



# JFF's Framework for a High-Quality Pre-Apprenticeship Program: Opportunity Youth

## AT A GLANCE

This pre-apprenticeship framework outlines strategies and promising practices for developing high-quality programs that serve opportunity youth participants.

## AUTHORS

**Lili Allen**  
Associate Vice President, JFF

**Vanessa Bennett**  
Associate Director, JFF

**Patricia Maguire**  
Associate Director, JFF

**Michael Sack**  
Senior Fellow, JFF

**Myriam Sullivan**  
Director, JFF

## About This Report

This pre-apprenticeship framework outlines the six key characteristics of a high-quality pre-apprenticeship program with a focus on *opportunity youth*—young people aged 16 to 24 who are disconnected from the workforce and education systems. Building on [JFF's existing Framework for a High-Quality Pre-Apprenticeship Program](#), it provides specific recommendations for aligning training for opportunity youth and offers examples of promising practices for existing training programs.

Pre-apprenticeship programs, which vary in length, can be delivered by a range of entities and are designed to prepare participants for success in Registered Apprenticeships or other high-quality apprenticeship programs and ultimately careers.

This framework can be used by new or existing programs to help guide their growth and development in both creating formal pre-apprenticeships and strengthening their existing training practices.

### About JFF's Center for Apprenticeship & Work-Based Learning

JFF is a national nonprofit that drives transformation in the American workforce and education systems. For nearly 40 years, JFF has led the way in designing innovative and scalable solutions that create access to economic advancement for all, including apprenticeship and work-based learning. These programs are proven methods for connecting people to good careers while providing employers with skilled workers. The center consolidates JFF's broad skills and expertise on these approaches into a unique offering. We partner with employers, government, educators, industry associations, and others to build and scale effective, high-quality programs. Visit [www.jff.org/center](http://www.jff.org/center).

#### Cover Photo

IT pre-apprentice Gregory Johns-Miller learns to replace a laptop keyboard during orientation training at UTP headquarters. *Source: Urban Technology Project*

## About the AEMF Project

JFF's Modernizing Apprenticeship for Opportunity Youth project is funded through an Apprenticeship Expansion and Modernization Fund (AEMF) contract provided by the Office of Apprenticeship within the U.S. Department of Labor's Employment and Training Administration. The project's goal is to expand access to Registered Apprenticeships for opportunity youth—young people aged 16 to 24 who are disconnected from the workforce and education systems—by building the capacity of youth-serving organizations, workforce boards, communities, and employers. JFF is partnering with Social Policy Research Associates, a national leader in research, evaluation, and technical assistance on apprenticeship and career pathways; the National Association of Workforce Boards; and the District 1199C Training & Upgrading Fund to provide technical assistance to [15 sites](#) comprising workforce development boards and community-based organizations across the country.

This workforce product was funded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the recipient and does not necessarily reflect the official position of the U.S. Department of Labor. The department makes no guarantees, warranties, or assurances of any kind, expressed or implied, with respect to such information, including any information on linked sites and including, but not limited to, the accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the institution that created it.



Source: American YouthWorks

## Acknowledgments

We would like to thank the U.S. Department of Labor for providing the funding to support this work and for its commitment to advancing diversity, equity, and inclusion in the apprenticeship and workforce systems. We would also like to thank our network of Apprenticeship Expansion and Modernization Fund (AEMF) sites, which are working to modernize and expand pathways to apprenticeship for opportunity youth.

We want to extend a special thank you to our colleagues Cheryl Feldman and Edison Freire for their review of and contribution to this framework.

Finally, we would like to thank and acknowledge the programs and training providers featured in this framework. We appreciate their thoughtful feedback and willingness to share promising practices and recommendations for this work. These sites include:



*Source: YouthBuild Philly*

- American YouthWorks
- The Wisconsin Regional Training Partnership (WRTP)
- The Urban Technology Project
- The Corps Network
- PowerCorps Philadelphia
- YouthBuild Philadelphia Charter School
- Institute for American Apprenticeships

# Table of Contents

<b>Acknowledgments .....</b>	<b>4</b>
<b>Adapting the Framework for Opportunity Youth .....</b>	<b>6</b>
<b>High-Quality Pre-Apprenticeships for Opportunity Youth.....</b>	<b>8</b>
a. Transparent Entry and Success Requirements .....	8
b. Alignment with Skills Sought by Local Employers and High-Quality Apprenticeship Programs.....	12
c. Culmination in One or More Industry-Recognized Credentials .....	17
d. Development of Skills Through Hands-On Activities and Work-Based Learning .....	20
e. Offering of Academic, Career Exploration, and Wraparound Supports .....	26
f. Transition into a Registered Apprenticeship or Other High-Quality Apprenticeship Program .....	29
<b>Conclusion.....</b>	<b>33</b>

## Adapting the Framework for Opportunity Youth

Apprenticeship can be a powerful tool for [keeping young people engaged in work and education pathways while](#) providing them with quality mentoring, services, and support. The structured earn-and-learn program is used in a broad range of high-growth industries to train workers while they receive pay and valuable classroom and on-the-job education. However, opportunity youth are often unable to take advantage of apprenticeships due to prerequisite requirements and a lack of awareness about available programs. These barriers are exacerbated in apprenticeship programs that lack proper diversity, equity, and inclusion practices. Pre-apprenticeship programs can help young people build the skills, capacities, and mindsets needed to enter and succeed in an apprenticeship while advancing equity across employers and industries.

Getting opportunity youth involved in apprenticeships can go a long way toward ensuring that they are not left behind. High-quality pre-apprenticeships will apply a strong lens of racial and social equity to all facets of their program design and training structure and will integrate best practices that meet the diverse needs of the participants and communities they serve.

### About Opportunity Youth

While there is a comprehensive apprenticeship system for adults and a growing movement to expand access to apprenticeship for high school and college students, young people who are disconnected from the education and workforce systems or who lack the credentials and skills necessary to access postsecondary pathways are often unable to take advantage of this valuable training opportunity.

As of January 2020, there were 4.9 million of these “opportunity youth” in the United States, and according to an article from the [National Conference of State Legislatures](#) that number will grow to roughly 10 million as a result of the pandemic. [Measure of America](#) has also projected that youth disconnection rates will grow, estimating that more than 25 percent of all young people could become disconnected from work and education. For these young people, building skills and gaining work experience are key to upward mobility.

Moreover, as employer demand for highly skilled workers increases as older workers retire and the number of new technologies grows, opportunity youth can fill the resulting gap in the labor market with the right training and support. Employers like [State Street](#) have even begun noting higher retention rates for youth hired through partnerships with programs like Year Up than “traditional hires.” While elements of this framework can help programs support opportunity youth and expand access to careers, there is a critical need to advance racial and social equity in our national systems, including workforce development. Making this approach a core component of employer partnerships and embedding it into the provision of supportive wraparound services will help pre-apprenticeships increase access to high-quality career pathways for young people.

