



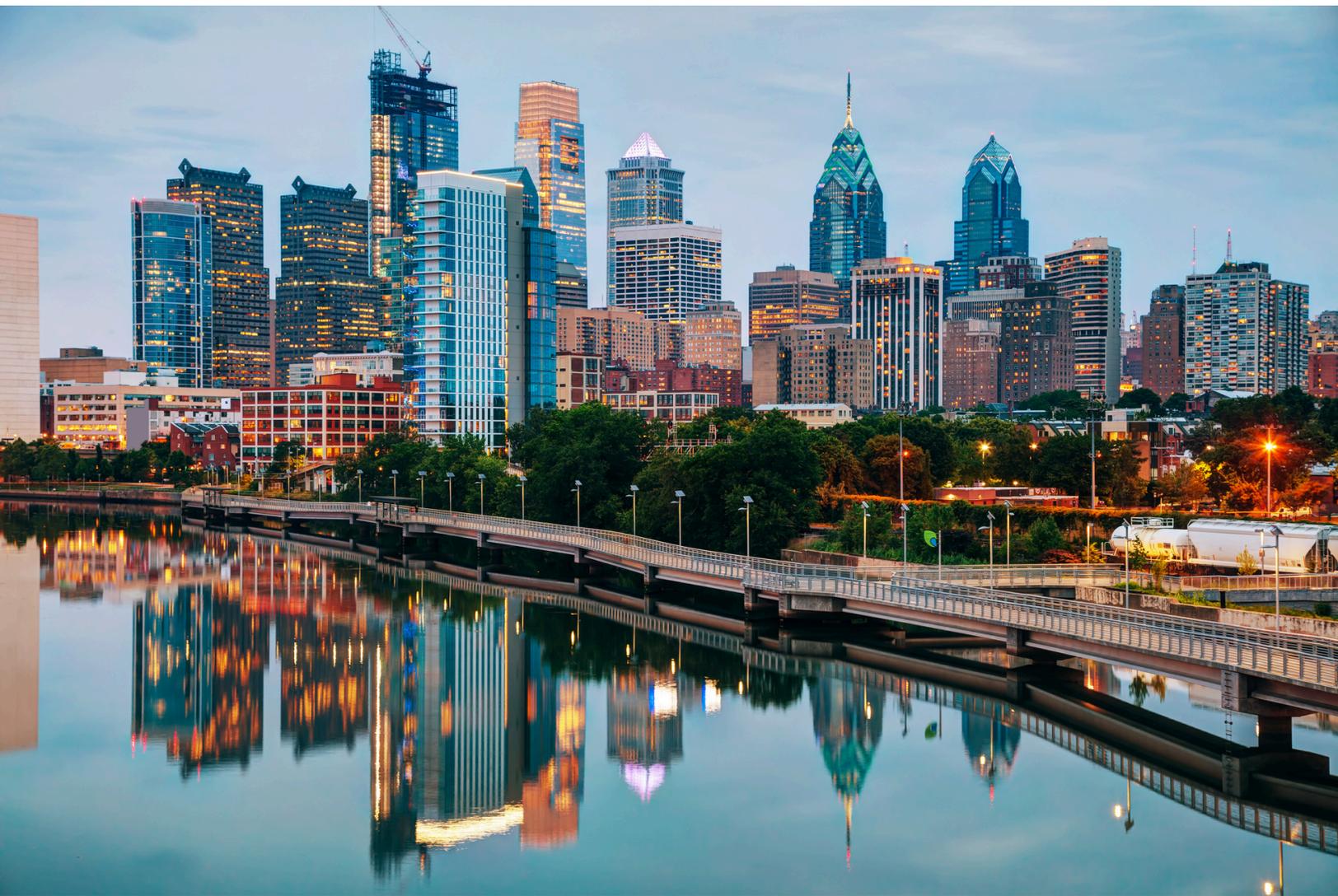
Pennsylvania

**Quality Registered
Pre-Apprenticeship
Program Models for
High School Students**



ApprenticeshipPHL

This page intentionally left blank.



