

# Education and Community and Social Service Occupations



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Occupational Outlook Handbook, 2004-05 Edition

U.S. Department of Labor  
Bureau of Labor Statistics



## Occupations Included in this Reprint

Archivists, curators, and museum technicians  
Clergy  
    Protestant ministers  
    Rabbis  
    Roman Catholic priests  
Counselors  
Education administrators  
Instructional coordinators  
Librarians  
Library technicians  
Probation officers and correctional  
    treatment specialists  
Social and human service assistants  
Social workers  
Teacher assistants  
Teachers—adult literacy and remedial  
    and self-enrichment education  
Teachers—postsecondary  
Teachers—preschool, kindergarten,  
    elementary, middle, and secondary  
Teachers—special education

# Archivists, Curators, and Museum Technicians

(0\*NET 25-4011.00, 25-4012.00, 25-4013.00)

## Significant Points

- Employment in this occupation usually requires graduate education and related work experience.
- Keen competition is expected for the most desirable job openings, which generally attract a large number of applicants.

## Nature of the Work

Archivists, curators, and museum technicians acquire and preserve important documents and other valuable items for permanent storage or display. They work for museums, governments, zoos, colleges and universities, corporations, and other institutions that require experts to preserve important records. They also describe, catalogue, analyze, exhibit, and maintain valuable objects and collections for the benefit of researchers and the public. These documents and collections may include works of art, transcripts of meetings, coins and stamps, living and preserved plants and animals, and historic buildings and sites.

Archivists and curators plan and oversee the arrangement, cataloguing, and exhibition of collections and, along with technicians and conservators, maintain collections. Archivists and curators may coordinate educational and public outreach programs, such as tours, workshops, lectures, and classes, and may work with the boards of institutions to administer plans and policies. They also may research topics or items relevant to their collections. Although some duties of archivists and curators are similar, the types of items they deal with differ: curators usually handle objects with cultural, biological, or historical significance, such as sculptures, textiles, and paintings, while archivists handle mainly records and documents that are retained because of their importance and potential value in the future.

*Archivists* collect, organize, and maintain control over a wide range of information deemed important enough for permanent safekeeping. This information takes many forms: photographs, films, video and sound recordings, computer tapes, and video and optical disks, as well as more traditional paper records, letters, and documents. Archivists work for a variety of organizations, including government agencies, museums, historical societies, corporations, and educational institutions that use or generate records of great potential value to researchers, exhibitors, genealogists, and others who would benefit from having access to original source material.

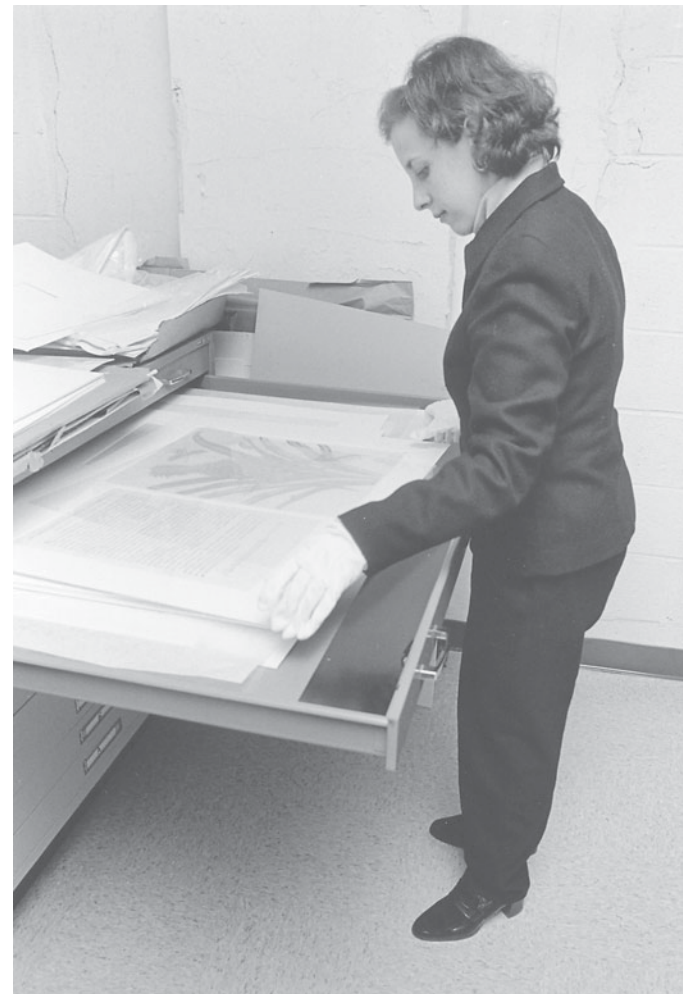
Archivists maintain records in accordance with accepted standards and practices, that ensure the long-term preservation and easy retrieval of the documents. Records may be saved on any medium, including paper, film, videotape, audiotape, electronic disk, or computer. They also may be copied onto some other format to protect the original and to make them more accessible to researchers who use the records. As various storage media evolve, archivists must keep abreast of technological advances in electronic information storage.