The purpose of this framework is to offer guidance to community-based organizations, training providers, employers, and other practitioners interested in developing a quality pre-apprenticeship program that is aligned with the specific needs of opportunity youth and that advances equity in the workforce. It adapts the quality elements of [JFF’s Framework for a High-Quality Pre-Apprenticeship Program](#) and provides recommendations specific to opportunity youth. These elements include:

- Transparent entry and success requirements
- Alignment of skill development with local employer and apprenticeship demand
- Provision of industry-recognized credentials
- Development of skills through work-based learning
- Inclusion of academic and career exploration, as well as wraparound supports
- Connections and transitions into a Registered Apprenticeship

This resource also spotlights several high-performing pre-apprenticeship programs for opportunity youth. These spotlights offer examples for how the various components of pre-apprenticeship can be developed and highlight a range of approaches to designing trainings that provide participants with the skills, competencies, and experience needed to access and progress through career and education pathways. For a more detailed description of a high-performing pre-apprenticeship program, see a deeper case study, JFF’s [Making Apprenticeship Work for Opportunity Youth](#), which shines a light onto the District 1199c Training & Upgrading Fund’s behavioral health apprenticeship pathway for opportunity youth.

## High-Quality Pre-Apprenticeships for Opportunity Youth



### Transparent Entry and Success Requirements

Pre-apprenticeship programs should ensure that their entry and success requirements are clear and fully defined at the outset. This helps opportunity youth understand how to navigate and persist through the program and, most importantly, puts them in the driver's seat and acknowledges their need for autonomy. At the same time, having clear and specific success requirements helps ensure that individuals find success in pre-apprenticeship programs. Such perspective is important to ensure there is equity in these important career pathway programs for opportunity youth.

*Pre-apprenticeship programs clearly articulate entry requirements, including specific stipulations of requisite academic, employability, and social-emotional skills.*

Fully and fairly articulating the requirements and demands of pre-apprenticeship and apprenticeship programs to the three distinct audiences (learners, staff and referral agencies) is an important dimension of high-quality programs. These practices must start early, at the recruitment stage. Ensuring program information is reaching communities with the least access ensures equity of opportunity. The best programs and networks of providers include a pre-enrollment phase—a quality orientation that provides prospective candidates a chance to try on the program; to get a feel for what's coming. This phase includes built-in time for reflection and for individual, youth-centered counseling to help candidates assess the program's fit with their career and life goals. At the same time, the best programs also work together as a network to ensure best-fit opportunities for learners when one program may not be a good match.

Programs that serve opportunity youth should be explicit about eligibility requirements. This includes properly conveying the *full range* of academic, technical and employability skills needed to qualify. Programs should also explain the specific foundational math and literacy proficiencies required (and the fact that these skills are often taught or reinforced in a broader career context), the rigors of classroom and related technical instruction, and any other requirements unique to a specific apprenticeship placement, such as a high school diploma, GED, entry exams, and driver's license. This specificity will help young people set realistic expectations for their training as they prepare for pathways beyond the pre-apprenticeship program. High quality pre-apprenticeship programs should provide these services directly when possible or partner with external providers who can.

In addition, programs should look at their assessment method itself to ensure that it is authentic and comprehensive, that it provides a true indicator of young people's skills and readiness, and that it helps identify areas of growth. Multifaceted assessments that capture academic skills, technical knowledge, and habits of mind, as well as inform what might impede or challenge a candidate from succeeding, are preferred. For instance, a traditional "one-shot" assessment test that relies on recall can prove to be a barrier, in particular for those with learning disabilities (diagnosed or undiagnosed). Instead of a one-size-fits-all approach, we encourage programs to explore and apply a [universal design for](#)

## American YouthWorks

[American YouthWorks](#) (AYW) delivers education and workforce development services to young adults in Central Texas, providing them with opportunities to build careers, strengthen their communities, and improve the environment through education, on-the-job training, and service.

AYW's YouthBuild Austin program is a comprehensive pre-apprenticeship model for opportunity youth that combines secondary education (HSD and GED), sector-based vocational training, and wraparound support services. A goal of AYW's pre-apprenticeship is to promote diversity and equity in apprenticeship. As such, it purposely keeps entry requirements at a minimum.

Its messages, materials, and assessment activities are explicit and strategic as to eligibility requirements and program expectations and designed to support both participants and referral providers. Providing this clarity at the start of the program helps many young people successfully complete their training and prepares others who may return to the program at a later time, once their lives have stabilized to the point where they can follow through on their initial motivation.

AYW applies the same level of clarity and transparency to its assessments and designs these activities to support participants and referral providers. Assessments are not designed to screen out candidates but rather to help staff learn what services will most likely promote youth success and inform best-fit career tracks.

[learning](#) (UDL) framework. UDL is an evidence-based framework for designing inclusive learning environments, instructional practices, and flexible educational tools and materials that gives all individuals equal access and support for learning opportunities. The goal in this case, as it should be in any assessment process, is to ensure fair and equal access to learning opportunities.

Programs should also clearly outline the daily expectations of participants, including attendance and scheduling, the number of study hours and assignments that will be completed outside of scheduled program hours, required site visits, job shadows, internships, and interviews with employers. Pre-apprenticeship programs, even in the same sector, often vary in duration. Potential candidates need to know the duration of the specific program they are considering. At the same time, all these requirements should be made clear to the provider network that refers and supports participants, so they can help young people prepare for the rigors of a pre-apprenticeship.

***Programs should clearly articulate expectations for participation, such as self-management, persistence skills, and other success requirements.***

Pre-apprenticeship programs should clearly articulate self-management, persistence skills, and any other non-academic or technical skills required for success in the program. Staff can deliver and reinforce clear and consistent messages as to the importance of study skills, time management, independent study, collaboration and teamwork, taking initiative, asking for help, and being self-aware. One strategy is to help opportunity youth recognize what these skills, behaviors, and attitudes look like, with concrete examples. Staff should also be realistic and specific about how much content participants will need to learn, the pace of the work, and what they'll need to produce and achieve during what can be a fast-moving, shorter term pre-apprenticeship program.

