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# Apprenticeship Training: Where Does It Stand Today?


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# Apprenticeship Training: Where Does It Stand Today?

## **Abstract**

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## **Keywords**

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## **Disciplines**

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## APPRENTICESHIP TRAINING Where Does It Stand Today?

by Lois S. Gray  
and Alice O. Beamesderfer

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**History and Legal Status.** In its simplest form, apprenticeship has existed since the beginning of civilization. More than 4,000 years ago, Hammurabi's code provided that artisans teach their crafts to young people, and our earliest records from Egypt, Greece, Rome, and the Orient show that skills were being passed on from one generation to the next in this way.

In the Middle Ages, craft guilds strictly regulated the apprenticeship system. Apprentices' admission, advancement, behavior, penalties, and work rates were closely supervised by guild members.

In America, apprenticeship began when craft workers from Europe brought with them the old practice of indenture and the system of master-apprentice relationships. In exchange for food, clothing, and shelter, colonial apprentices (who were usually 14 or younger) lived and worked with a master for a given number of years. Northern colonies used the apprenticeship system to punish debtors and to deal with the poor; Southern colonies substituted indentured servitude and slavery.

With the industrial revolution and the beginning of the machine age in this country, the apprenticeship system began to change dramatically. For the first time, apprentices began receiving wages, but they were meager by today's standards. The close personal relationship between master and apprentice disappeared, along with the educational aspects of apprenticeship, and working conditions grew worse. In addition, a major innovation growing out of the industrial revolution - the division of labor - began to affect apprenticeship in the 19th Cen-



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**EDITORIAL ADVISORY COMMITTEE:** Henry S. Com mager, Professor of History, Amherst College; Richard W. Cortright, Division of Instruction and Professional Development, National Education Association; Sister Sarah Fasenmyer, Dean, School of Education, Catholic University of America; James W. Fesler, Professor of Government, Yale University; Eric F. Goldman, Professor of History, Princeton University; Philip Handler, President of the National Academy of Sciences; Richard I. Miller, Associate Director of Programs, Illinois Board of Higher Education; Robert Spiller, Professor Emeritus of English, University of Pennsylvania, and Past-President of the American Studies Association.

**EDITOR:** Townsend Scudder, President of the Center -----

ture. Craft workers who had been hiring apprentices for five years to teach them every aspect of their trade began teaching only one part of a job that could be mastered in a few months.



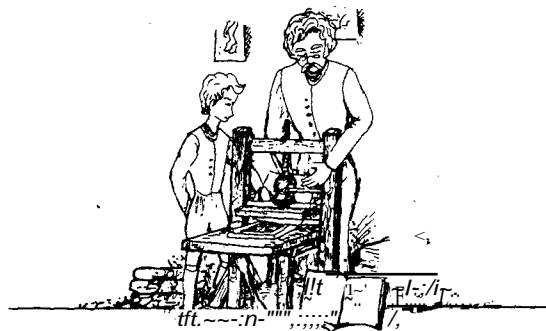
The need for a national, uniform system of apprenticeship and for comprehensive rather than "piecemeal" training became clear during the economic boom which followed World War I. Because immigration had been sharply limited, few workers were entering the United States from other countries, and there was a serious shortage of skilled labor.

To deal with these problems, Congress in 1937 passed the National Apprenticeship Law, popularly known as the Fitzgerald Act. The purpose of the law was:

"... to promote the furtherance of labor standards of apprenticeship ... , to extend the application of such standards, by encouraging the inclusion thereof in contracts of apprenticeship, to bring together employers and labor for the formulation of programs of apprenticeship, and to cooperate with state agencies in the formulation of standards of apprenticeship."

Since the passage of the Fitzgerald Act, apprenticeship opportunities for young people have increased substantially. According to the 1977 *Employment and Training Report of the President*, 368,000 apprentices received training in 1975 under programs served by state and federal apprenticeship agencies. The report says there are about 41,000 registered apprenticeship programs in the United States; more than 82 percent of these are sponsored by single employers without union participation. Nevertheless, most apprentices today are trained under joint employer-union agreements which cover all of the large programs.

**How Apprenticeship Works.** In keeping with the United States' traditionally decentralized system of administering social legislation, regulation of apprenticeship



programs is delegated to individual states which choose to exercise this responsibility. State apprenticeship regulations must conform to minimum guidelines set by the Federal Bureau of Apprenticeship and Training, but additional requirements may be added. Employers and unions apply for official registration of their apprenticeship arrangements, and government inspectors

check out work sites and classrooms to verify that the requirements are being met. This kind of enforcement protects apprentices and prevents young people from being hired as "cheap labor" with no prospect for acquiring journeyman status.

