

Appendix B

Wisconsin Science, Technology, Engineering, & Math (STEM) Youth Apprenticeship Implementation Guide for Employers

BENEFITS TO THE EMPLOYER

The Science, Technology, Engineering, & Math (STEM) cluster provides thousands of career opportunities for learners with an interest in math, science, and problem-solving. Students who pursue one of these careers will be involved in planning, managing, and providing valuable scientific research and technical services. Job possibilities abound even in economic downturns as more scientists and engineers are called upon to control and solve problems ranging from the environmental to the economic, the aeronautical to the zoological¹.

Employment of scientists is projected to grow about as fast as the average for all occupations. Opportunities will differ by specialty; however, biologic scientists are expected to increase faster than the average. Growing numbers of agricultural and medicinal products from biotechnology research will drive this demand. Employment will be best for those workers well trained on equipment used in laboratories or production facilities².

The outlook in engineering is the same with opportunities varying by specialty. Biomedical engineers should experience the fastest growth, while civil engineers should see the largest employment increase spurred by population growth and related infrastructure demands².

By working with the STEM Youth Apprenticeship Program you make an investment in the young people in your community. You will have access to a dependable recruitment pipeline of entry level workers that can be used to increase workforce diversity and provide supervisory opportunity for staff. You will be directly involved in the economic development efforts of your community as well as become a part of the creation of highly skilled workers, an excellent point in any public relations marketing.

A unique opportunity and added incentive for participation in the STEM Youth Apprenticeship Program for both the employer and the student is that the competencies are aligned with the curriculum objectives of the Project Lead the Way and STEM Academy high school engineering and biomedical programs, the national occupational skill standards recognized by the National States' Career Cluster Skill Standards in STEM, <http://www.careerclusters.org/>, and the Secretary's Commission on Achieving Necessary Skills (SCANS).

¹ STEM Career Cluster Brochure, www.careercluster.org, October 2008.

² Department of Labor, Occupational Outlook Handbook, 2010-11.

Employers also play an active role in improving the quality of the future workforce by helping develop skill standards geared to employer needs, reducing employee turnover by hiring program graduates, supporting program graduates as they continue their education in post-secondary settings, raising the interest of other employees in education and training, and increasing the potential for teamwork and flexibility in work sharing. One employer noted, “This program is the single most effective use of taxpayer dollars to link our business community to the workforce and training needs of the community. We must expand, celebrate, promote and encourage participation in this endeavor. I have personally gained staff, changed some lives, and enjoyed the successes of the participants. It has enriched our staff in learning to operate as mentors, and enhanced our perception in the community as involved participants.”³

ROLE OF THE EMPLOYER

The work-based learning component of the Youth Apprenticeship Program is the **primary** method for teaching the required competencies. The local business becomes an extension of the classroom for the youth apprentice. The related classroom instruction is intended to *support* the work-based learning experience by providing theoretical knowledge and, when needed, providing appropriate skill development. The work-based learning component is designed to provide an on-the-job learning environment for students by being “apprenticed” to an experienced mentor.

As an employer of a youth apprentice, you will be responsible for the following:

Student Selection

Review employment applications, interview candidates, and select the student(s) they want to hire. New Employee Orientation is provided by you according to your facility’s Human Resources policies.

Wages

Youth apprentices must receive minimum wage or higher. A pay schedule is agreed upon with the employer, local YA coordinator and the student. Most employers grant periodic raises dependent upon performance or length of employment.

Workers Compensation

Once a youth apprentice becomes a paid employee they must be covered by the employer’s workers compensation coverage. Other benefits may be provided at the discretion of the employer.

Education/Training Agreement (ETA)

Employers must sign and comply with the requirements in the ETA, and have a copy on file. See *Appendix A “Work Contracts, Child Labor Laws, Liability & Insurance”* for more detail.

³ Kent Olson, YA Employer, Wausau, WI

Work Permits

See *Appendix A “Work Contracts, Child Labor Laws, Liability & Insurance”* for more detail.

