

What education and training are a part of my future?



# Chapter 9

## Options for Education and Training

### Chapter Objectives

After studying this chapter, you will be able to

- **explain** the importance of basic skills in any career choice.
- **determine** the impact of technology on the job market.
- **list** the opportunities that are available for job training and higher education.

### Key Concepts

- Training, education, and basic skills are needed no matter what your career choice is.
- Preparing for a career involves checking out training and education requirements.
- Further training and education often involves financial decisions.

### Key Terms

*career/technical program*  
*apprenticeship*  
*associate degree*  
*bachelor's degree*  
*graduate degree*  
*master's degree*  
*doctoral degree*  
*intern*

## The Need for Further Training and Education

Jobs are changing quickly, primarily because of technology. Before the computer revolution, a high school diploma often was adequate preparation for the workplace—but no longer. High school graduates without special training are rarely considered for good-paying jobs today. The higher-paying jobs go to workers with more education, training, and experience.

Further training and education are very likely to be a part of your future. Prepare yourself for that step by perfecting your foundation skills *now*.

## The Importance of Foundation Skills

Any career you choose will require you to have good *foundation skills*. These involve the following basic skills and thinking skills:

- *Basic skills* include reading, writing, math, speaking, and listening abilities.
- *Thinking skills* include thinking creatively, making decisions, solving problems, visualizing ideas, knowing how to learn, and reasoning.

Suppose you plan to apply for work as a cashier. You must be able to read and write in order to fill out the job application form. As a cashier, good math skills are crucial, 9-1. You would also need good reasoning skills to be able to handle customer questions and unexpected events.

The best way to perfect your foundation skills is to work on them now while in school. Study as much as possible to get ahead. Take advantage of your schooling and gain as much knowledge and experience as possible. Perfecting these skills now will pay off in the future. Employers appreciate a job applicant who has performed well in school. Employers realize that a good student is likely to be a good employee.



### Your Reading

Why are foundation skills important?

**9-1**

People who work with money must have good math skills.

## Preparing for a Career

As you learn about different types of jobs, check the education and training needs. What is required by the career you seek? Is prior work experience necessary? Once you know all the requirements of a career field, you can begin preparing for it.

For some careers, you can enter training programs while in high school. A career/technical school is one example.

Most of the advanced training and education programs, however, are available after high school. Some of the options are private trade schools, business schools, colleges, and universities. Most higher education programs are at least one year in length. Often, day and evening classes are available.

## Career/Technical Training

Many schools throughout the country offer a **career/technical program**. In these programs, you learn and develop the skills necessary for entry-level employment. You also learn the technical information required for earning a living. These programs are offered in the areas of health, business, agriculture, skilled trades, and marketing.

Some career/technical programs are offered to students who are still in high school. See 9-2. These programs are