***Programs should clearly articulate requirements for successful transition from the pre-apprenticeship program to at least one specific apprenticeship program, including skills, credentials, and other aspects that ensure access to stable employment.***

Pre-apprenticeships are the first step in a longer career pathway within an occupation and industry sector. The best programs explain upfront how the pre-apprenticeship training will serve as the foundation for continuing career advancement within an occupation and across occupational pathways. Beyond that, high-quality programs are explicit and intentional in helping opportunity youth understand the specific workplace skills, attitudes, and habits required of an occupation. This includes understanding the extent to which employers require flexibility of an employee's work schedule or work location. Identifying and flagging these

requirements ahead of time gives opportunity youth the information they need to be properly prepared for apprenticeship and to identify their best path after completing their pre-apprenticeship training.

***High-quality programs identify and flag requirements, such as the need for certain physical capabilities (such as lifting heavy boxes) or the absence of specific criminal convictions, that cannot reasonably be overcome through program supports.***

Given the over-representation of young people, and in particular young people of color and those from low-income families or communities, in the criminal justice system, programs may need to identify any barriers to being hired in occupations and industries that the pre-apprenticeship connects to. Programs should not only identify these barriers but help participants understand what they mean for their long-term goals and help them pivot to a different occupational area if they are likely to be locked out of employment. Programs should support participants by helping them understand how past convictions and incarceration may impact their access to different career pathways, and by providing guidance around how to discuss these barriers in job interviews. When possible, programs should also [take steps to remove these barriers](#) by working with employers, workforce and community-based partners, and the legal system.



Source: PowerCorpsPHL

Pre-apprenticeship programs should also clearly identify and flag any physical requirements of the pre-apprenticeship training, and of the pathways connected to that training. This includes assessing a young person's level of comfort with the physical requirements of a job and helping them determine if that occupation is the best fit. JFF also recommends that when and where possible programs provide accommodations to ensure that all young people can fully participate in training. The [Job Accommodation Network \(JAN\)](#) is a free and expert resource on job accommodations and disability employment issues that programs can leverage to support this work. Programs should also work with Registered Apprenticeship sponsors to add or ease accessibility by removing as many of these barriers to participation as possible.



## Alignment with Skills Sought by Local Employers and High-Quality Apprenticeship Programs

High-quality pre-apprenticeship programs help opportunity youth build skills that align with the needs of employers and that are required in apprenticeships. Too often, pre-apprenticeship programs do not deliver the appropriate in-demand skills and graduates are left without access to the apprenticeships that can provide access to career pathways and family-sustaining wages.

***Pre-apprenticeship programs should support participants in acquiring employability skills such as teamwork, written communication, problem solving, initiative, flexibility, and reliability.***

Ensuring that participants gain employability skills is especially important for opportunity youth who may have limited work experience. Programs should design their curriculum with input from employers to address and provide the critical personal and workplace skills needed across industries. JFF recommends that providers design daily activities that give young people the opportunity to practice and reflect on employability skills. This could include collaborative group projects that give young adults the opportunity to practice teamwork and communication skills or role playing and simulations that help young adults understand how to have agency and how to self-advocate in the workplace. Employers can be brought into these simulations to highlight the importance of these skills, which are particularly important in the future of work context as they are least likely to be automated.

***Programs need to help participants acquire sufficient skills and academic credentials for entry into a high-quality apprenticeship or an entry-level job with advancement potential in the industry.***

In addition to providing participants with the necessary employability skills, programs should include the provision of academic credentials in their program design. This includes providing opportunities for high school equivalency and diploma attainment and access to certifications that can bolster skill development and increase a participant's readiness for pathways beyond

pre-apprenticeship training. Programs should work with employers and apprenticeship providers to determine which certifications are most advantageous. Programs should also ensure that the academic credentials and certifications they offer will help opportunity youth beyond entry-level employment and support their long-term career advancement.

***Effective programs align curriculum with a range of training and employment pathways.***

Successful pre-apprenticeships include curriculum that connects participants to a range of training and employment pathways. This is especially important for opportunity youth who may still be developing their long-term career and education goals and can benefit from having a range of options to explore. This approach can help young people determine whether Registered Apprenticeship is the best next step and if not, what other pathways can meet their immediate and long-term needs. It also helps them gain critical foundational skills that can be used in a range of post-program options.

The Competency Model Clearinghouse is a good resource for both employability and industry-specific skills. For example, the [Fundamentals of Health Care Competency Model](#) is a tool that supports occupational mobility and the development of transferable skills across allied health pathways. In addition, contextualizing curriculum with industry specific skills, competencies, and terminology can accelerate learning and skills. JFF recommends that programs engage employers to get feedback on curriculum design and content as well as pair curriculum with employer presentations and job shadowing to make the contextualization of academic skills real and relevant.

## WRTP's Industrial Manufacturing Technician (IMT) Pathway

[IMT](#) is a nationally-recognized apprenticeship program registered with the U.S. Department of Labor that trains frontline manufacturing production workers in foundational skills manufacturers look for, in settings as diverse as food processing, foundries, plastics, and bio-medical production.

The [Wisconsin Regional Training Partnership \(WRTP\)](#) is an apprenticeship intermediary that developed and operates a certified pre-apprenticeship program that addresses workers' skills and training gaps and prepares them for career advancement and advanced standing in higher-skilled apprenticeships.

This pathway incorporates several innovations, including a flexible approach that enables IMT pre-apprentices and apprentices to progress at their own pace and accelerates their completion by demonstrating mastery of skills and competencies. For example, WRTP recently implemented [IMTfolio](#), an e-portfolio software that applies a universal design for learning approach, in partnership with JFF and [CAST](#), to address the challenge of assessing readiness for the IMT pathway.

***The strongest pre-apprenticeship programs design instruction and training to reach underserved populations.***

It is critical that pre-apprenticeship programs serving opportunity youth are designed to reach all learners. There are a number of strategies to do this, including literacy circles, collaborative group work, and projects, all of which can help opportunity youth take charge of their own learning. Online learning platforms such as [Khan Academy](#) can be used simultaneously with these strategies to address any skills gaps.

Programs should support participants in setting long-term goals with interim benchmarks and milestones so they understand the progress they are making, especially when their ultimate goals may take multiple months or even years to achieve. Interim benchmarks and incentives help foster persistence on what can be a very tough but worthwhile journey.

JFF recommends that programs apply a [universal design for learning](#) (UDL) approach to pre-apprenticeship program instruction, training, and assessment. This helps providers design and deliver content in a way that is accessible to all learners and that meets the needs of different learning styles. Some strategies for implementing a UDL approach include:

- Building in opportunities for **collaboration and engagement** with peers and instructors to support learning and processing of information.
- Delivering information and content through a **range of modalities** to meet the diverse needs of tactile, visual, and auditory learners. This includes using multimedia, visual aids, recorded content, and hands-on learning and instruction activities.
- Using **e-portfolios** to offer options for documenting skills and knowledge. Strong examples of this come from [CAST](#), a leader in the UDL field. In partnership with YouthBuild, CAST has designed [STEMfolio](#) for opportunity youth interested in pursuing STEM careers. Leveraging this technology, CAST co-designed the [IMTfolio](#) with WRTP and JFF to support apprentices and pre-apprentices with learning disabilities in the Industrial Manufacturing Technician Registered Apprenticeship program.
- Incorporating opportunities for **reflection** to help participants process information and demonstrate their understanding of the content.