Child Labor Laws

Employers must ensure that the work of any student at their worksite is allowed by Child Labor Laws and is under the direct and close supervision of a qualified and experienced person. Students must be provided with adequate safety training both in the school and at the worksite. All STEM Youth Apprenticeship skill standards competencies have been reviewed by the Wisconsin Department of Workforce Developments Labor Standards Bureau and are in compliance with the child labor rules.

See *Appendix A “Work Contracts, Child Labor Laws, Liability & Insurance”* for more detail.

Unemployment Compensation

YA students are typically not eligible for unemployment compensation from the employer.

See *Appendix A “Work Contracts, Child Labor Laws, Liability & Insurance”* for more detail.

Job Performance

Employers review, evaluate, and report on the youth apprentice’s job performance approximately every nine weeks to ensure they are learning the required competencies. Mentors are expected to participate in progress reviews with the apprentice, school staff and/or Youth Apprenticeship instructors, and parent(s)/guardian(s).

Worksite Hours

Employers must provide for the youth apprentice to meet the following work requirements:

- Youth Apprentices in a Level Two (2-year) program must complete a *minimum* of 900 hours of work-based learning while they are enrolled in the program. At least 500 hours of the required minimum work-based learning hours must take place when related classes are being held, so that classroom instruction can be integrated with worksite learning.
- Youth apprentices in a Level One (1 year) program must complete a *minimum* of 450 hours of work based learning while they are enrolled in the program. At least 250 hours of the required minimum work-based learning hours must take place when related classes are being held, so that classroom instruction can be integrated with worksite learning.
- Youth apprentices may work *more* than the required minimum hours throughout the program as long as they do not exceed the daily or weekly hours allowable under the child labor laws.

Training to Competencies

The employer is responsible for providing the worksite training required to meet the skills standard competencies specified in the applicable STEM area. This requirement means that while the youth apprentice may be hired under one particular job function, he/she must be allowed to rotate and perform other functions in other departments to meet competencies if some of them are not normally a part of that job function.

Mentors

Employers assign worksite mentors to supervise and train youth apprentices. They also allow the mentors to attend special training classes provided by the local YA consortium to become successful mentors of high school apprentices. See “Role of Mentors” below for more detail.

Organized Labor

Usually the STEM Youth Apprenticeship is considered an educational activity rather than a job classification/position status. However, the youth apprenticeship program should not impair existing contracts for services or collective bargaining agreements. Any youth apprenticeship program that would be inconsistent with the terms of a collective bargaining agreement shall be approved only with the written concurrence of the labor organization and employer involved. If youth apprentices will be working in areas covered by labor agreements, organized labor must be involved to approve the program at the worksite.

See *Appendix A “Work Contracts, Child Labor Laws, Liability & Insurance”* for more detail.

ROLE OF THE MENTOR

Workplace mentors are one of the most critical elements which often determine the success of a youth apprenticeship. One mentor may work with more than one youth apprentice at a worksite, and the mentor may assign multiple “trainers” to instruct the youth apprentice while they rotate among various departments.

Effective Mentor Qualifications.

- Experience working with adolescents either on the job, through family, or through outside activities
- Effective teaching/training skills with adults and/or youth
- Highly skilled in the area in which the youth apprentices will be trained
- Good communication skills in the workplace
- Knowledge of and commitment to the STEM Youth Apprenticeship program

Mentor Responsibilities.

- Develop a cooperative training schedule for the youth apprentice to ensure performance of the required work-based skills
- Work with instructors to coordinate the application of classroom learning objectives to the worksite
- Communicate regularly with the school, YA coordinator, and the instructor to ensure work-based learning objectives are being met
- Demonstrate tasks to youth apprentices and explain their importance
- Identify other trainers appropriate to train youth in the required competencies
- Evaluate the youth apprentice's progress on a regular basis and document achievements and skills
- Meet with the student, the student's parent(s)/guardian(s), and school staff and/or YA instructor at least once each grading period to review and update them on the student's progress
- Provide encouragement, support, and direction about the work site culture and skills
- Help the youth apprentice build self-confidence and self-esteem
- Be alert to personal problems that may affect the apprentice's work performance and guide them to seek help from appropriate sources
- Attend mentor training workshops and mentor meetings

Obtain additional resources for mentoring guidance from your YA coordinator.