**career/technical program**  
A program that teaches students skills necessary for entry-level employment.

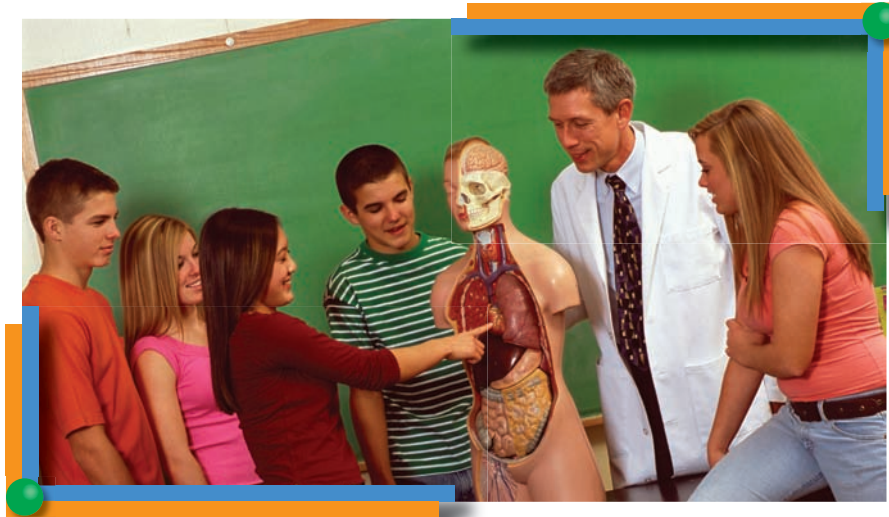
**9-2**

Career/technical schools teach high school students entry-level skills in areas such as health-related fields.



## Making a Difference

Contact the local training schools and community colleges that offer career/technical programs to determine if they need help collating program brochures or mailings. Ask them to put your group on a list to help with future projects.



often called *Tech-Prep programs*. Tech-Prep programs begin in the junior year and usually involve two years of additional schooling after high school. They allow students to receive college credit for work done in high school.

For information about technical or career programs in your area, talk with your teacher or guidance counselor.

## Cooperative Education

Many schools offer cooperative education programs, also called co-op programs. Cooperative education is an arrangement between schools and places of employment. The program allows students to receive on-the-job training through part-time work. At the same time, students attend classes part-time.

In co-op programs, students earn money for their work. They also earn credits toward graduation. Their grades are based on their performance at work and on class assignments. Often their class assignments relate to their jobs. For instance, students may be asked to do the following projects:

- Research a career ladder for their occupation.
- Write reports about the occupations in the companies for which they worked.
- Research their career fields
- Write about their cooperative education job experiences.

## Apprenticeships

Another kind of training for an occupation is an **apprenticeship**. An apprenticeship consists of two parts. One part is on-the-job training under the direction of a skilled worker. The other part is related classroom instruction and theory.

Apprenticeship is a formal employment relationship designed to promote skill training and learning on the job. An apprenticeship usually requires three to five years of training. Training is a combination of practical and related instruction. Related instruction is usually conducted in a classroom setting, often at a community college or technical school. The related classroom instruction, or theory portion, is taught by a person knowledgeable in the technical aspects of the occupation. Related instruction may include mathematics, technical writing, and problem solving.

Apprenticeships can lead to over 900 different careers. The following are some examples:

- automotive technician
- carpenter
- chef
- jeweler
- photographer
- tailor
- upholsterer

Most apprenticeships are for adults who have already graduated from high school. However, anyone who is at least 16 years old can apply for an apprentice program. While working and learning, the apprentice is paid entry-level wages for a beginner in that field. Those who complete a registered apprenticeship receive a certificate of completion. Certificates of completion are nationally- and internationally-recognized by employers of skilled workers.

## Company Training Programs

Some large companies offer their own training programs. These programs are designed to prepare employees to do specialized jobs. The programs may train employees to operate certain types of equipment or teach them specific skills.

### apprenticeship

Occupational training involving learning a trade by working under the direction and guidance of a skilled worker and receiving related classroom instruction and theory.

The length and quality of training programs vary. A short-term program may involve up to one month of on-the-job training. Long-term training involves more than one year of on-the-job training or a combination of training and classroom instruction. Most people who take part in company training programs consider them very helpful, 9-3.

## Community and Junior Colleges

Community colleges and junior colleges usually offer programs that are two years in length. When you complete a two-year program, you usually receive an *associate degree*. After completing an associate degree, it is very common to transfer to a four-year college for additional studies.

Many high schools link their course offerings to community or junior college programs in the area.

### associate degree

The award granted after completing a two-year college program.