Finally, high-quality pre-apprenticeship programs for opportunity youth should provide productive and inclusive learning environments for participants. JFF recommends that programs embed a healing-centered approach to program design. This is critical for opportunity youth who have experienced trauma resulting from systemic racism, abuse, neglect, poverty, and community violence. Although program staff are likely not clinicians, applying this lens can

support the long-term success of participants within the pre-apprenticeship program and beyond. JFF recommends that programs invest in professional development and learning to support these efforts and partner with community partners to address issues of trauma in a way that is informed and sensitive to the needs of participants. A recent National Fund for Workforce Solutions guide, [A Trauma-Informed Approach to Workforce](#), provides foundational information, guidance, and examples of workforce development organizations and employers who have implemented trauma-informed approaches.



Source: American YouthWorks

## The Importance of Integrating a Trauma Lens in Pre-Apprenticeship Training

Trauma results from an event, series of events, or set of circumstances. Trauma from systemic racism, abuse, neglect, poverty, and community violence can have lasting adverse effects on an individual's functioning and well-being. Trauma has become even more prevalent during the COVID-19 pandemic and can impact opportunity youth and their ability to persist in pre-apprenticeship training.

Applying a trauma-informed or healing-centered lens does not mean that staff diagnose trauma or other behavioral health conditions. It does advocate taking a holistic approach, acknowledging we do not live, work, and learn in a vacuum, and helps pre-apprenticeships build supportive environments that are safe, inclusive, and productive for all participants. Using a trauma and healing-centered lens means creating ways to help participants build trust, skills for managing emotions, and a sense of self-worth in program systems and practices. [Healing-centered](#) practices can be especially impactful because they employ an asset-based approach that focuses on the strengths of young people and supports their agency in their own well-being and care. This redefines trauma so that rather than being defined as victims, young people are empowered and grounded in a sense of meaning and purpose.

The Substance Abuse and Mental Health Services Administration ([SAMHSA](#)) has developed six principles of a trauma-informed approach that can be useful in program design. They include safety; trustworthiness and transparency; peer support; collaboration and mutuality; empowerment, voice, and choice; and cultural, historical, and gender issues. A trauma-informed approach includes having clear program guidelines in place; ensuring consistency of expectations, activities, and feedback; explicitly highlighting the impacts of structural racism and gender inequities; and offering opportunities for reflection. These align with inclusive best practices that benefit all participants.

Transparent Entry and Success Requirements	Alignment with Skills Sought by Local Employers and High-Quality Apprenticeship Programs	<b>Culmination in One or More Industry-Recognized Credentials</b>	Development of Skills Through Hands-On Activities and Work-Based Learning	Offering of Academic, Career Exploration, and Wraparound Supports	Transition into a Registered Apprenticeship or Other High-Quality Apprenticeship Program
--	--	---	---	---	--



## Culmination in One or More Industry-Recognized Credentials

A core feature of a high-quality pre-apprenticeship program is that it provides participants with at least one industry-recognized credential or other short-term credential such as OSHA 10 or CompTIA A+. These credentials are typically stackable and portable to support a participant's entry, growth and advancement along a career pathway. Stackable credentials are defined as a sequence of certifications that can be attained over time and move an individual along a career pathway. They allow learners to [quickly switch between school and work](#) while continuing to progress toward a comprehensive credential like a degree. Stackable credentials also contribute to higher-level certificates, degrees, or other credentials recognized across labor markets. It is important to note that there are several types of credentials that can be stacked and they encompass both micro-credentials and industry-recognized credentials which are discussed in this section. Micro-credentials develop distinct skills that are usually earned through performance-based assessments that showcase skills in specific topic areas. Industry credentials typically involve demonstrating a broader set of skills that can be shown through attainment of a certification (via exams).

***Credentials should support direct entry into the workforce, be aligned with labor-market demand, and be validated by regional or national employers or industry associations.***

High-quality pre-apprenticeship programs engage with employers to provide requisite credentials and certifications while designing training curriculum to identify and remove barriers that may be experienced by opportunity youth when trying to obtain them. This is especially important for opportunity youth, who too often can be guided into jobs that do not offer pathways for advancement.

To ensure that the credentials being offered will provide the greatest value to young people, pre-apprenticeship programs should select those that are in highest demand with employers. Programs should consult with their state [labor market information entities](#) and workforce development boards to identify credentials and competencies sought by employers, and when possible, programs should remove financial barriers associated with these credentials by defraying the costs associated with them. This can include exam fees, the cost of books and

materials, and costs associated with transportation to and from exam sites. Programs should

also gather information from state and federal resources, employers, and industry associations to inform their career pathways and credential strategies. This will ensure that training and credentialing offered aligns with the reality of industry and employer needs and expectations.

### ***Credentials should be stackable and portable.***

Stacking credentials helps opportunity youth adapt to shifting market demands and improves their ability to advance along and across career pathways, which is important in ensuring that they have access to economic mobility. One effective strategy is to employ targeted short-term courses to help learners acquire essential knowledge and skills. These micro-credentials signal proficiency in understanding and applying the competencies needed for the apprenticeship. The goal of using micro-credentials in this context is to lead to formal industry recognition or preparation for industry-recognized credentials.

For example, Pennsylvania-certified Smart Manufacturing and Advanced Robotics Training (SMART) developed a pre-apprenticeship program to develop a pipeline of industry-certified workers ready to enter internships, apprenticeship programs, certificate and associate degree programs, and in some cases, employment in robotics. SMART organizes short,

## **The Urban Technology Project (UTP)**

[UTP](#) is a joint enterprise between Communities in Schools of Philadelphia and the School District of Philadelphia. This pre-apprenticeship program targets Philadelphia high school graduates ages 17 to 24 who are interested in information technology. UTP is comprised of the Computer Support Specialists Registered IT Apprenticeship Program and the Pre-Apprenticeship Digital Service Fellows AmeriCorps Program. The DSF AmeriCorps Pre-Apprenticeship program is a 1,700 hour program that combines pre-apprenticeship training with national service. It leverages the service experience to offer work-based learning activities and help participants contextualize their skill development and classroom learning.