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

Quality Registered Pre-Apprenticeship Program Models for High School Students ©

2024 by ApprenticeshipPHL is licensed under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)  



This page intentionally left blank.

Table of Contents

Section	Topic
01	Introduction
02	Building Trades
03	Early Childhood Education
04	Manufacturing
05	Funding Strategies for Registered Pre-Apprenticeship Programs
06	Next Steps & Acknowledgements



ApprenticeshipPHL

Introduction

When considering the development of a quality Registered Pre-Apprenticeship program for high school students, several questions commonly arise.

- Where do I start?
- How are existing quality programs structured?
- How do existing programs best serve students?
- How are programs funded?
- What best-practices might I learn prior to developing a program?
- And what is a Registered Pre-Apprenticeship Program anyway?

This guide is designed to answer those questions and provide valuable details related to the structure and delivery of existing programs. Sharing the details leading to the success of others is a critical component of ApprenticeshipPHL's efforts to foster the expansion of sustainable pre-apprenticeship programs throughout the region.

Please utilize the information herein and feel free to reach out to any of the associated contacts to assist in the building of your program. As always, the experts in the ApprenticeshipPHL network are eager to help you as well. Providing high school students with the skills and abilities to meet the evolving needs of employers across industries benefits individuals and companies alike. We look forward to aiding in the expansion of sustainable programs that addresses these critical needs.

About ApprenticeshipPHL

ApprenticeshipPHL is a regional public/private collaboration with the overall goal of increasing and aligning Registered Apprenticeship and Pre-Apprenticeship programs for the benefit of the area's residents and employers.

As a collaborative, our members are located in the six-county area of Southeastern PA which includes Berks, Bucks, Chester, Delaware, Montgomery, and Philadelphia. We provide supports to others in the region through outreach, education and awareness, technical assistance with program registration and maintenance, funding opportunities, and regional partnerships.



ApprenticeshipPHL

Registered Pre-Apprenticeship Programs

Registered Pre-Apprenticeship programs are designed to prepare individuals to enter and succeed in a Registered Apprenticeship program, and ultimately a career. Many programs focus on introducing people to careers within the industry or with a specific employer and incorporate career readiness, technical training, and opportunities to build literacy, math, and English. While there are some pre-apprenticeship programs that are specifically for older professionals who are looking to change careers, we are seeing an increase in programs designed specifically for high school students to align with opportunities for pathways to graduation with the passage of Act 158 in Pennsylvania.

Registered Pre-Apprenticeship programs must be connected to a Registered Apprenticeship program. Registered Apprenticeships drive the design of the training curriculum including technical training based on industry standards and hands-on experience that introduces individuals to the expectations of the job. When considering developing a Registered Pre-Apprenticeship program, the first place to start is identifying a Registered Apprenticeship Program sponsor who will work with you to develop the program.

For more information on building a Registered Pre-Apprenticeship, visit:

[ApprenticeshipPHL](https://www.apprenticeshipphl.org)



[PA Apprenticeship & Training Office](https://www.paapprenticeship.org)



**QUALITY REGISTERED PRE-APPRENTICESHIP
PROGRAM MODELS FOR HIGH SCHOOL STUDENTS**

Building Trades

General Information

Program Name: Vocational Intern Partnership Program

Program Sponsor: The Finishing Trades Institute of the Mid-Atlantic Region

Location: Philadelphia, PA and New Jersey

More Info: <https://www.fti.edu/>

Contact: Tureka Dixon Tureka@fti.edu



Program Description: The Finishing Trades Institute of the Mid-Atlantic Region (FTI) in partnership with the Philadelphia School District developed the Vocational Intern Partnership (VIP) Program in 2009 and registered it as a Pre-Apprenticeship program in 2022. This program educates and provides hands-on experience in painting, drywall finishing, and glazing to students in their 11th and 12th grade years of high school. The goal of the program is to provide inner-city youth the opportunity to experience the potential that careers in the building trades have to offer by providing professional instruction and guidance in these trades. The program is geared to be a stepping-stone for students to progress from classroom to potential apprentices in these industries by teaching them the skills and knowledge that is needed to be a successful tradesperson.