### bachelor's degree

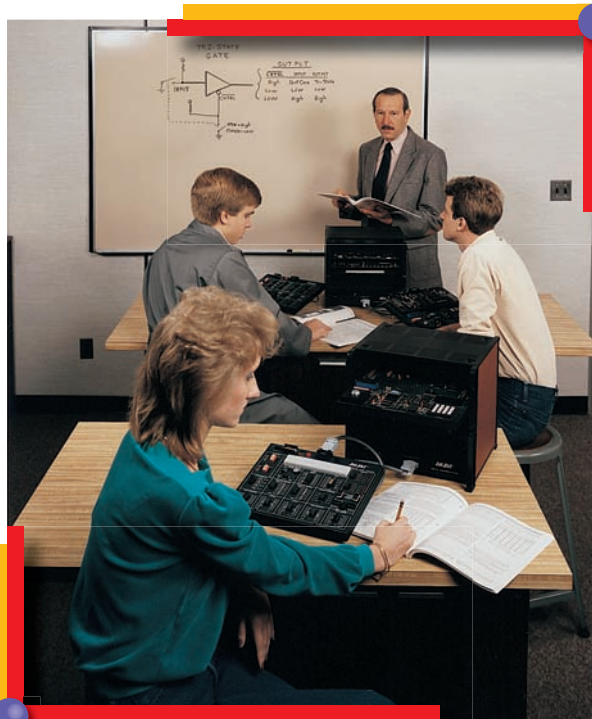
The award granted after completing a four-year college or university program.

## Colleges and Universities

When you complete a four-year program at a college or university, you receive a *bachelor's degree*. Hundreds of majors are offered at thousands of colleges around the world.

### 9-3

Company training programs focus on teaching information or skills needed by employees to do their jobs better.



A *major* is an area of study in which you specialize while in school.

Information about programs of higher education is available in many places. Start with the guidance department at your school. Guidance counselors have books that list programs and give information about schools. These books can also be found in libraries.

Write to or e-mail the schools you might want to attend and schedule appointments to visit the campuses. During your visits, talk to administrators and teachers as well as students. Doing so will help you determine if a particular school is right for you.

Jobs requiring an advanced degree require schooling beyond a bachelor's degree. An advanced degree is also called a **graduate degree**. Basically, there are two levels of graduate degrees.

- A **master's degree** involves one to two years of study beyond a bachelor's degree.
- A **doctoral degree**, the most advanced degree, often requires three years of study beyond a bachelor's degree. This degree is also called a *doctorate*.

Try not to make quick decisions when choosing a program or school. Higher education is quite expensive and time-consuming. A poor decision may result in wasted time and tuition on courses that may not be accepted by another school. Many colleges and universities have information on their Web sites about the programs they offer and their admissions requirements. Some colleges and universities offer virtual tours of the campus as well. You can use the on-line links to contact college or university representatives to ask questions. Some colleges and universities offer on-line classes to allow you to earn a degree.

## Internships

An internship is another type of occupational training program. An internship may be a paid or unpaid period when a high school or college student or college graduate gains practical experience under supervision. Internships may be part-time or full-time. Typically, they are part-time during the school year. Some may be full-time in the summer. The usual internship lasts 6 to 12 weeks, but can be shorter or longer.



## Community Connections

Investigate the community colleges and career training schools in the area so you are aware of the educational and training options that exist locally. Check the schools' Web sites to find answers to the following questions: What degree programs are offered? What types of financial assistance are available? What percentage of each school's graduates find careers in their chosen area?

### graduate degree

An advanced degree requiring education beyond a bachelor's degree.

### master's degree

An advanced degree involving one to two years of study beyond a bachelor's degree.

### doctoral degree

The most advanced degree, often requiring three years of study beyond a bachelor's degree; also called a doctorate.

**intern**

A student, seeking skills for a career, who works in a temporary position with an emphasis on on-the-job training rather than employment.



## Community Connections

Look for people in the area who have completed an internship program and invite them to speak to the class about their experiences. Prepare questions in advance, including: What did they learn? What were the program requirements? What are the advantages and disadvantages of completing this type of program?