Pre-apprentices work to receive industry-recognized credentials, including Apple Certified Macintosh Technician (ACMT), Amazon Web Services (AWS), CompTIA A+, and Google Apps for Education Certification. The certifications provided in the pre-apprenticeship are stackable and portable and provide an example of short-term credentials that equip opportunity youth with requisite essential skills for a longer-term apprenticeship or career opportunities in the tech sector.

targeted lessons and activities to help students earn certain parts of certifications in class and robotic labs. Hands-on learning is included, and students are able to document their learning in an electronic portfolio. This graphic provides an example of how SMART involves micro-credentials in its pre-apprenticeship program.

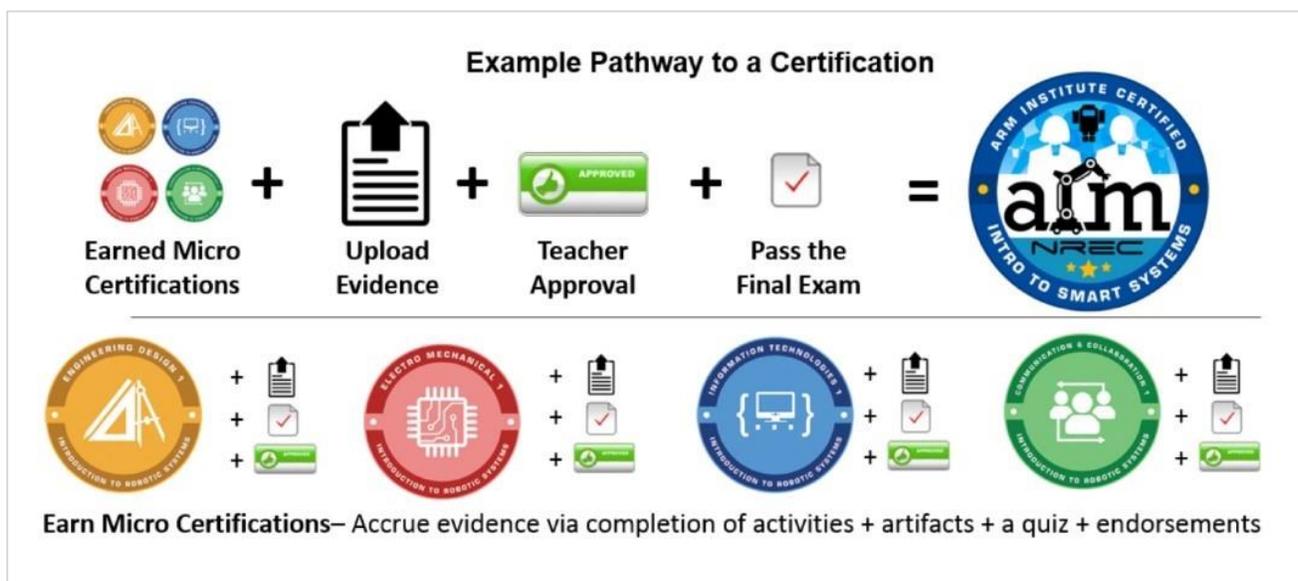


Figure 1: Carnegie Mellon Robotics Academy: Micro-Certifications.

(<https://www.cmu.edu/roboticsacademy/Research/SMART/micro-certifications.html>)

Finally, in non-traditional apprenticeship programs in healthcare, human services, and early childhood, for example, it is also important to connect technical curriculum to college credits leading to degree attainment. Thus, the pre-apprenticeship to apprenticeship model becomes a degree pathway. Both credentials and the degree path ensure portability of skills and competencies.

***Pre-apprenticeship programs need to facilitate earning credentials that prepare participants or align with the skills identified for training and curriculum.***

It is important that every credential offered to a participant aligns with the reality of the industry and the needs of employers. To ensure that the credentials provided through a high-quality pre-apprenticeship will properly prepare young people for entry into and success along a career pathway, programs should partner with employers and apprenticeship sponsors to determine which credentials are in highest demand and to validate their selections. Programs should also work with employers and credential providers to then ensure that their training curriculum properly prepares young people for any testing or requirements associated with credential attainment and to address, where possible, any barriers that might be experienced by opportunity youth participants.

***Programs should embed preparation for earning industry-recognized credentials into the curriculum, including supports for test delivery and credential attainment.***

To ensure equitable access to credentials for all pre-apprenticeship participants, including opportunity youth, JFF recommends that programs reduce any barriers participants may face, including financial and academic. The cost of obtaining a credential can be expensive, especially if they want or need to earn multiple credentials. To expand access for opportunity youth, JFF recommends that pre-apprenticeship providers fund training and other costs associated with obtaining credentials, including exam fees and costs associated with equipment, materials, and transportation.

Additionally, programs should explore all available testing accommodations for young people and whenever possible offer testing models that meet a diverse range of learning styles. This includes adapting testing formats, offering additional time or practice testing, and employing a universal design for learning strategy. This approach ensures that access to credential attainment is equitable for all participants, including those with learning differences. To do this, JFF recommends that training providers partner with credentialing agencies and employers to assess when and where adaptations can be made.



## **Development of Skills Through Hands-On Activities and Work-Based Learning**

[Work-based learning](#) is a critical component of any successful training program, including pre-apprenticeship. It supports job attainment and career advancement by providing participants with opportunities for career exploration, engagement with employers, and exposure to career pathways. It has been [shown](#) to lead to stronger employee engagement, higher levels of workplace satisfaction, and increased diversity and inclusion. For opportunity youth, work-based learning is especially important because it helps them gain the work experience frequently required by employers while also helping them contextualize and connect their classroom learning and on-the-job training. This approach, especially when designed with input and

ownership from youth, can help young people better understand how the skills and competencies they are building translate to a range of career pathways and advanced training opportunities across occupations, industries, and sectors.

It is important to note the value of providing [compensation](#) to youth participants as part of work-based learning and the pre-apprenticeship program in general. Monetary compensation for the work completed by youth participants can help remove the financial barriers to training completion they may face and demonstrates the program's investment in their continued success.

***Programs should embed into the curriculum hands-on activities that are relevant to the target occupation, including work-based or on-the-job learning.***

Work-based learning activities should mirror the real-world work required for an occupation. They should be aligned with the program's overall curriculum, support diverse and transferable skill development, and be informed by employers. Effective programs will help participants identify target skills and understand how gains will be validated.

To strengthen the impact of work-based learning for opportunity youth specifically, JFF recommends that, when and where possible, training providers engage with opportunity youth to design these activities. This not only ensures that their voice is incorporated into program design but also facilitates their engagement with employers, which can help build their social capital and increase their connections to employment after training. Program staff should talk with participants about their interests and their goals to ensure that activities not only meet employer needs but also resonate with participants. Programs should also consider establishing youth advisory councils or work-based learning work groups with employers and youth to create opportunities for participants to provide regular feedback on design, facilitation, and structure.

