Statistics prepared by the U.S. Bureau of Labor Statistics underscore the fact that most jobs require skills. In 1950, 60 percent of all jobs were classified as unskilled. By 2000, only 15 percent of all jobs were classified as unskilled. This is where apprenticeships can play a key role. Registered Apprenticeship is a proven training strategy that prepares individuals for careers that demand a wide range of skills, knowledge, and independent judgment. For youth and adults—whether entering the labor force for the first time or changing careers—apprenticeship provides the opportunity to make the transition.

Historically, apprenticeships have been viewed as alternatives to post-secondary education, but today they are considered as an adjunct to other forms of higher education.

Research shows that apprenticeship programs directly correlate to higher wages. An apprentice is practically guaranteed a good-paying job in a few years with much potential for advancement. Studies have also shown that employees who have completed apprenticeships stay in their positions longer than their non-apprenticed peers.

**History of Apprenticeship**

The concept of apprenticeship can be traced back to earlier civilizations when the approach was used to transfer skills from one generation to another. In fact, some of America’s early apprentices were famous figures in our nation’s history. George Washington was a surveyor, Benjamin Franklin a printer, and Paul Revere a silversmith. In modern society, apprenticeships keep alive a knowledge of many crafts and skills that in other times were passed on largely by family tradition. For example, the bricklaying trade has been well represented in the McGlade family of Waterloo, Iowa. Eight bricklayers had appeared on the family tree by the middle of the century, descended from an Irish stonemason who settled in Cedar Falls, Iowa, during the last part of the 1800’s.

The first legislation in the United States to promote an organized system of apprenticeship was enacted in Wisconsin in 1911. The law placed apprenticeship under the jurisdiction of an industrial commission, and included safeguards for both the apprentice and the employer. Wisconsin’s law became a model for other states and for the federal government.

The National Apprenticeship Act of 1937, also known as the Fitzgerald Act, authorized the Federal government, in cooperation with the states, to oversee the nation’s apprenticeship system. Today, the federal agency that oversees apprenticeships is called Apprenticeship Training and Employer Labor Services (ATELS). The agency’s functions are advisory and promotional, and it works closely with employers, employer associations, labor organizations, educational institutions and state apprenticeship agencies.

**How Does an Apprenticeship Program Work?**

Apprenticeship is career preparation. An apprentice is usually a full-time employee who is learning while earning. In a “hands-on” environment, the apprentice is placed under the oversight of a skilled journey worker. The beginning wage, about half that of a journey worker, increases as the apprentice learns and performs more complex tasks proficiently.
Apprenticeship programs combine on-the-job training with formal, classroom instruction. It is one of the few training approaches, public or private, that is driven directly by the demand of the industry. Traditional apprenticeship programs require a specific number of hours of on-the-job training. Increasingly, industries are requiring competency-based training programs that reflect mastery of key skills, and allow motivated workers to progress at their own pace. However, these programs still have to comply with the requirement for the allocation of the approximate time to be spent in each major process. In addition to these two types of programs, a third alternative has evolved which, in effect, is a “hybrid” of the two programs previously mentioned. The program is basically a combination of time and performance achievements.

The formal, classroom training helps apprentices learn the theories underlying the work they perform. For example, an apprentice may be required to learn higher mathematics and how to read blueprints. Formal instruction can be obtained in a variety of formats. Many apprentices attend a vocational school or community college one or two evenings a week after work, while others attend school full-time for a few weeks each year. Others may obtain their classroom instruction via the Internet.

Requirements of an Apprenticeship Program

All apprenticeship programs require at least one year or 2,000 hours of on-the-job training and a recommended 144 hours of formal instruction. In general, most programs last one to five years. Currently, there are more than 1,000 occupations that are apprenticeable in all major industries in the United States, and the list is growing.