Student Supports

- Personal Protective Equipment (i.e., hard hat, gloves, safety glasses)
- Transportation support
- Lunch



Career Opportunities

- Students have the opportunity to earn recognized construction-wide industry certifications, such as OSHA 10; Scaffold Erector Dismantler; Fall Protection; Lead Renovation, Repair, and Painting; and First Aid/CPR.
- Students can earn up to 6 college credits.
- Students who successfully complete VIP can apply to Registered Apprenticeship programs in the Building Trades.



QUALITY REGISTERED PRE-APPRENTICESHIP
PROGRAM MODELS FOR HIGH SCHOOL STUDENTS

Building Trades

Case Study – The Finishing Trades Institute of the Mid-Atlantic Region

Program Design

The program takes place at FTI's training center in Northeast Philadelphia. In partnership with schools in Philadelphia and New Jersey, students attend the program on specified days during the school week for a total of 15 weeks. Students learn basic topics of instruction necessary for careers in the building trades such as Trade Math, Labor History, and Blueprint Reading. The hands-on portion consists of demonstrations about the use of different tools including equipment operations and safety in order to complete projects. In addition, students are taught life skills and career preparation including how to apply to the Registered Apprenticeship programs offered through FTI and partner trades unions, preparing for an interview, and expectations on job sites.

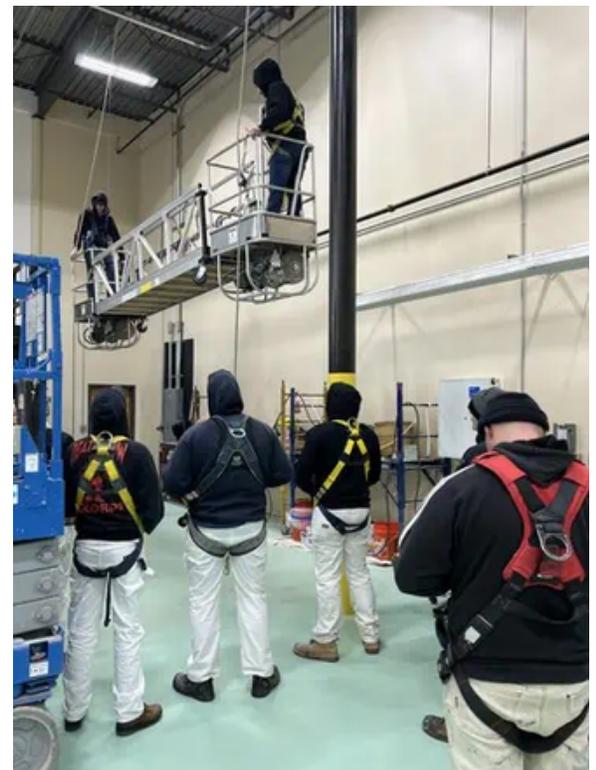
Cost Sharing through School Partnerships

There is a per student cost that is approximately \$2,200 and covers administration fees, program supplies, instructor, certifications and exams, lunch, and personal tools and equipment that students keep (i.e., hard hat, gloves, safety vest, eye protection, and other PPE). In most cases, the schools cover the cost for students who are committed to enrolling into the program.

Best Practices & Recommendations for Success

FTI designed the VIP program to connect with its own Registered Apprenticeship programs and partner trades union to ensure that students were learning the basic skills that they will need to be successful in careers in the Building Trades and construction work sites. Approximately 25% of graduates are accepted into one of FTI's Registered Apprenticeship programs.

Since the program started in 2009, it has gained traction. FTI conducts very little outreach and is often approached by new schools that are interested in the program. FTI hosts information sessions and tours at their training center for schools to learn more about the program. The Program Coordinator is dedicated to conducting outreach with schools, making presentations to students and teachers, hosting tours at the training facility, and supporting pre-apprentices while in the program.