***The best pre-apprenticeship programs structure hands-on activities to make clear what skills are gained, how they are validated, and how they can be applied in a future career.***

To strengthen the impact of work-based learning for opportunity youth, programs should incorporate opportunities for reflection and career exposure into activities. This will help participants understand the skills, strengths, and competencies they are building through work-based learning and how they are connected to their long-term career and education goals. This approach facilitates a deeper understanding of what is needed to access a career pathway and shows participants how the skills they are building can support their ability to pivot to different occupations in other industries. Most importantly this approach helps participants understand the value and assets they can bring to the workforce.

Effective strategies for embedding reflection activities into work-based learning include:

- **Creating portfolios that track skill development and credential attainment.** JFF recommends that programs empower young people to manage their own portfolios to help them develop ownership and agency.
- **Peer sharing through small group discussions or presentations.** Creating spaces for peers to learn from one another is critical for all participants but especially for opportunity youth. Sharing perspectives and opinions, leading group discussions, and presenting information not only helps young people think critically about their skill building but also supports their continued learning and development of employability skills.
- **Leveraging a range of modalities for reflection.** By offering a range of modalities for reflection, including writing, video, and audio, programs can ensure that they are meeting the diverse range of learning styles of their participants.
- **Enabling engagement between participants and employer partners.** Building in intentional opportunities for young people to connect with employers has many benefits. It helps participants connect their skill gains to specific occupations while also building their social capital. Programs should design these spaces to include conversations led by young people about what advancement looks like for them, based on their long-term goals.
- **Using existing career exploration tools provided by O\*Net and Career OneStop.** These interactive platforms offer participants a more tactile and personally reflective opportunity to think about work-based learning.

*Programs should structure hands-on activities in a classroom, work site, or lab to be experiential, problem-based, and designed with input from employers and apprenticeship sponsors*

[Quality work-based learning activities](#) are structured and adaptable for different learning environments. They place an emphasis on problem-based learning and include input and continuous feedback from employers and apprenticeship sponsors. Without this input, programs run the risk of designing activities that do not properly prepare participants for career pathways beyond their pre-apprenticeship training and do not provide them with the proper career exploration and exposure.

JFF recommends that pre-apprenticeship programs bring employers into the process as designers, facilitators, and investors so that participants are prepared for the requirements of various occupations. This collaboration can help strengthen commitments to directly hire opportunity youth once they've completed their training and increase funding for WBL activities. It can also help employers better understand the value that youth bring to the

workforce and the practices needed to create safe, positive, and supportive work environments. Engagement with employers in work-based learning helps opportunity youth participants build their understanding of what working in a particular occupation day to day might look like by providing an opportunity for them to learn from employers directly. It can also support the development of [positive relationships with adults](#) and expand their professional networks.

***Pre-apprenticeship programs need to prioritize opportunities for work-based learning in which the participant completes meaningful job tasks in a workplace.***

It is essential that work-based learning activities [meaningfully replicate the job tasks in real-world work environments](#) so that opportunity youth develop an understanding of a range of jobs and occupational pathways. This supports the [success of opportunity youth](#) by providing them with the skills and competencies required beyond the technical skills and credentials required for a job.

To maximize value and impact for opportunity youth, pre-apprenticeship programs should set expectations for participation in work-based learning at the outset. This includes clearly outlining time commitments, employer expectations, and job duties. Participants should also have ample opportunities to check in with program staff and employers to help them assess their progress and offer feedback on their experiences.



IT pre-apprentice Christian Cherry replaces a MacBook Pro hard drive for a teacher at his worksite, Frankford High School.

*Source: Urban Technology Project*

***Programs should use work-based learning to develop participants' understanding of and ability to navigate company and industry culture, as well as specific position functions and workplace policies and procedures.***

Work-based learning activities should also help participants fully understand industry and workplace culture. This includes helping opportunity youth understand what to expect from workplace policies and procedures and how to navigate human resources and other supports that may be available.

It is critical that programs recognize how discriminatory practices show up in the workplace and prepare young people to maneuver within these environments. Programs should help young people understand structures and policies that spur discrimination based on gender, [gender identity, and sexual orientation](#) and should acknowledge how [race is historically and structurally built into the workplace](#). High-quality pre-apprenticeships will ensure that young women, LGBTQ youth, and young people of color are properly supported and prepared for working in what may be majority-white, majority male, or majority cisgender environments by helping them understand how to navigate racial hierarchies and organizational policies that advance inequity. Programs can hold reflection sessions for work-based learning participants to share their experiences and identify and troubleshoot challenges they experienced.

This work does not rest solely on the shoulders of participants, and programs should ensure that employers are held accountable for creating positive and supportive work environments for young people. To do this, programs should actively engage employers in conversations about race, gender, gender identity, and equity. They should build commitments to hiring and supporting opportunity youth, young people of color, women and LGBTQ youth into partnership agreements, require employers to demonstrate how they will build safe and equitable work environments, and assess the quality of existing DEI policies and practices prior to placing participants. Programs should not partner with employers that are not able to provide work environments that are positive, safe, and supportive, and that provide equitable opportunities for advancement.

## The Corps Network and PowerCorps PHL

[The Corps Network](#) (TCN) is the member association for the nation's 130-plus Service and Conservation Corps. TCN engages more than 25,000 young people, many of whom are opportunity youth, in service designed to prepare our next generation of environmental stewards and community leaders. The Corps model combines hands-on technical skills training, classroom-based education and training, credential attainment, and workforce-readiness skills training to create a robust pre-apprenticeship experience for a wide range of employment opportunities in environmental stewardship.

[PowerCorpsPHL](#) (PCPHL) is a member of TCN that exemplifies [quality work-based learning](#). It designs programs to support participant success and uses a range of approaches to deliver WBL. That includes job shadows, mentorships, and individual and group reflection activities. PCPHL's approach to WBL prepares participants for the realities of workforce culture through scenario-based planning and trauma-informed care. This aspect of its programming helps participants navigate situations that may be influenced by their race, ethnicity, or socioeconomic background and emerge with greater resiliency.

PCPHL prioritizes the inclusion of participant voice when designing WBL activities and uses an evaluation tool to gather participant feedback and assess the quality and impact of activities. Staff and WBL supervisors then engage participants in guided conversations to learn from their experiences and identify opportunities to integrate feedback into future WBL design. The program collaborates with employers to establish performance metrics to help participants track their progress and find success, map classroom learning onto WBL activities, vet activities against the reality of work sites, and ensure that activities are designed in alignment with occupational safety standards. Finally, PCPHL provides stipends to participants for their WBL through their enrollment in AmeriCorps and through a range of financial partnerships. It also builds wraparound supports and services into the WBL to help keep young people engaged and work with their employer partners to ensure that they are providing similar supports as well.