In Iowa, there are currently 500 Registered Apprenticeship Programs with 4,921 active apprentices. While apprenticeship has long been a proven training model for the trades, apprenticeship is also keeping pace with the economic changes of the 21st century and offering skills development, competency-based training, and interim credentials in high growth, high demand industries. Examples of these high-growth areas are: advanced manufacturing, automotive, biotechnology, financial services, geospatial technology, green/clean energy, health care, homeland security, hospitality, information technology, nanotechnology, retail trade and transportation.
How to Qualify for an Apprenticeship

There is a standard application procedure for all registered apprenticeships. Applicants must complete the forms, and take any required tests. Admission requirements and eligibility vary by program because program sponsors define them according to their specific training needs. All apprenticeship programs require applicants to be at least 16 years old, and most programs require applicants to be at least 18. Programs also require applicants to have a high school diploma, or a passing score on the high school equivalency exam.

Certification

Apprentices receive a nationally recognized certificate from the U.S. Department of Labor upon completion of a registered program. The primary apprentice certification is a Certificate of Completion, which is awarded at the end of the apprenticeship. These certificates are highly portable, and they are accepted by employers nationwide. Many apprenticeship programs—particularly in high-growth industries such as advanced manufacturing, health care, and transportation—also offer interim credentials and training certificates based on a competency model that leads to a Certificate of Completion.

Sponsorship

A single employer, group of employers, labor organization or employer association may choose to sponsor an apprenticeship program. By sponsoring an apprenticeship program, employers can build employee loyalty, reduce training costs, attract better applicants, and improve productivity. The sponsor of an apprenticeship program plans, administers, and usually pays for the program. In some areas of the country, colleges, faith-based organizations, and public employment agencies have begun to collaborate with business and industry to sponsor registered apprenticeship programs through employer-participation agreements. All programs are registered with the U.S. Department of Labor, or a federally recognized State Apprenticeship Agency. A formal agreement is put into place between the program sponsor and the apprentice that specifically outlines the requirements of the program.

Benefits of an Apprenticeship Program for the Employer:

- Provides a skilled workforce that is trained to industry standards
- Provides an effective way to screen new employees both during and after the program
- Reduces absenteeism and turnover
- Increases employee motivation and productivity
- Keeps companies competitive by improving quality of product or service
- Emphasizes safety training that may reduce worker compensation costs
- Encourages a closer relationship between management and employee

Benefits of an Apprenticeship Program for the Employee:

- Provides an opportunity to obtain a higher level of education and skills
- Identifies a detailed, planned training schedule during the term of apprenticeship
- May count as credit toward an associate degree upon successful completion of the program
- Potential for career advancement
- Entitles veterans to collect training benefits from the Veterans’ Administration
- Provides an increasing scale of wages during training period
- Provides portable credentials recognized nationally and often globally
- Builds self-esteem
Apprenticeable Occupations

Any occupation can be registered as apprenticeable if it meets four criteria:

- It is clearly defined and commonly recognized throughout an industry;
- It is customarily learned on the job;
- It requires manual, mechanical, or technical skill; and
- It requires at least 2,000 hours of work experience and, at least 144 hours of related classroom instruction to supplement the on-the-job training.

Wages for Apprentices

Wages are paid to an apprenticeship during the term of the apprenticeship. The wages represent a portion of the skilled wage rate that increases progressively throughout the training program in accordance with a predetermined wage scale. Wage increases occur in both related instruction and on-the-job training until wages reach 85 to 90 percent of the rate paid to the journey worker in the occupation.

Finding an Open Program

Individuals interested in apprenticeship can contact the State Bureau of Apprenticeship. This agency has a list of current programs:

Greer L. Sisson, Iowa State Director
U.S. Department of Labor/Office of Apprenticeship
210 Walnut, Room 715
Des Moines, Iowa 50309
Phone: 515-284-4690
Fax: 515-284-4195
e-mail sisson.greer@dol.gov

Additional information on Registered Apprenticeship can also be accessed from the Iowa Workforce Development website at: http://www.ioaworkforce.org/apprenticeship/