QUALITY REGISTERED PRE-APPRENTICESHIP PROGRAM MODELS FOR HIGH SCHOOL STUDENTS

Building Trades

General Information

Program Name: Aspire to Be an Electrician

Program Sponsor: Independent Electrical Contractors Pennsylvania

Location: Statewide; headquarters in Dauphin County

More Info: www.iecpennsylvania.org

Contact: Kristi Wickard apprenticeshipcoordinator@iecpennsylvania.org



Program Description: Independent Electrical Contractors Pennsylvania (IEC PA) offers a program to high school students in the 12th grade designed to provide the skills necessary to enter directly into the IEC Registered Apprenticeship Program. The Aspire to Be an Electrician Registered Pre-Apprenticeship program incorporates online learning, labs, and homework. Students attend the program 100% virtually and learn at their own pace for approximately 10 hours per week. An IEC PA instructor provides weekly support to pre-apprentices in alignment with each week's lesson. In-person labs are facilitated twice per year – during the first and second semester of the program – by IEC PA contractor members or associate members. The program boasts a strong 90% completion rate and successful completers will earn a completion certificate from the Pennsylvania Apprenticeship & Training Office. Some students have the opportunity to earn additional certifications such as OSHA 10 and/or CPR-First Aid when offered by their educational institution directly.

Student Supports

- Participating students are provided curriculum books and other instructional materials as part of the tuition cost.
- Interested students may be able to engage in co-operative work experiences with IEC PA contractor members.



Career Opportunities

- Students may be eligible to earn OSHA 10 and/or CPR-First Aid certifications.
- Successful graduates are eligible to enter the IEC Registered Apprenticeship Program.
- Some students pursue jobs in a variety of construction fields based on experience from the program.

QUALITY REGISTERED PRE-APPRENTICESHIP
PROGRAM MODELS FOR HIGH SCHOOL STUDENTS

Building Trades

Case Study – Independent Electrical Contractors Pennsylvania

Program Design

IEC PA partners directly with interested educational institutions and works with them to determine the schedule and identify eligible students. The curriculum course schedule is completed annually and begins during the middle of September and concludes at the end of May. IEC PA recommends that students participate in the virtual curriculum during the school day for approximately 5–6 hours per week with the remaining time to be assigned as homework. Educational institutions can decide on specific qualifications for eligibility such as enrolling students who are in a Career & Technical Education program, course pre-requisites like Algebra II and Geometry, and/or a 10th grade Reading level. IEC PA also recommends encouraging students to work towards earning their PA Driver's License as this will be a requirement to get accepted in the Registered Apprenticeship program or employment with many electrical contractors.

Funding for Program Development & Maintenance

IEC PA's Aspire to Be an Electrician program was initially piloted in 2018 with the support of a state grant for approximately \$7,500. The grant covered expenses to launch the program with a small pilot cohort. IEC PA has continued to offer the program in partnership with educational institutions that cover the tuition cost, which is approximately \$1,300 per student. The tuition covers the cost of staffing, curriculum books, and other instructional materials, as well as the online program. Educational institutions have leveraged a variety of funding models to cover the tuition cost. For example, one school district has been able to leverage TANF Youth Development funding while another school district pays for student participation through their annual budget. Some educational institutions employ a cost sharing model whereby the school district pays for core tuition and the students are charged for textbooks (\$200 – \$300). Other educational institutions achieve cost sharing by working with individual IEC PA contractor members willing to pay for a portion of the program. IEC PA continues to pursue future grant opportunities to offset cost and fund expansion including two new mobile lab units.

Best Practices & Recommendations for Success

A primary objective of the IEC PA Aspire to Be an Electrician program is to provide a seamless integration with requirements necessary for entry into their Registered Apprenticeship program.

While online learning offers scheduling flexibility, IEC PA recommends that others looking to build a program understand from the beginning that learning through an asynchronous online model is not for everyone. It is recommended that educational institutions rely on teachers or support personnel with the selection of the right students to complete the program. Also, it is strongly suggested that each educational institution has at least two participants, so that students have at least one partner for shared experience, idea exchange, and mutual support.