## Offering of Academic, Career Exploration, and Wraparound Supports

High-quality pre-apprenticeships offer strong, well-balanced, and continuous blends of academic, career exploration, and wraparound supports. They prioritize these as core activities within a dedicated academic bridge program that contextualizes academic coursework with industry content using dedicated staffing, well-sequenced activities, strategic partnerships, and targeted funding (such as with Title II that allows for customized curricula in partnership with adult education providers) thus increasing the likelihood of participant success at the next level. This is especially true for opportunity youth who may come to the program with less developed foundational skills, limited exposure to career options, and minimal work experience. Academic courses should be personalized and practical and focus on critical and core academic concepts important for a smooth transition to next-step training opportunities. Transportation to and from job sites is also critical to preparing for real-world employment, and addressing barriers (such as obtaining a driver's license) in advance helps ensure success. In addition, to be fully present and engaged, opportunity youth should be provided with positive adult supports and ample access to mental health services, childcare, housing, and nutritional services.

***Programs need to provide orientation to the industry and exposure to a range of occupations, career paths, wages, and information about job opportunities.***

Career navigation activities help young people map a clear career pathway that extends beyond an entry-level job and across various occupational pathways. These activities should support participants in developing a career plan that identifies short- and long-term goals, including potential barriers and possible solutions. To do this, programs should start by helping opportunity youth research and explore their own career interests, including what skills, credentials, and continuing education are required to enter and advance. This can be complemented with well-structured and sequenced informational interviews, career fairs, job shadows, short-term internships, and the use of alumni, workplace mentors, and peer advisories. Another best practice is engaging opportunity youth in local labor market research to help them learn about the best training and career pathway opportunities, providing another way to increase their agency and reinforce the lifelong skill of self-advocacy.

### *Support exploration of postsecondary credential options aligned with career interests.*

While pre-apprenticeships traditionally connect to Registered Apprenticeship pathways, they should also highlight the postsecondary pathways available after training. This is important for those who may not be ready to advance into a Registered Apprenticeship or who may wish to continue their education instead. To support opportunity youth in exploring education pathways, programs can leverage “the power of place” and create activities that put young people on a college campus and give them exposure to academic opportunities and resources. Other best practices include inviting college campus staff to participate in college and career fairs and hiring college students as mentors or volunteers to support postsecondary navigation.

One of the most effective strategies for helping opportunity youth and other participants understand the range of post-program options available is to invite alumni to share their experiences. Hearing from peers is a powerful way to highlight the opportunities available to participants and to help them assess what next step is best for them. They can also help young people understand the financing options and how to juggle work and school if they decide not to do an apprenticeship and instead want to pursue postsecondary education in a different setting.

### *Provide wraparound supports such as tutoring and case management, including access to resources for childcare, mental health, transportation, and housing.*

The provision of wraparound supports and other related services closes academic and skills gaps and helps participants be fully present and acquire the knowledge, skills, and competencies needed for career advancement. Offering wraparound supports is important for opportunity youth, who often face myriad barriers; such supports can promote a healthy, youth-centered, and supportive environment in which they can successfully complete their training. These services often include offering stipends for childcare, housing, and transportation; providing or making connections to mental health and healthcare services; and inclusion of mentorship and case management. Programs can offer these services in-house or partner with local community-based organizations and agencies to build a provider network and ecosystem of support for participants. Practices that reinforce quality delivery of service and support include those that:

- **Engage educational specialists** and use well-regarded partners that can offer on-premises supplemental courses and tutoring, and ensure participants have access to and are trained to use basic technology required for online academic supports.
- **Facilitate connections to appropriate service providers**, including orienting opportunity youth to provider partners and their individual staff, providing easy access, and offering incentives to follow through with important appointments. It also includes co-location of services whenever possible.

- **Are personalized and tailored** to help individual participants address specific gaps in requirements and provide just-in-time supports that make it easier for opportunity youth to participate successfully.
- **Include a lens on trauma-informed or healing-centered care**, with an emphasis on helping young people cultivate their agency by using a strengths-based approach to developing leadership and self-advocacy skills.

## YouthBuild Philadelphia Charter School

[YouthBuild Philadelphia Charter School's](#) mission is to empower young adults to develop skills and connect to opportunities in an environment of love, support, and respect for their whole person. They are the largest single-site YouthBuild program in the country, enrolling approximately 220 students every August. All students participate in intensive instruction in academics and workforce development, resulting in a high school diploma and industry-recognized vocational certification(s).

Students develop leadership skills by working with peers and community organizations to create, lead, and participate in community service projects around the city of Philadelphia. After graduation, participants stay connected as they begin their postsecondary journeys to college, career, and leadership development. Throughout the entire program model, young people are supported by peers, student success managers, a network of staff members, and a direct mentor committed to their personal and professional growth. Incoming students have extensive on-site exploration opportunities to select one of four primary vocation tracks: Building Trades, Business Administration Scholars, Child Development Associate, and Health Care.

All training tracks focus on building transferrable professional skills and habits that will lead to success in postsecondary education and employment. In the 2020-21 program year, the school is shifting its staffing model so that a dedicated staff member will follow each student through both years of the program, providing a continuous array of personalized supports and guidance for overcoming life barriers, college/career planning, navigating through social service systems, and supporting employment placement and advancement.



## Transition into a Registered Apprenticeship or Other High-Quality Apprenticeship Program

A key characteristic of a high-quality pre-apprenticeship is the connection to Registered Apprenticeship or other high-quality apprenticeship programs. Building these connections for opportunity youth can be challenging given the varying level of understanding of the population that employers and apprenticeship sponsors have. While there has been a growing movement in building apprenticeships for in-school youth, opportunity youth and other disconnected job seekers remain largely unserved and therefore many employers do not understand the value and assets that they present to the workforce.

High-quality pre-apprenticeships will also provide participants with connections to various postsecondary and career pathways after training. This is especially important for those who may not be ready to advance into a Registered Apprenticeship or who may wish to continue their education instead.

***Pre-apprenticeship programs should partner with industry, employers, unions, intermediaries, and the public workforce system to facilitate placements.***

Partnerships with industry, employers, unions, workforce intermediaries, and public workforce partners can be especially important for programs serving opportunity youth because the population is often misunderstood by these stakeholders. Many employers are hesitant to engage younger workers out of concern that there may be too much risk or that they may require too much support. Strong partnerships and engagement can help underscore the assets that these young people bring with them, including their skills, competencies, knowledge, and perspectives, and demonstrate the positive impacts that hiring them can have on an individual employer or industry's bottom line. They can also highlight the ways in which community-based organizations can partner with employers for the successful retention and advancement of opportunity youth.