CHECKLIST FOR PROGRAM PARTICIPATION

The following checklist will help you to participate in an STEM Youth Apprenticeship (YA) Program. Youth Apprenticeship coordinators are available to meet at your location to facilitate any phase of the YA program.

- Discuss the STEM YA program with the local partnership that offers Youth Apprenticeship Programs.
- Consult with the management team of your organization and union officials, if applicable.
- Obtain approval from appropriate organization officials to hire youth apprentices.
- Identify mentors and arrange for mentor training through your local YA Coordinator.
- Interview STEM YA candidates for the program.
- Select youth apprentice(s).
- Sign Education/Training Agreement (ETA).
- Secure a Work Permit form.
- Orient your new youth apprentice to the workplace according to your organization's Human Resources policies.

CHECKLIST FOR PROGRAM OPERATION

The following checklist will help ensure continued operation of the STEM Youth Apprenticeship (YA) Program.

- Provide worksite training according to the STEM Youth Apprenticeship Area curriculum.
- Participate in progress reviews with youth apprentices, school staff and/or YA instructors, and parents/guardians.
- Meet regularly with the youth apprentices to discuss their performance and any other issues.
- Employ youth apprentices during school breaks, either part-time or full-time.
- Participate in recognition events organized by the school for youth apprenticeship graduates.

FREQUENTLY ASKED QUESTIONS

For questions not addressed here, do not hesitate to call your local youth apprenticeship coordinator or visit the [Department of Workforce Development Youth Apprenticeship website](#).

How does this program differ from other work-based programs like coop education?

Skilled Certified Coop Education and Youth Apprenticeship are similar in that they are both components of Wisconsin’s overall school to work transition programs. An important difference, however, is that Youth Apprenticeship students are exposed to an occupational cluster versus a specific job. Additionally, the skills the student learns are developed in association with Wisconsin STEM personnel, Wisconsin technical college faculty, YA consortium coordinators, and school district coordinators/instructors. The curriculum is standardized throughout the state.

Will the mentor have to spend his/her entire time at work teaching the student?

No. Apprentices need to be supervised, but you are not required to “shadow” them at all times. However, someone should be available for guidance as necessary. One mentor may work with more than one youth apprentice at a worksite, and the mentor may assign multiple “trainers” to instruct the youth apprentice while they rotate among various departments.

Will the student do productive work?

Yes. After appropriate training, youth apprentices can become productive employees of the facility. However, since they are often rotated through different departments they will require more training time than employees who stay in the same department. It is important to remember that this is a training program. Upon completion of the probationary period, students are expected to meet the requirements of the position.

Will there be a lot of paperwork for me to complete?

Prior to the program, employers are required to sign the Education Training Agreement and maintain it. During the program, employers are expected to verify the youth apprentice’s skills on the job and provide input during grading periods. Mentors must

complete/maintain a simple “Skill Standards Checklist” as the student completes their competencies.

What happens if I cannot provide all of the required competencies at my facility?

In order to successfully complete the program and receive a Certificate of Occupational Proficiency, the youth apprentice must demonstrate proficiency in all areas required on the Skill Standards Checklist. If your facility does not provide the full range of services needed for competency mastery, the local youth apprenticeship coordinator may be able to arrange for the missing skills to be provided by another company. This arrangement should be discussed with the coordinator before you hire the youth apprentice.

What costs will my business incur and will I be reimbursed?

Primary costs to the employers are the wages paid to the youth apprentice and mentor during the training period.

Will I have to treat the youth apprentice differently than my other employees?

It is important to remember youth apprentices are placed in your facility to learn. Patience and guidance are required while they learn responsible work habits as well as the required skills. However, they are expected to follow your facility’s work rules, e.g., dress code, behavior, discipline, etc., and to become a productive member of the STEM team.

What is the typical time frame for activities over the course of a youth apprentice’s stay with a facility?

Most program activities follow a one-year or two-year cycle depending on the offerings within your company. There may be variance in the timing of learning activities to accommodate local and seasonal needs including trainer availability.