An *intern* is a student, seeking skills for a career, who works in a temporary position with an emphasis on on-the-job training rather than employment. Student internships may provide opportunities for students to gain experience in an area of their interest. They may also help students determine if they have an interest in a particular career, assist them in creating a network of contacts, or gain school credit.

Teachers, doctors, nurses, dentists, dietitians, broadcasters, and others must successfully complete an internship before they can work in their career fields. A classroom, hospital, and television newsroom are just some of the sites of an internship.

### Types of Internships

Various types of internships are available in different industries or settings, depending upon the purpose of the internship. These include the following:

- *Work experience internship:* The placement can be for varying periods of time during the school year. During this period, the student is supposed to use the knowledge and skills learned in school and put it in practice. This way, the student gains work experience in his or her field of study.
- *Research internship:* In this type of internship, a student does research for or about a particular company. The student may choose a topic within the company to study. The results of the research study are compiled into a report and often are presented.
- *Diversity internship program:* This type of program provides internships for minorities. These programs are most often sponsored by community and special groups organized to offer minorities training opportunities.

### Military Training

Another way to gain experience is through military training. Many military duties are the same as those done by civilian workers. The military offers a variety of jobs that are similar to those in nonmilitary communities. Many workers start their career training while serving in the military. Military service is also a way to pay for higher education. The



military provides scholarship and grant programs for people who complete an active duty enlistment.

The branches of the U.S. military are the Army, Navy, Air Force, Marines, and Coast Guard. After basic training and a series of aptitude tests, a person is usually sent for further training. In the military, you can begin to prepare for such careers as *automotive technician*, *chef*, or *electronics technician*. See 9-4. All branches of the service also offer apprenticeships and college degree programs.

## Financing Further Training

Many young people have career goals that require education beyond high school. If you choose this path, consider how to pay for the training.

Higher education can be costly. Suppose you decide to enroll in a one-year program at a trade school. If the school is far from home, you will have daily living expenses to pay in addition to tuition. You will need money to cover items such as room and board, school supplies, clothing, and health care. You should know how much money you have available for education and how much your education will cost.

The costs of attending school may be high, but you may be able to lower these costs. Perhaps you could obtain financial aid to help pay tuition. Student financial aid is intended to



### Your Reading

Why should you know the training and education requirements of a career as you prepare for it?



#### 9-4

Military training can prepare people for careers in many technical fields.

help students pay educational expenses. Those expenses include tuition, fees, room and board, books, and supplies. You may be able to get financial help in the form of loans, grants, or scholarships.

Financial aid may be classified into two types—merit-based or need-based. *Merit-based financial aid* includes scholarships and grants awarded by colleges, universities, trade schools, or organizations. Merit-based scholarships and grants are typically awarded for outstanding academic achievements. Some merit scholarships can also be awarded for special talents, leadership potential, or other personal characteristics. Scholarships may also be given because of group affiliation, such as student or community organizations. Athletic scholarships are a form of merit aid that takes athletic talent into account. *Need-based financial aid* is awarded on the basis of the financial need of the student. The government offers a variety of loans and grants.

You may want to investigate tax-advantaged savings plans designed to encourage saving for future college costs. These plans include prepaid tuition plans and college savings plans. They are sponsored through states, state agencies, or educational institutions. The school you will attend probably offers various forms of financial assistance, too. Private sources provide a variety of loans and scholarships. Your guidance counselor or a financial planner will be able to tell you more about the options available to you. See 9-5 for more tips on financing further training.

Another way to save money may be living with a relative in a nearby town. Perhaps you could work part-time while going to school or attend a school nearby.



## Your Reading

What financial considerations are involved in planning for training and education?