To build effective partnerships, JFF recommends that programs [convey the benefits pre-apprenticeship and opportunity youth bring to employers and other stakeholders](#) from the start of engagement. Programs should prioritize the inclusion of formal agreements for hiring and placing opportunity youth participants into jobs and apprenticeships and establish comprehensive memorandums of understanding that articulate the percentage of participants who will receive employment upon successful completion of their pre-apprenticeship program.

These agreements should include commitments to diversity, equity, and inclusion, and nondiscriminatory hiring practices. JFF also recommends that programs create opportunities for young people to engage with employers. This can happen through job shadows, career fairs, and work-based learning, as well as through mentoring and including young people in groups and meetings with stakeholders where they can share their feedback. Doing this will help employers better understand the value that opportunity youth represent to their workforce needs and can also help participants expand their professional networks, which can support their future career advancement.

***Programs should work with program sponsors to determine their form of selection preference for program graduates, such as guaranteed interviews or direct entry into a high-quality apprenticeship.***

To ensure that opportunity youth can successfully progress from a pre-apprenticeship into a Registered Apprenticeship, providers should have a full understanding of the entry requirements and selection criteria of apprenticeship programs and design their programs with these requirements in mind. JFF recommends that programs also consult resources like The Urban Institute's [Competency-Based Frameworks](#) or [JFF's self-paced, online Competency-Based and Hybrid Apprenticeship course](#) to ensure that they provide the proper technical and soft skills needed for success in the apprenticeship.

***Programs should connect pre-apprenticeship graduates who do not enter an apprenticeship to a postsecondary education and training option, or to an employer in a related field for an interview.***

As mentioned previously, not all young people who complete a pre-apprenticeship will want to transition into a Registered Apprenticeship or other high-quality apprenticeship program. Some may want to directly enter the workforce while others may choose to continue with their education in a postsecondary setting. An apprenticeship can be an alternative route to attaining a college education. Pre-apprenticeship programs can facilitate connections to postsecondary education by establishing advanced standing agreements for program completers.

High-quality pre-apprenticeships will help opportunity youth not only understand the range of workforce training and career pathways available but also the different postsecondary pathways available. To do this, JFF recommends that programs leverage their career navigation activities to help participants explore potential careers before they make a decision about their next steps. Programs should also explore partnerships with educational providers such as community colleges or four-year universities to help inform the connections participants can make to postsecondary pathways.



IT apprentice Shabazz Ransom troubleshoots an issue with a printer at his worksite, Philadelphia Learning Academy North.

*Source: Urban Technology Project*

## Institute for American Apprenticeships

The [Institute for American Apprenticeships at Vermont HITEC](#) (IAA) has offered Registered Apprenticeships in healthcare, information technology, advanced manufacturing and business services for nearly two decades. Its apprenticeship model serves as an example for how pre-apprenticeship programs can create seamless transitions to apprenticeship for participants. Its program uses three phases:

1. The program consults employers to identify their hiring needs and interest in developing an apprenticeship. The design process starts with a commitment by the employer to hire every program participant who successfully completes the pre-apprenticeship program. Once a commitment has been secured, IAA staff work with the employer to determine the essential functions of the occupation and qualities of a successful worker. An IAA subject matter expert shadows that occupation for several months to develop an intimate understanding of what it takes to learn and do the job. They document the requisite knowledge, skills and abilities before designing a custom curriculum and set of technical competencies for the employer. Recruitment also occurs in this phase which also allows opportunity youth to learn about the occupation, the employer and about apprenticeship. This awareness is a key element that contributes to the success of the individual, which then translates into a higher completion and retention rate for the program. IAA leverages funding from the workforce system to enable this high-quality pre-apprenticeship program.
2. Learners receive rigorous and time-intensive instruction as well as assistance in terms of transportation, housing, counseling, childcare assistance and materials (e.g., books and supplies) to encourage their ongoing involvement and support program completion. Each program includes an experienced instructor and project leader who manages logistics and coaches on professional presentation. IAA leverages funding from the workforce system to provide both the technical program and the wraparound supports to apprentices.
3. An apprentice receives a mentor who offers them support on a regular basis to promote on-the-job learning, support services are provided until the apprenticeship is completed, and apprentices earn the applicable industry-recognized credentials.

The attention to the needs of the individual and the employer in every phase of the process have contributed to the IAA program's completion rate of over 90 percent and to the apprenticeship completion rate of 84 percent. This represents a win for the apprentice, the employer and the community.

## Conclusion

For too long, opportunity youth have been left behind in the apprenticeship movement. This framework aims to address that gap with specific guidance to drive strong programming. The promising practices outlined in this framework can help existing pre-apprenticeship programs strengthen their programming so that opportunity youth and other low-income young adults can succeed and make successful transitions to high-quality apprenticeship programs. It can also serve as a guide for those seeking to design new pre-apprenticeship programs for opportunity youth. With the right supports and opportunities, this population can thrive in apprenticeship pathways that enable them to learn, earn a paycheck, and advance in their careers.

### Resources to Support the Design of High-Quality Pre-Apprenticeships for Opportunity Youth

- JFF: [\*Framework for a High-Quality Pre-Apprenticeship Program\*](#) (2020)
- JFF: [\*Framework for a High-Quality Pre-Apprenticeship Program: IT\*](#) (2020)
- JFF: [\*Work-Based Learning Framework\*](#) (2018)
- JFF: [\*Work-Based Learning Glossary\*](#)
- JFF: [\*Benefits of Work-Based Learning\*](#)
- JFF: [\*How to Develop an Effective Work-Based Learning Program\*](#)
- JFF: [\*How Apprenticeship Programs for Opportunity Youth Stay Resilient Through the COVID-19 Recession\*](#) (2020)
- JFF: [\*CareerNext Framework\*](#)
- YouthBuild USA: [\*Connecting Opportunity Youth and Employers Through Work-Based Learning\*](#) (2020)
- Aspen Institute: [\*Unpacking the Work of Work-Based Learning\*](#) (2021)
- Corporation for a Skilled Workforce: [\*Employing Opportunity Youth: Employing and Reinforcing the Business Case\*](#) (2014)
- Brookings Institution: [\*Work-Based Learning Can Advance Equity & Opportunity for America's Young People\*](#) (2020)
- *Harvard Business Review*: [\*"Toward a Racially Just Workplace"\*](#) (2019)