



The Tech Prep Approach to Worker Training

Industry and Education Combine Forces to Close the Training Gap.

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"More than half our young people leave school without the knowledge or foundation required to find and hold a job," according to a 1991 report from the U.S. Dept. of Labor. A huge gap exists between the needs of employers (especially in manufacturing) and the training received by most high school students.

This is not good news for employers, especially in the manufacturing sector, for their managers, who need skilled workers to keep their departments running at peak efficiency, or for the high school graduates who find that their diplomas have not prepared them to earn a decent living. However, just in the last few years, more than a half a million young people and the employers and managers for whom they work have found a bridge across this training gap with the help of a program called Tech Prep.

The Tech Prep Idea

The idea behind the program is a simple one: Employers and schools must work together to change the way we educate most of our students today. Eighty percent of the jobs in this country do not require a college degree, but they do require some kind of advanced training; however, at present, students in "general" curricula, (those not bound for college) are not trained for any of these jobs. The goal of present high school programs seems to be to qualify students for a diploma, not to train a work force.

Tech Prep addresses this issue through the democratic notion of "grass roots" efforts on the part of the people involved — in this case educators, employers, students and parents. In Tech Prep, local employers discuss their particular training needs with the high schools and community colleges in their area and then develop a program to meet those needs.

One such program is now in the works in north central Illinois. There, Rock Valley College, several Rockford area high schools and six local employers (including a gear tool manufacturer) have combined their resources to start a Youth Apprenticeship Program. This program recruits students after their tenth grade year and places them in an intensive work/study program that combines a rigorous academic schedule with on-the-job training at the facilities of one of the six sponsoring companies. The program carries students through their high school years and continues as they pursue studies at Rock Valley College and into full-time apprenticeships.

Youth Apprenticeship Training Program

This is how it works. The summer after their junior year, the Rock Valley program recruits begin full-time (40 hours a week for at least six weeks) work/training at all the sponsor sites. During their senior year, they work four hours a day with an individual sponsor while maintaining a regular academic schedule. After graduation, qualifying students move to full-time apprenticeships, with credit being given for their Youth Apprenticeship hours. They also have the option of continuing their education toward an associate's degree (or a baccalaureate) while working as full-time apprentices.

Students in the program get paid for the work they do while learning. They also explore the variety of opportunities available in manufacturing and acquire skills essential in the workplace now. At the same time, employers get a supply of skilled, capable employees, trained for present jobs in their factories and ready to take on new challenges.

The Basic Ingredients

Other programs in other places are tailored to the particular needs of their developers, but

whatever the externals, each one incorporates the following characteristics:

- **Contextual learning.** The emphasis is on applied academics — how math, science and communication skills are usable in “real world” settings. Content is academically rigorous, but also connected to actual workplace experiences. The principles of productivity, teamwork, and flexibility that are so important to the modern workplace are also emphasized.

- **Local Partnerships.** Employers, labor and community leaders, parents and educators are all part of the planning and implementation of local programs. Broad-based local support is essential to the success of Tech Prep programs.

- **Career exploration and counseling.** One of the goals of Tech Prep programs is to help students to make intelligent career choices and explore options that best suit their aptitudes.

- **Advanced degree potential.** Foundational skills are solid enough to prepare students for either associate or baccalaureate degrees if they wish.

- **A “bridge” program.** Participating groups have also developed a variety of internship and other work/study and “bridge” programs addressed to the needs of older workers who have already left school and may need some academic “refresher” courses to succeed in the advanced associate degree programs required to upgrade their skills.

Flexibility and Options

One of the virtues of the Tech Prep program is its versatility. Programs are developed by the people who will use them to address their specific needs. All the programs begin with extensive conversations between local employers, educators, labor and community leaders, and students and parents to assess needs and plan systems that best fit the requirements of particular communities. Extensive community support is needed in order to make the program work, and development of “ownership” on the part of all participants is crucial to program success. Company size is no deterrent to participation. In fact, smaller companies without the resources to provide elaborate training of their own may find a Tech Prep alliance particularly useful.

Beginnings

The “father” of Tech Prep is Dale Parnell, an educator and president of the American

Association of Community and Junior Colleges. He first outlined the idea in his book *The Neglected Majority*. Parnell and engineer Dan Hull further refined the idea of building alliances between high schools, community colleges and employers, and in the late 1980s Parnell established the Center for Occupational Research and Development (CORD), a non-profit organization with headquarters in Waco, TX, devoted to fostering the Tech Prep idea.

The program was given more impetus by the passage in 1990 of the Carl D. Perkins Vocational and Applied Technology Education Act, which provides funds for programs addressing worker education, including Tech Prep.

In 1991, CORD organized the National Tech Prep Network to support local Tech Prep programs through information-sharing, networking, conferences, publications, and publicity. The NTPN also has a data base of information on various local programs and will arrange tours of model pilot programs in various parts of the country for groups interested in developing their own Tech Prep programs. A call to NTPN is frequently the first step in getting a local Tech Prep program off the ground.

For a \$95.00 membership fee individuals in industry and business, education, community organizations and local, state and national government, can become part of the network and make use of all its programs and services.

A Drop In The Bucket

One estimate of employment trends suggests that by the year 2000, 15,000,000 manufacturing jobs will require advanced technical skills. At the same time 15,000,000 service jobs will disappear from the economy. These numbers suggest that Tech Prep, and programs like it, have a long way to go if they are to meet current and future demands for skilled labor.

What they are attempting is nothing less than a reform of general high school education and worker training nationwide. While the undertaking may seem visionary, it is also essential if the country is to maintain its competitive edge in the future. It is a chance for manufacturers of all types and sizes to take a pro-active stance in developing the skilled work force they need to remain competitive. ■

Call the NTPN at 1-800-972-2766 for more information about Tech Prep.

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