While it is possible for a student to 'fail' the program, this well-structured program boasts a 90% completion rate. However, educational institution personnel should be prepared to support any pre-apprentice that may not complete a program by providing career counseling, guidance, and support.

Early Childhood Education

General Information

Program Name: Early Childhood Education Pre-Apprenticeship

Program Sponsor: Philadelphia Academies, Inc.

Location: Parkway West High School - Philadelphia

More Info: www.academiesinc.org

Contact: Cheryl Lafferty Clafferty@academiesinc.org



Program Description: Parkway West High School offers an Early Childhood Education (ECE) Career and Technical Education program. Students in the 12th grade have the opportunity to enroll in a registered Pre-Apprenticeship Program linked to a Registered Apprenticeship Program in ECE, and a chance to earn a Child Development Associate (CDA) credential upon graduation. To earn the CDA credential, students must complete 120 hours of classroom time on required CDA topics that are part of the existing curriculum, as well as 480 hours of experience working directly with children which can take place via summer internships, school-year internships, and/or afterschool work.

Student Supports

- Career Counseling
- Academic Tutoring
- Transportation to Summer Internship Sites
- Opportunity to earn \$1,000 Stipend
- Clothing Assistance
- Housing Assistance
- Food Assistance
- Referrals to community services
- Background clearances for employment



Career Opportunities

- Students can earn CPR/First Aid Babysitting Certification and Child Development Associate (CDA)
- Program offers a clear pathway to District 1199C Training & Upgrading Fund's Registered Apprenticeship Program in Early Childhood Education

QUALITY REGISTERED PRE-APPRENTICESHIP
PROGRAM MODELS FOR HIGH SCHOOL STUDENTS

Early Childhood Education

Case Study – Philadelphia Academies, Inc.

Program Design

Philadelphia Academies, Inc. (PAI), a non-profit organization, has been partnering with the School District of Philadelphia for over 50 years in areas of workforce development and teacher supports. PAI serves as the program sponsor, providing staff who support Parkway West teachers, administration personnel, and students. Staff will coordinate work-based learning, internships, 21st Century Skill Building, case management, supportive services, and more. Classroom instruction is provided by teachers within the school in alignment with the CTE curriculum. During the internship phase, 12th grade students spend three days per week during school hours at a KenCrest Early Learning Center accompanied by their classroom teacher for a total of 15 weeks. This, in combination with summer internships after 10th and 11th grades and additional school year exposures, enable students to meet the 480-hour work experience component. PAI chose to work with Parkway West High School due to a long-standing relationship in helping to develop the ECE CTE program which naturally led into the creation of a Pre-Apprenticeship. At this time, it is not open to students at other schools.

The Registered Apprenticeship (RA) sponsor is District 1199C Training & Upgrading Fund, which has an advanced Early Childhood Education program. Pre-Apprentices who successfully complete the program can apply their 120 classroom hours towards the Related Technical Instruction component of the RA program. PAI also provides follow-up services to students for one year after completion to support them in preparing for the CDA exam and with their transition to the RA program, post-secondary education, or employment.

Funding for Program Development & Maintenance

PAI started with two foundation grants to support with curriculum development (~\$80,000) and developing and implementing the program including staffing (~\$500,000 over 5 years). They were awarded a 2-year state grant to support with ongoing maintenance/ operations (\$250,000) and approximate that the program will require ~\$100,000 annually to support operating costs.

Best Practices & Recommendations for Success

As a non-profit organization with over 50 years supporting schools in Philadelphia, PAI recognized that true partnerships are essential to developing pre-apprenticeship programs. PAI was able to build upon successful initiatives in order to develop the ECE pre-apprenticeship:

- PAI initially partnered with Drexel University's School of Education to develop a 3-year CTE program, which also meets the needs of the pre-apprenticeship program.
- Identifying the right childcare center for partnership was key; collaborating with KenCrest Early Learning Center established a win-win relationship for all involved.

