did not choose to register an apprenticeship program.²⁸

Exhibit 4-2: Philadelphia Works Employer Outreach Methods



Source: Philadelphia Works spreadsheet recording services and outcomes. N=21 contacts and 21 employers.
Note: Percentages do not sum to 100 due to rounding.

Grantee staff engaged more employers during the demonstration period than are recorded in Exhibit 4-2, but many of those engagements were with employers that were not part of the employer treatment group list. In interviews with the evaluation team, Philadelphia Works staff and its partners reported that they preferred to rely on existing relationships with local employers or referrals from American Job Center employer engagement staff to build apprenticeship programs. Providing services to employers that were not part of the demonstration’s treatment group often competed with the demonstration for the staff members’ time.

Exhibit 4-3 shows the consultative sales approach implementation steps Philadelphia Works and its partners took. For purposes of illustration and given the issues identified above with many employers on the list being too small or not in the right industries, the exhibit includes only the 500 treatment group employers identified as prospects, rather than the entire treatment sample. As shown, Philadelphia Works and partner staff researched and prospected 500 treatment group employers (100 percent) and contacted 21 of them (4 percent). They had meetings with two employers (less than 1 percent) and followed up with them after the meetings. None of the employer engagements resulted in any subsequent engagement to develop an apprenticeship program and so Philadelphia Works and JEVS did not register any apprenticeship programs during the demonstration.

²⁷ During monitoring calls to ensure fidelity to the study’s research design, the evaluation team also discussed with the grantee staff referrals made outside of the demonstration.

²⁸ Grantee staff provided services to this employer because it was referred under “business as usual” services provided by the JEVS business services staff.

Exhibit 4-3: Philadelphia Works Progression of Treatment Group Employers through the Consultative Sales Approach and Apprenticeship Program Registration



Source: Philadelphia Works spreadsheet recording services and outcomes. N=21 employers.

All expansion by Philadelphia Works of apprenticeship programs under the AAI grant was the result of cultivating existing relationships with employers that were not a part of the demonstration. Information on apprenticeship programs developed outside of the demonstration is not included in this report, but this work is discussed in Copson et al. (2021) and Fumia, Griffith, and Copson (2022).

4.4. Conclusion

Philadelphia Works and its partners did not successfully implement the consultative sales approach. After concluding the demonstration, Philadelphia Works staff planned to continue outreach to employers, but they expected these efforts would build on their existing business services processes and relationships rather than using the consultative sales approach. There were some aspects of researching employers, such as analyzing job postings, that they found useful and thought they might use in a limited way going forward. Overall, staff reported that the consultative sales approach was a dramatic departure from their normal business practices and not feasible to implement longer term.

Several themes emerged from the evaluation team’s interviews with grantee staff and IAA regarding the sustainability of employer outreach activities at Philadelphia Works. First, the grantee must be willing to implement the consultative sales approach with employers with which it has no prior relationship. All Philadelphia Works staff reported the approach did not align with how they approach and work with employers. Instead of contacting and holding sales calls with unknown employers, Philadelphia Works staff preferred to cultivate existing employer relationships and expand the programs of current apprenticeship sponsors. Without fully adopting the strategy and applying it to all employer engagement efforts, Philadelphia Works and its partners had difficulty making progress with treatment group employers.

Second, the experience of Philadelphia Works suggests that it is important for organizational leadership to prioritize registered apprenticeship and establish target outcomes so that employer engagement staff know how to dedicate their time. When staff split their time across competing activities or do not have a clear objective with regards to apprenticeship registration, it can be difficult to make progress in implementing a highly tailored and employer-focused consultative sales approach to develop registered apprenticeships.

Third, given the grantee continued to operate “business as usual” employer engagement activities, there is value in ensuring employer engagement staff within the American Job Centers understand registered apprenticeship and how it is a potential solution for an employer. Not all employer engagement staff need to be registered apprenticeship experts, but they could have enough knowledge to start a conversation and then refer interested employers to an apprenticeship specialist for more intensive consultation.

5. Conclusion

The American Apprenticeship Initiative (AAI) aims to expand registered apprenticeship in the United States, particularly in non-traditional occupations, such as healthcare and IT. Although apprenticeship is a common training approach in other countries, less than a half of a percent of American workers participate in registered apprenticeships due in part to registered apprenticeship in the United States being concentrated in the building trades. Employers are an essential part of registered apprenticeship expansion. To register more apprentices, employers must register new apprenticeship programs or expand existing ones. However, there is limited evidence on strategies to encourage employers to adopt apprenticeship. This study assessed the implementation and impact of a demonstration—a *consultative sales and organizing approach*—to engage employers.

