



MANUFACTURING
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COUNCIL



Certifying the Industrial Athlete of the Future

Apprenticeships: Change that revolving door to the elevator to prosperity!

*Build your talent pipeline with CPT and TRACK
Pre-Apprenticeship Programs*

(The first article in a series covering the value and benefits of apprenticeship programs.)

Americans are feeling more prosperous, the economy is fueled with consumer spending and the United States is experiencing historically low unemployment rates. All is great, right? While our country is experiencing an economic rebound after years of stagnation, employers still confront the challenges of hiring a skilled workforce and retaining those people. “It’s a revolving door – people get hired, but they don’t stay for long” remains an all too common experience for manufacturers.

Hiring and retaining a skilled workforce is THE key issue for employers across the Commonwealth and our nation. The business community, education/training and economic development groups are working together to clearly articulate their needs in an effort to close skill gaps and build the pipeline for their workforce. The U.S. Chamber of Commerce Talent Pipeline Management (TPM) program focuses on developing the capacity of business organizations seeking to organize employer members and orchestrate talent supply chains. The Kentucky Chamber of Commerce is part of this national program and has identified professionals in several areas around the state to work toward a plan by 2020.

In encouraging news, last year the Trump Administration announced plans to re-invigorate apprenticeship programs to build the talent pipeline in all business sectors. While European countries use apprenticeship programs as their main pipeline for talent, the U.S. has been slow to adopt this strategy. But as the pool of available and skilled workers becomes smaller, communities will need to look for multiple sustainable ways to build and grow the talent pipeline. Enter **apprenticeships**.

What is an apprenticeship?

Apprenticeship is the proven approach for preparing workers for jobs while meeting the needs of a business needing a highly-skilled workforce. It is an employer-driven, “learn-while-you-earn” model that combines on-the-job training that is tied to the attainment of national skills standards. (Source, *U.S. Department of Labor*.)

The five key components to apprenticeship are:

- Business involvement
- Structured on-the-job-training
- Related instruction
- Rewards for skill gains
- Nationally-recognized credentials

There are two types of apprenticeship models: apprenticeship for incumbent workers and new hires and pre-apprenticeship for secondary (high-school) students. The best thing about an apprenticeship program is that it is a completely customizable approach to training the current and future workforce. The U.S. Department of Labor has a national registry of registered apprenticeships that companies can use or model for their own training programs. There are great benefits to registering an apprenticeship with the U. S. Department of Labor, including:

- **Technical Assistance and Support:** The program joins the Apprenticeship system, which provides access to a nationwide network of expertise, customer service, and support at no charge for program sponsors.
- **National Credential:** Graduates of Apprenticeship programs receive a national, industry-recognized credential.
- **Quality Standards:** Registration means the program has met national and independent standards for quality and rigor. Registration tells prospective employees, customers and suppliers that the business invests in its workforce and believes employees are its most important asset.
- **Tax Credits:** In many states, businesses can qualify for state-based tax credits related to apprenticeship programs. In addition, employers may be able to claim some expenses for training as a federal tax credit.
- **Federal Resources:** Businesses and apprentices can access funding and other resources from many federal programs to help support their Apprenticeship programs.

Other benefits abound. Most notably, employers report a **91% retention rate** of apprentices who remain on the job nine months later after their program has ended (*Source: U.S Department of Labor*). For employees, they are working and learning, have an average starting salary of \$15/hour with wage increases as they obtain skills, and earn a nationally-recognized credential at the end. The average wage for a fully-proficient worker who completes an apprenticeship is \$50,000 annually. Apprentices who complete their program earn approximately \$300,000 more during their career than non-apprenticeship workers. (*Source: U.S. Department of Labor*.)

In addition to high wages, the credential piece is important as more and more employers look for nationally-recognized industry credentials for their workforce. The Manufacturing Skill Standards Council's Certified Production Technician (CPT) program stands out and is part of the U.S. Department of Labor's registered apprenticeship and pre-apprenticeship programs. Accredited under ISO Standard 17024 (Personnel Certification) the CPT program maintains

annual quality and content audits to remain up-to-date with manufacturing work. The CPT is embedded in over 60 apprenticeship programs registered with DoL and has been recognized as a “quality pre-apprenticeship” because of its cross-functionality.