The federal apprenticeship law requires: (1) a planned system of training in all aspects of the trade, (2) on-the-job experience of 2,000 hours per year, (3) related instruction of 144 hours per year, (4) progression in wage rates to the journeyman's level, and (5) an agreed upon ratio of apprentices to journeymen. When a program fails to meet these requirements, its registration is not approved, and programs which lapse in meeting the requirements can be de-registered. Thus, the federal apprenticeship law insures that apprenticeship programs provide a learning experience and progression in rates of pay for apprentices.

**Current Practices in Apprenticeship.** Despite advances in apprenticeship training, registered apprentices are still a minority of workers seeking skilled training. In construction, for example, a recent report in the *Monthly Labor Review* indicated that "less than half of the craftsmen learned their job through formal training, including apprenticeship, school, or the armed forces; somewhat more than half report casual learning from a relative or friend or just picking up the occupation on the job."

Many employers are reluctant to provide workers with apprenticeship opportunities because they tend to lose money in the early stages of training and have no guarantee of keeping the workers they train. When employers do provide apprenticeship training, it is likely to be narrow, serving the needs of the individual employer more than the industry as a whole. Unions therefore have taken an active role in promoting broad apprenticeship training, and many apprenticeship programs are sponsored by joint apprenticeship councils made up of labor and management representatives.



There is substantial evidence that apprenticeship training provides an effective link between education and the workplace. A national survey directed by U.S. Labor Secretary Ray Marshall, when he was a faculty member at the University of Texas, concluded that apprentice-trained craftsmen are more broadly trained and suffer less from unemployment than other journeymen, as well as being more heavily represented in supervisory positions. In New York State, a detailed study of former apprentices also indicated highly successful experiences with registered programs. At the time of the survey, which covered a twelve-year period, nine out of ten completers of apprenticeship programs were working at the journeyman level in fields related to their training, as compared with four out of ten noncompleters. Significantly, the percentage of former apprentices working in related trades rose with the number of program hours completed.

**Minority Participation in Apprenticeship.** Many civil rights leaders in the 1960's saw the union's role in restricting entry into apprenticeship as a means of keeping black people out of skilled trades. Efforts to increase black par-

ticipation in apprenticeship arose from the conviction that such training would help black people overcome the job difficulties they faced as a result of being technologically displaced from jobs they traditionally held, such as agricultural work. Civil rights leaders believed that well-rounded craft workers would be less vulnerable to technological change and more likely to obtain higher-paying jobs.



Recently, there have been sizeable proportions of blacks entering apprenticeship programs. An article in *Worklife* reports that minority group members were 18.1 percent of all apprentices at the end of 1976, up from 17.3 percent in a single year. Yet 26,000 of the 44,000 registered minority apprentices were employed in only 10 occupations, most of them construction trades.

**Women and Apprenticeship.** While minorities have made important gains in apprenticeship, women are only beginning to make inroads. The latest figures show that female participation in registered apprenticeship programs rose from 0.9 percent at the beginning of 1977 to 2.2 percent at the end. Women were 2.1 percent of new apprentices entering programs during 1977, according to the *1977 Employment and Training Report of the President*.

Women can be found in 200 of the 450 apprenticeable trades recognized by U.S. Department of Labor, Phyllis Lehmann writes in *Worklife*, but most are working in traditional, lower-paying "female" jobs, such as cosmetology. Fifty-six percent of all barber and beautician apprentices are women, but only 0.2 percent of apprentice plumbers are.

Norman Briggs, author of an in-depth study of women in apprenticeship, mentions several obstacles preventing women from participating more fully in apprenticeship programs. These obstacles include priority on hiring veterans; collective bargaining agreements that prevent job openings from being advertised through outside agencies; the passing of information about openings to male industrial arts teachers who teach mostly young men; stereotyped notions of "femininity"; and employment service procedures and manpower programs that tend to steer women only into traditional jobs.

## NEW DIRECTIONS IN APPRENTICESHIP

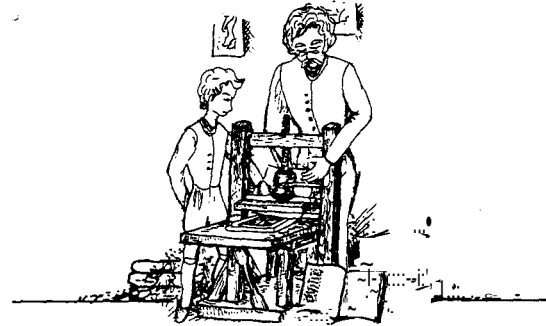
Apprenticeship training is undergoing a number of changes in response to social, political, and technological developments. These innovations are aimed at encouraging more young people to enter apprenticeship programs, decreasing dropout rates, and improving the overall effectiveness and efficiency of the apprenticeship system.

**Affirmative Action.** The pressure from civil rights groups for integration in apprenticeship programs has been reflected in federal and state regulations requiring "affirmative action" outreach to minorities and women.

Currently, recruitment of apprentices is expected to reflect the local labor force participation of minorities, and new guidelines require a progressive increase in the proportion of women.

