**APPRENTICESHIP:**

Apprenticeship is an agreement through which the apprentice gains instruction and support in exchange for work. The apprentice learns with masters of the trade, craft, or profession and begins an occupational career while contributing to the productivity of the company (or sponsor). The tradition of classroom and on-the-job training is embedded in a full range of over 1100 occupations in the United States and around the world. In every apprenticed occupation, the apprentice is instructed and supported at the same time he or she works. Student apprenticeship is contextualized learning in a specific career area or skilled occupation, which will prepare the student for post-secondary education or advanced placement within a Registered Apprenticeship Program.

**Registered Apprenticeship** is governed by two regulations 29 Code of Federal Regulations (CFR) part 29 Apprenticeship Programs, Labor Standards for Registration and 29 CFR part 30 Equal Employment Opportunity in Registered Apprenticeship. Registered apprenticeship standards must be developed for the occupation(s) that will be registered and meet the requirements contained in the revised Federal regulations, Title 29 CFR, Part 29. A Registered Apprenticeship program is sponsored by an employer or, in some cases, a labor union or trade association. Students who are enrolled in a Registered Apprenticeship are afforded a structured training opportunity. Apprentices are mentored on the job by a fully-trained individual and receive training in accordance with a written training outline. While most apprentices also attend classroom training in the evenings, the related instruction component can be deferred for high school students until after graduation. All hours worked while still in school are recorded.

Mentors at the work site can become better employees. Many employers report that when a veteran employee is passing along their skills to an apprentice, it re-energizes their work in a unique way. Employer sponsors of a Registered Apprenticeship program benefit from a highly skilled work force. In the plumbing and electrical trades, the program enables employers to ensure that employees qualify to take the journey level licensing exams. Offering a Registered Apprenticeship program also helps employers recruit and retain employees. Sponsors of the Registered Apprenticeship Program benefit greatly by collaborating with a pre-apprenticeship program. Students who complete pre-apprenticeship understand the rigors of the occupations and already have entry level skills needed for the occupation.

**Internship**

An internship is a temporary position with an emphasis on on-the-job training rather than merely employment, and it can be paid or unpaid. An intern is someone who wants to explore a short-term (six weeks to nine months on the average) options for their career pathway.
Pre-Apprenticeship: Pre-apprenticeship means simply a program that teaches basic technical and job readiness skills in preparation to enter a Registered Apprenticeship program. A pre-apprenticeship program can take many forms. A pre-apprenticeship program can provide classroom training and hands-on labs related to an apprenticeship occupation. It can also include paid work experience. The best pre-apprenticeship programs are set up with close collaboration between schools and a Registered Apprenticeship company/sponsor. Many pre-apprenticeship programs enable students to earn credit toward the completion requirements for a Registration Apprenticeship program.

ORC 5101:11-2-01 Ohio state apprenticeship council and the council office: A Registered Apprenticeship program is sponsored by an employer or, in some cases, a labor union. The Ohio Department of Job and Family Services, Ohio Apprenticeship Council, is the "registration agency" and ensures that all program guidelines are met. All Registered Apprenticeship programs must include paid on-the-job training, classroom training called "related instruction", and a progressively increasing wage scale. Apprentices are hired by the employer and can work part-time/full-time.

ORC 4109.07 Restrictions on hours of employment: (B) No person under sixteen years of age may be employed more than forty hours in any one week nor during school unless employment is incidental to bona fide programs of vocational cooperative training, work-study, or other work-oriented programs with the purpose of educating students, and the program meets standards established by the state board of education.

Definition of Student Apprenticeship: The minimum age for participation in a Registered Apprenticeship is 16, although some programs (due to safety) require apprentices to be 18. Apprenticeship programs vary in length between 2000 and 10,000 hours, depending upon the skill level of the occupation. Legislature authorizes student app A student apprenticeship is not a Registered Apprenticeship which must be registered by the state apprenticeship council under law. A student apprenticeship may lead into a registered apprenticeship program. It may be a multi-year program and the A student apprenticeship may or may not include financial compensation.

The statute defines a student apprenticeship program as "a skill-based education program which coordinates and integrates classroom instruction with a structured, work-based learning experience." The individual receives academic instruction and training in a direct employment opportunity.