Two grantees participated in the demonstration between January 2019 and July 2020: MassHire Hampden County Workforce Board, a sub-grantee to the Massachusetts Executive Office of Labor and Workforce Development, and Philadelphia Works, along with two of its grant partners (Communities in Schools-Philadelphia/Urban Technology Project and JEVS Human Services). Institute for American Apprenticeships (IAA)—an organization with experience developing and organizing apprenticeship programs with employers—provided training and technical assistance to grantee and partner staff on how to implement a five-phase consultative sales approach.

MassHire staff implemented all five phases of the process. Ultimately, staff recruited three employers that together registered five apprenticeship programs. These programs collectively registered 137 apprentices during the study period. The demonstration detected a statistically significant impact of 12 percentage points of the consultative sales approach on employer registration of apprenticeship programs. Philadelphia Works and its partners worked primarily through the first two phases only and did not recruit any treatment group employers to develop apprenticeships.

This chapter describes potential implementation facilitators and challenges that could explain the different outcomes of the MassHire and Philadelphia Works efforts. These include differences in target industry and target population, the nature of the employer list, and use of partners. Each is discussed below.

5.1. Implementation Facilitators and Challenges

■ Focusing on recruiting employers in a single industry could facilitate employer outreach.

MassHire focused on one industry—advanced manufacturing—and sought to recruit employers from the industry to develop apprenticeship programs. In collaboration with a regional manufacturing trade association, MassHire identified 50 employers for random assignment. Thus, the treatment group list from which staff worked consisted of employers known to be manufacturers. MassHire staff could focus their prospecting efforts on open positions and tailoring their sales pitch to manufacturing employers. In addition, in their pitch, staff could reference the employers' connections with the trade association. MassHire's employer engagement staff reported this common connection facilitated the initial sales call to the employer.

Philadelphia Works largely focused on the IT sector. But, because many types of employers hire IT staff, not just IT-specific companies, the grantee's employer list included over 2,000 employers in a variety of industries. The evaluation team and Philadelphia Works initially viewed the large sample size as desirable

for generating a more precise impact estimate. However, in practice, the list presented challenges. The IAA trainer and technical assistance provider indicated that the broad nature of the employer list likely complicated implementation of the consultative sales approach, as staff needed to research the extent to which employers had IT positions and then locate the appropriate contact to discuss IT-related staffing. Staff also had to tailor their sales pitch to employers in a variety of industry sectors.

■ **Focusing on apprenticeship for a specific target population could create challenges to employer engagement.**

Philadelphia Works focused exclusively on creating apprenticeships for opportunity youth, a population historically underrepresented in local apprenticeship programs. Thus, if staff succeeded in identifying employers to offer IT apprenticeships, the next step would be gaining a commitment to serve opportunity youth. Research suggests that engaging employers to provide youth apprenticeships is often difficult. For example, some employers worry about legal liabilities associated with employing youth, or they assume that youth will be less productive (Lerman, Kuehn, and Shakesprere 2019). However, because Philadelphia Works staff did not reach the phase associated with discussing the specifics of an apprenticeship program, including the target population, the demonstration cannot directly address this issue. In contrast, MassHire’s AAI grant did not restrict the population from which it could recruit apprentices.

■ **A centralized, coordinated, and stable team of employer engagement staff facilitated implementation of the consultative sales approach.**

MassHire implemented the demonstration with two staff members who worked directly for the sub-grantee, both of whom remained in their positions for the duration of the demonstration. As a result, IAA’s technical assistance to those staff went beyond the fundamentals of registered apprenticeship and the consultative sales approach to more technical and complex topics, tailored to the specific issues or challenges encountered by those staff in working with employers. In turn, those staff then were able to work through all five phases of the consultative sales approach and ultimately “close the deal” with three employers. That the employer engagement work was centralized within a single organization also enabled staff to receive common directives from leadership and coordinate their outreach efforts closely.

Philadelphia Works engaged two partners to implement the demonstration along with its own staff. Managing staff from different organizations presented challenges. The partners operated independently; their leadership had competing priorities for their staff’s time, which necessitated one ending its participation in the demonstration early. Philadelphia Works and its partners had their own employer engagement processes and had difficulty adopting a consultative sales approach for the purposes of the demonstration.