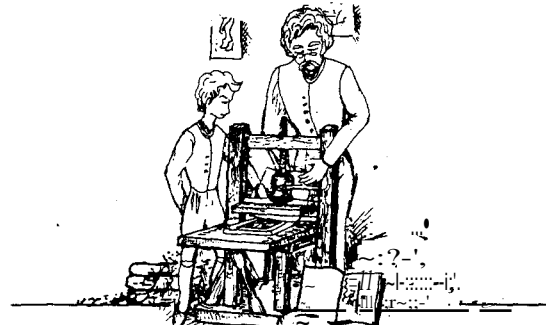
**Pre-Apprenticeship Training.** Pre-apprenticeship training, as its name suggests, generally refers to short orientation programs that occur before formal apprenticeship begins. The purpose of such training is to familiarize potential apprentices with the trade and the apprenticeship program before they make a definite commitment to enter the program. Observers claim that pre-apprenticeship training makes it more attractive for employers to hire apprentices since there is a lower probability of apprentices dropping out in the early stages of training. In addition, pre-apprenticeship training enables young people to make more intelligent and informed career choices; helps provide a good foundation for skills and knowledge gained during formal apprenticeship; and increases participation by minorities.

**Modular Training.** A 1975 Department of Labor study of apprenticeship in Wisconsin found that the rigidity of



the current apprenticeship system may keep some young people from entering or completing apprenticeship programs and may discourage employers from participating. The study therefore suggests reorganizing apprenticeship programs into individual modules of shorter duration. The first module would consist of basic training in a craft and would last a year or two. The others would be optional, offering training in specialized aspects of the trade. This kind of arrangement would give apprentices more flexibility and allow them to return later to the program if they wish. Employers' training costs would decrease, and they would be free to hire workers of varying skill levels instead of having to hire fully trained, all-round workers to do jobs that demand only a basic knowledge of the trade.

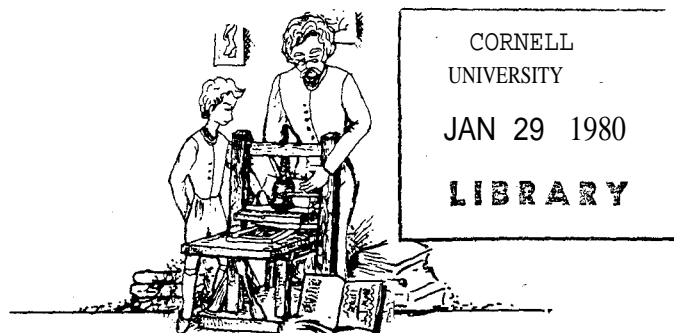
**Expansion of Apprenticeship to Non-Traditional Occupations.** Bureau of Labor Statistics estimates show the United States will need about 400,000 new craft



workers in the present decade, yet the number of new apprenticed journeymen has averaged only 50,000 per year. Expansion of apprenticeship training to occupations in which it has not traditionally been offered seems a logical strategy for meeting the demand for skilled workers.

Many occupational fields appear ripe for apprenticeship expansion. Those most frequently mentioned include the allied health professions, a field in which technological advances have created new professional and paraprofessional occupations, such as inhalation therapist, rehabilitation and pharmacy technician, dietetic cook, and medical records technician.

**College Credit for Apprenticeship.** Technological change has, in many trades, raised the skill requirements of workers. A recent development which responds to this trend is the inauguration of college degree programs for apprentices. Traditionally, "related instruction" has been provided by secondary schools or private trade schools. In recent years, however, a number of union employers who



sponsored apprenticeship programs have moved related instruction to community colleges where "dual enrollment" in apprenticeship and college courses leads to an associate

degree. The Operating Engineers Union has been a leader in this movement, and the International Brotherhood of Electrical Workers in New York City currently requires all apprentices to complete an associate degree program. Recognizing this trend, the American Council on Education is currently engaged in an evaluation of apprenticeship training for college credits, an approach which will facilitate the link between job training and a college degree.

## OUTLOOK FOR THE FUTURE

If apprenticeship training is to achieve its full potential, a number of initiatives must be supported. The integration of the skilled trades cannot be accomplished by affirmative action regulations alone; there is a need for increased information in the public schools to combat stereotyped thinking about career opportunities for minorities and females. Guidance counselors and teachers can play a key role in changing the aspirations of these young people.

Quality training requires increased attention to curriculum and instructor training. Traditional approaches to subject matter should be reevaluated in light of technological changes, and teaching methods should be updated to incorporate what is known about the psychology and methodology of teaching adults.

Finally, experience with apprenticeship, a tried and tested method of linking education to work, should be extended to a broader spectrum of jobs. The federally sponsored "New Initiatives in Apprenticeship" is a promising move in this direction.

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### FOR FURTHER READING

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