Benefits to Students: An apprenticeship gives students an opportunity to connect what they've learned in the classroom to a real world job and learn all aspects of a trade. It increases the high school choices for students and upon successful completion, a student may receive advanced placement in a registered apprenticeship or in a college program. At graduation, a student who completes a student apprenticeship receives credit for both academic and occupational accomplishments. Students benefit from pre-apprenticeship by learning skills and behaviors that will lead to success as an apprentice. Students who have completed a pre-apprenticeship program are much more likely to be hired and registered as an apprentice.
Benefits to Schools
Apprenticeships increase practical hands-on learning options offered to students. They can provide a way for a student to learn skills in an area not offered currently in the school or in any other formal training program. Often, an apprenticeship will help a school meet a student’s learning style and career needs. A successful apprenticeship will also create good working relationships with the businesses in a school's area.

Benefits to Employers
Apprenticeships help businesses train future workers when it is hard to find skilled workers, especially in areas where no training or educational programs in that career area.

The Process for Setting Up a Student Pre-apprenticeship Program

Step (1): Market Research and Industry Outreach
Study your industries with the in-demand jobs within a fifty mile radius. Identify the jobs and skills required for those jobs. Approach the industry to serve on your advisory committees, offer tours, job shadowing, internship, and pre-apprenticeship experiences. Disseminate information to students who may be interested in being a student apprentice, including students who have completed some technical education. Ask guidance counselors to notify you when a student has an interest in an area where no technical education program or academic class exists. Let students know of current student apprentice opportunities. Provide open houses for parents, students, counselors, and ask the industry to participate.

Step (2): Recruit a Business Partner
Check to see if there are any companies which practice the specific trade in the skill area. Also contact trade associations such as the Associated General Contractors, Vermont Subcontractors Association, dealer associations, etc. Make a list of potential sites for the student apprentice and contact all sites personally. A student apprenticeship is an intensive commitment and will require a strong partnership between the school and the work site.

Step (3): Identify Potential Student Apprentices
Provide information to students who may be interested in being a student apprentice, including students who have completed some technical education. Ask guidance counselors to notify you when a student has an interest in an area where no technical education program or academic class exists. Let students know of current student apprentice opportunities through an orientation and/or outreach initiative. Remember that a student apprentice must be supervised by a student apprenticeship (School-to-Work Coordinator) or job placement coordinator.

Step (4): Orientation to Prepare Students and Parents
A student apprenticeship is a serious commitment. Talk with the student about the proposed career and what they will be expected to do and to learn. Discuss with the student their own strengths and weaknesses and if the apprenticeship is a good match. Discuss with the parents and students the future career goals and how the student apprenticeship will help them reach those career goals. Make sure that the student has the
prerequisite skills needed for the experience and the appropriate clothing and accommodations needed for the particular work site.

**Step (5): Prepare the Employer (apprenticeship agreement)**

Assist the employer in identifying a qualified mentor at the work site. A mentor should be skilled in the craft, skilled in teaching, and have a temperament to work with young people. Provide all the necessary information to the employer and mentor, including any legal or insurance issues about which they should be aware. Some schools have provided formal training on working with students to mentors and employers when the school has more than one student apprenticeship in place. The company will sign an agreement with the school outlining training competencies, and goals.

**Step (6): Application Process/Early or Advanced Placement**

Schools are already prepared to place students through early or advanced placement. The application process may include an interview with the student (matching personality, level of skills, and expectations to the employer), completing the application with two-three teacher recommendations, and establishing entry guidelines (e.g. student must have a 2.5 or 3.0 GPA in their career field, 95% attendance rate, and their own transportation). Some schools work out a transportation shuttle with the employer or the trade associations.

**Step (7): Draft a Student Apprenticeship Training Plan (training outline)**

Upon recruiting a business partner to enter into an apprenticeship agreement, draft a student apprenticeship plan (training outline). The plan is a highly detailed training plan based on industry standards and includes prerequisite education and training, industry competencies, related academic training linked to academic standards and evaluation procedures. Work with the participating industry partners to refine the plan until satisfactory to both the school and employer. Work with the school to determine how much school credit will be awarded for completion of the student apprenticeship.