Philadelphia Works and its partners also had considerable staff turnover, so IAA had to re-train staff on the fundamentals of registered apprenticeship. As a result, staff in Philadelphia did not advance to the point of more tailored technical assistance, and they ultimately contacted very few employers. The IAA training and technical assistance provider noted that consistent staff dedicated at least part-time to employer outreach are necessary factors for success with its consultative sales approach (Box 5).

Box 5: Reflections on Implementation Facilitators from the Technical Assistance Provider

IAA's trainer and technical assistance provider identified several factors and conditions necessary for its consultative sales approach to employer engagement to be effective in getting employers to develop and register apprenticeship programs.

- **Organizational leadership must commit to supporting and prioritizing registered apprenticeship.** Leaders articulate organizational priorities and set expectations for staff. Their support for registered apprenticeship is required so that staff also prioritize employer engagement and apprenticeship development. Leaders also help make sure that staff have time and resources needed to implement the consultative sales approach.
- **Organizations need staff in a dedicated employer engagement or recruitment role that is specific to selling and organizing apprenticeships with employers.** The role can be part-time or full-time, but at least a portion of staff time must be dedicated specifically to apprenticeship development with employers. Without this role and an explicit focus on apprenticeship registration, there is no one to manage and carry out employer engagement and the consultative sales approach.
- **Staff in employer engagement or recruitment roles must already deeply understand apprenticeship and workforce development solutions, or they need to be willing to develop this understanding.** Staff must have solid knowledge of registered apprenticeship, based on federal and state regulations, to be able to sell employers on it and assist them in developing a program. If receiving training and technical assistance on employer engagement, staff need to commit to attending sessions, actively participating, and completing assignments between sessions.

Source: Evaluation team interviews with IAA trainer and technical assistance provider.

5.2. Concluding Thoughts

MassHire and Philadelphia Works had very different experiences implementing the consultative sales approach. The demonstration showed that the consultative sales approach can be implemented to expand registered apprenticeship. Because the demonstration included just two self-selected grantees, additional exploration of this intervention with more organizations or grantees is warranted. Further, the number of employers in the MassHire sample was small—although notably the study still detected an impact—so testing the approach with a larger sample would offer more insight into its effectiveness. Future impact evaluations could further test the consultative sales approach and build evidence around “what works” to identify employers and engage them to use registered apprenticeship to hire and train workers.

Still, the experiences of MassHire and Philadelphia Works suggest some lessons for other grantees or organizations interested in selling apprenticeship as a workforce development strategy to employers. For one, organizational leadership can clearly prioritize employer engagement for registered apprenticeship by ensuring staff have time and resources needed to participate in training and technical assistance activities and implement the consultative sales approach. Second, limited staff turnover reduces the need to retrain staff on the fundamentals of registered apprenticeship. Finally, the grantee experiences suggest that it may be helpful to collaborate with an industry association to identify potential employers.

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Appendix. Data Collected for the Demonstration

The table below lists the data fields collected for the demonstration.

Database Field	Response Type
Employer name	Text
Employer address	Text
Employer phone number	Number
Employer website	URL
Employer size	Number
Estimated number of job openings in target industry	Number
Contact person name	Text
Contact person phone	Number
Contact person email	Email address
Results of Activities Associated with Technical Assistance	
1: Prospecting	Yes/No
2: Needs analysis/discovery	Yes/No
3: Value proposition	Yes/No
4: Standards development	Yes/No
5: Analysis/negotiation	Yes/No
6: Internal standards review	Yes/No
7: External standards review	Yes/No
8: Signed Standards of Apprenticeship	Yes/No
9: Declined	Yes/No
10: Transferred to contractor/grantee	Yes/No
11: Transferred to State Apprenticeship Agency	Yes/No
Occupation 1	
Title	Text
Employer Created New AAI Apprenticeship Program(s) at 1 Year after Random Assignment	Yes/No
Employer Expanded Existing AAI Apprenticeship Program(s) at 1 Year after Random Assignment	Yes/No
Number of Apprentices Enrolled in AAI Apprenticeship Program(s) at Employer at 1 Year after Random Assignment	Number
Total Number of New Apprentices Added to AAI Apprenticeship Program(s) at Employer during Full Year since Random Assignment	Number
Occupations 2, 3, 4, etc.	
[Same fields as noted above]	