### Tips for Financing Further Training

- Know how much money you have to spend and how much your education will cost. Then plan for ways to make up the difference.
- Plan ahead. Save the money you earn from part-time and summer jobs. Apply that money toward your education.
- Work while in school to help cover your costs. You may want to work part-time or participate in a work-study program. You may prefer to work full-time and be a part-time student.
- Choose an education option you can afford. Local community colleges are a fairly low-cost option. State colleges and universities are less costly than private colleges and universities. Tuition is often less if you attend school in your state than if you attend school in another state.
- Live at home or with a relative while attending school.
- Apply for government funded loans, grants, and scholarships. This is done by filling out forms describing your family's financial status. Aid is given to those who show financial need.
- Apply for any other scholarships for which you might qualify. These might be based on need, athletics, or academics. They are available from many sources.
- Consider borrowing money from a person or a financial institution.
- Join the military and arrange to have all or part of your education costs paid through military funding.
- Talk with your guidance counselor and do library research to learn more about financing further training.

### 9-5

Many resources are available to help meet the high costs of career training.

A circular graphic with a blue background and a white glow effect. The word "Chapter" is written in a light blue, sans-serif font at the top. Below it, the number "9" is written in a large, bold, orange font.

## Summary

Education plays a key role in a person's career and future lifestyle. The basic skills of reading, writing, math, speaking, and listening, together with the thinking skills, are needed for success in any job. Further education is often necessary due to technological change. The more education a person has, the better his or her chances are of moving up the career ladder and the greater his or her job satisfaction.

Training is available in different forms to prepare people for various careers. Options include career/technical training, cooperative education programs, and apprenticeships. Other options are company training programs, colleges, universities, internships, and military training.

Financing higher education can be costly. Students can lower this cost by planning ahead and seeking financial assistance from other sources.

## Reviewing Key Concepts

1. For which jobs are foundation skills needed?
2. Why do employers appreciate a job applicant who performs well in school?
3. Name three advanced training and education programs that are available after high school.
4. Name three subject areas in which career/technical programs are offered.
5. What is the basis for grades in cooperative education programs?
6. What kind of training involves learning a trade by working under the direction and guidance of a skilled worker?
7. What is the difference between an associate degree and a bachelor's degree?
8. Name three jobs that require internships.
9. Why should you think carefully before choosing a program or school of higher education?
10. Name two nonmilitary careers for which military training can help you prepare.

### Building Academic Skills

**Writing.** Write a letter to the university of your choice, seeking information on programs in your area of interest. Check the letter for correct format and appropriate grammar and style.

### Building Technology Skills

1. Conduct an online search with the words *wages* and *education*. Document what you learn regarding the link between a worker's level of education and income, especially in occupations that interest you. Summarize what you learn in a written report.
2. Investigate a local company that offers a training program to learn answers to these questions: What types of skills are taught to employees? How long is the training? What training methods are used—classroom instruction, on-site demonstrations, an Internet program, or some other method? Are skills taught that employees should have learned in high school?

### Building Career Knowledge and Skills

1. Explore the Web site of a college or technical school. Make a list of the admission requirements. List the courses offered that relate to your career path. Calculate the cost of tuition, room and board, and any fees that may be required.
2. Interview someone in a career field that interests you. Find out what education and training he or she would recommend for a person entering that field today.

3. Visit the Web site of the U.S. Department of Labor, Bureau of Apprenticeship and Training. Locate a list of occupations in which a person can become an apprentice.
4. Examine the help wanted section of the newspaper for job openings. Sort the ads into the following categories: Jobs out of high school, jobs requiring a two-year college degree, jobs requiring a four-year college degree, and jobs for which there is an apprenticeship program.

### Building Workplace Skills

Research a career field that interests you. Identify the education and training required and the associated time and costs involved. Talk with your guidance counselor to learn which schools offer this training. Then write to two schools for information about program specifics and costs. Obtain as much information as possible through the Internet. If your schooling would force you to live away from home, find out costs for room, board, and travel. Summarize your findings in a written report. Indicate the career researched, the education and training needed, and the schools selected. Also report all related costs, itemized per school year, and your ideas about how to pay for them. Based on what you have learned, which school would you choose? Share your decision and the facts that led to your decision in a brief written report.