- In November 2014, US Department of Labor Office of Apprenticeship (DOL/OA) officially registered the Industrial Manufacturing Technician (IMT) occupation, which embeds CPT certification in its Related Training. It is used by companies as the foundation for a traditional 3,000-hour U.S. DoL Registered Apprenticeship (RA). ***It is available only to full-time incumbent workers.***
- In January 2018, DOL Office of Apprenticeship approved a MSSC CPT Pre-apprenticeship as a “Quality Pre-apprenticeship program available nationwide. ***It is available only to enrolled high school students.***

Pre-apprenticeship programs are key to building the talent pipeline for manufacturers because they reach those students who are enrolled in career pathways where the apprenticeship model can be utilized. Because CPT is foundational to all sectors of manufacturing, it is the perfect fit for the TRACK program (Tech Ready Apprentices for Careers in Kentucky). Currently, four Kentucky high schools have implemented CPT training for students in several manufacturing-related career pathways. Those students, and the companies that sponsor those programs, are prime for setting up a TRACK program that will lead to jobs and future employees.

So how do you set up a MSSC CPT Pre-apprenticeship program?

Pre-apprenticeships are designed to prepare individuals for traditional 3,000-4000 hour Registered Apprenticeships. The MSSC Pre-Apprenticeship CPT program includes a total of 720 hours and takes place over two years while the candidate is enrolled in high school. It consists of 160 hours of Related Training, which is based entirely on the full CPT program which includes hands-on training activities with the related Skill Boss CPT+ machine, and it secures the related MSSC CPT credentials in Safety, Quality Practices & Measurement, Manufacturing Process & Production and Maintenance Awareness. This Related Training can take place throughout the students’ sophomore, junior and senior years, combined with On-the-Job learning (OJL) of 560 hours in a manufacturing plant.

The in-plant OJL will require 280 hours (8 weeks) in the summer of their junior year and 280 hours (8 weeks) in the summer of their senior year for which the student will receive wages from the company sponsor. The four Kentucky high schools currently offering the CPT, which are part of the Academies of Louisville, currently engage employers to sponsor their manufacturing programs by providing mentors, facility tours and classroom visits to the students. Employing these students during the summer for their OJL is an excellent path for both the company and the student, leading to secured employment and full apprenticeship after graduation.

While the MSSC Pre-apprenticeship provides a solid foundation for any traditional, longer-term Registered Apprenticeship for front-line manufacturing production work, it is an ideal prep for IMT. Any MSSC credentials secured in the pre-apprenticeship can be credited towards the IMT RT requirements, which means that the employer does not have to pay twice. Also, the employer does not have to repeat the basic tasks in the IMT OJL already covered in the MSSC Pre-apprenticeship, a significant savings in time and cost.

The opportunity is now for both employers and future workers who engage in pre-apprenticeship and apprenticeship programs: tax credits, secured employment, and high wages for workers.

Move forward today by contacting the references listed below this article so your company can build an apprenticeship program that will grow your workforce and your productivity.

For additional information on apprenticeships, visit the [U.S. Department of Labor FAQs](#).

For additional information on TRACK, visit [KY OCTE](#).

For more information on the [Certified Production Technician \(CPT\)](#) program, contact LeeSa Page, Senior Advisor to MSSC at lpage@msscusa.org or 502-612-8450.

The non-profit, industry-led [Manufacturing Skill Standards Council \(MSSC\)](#) is the national leader in training and certifying individuals with the core technical competencies needed to begin careers in advanced manufacturing. Applicable to all sectors of manufacturing and part of the [NAM stackable credentials framework](#), the MSSC CPT is the technical foundation for building the manufacturing pipeline since its focus is on the entire population of entry-level workers for all production jobs.