**Written Plan:** The program must have an organized, written plan (program standards) embodying the terms and conditions of employment, training, and supervision of one or more apprentices in an apprenticeable occupation. Some of the key components required in program standards are provisions that address:

1. The employment and training of the apprentice in a skilled occupation; the identified term of apprenticeship, whether completed as a time-based, competency-based or hybrid (and combination of time and competency) program;
2. An outline of the work processes in which the apprentice will receive supervised work experience; - Provision for organized, related instruction in technical subjects related to the occupation; -
3. A progressively increasing schedule of wages;
4. Periodic review and evaluation of the apprentice's performance on the job and in related instruction;
5. A numeric ratio of apprentices to journeyworkers consistent with proper safety and supervision;
(6) A probationary period reasonable in relation to the full term of apprenticeship; - Adequate and safe equipment and facilities for training; Minimum eligibility requirements;
(7) The placement of an apprentice under a written Apprenticeship Agreement; - The granting of advanced standing or credit when applicable;
(8) The ability to transfer an apprenticeship from one program to another;
(9) Recognition for successful completion of apprenticeship (Completion Certificate);

**Step (8): Obtain Approval for the Student Apprenticeship Plan**
A student apprenticeship is guided by a student apprenticeship plan based on industry standards. This plan outlines the learning components of the apprenticeship and serves as a basis for instruction and evaluation. Present the draft plan to the career and technical center regional advisory board for review and approval or district representative(s); obtaining the appropriate signatures.

**Step (9): Implement the Plan**
Schedule the student's work days based on how much time is needed to learn the skills outlined in the student apprenticeship plan. Apprentice hours are set according to the employer's schedule and the employer's business hours. Make the schedule replicate true working conditions at the work site—full days, if possible. Some schools utilize the two week “on” at the worksite for the student and two weeks “off” in class at the school, while the second group of students switch places, always having an apprentice at the work site. A coordinator will need to work closely with and negotiate with both the school and employer. Schedule a day and time that is convenient to visit the employer at the work site. This will give you an opportunity to discuss any questions the employer might have as well as giving you an opportunity to become familiar with the site where your student will be working. Talk with the employer about how the student's safety will be ensured. If a student needs accommodations at the work site, agree on who will make the arrangements. Discuss with the employer legal and risk management issues. Make sure the student has health and accident coverage and that the school and employer have the appropriate insurance to reduce their risks. Areas of instruction related to the apprenticeship should be coordinated and provided to the student apprentice. For example, if a student needs algebraic skills at the work site, arrange the student's schedule to include an algebra class. If a student needs keyboarding skills, a student may receive tutoring before or after their work day.

**Step (10): Ongoing Monitoring and Student Evaluation**
The coordinator must maintain regular contact (weekly is best) with the student to assess progress, conduct, commitment, and to ensure that the work site is providing the agreed upon learning opportunities. The coordinator should have regular contact with the apprenticeship site, particularly with the mentor, to gauge the direction of learning and the level of satisfaction with the program for all involved. Formal evaluations should be conducted at regular intervals, during which the student, mentor, and coordinator review the student apprenticeship plan. These evaluations should gauge the level of competence related to the identified industry standards and evaluate the student's general workplace
skills. From these evaluations, the direction of short-term training should be identified and agreed upon.

**Step (11): Evaluation and Reflection**
The final evaluation and assessment should be based on the competencies in the student apprenticeship plan. Identify specific skills the student has mastered and report them in a way the student can use them to connect to the next skill level in a registered apprenticeship program, a job, or further education. Assess the experience with the employer, mentor, and student, and use the information to improve future student apprenticeships. All participants should receive recognition. The apprentice and coordinator should thank the employer and the school may want to formally recognize the employer with a certificate.