PAI also identified several components that have led to increased program successes. Providing professional development specific to ECE for teachers is a game changer. School-day internships are key, both for attaining the needed internship hours as well as getting students excited about ECE work. Nothing is a substitute for actually working with children! Finally, success is not only entrance into an RA, but also post-secondary education or a chosen career since so many of the skills that students gain are transferable to other careers.

Manufacturing

General Information

Program Name: Manufacturing Applied Technologies

Program Sponsor: The Manufacturers' Association

Location: Serving high schools in multiple counties in South Central PA including Chester, Lancaster, Perry, and York

More Info: <https://mascpa.org/career-exploration/>

Contact: Miranda Martz mmartz@mascpa.org



Program Description: The Manufacturing Applied Technologies registered Pre-Apprenticeship program was developed with the intention to get high school students interested and prepared for careers in manufacturing in the South Central region of Pennsylvania. As the program sponsor of both Registered Apprenticeship and Pre-Apprenticeship programs, the Manufacturers' Association (MA), recognized the need to grow a talent pipeline to support over 50 partner companies in the region. In this one-year program, Pre-Apprentices in the 11th and 12th grades are prepared for a career in manufacturing through earning OSHA 10 certification, learning related technical instruction within their schools and gaining hands-on learning that is based at the training facility in York, PA.

Student Supports

- Transportation support for some students
- Job Placement Assistance



Career Opportunities

- Preparation and connection to seven Registered Apprenticeship programs offered by MA including articulation of 64 hours towards Related Technical Instruction (RTI).
- Articulation agreement with Thaddeus Stevens College of Technology and HACC Central Pennsylvania's Community College in which RTI hours count as college credit toward continued education.
- Students can earn an OSHA 10 lifetime credential.

QUALITY REGISTERED PRE-APPRENTICESHIP PROGRAM MODELS FOR HIGH SCHOOL STUDENTS

Manufacturing

Case Study – The Manufacturers’ Association

Program Design

MA designed the curriculum to cover multiple manufacturing occupations as a way of giving students an introduction into possible careers. Topics include emerging technologies, SolidWorks, basic math applications and formulas, shop classes using metal and aluminum, and quality control. The program runs from October through April each year; the instructor travels to each school once every three weeks to teach classes. For most schools, the hands-on classes are taught at the training facility in York, PA; students are granted an excused absence and will travel to the facility or be provided transportation by the school.

Funding for Program Development & Maintenance

Funding from the PA School-to-Work grant (~\$250,000) initially supported MA with program development and launch. It covers the cost for a full-time instructor who handles program coordination with schools, supports student recruitment, facilitates classroom instruction, and supports other program activities such as connecting pre-apprentices to paid work experience with partner companies. As a nonprofit organization, MA is also able to fundraise and apply for additional grants to support program operations. It is estimated that this program costs approximately \$13,000 per cohort. This covers the cost of the instructor’s salary, supplies, tools, equipment, lunch, and other supportive services for students as needed.

Best Practices & Recommendations for Success

After initial program launch, MA realized that they needed to make programmatic changes as interest grew and they expanded into working with additional high schools. Originally a two-year program, the instructor was not able to meet the demand and coordinate the schedule in a way to meet the need. They adapted the curriculum into a one-year program and hired a dedicated, full-time instructor to manage coordination and preparation in the months leading up to each school year.

MA also recognized how essential it is for both students and companies to include a paid work experience opportunity. It allows students to gain valuable skills while companies provide a foundation in workplace expectations and company culture. MA facilitates work-based learning experiences with partner companies to help students get internships, summer jobs, or part-time jobs. Companies will come in to present to cohorts about the opportunities and students will be supported to apply. Students are hired directly by the company. Further, the School-to-Work grant includes incentives for companies to hire students for work experience; MA is able to reimburse the companies for the cost of wages for up to 30 students.

Finally, MA prioritizes making the program available at no cost to students or participating high schools. They believe it is essential to provide students with early career exposure and hands on experience into a rewarding manufacturing career, which also benefits partnering companies and the regional economy.