**Contacts:**
How to Set Up a Pre-apprenticeship Program: Schools can contact Registered Apprenticeship sponsors directly to inquire about their interest in collaborating to set up a pre-apprenticeship program. Guidance can also be obtained by calling the Ohio Department of Education, Career-Technical Education, Linda O’Connor, Assistant Director/Apprenticeships and Work Based Learning, (614) 644-6095, linda.oconnor@education.ohio.gov and the Ohio State Apprenticeship Council, Patrick Reardon, Executive Administrator, (614) 644-0863, patrick.reardon@jfs.ohio.gov

**Models**

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Recruitment and Partnerships

Resource: Toni Neary is an educational specialist for the Government and Education Group of Tooling U-SME, an industry leader in manufacturing training and development. This group provides a unique perspective to educators, bringing knowledge and relationships from both its corporate side of the business, which works with more than half of all Fortune® 500 manufacturing companies, as well as its sister organization, the SME Education Foundation. Tooling U-SME can be found at toolingu.com, facebook.com/toolingu or follow @ToolingU on Twitter Provides the following (2015):

Create a strong advisory committee. The most progressive schools have a well-rounded advisory group comprised of industry partners and leaders that advise them on the content and direction of their program. Typically a mix of small/medium and large companies. These committees can help with funding, securing new equipment, recommending technology, getting support of the school system, job placements/co-op opportunities and building awareness of your programs. The more these leaders get to know you and your program, the more they become advocates to help your program flourish. There is a bonus for them, too, as they have direct access to an important pipeline of skilled workers.

Build strong local partnerships. Leverage the success and expertise of those around you to help your program. Comparing notes and learning from other’s experiences has great value. Other schools have likely faced similar challenges with enrollment, funding and more, and can provide helpful insight. For instance, in Ohio, schools participating in Skills USA have a regional meeting where the instructors talk about topics such as what is working and how to overcome challenges to make their students stronger. Look for connections through regional skills contests or through other associations and groups in your area. LinkedIn is a valuable resource for finding groups. Also, talk with your vendors and find out who in the area has a similar program and if they know of any conferences that may be good for you to attend.

Share the good news. Many schools have amazing accomplishments from placing 100% of their students in local jobs to seeing their students take a gold medal at the National Skills USA competition. Success begets success, and the community needs to know about it. Certain schools do this well by creating news releases about students’ accomplishments and working with industry partners to get the word out. Celebrate your successes, and your program may be featured in the daily paper. This visibility helps attract students and their parents, recruit advisory members and interest local companies who want to hire your students.

Enlist students to spread the word. It’s a social world and students of all ages like to talk about their experiences in person or via social media. By tapping into your most enthusiastic and positive students, you can offer them as “ambassadors” to those considering attending your school. Yes, sometimes students respect another student’s opinion over that of instructors! These “stars” can talk about different classes, the flexibility of 24/7 access through online training courses, lead tours and more. Many instructors also stay in touch with recent graduates, inviting them back to talk with classes about their experiences in the workplace or asking them to participate in an advisory role. These former students are direct ties to companies looking for a skilled workforce, which is great news for your students. Without a doubt, staying connected to current and former students helps attract that next generation within their career fields.

Share those metrics. Parents sometimes need convincing that manufacturing, construction, or other fields provide the opportunities of a long-term career. It is important to emphasize success metrics such as placement rates, postsecondary education and pay rates for your specific program/area. Post these on
your website, use metrics in your marketing materials, share via social media, etc. This reinforces that students are starting careers, not jobs.

**Manufacturing:**

Modern-day manufacturing has come a long way in 30 years, and working with partners that have a vested interest in the viability and success of your program helps you recruit students and grow your program. Most importantly, this helps students appreciate that manufacturing is an exciting, high-tech field with extraordinary opportunities to learn, problem solve and advance to new levels.

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**Forms/Templates**

[http://education.ohio.gov/Topics/Career-Tech](http://education.ohio.gov/Topics/Career-Tech)

**Apprenticeships and Internships**

- Parent/Student Orientation Power Point
- Recruitment Letter
- Rules and Guidelines of the Program
- Application
- Interview Request
- Job Shadow Request
- Teacher Recommendations
- Training Plan
- Employer-Student Agreement
- Student-Parent Agreement
- Weekly Work Report
- Time Sheet
- Labor Laws
- Employee/Employer Bi-weekly Evaluation
- Apprenticeship Calendar
- Early or Advanced Job Placement Check List