Funding Strategies for Registered Pre-Apprenticeship Programs

**A Tactical, Realistic Approach to Funding Helps
Ensure Sustainability**

Offset Startup Costs

The development of a Registered Pre-Apprenticeship program nearly always requires funding for startup items such as curriculum purchases or development, training aids, equipment, supplies, and other materials. Pursuing grants or other assistance is ideal to fund these needs as well as a pilot cohort's participation costs.

Budget for Sustained Operations

During program development it is essential to determine the full amount (cost per person or cohort) required to offset all ongoing operating costs. Associate that amount with participation from the beginning and identify a model for operations that includes no grant funding or other government or workforce subsidies.

Create Strong and Comprehensive Partnerships

Starting with the company(ies) in the associated Registered Apprenticeship, consider every entity that may benefit from the successful operation of the pre-apprenticeship. Companies, trade associations, schools, and participating individuals all stand to gain from the development of a better and more appropriately skilled future workforce. Seek their assistance with making a direct investment into the program to cover annual operating costs.

Embrace the Critical Funding Lesson

It can be tempting to see what funds are available related to apprenticeship and pre-apprenticeship and believe those will always be available to you and your program. This is a patently false assumption. While there have been and continue to be grant opportunities and investments from the federal government, state, and other sources to support program development and launch, there is no guarantee that funding will be available in the future. The bottom line? Do not create a program that is contingent upon grant/workforce funds to operate – it's a recipe for certain failure. Instead, research funding tactics and models that have long-term sustainability in mind.



ApprenticeshipPHL

Next Steps

Ready to Get Started?

Steps to Developing A Pre-Apprenticeship Program

Where do you go from here? Rest assured, you do not have to do this alone. Technical assistance is available at every step of the way. There are many experts, like APHL Apprenticeship Navigators, ready to support you on this journey!



01. Contact ApprenticeshipPHL

We will meet with you to discuss your ideas and create a strategy to develop and register your pre-apprenticeship program. Email info@apprenticeshipphl.org.



02. Partner and Connect

We'll help you find the right partners for program success including curriculum development, hands-on work experience, credential opportunities, and supports for pre-apprentices.



03. Design and Register

Once you are ready to design your program, we can support with developing the framework and preparing the documentation you need to register.



04. Launch!

It's time to deliver your program! If you need additional support with outreach and recruitment, APHL can boost your program with our network of members and partners across the region.

QUALITY REGISTERED PRE-APPRENTICESHIP
PROGRAM MODELS FOR HIGH SCHOOL STUDENTS

This page intentionally left blank.



ApprenticeshipPHL

Acknowledgements

ApprenticeshipPHL extends its gratitude to the many contributors who supported the creation of this resource. From those who were there from the very beginning and came up with the concept, to the many partners and program staff who captured the details, and finally the people who helped put it all together, we thank you for your partnership!

APHL Education Committee

Tracey Dougherty – Chester County LWDB
Edison Freire – Consultant
Faith Goldstein – Philadelphia Youth Network
Sarah Hill – Community College of Philadelphia
Mel Jackson – School District of Philadelphia
Cheryl Lafferty – Philadelphia Academies, Inc.
Crystal Lanier – Philadelphia Academies, Inc.
Bill Miner – L&I Apprenticeship & Training Office
Liz Pisarczyk – Philadelphia Works
Adina Tayar – EDSI Bucks and Montgomery County
Donna Tutak – Delaware County LWDB
Tiffany Unger – Keystone Development Partnership
Jerome Walker – Year Up

Pre-Apprenticeship Program Sponsors

The Finishing Trades Institute of the Mid-Atlantic Region
Tureka Dixon
Independent Electrical Contractors Pennsylvania
Marissa Bankert and Kristi Wickard
Philadelphia Academies, Inc.
Cheryl Lafferty
The Manufacturers' Association
Brian Paterniti and Miranda Martz

Special Thanks



Peritex Solutions – Chris Ray



Keystone Development Partnership – Tara Toms

We thank you for your partnership!

QUALITY REGISTERED PRE-APPRENTICESHIP PROGRAM MODELS FOR HIGH SCHOOL STUDENTS