Archivists often specialize in an area of history or technology so they can more accurately determine what records in that

area qualify for retention and should become part of the archives. Archivists also may work with specialized forms of records, such as manuscripts, electronic records, photographs, cartographic records, motion pictures, and sound recordings.

Computers are increasingly being used to generate and maintain archival records. Professional standards for the use of computers in handling archival records are still evolving. However, computers are expected to transform many aspects of archival collections as computer capabilities and the use of multimedia and the Internet expand and allow more records to be stored and exhibited electronically.

*Curators* administer the affairs of museums, zoos, aquariums, botanical gardens, nature centers, and historic sites. The head curator of the museum is usually called the *museum director*. Curators direct the acquisition, storage, and exhibition of collections, including negotiating and authorizing the purchase, sale, exchange, or loan of collections. They are also responsible for authenticating, evaluating, and categorizing the specimens in a collection. Curators oversee and help conduct the institution's research projects and related educational programs. However, an increasing part of a curator's duties involves fundraising and promotion, which may include the writing and reviewing of grant proposals, journal articles, and publicity materials, as well as attendance at meetings, conventions, and civic events.



*Archivists and curators oversee the cataloguing and display of collections of artwork, documents, and other valuable items.*

Most curators specialize in a particular field, such as botany, art, paleontology, or history. Those working in large institutions may be highly specialized. A large natural-history museum, for example, would employ separate curators for its collections of birds, fishes, insects, and mammals. Some curators maintain their collections, others do research, and others perform administrative tasks. In small institutions, with only one or a few curators, one curator may be responsible for multiple tasks, from maintaining collections to directing the affairs of the museum.

*Conservators* manage, care for, preserve, treat, and document works of art, artifacts, and specimens, work that may require substantial historical, scientific, and archaeological research. They use x rays, chemical testing, microscopes, special lights, and other laboratory equipment and techniques to examine objects and determine their condition, their need for treatment or restoration, and the appropriate method for preserving them. Conservators document their findings and treat items to minimize their deterioration or to restore them to their original state. Conservators usually specialize in a particular material or group of objects, such as documents and books, paintings, decorative arts, textiles, metals, or architectural material.

*Museum technicians* assist curators by performing various preparatory and maintenance tasks on museum items. Some museum technicians also may assist curators with research. Archives technicians help archivists organize, maintain, and provide access to historical documentary materials.

### **Working Conditions**

The working conditions of archivists and curators vary. Some spend most of their time working with the public, providing reference assistance and educational services. Others perform research or process records, which often means working alone or in offices with only a few people. Those who restore and install exhibits or work with bulky, heavy record containers may climb, stretch, or lift. Those in zoos, botanical gardens, and other outdoor museums or historic sites frequently walk great distances.

Curators who work in large institutions may travel extensively to evaluate potential additions to the collection, organize exhibitions, and conduct research in their area of expertise. However, travel is rare for curators employed in small institutions.

### **Employment**

Archivists, curators, and museum technicians held about 22,000 jobs in 2002. About 35 percent were employed in museums, historical sites, and similar institutions, and 15 percent worked for State and private educational institutions, mainly college and university libraries. Nearly 40 percent worked in Federal, State, and local government. Most Federal archivists work for the National Archives and Records Administration; others manage military archives in the U.S. Department of Defense. Most Federal Government curators work at the Smithsonian Institution, in the military museums of the Department of Defense, and in archaeological and other museums and historic sites managed by the U.S. Department of the Interior. All State governments have archival or historical-record sections employing archivists. State and local governments also have numerous historical museums, parks, libraries, and zoos employing curators.

Some large corporations that have archives or record centers employ archivists to manage the growing volume of records

created or maintained as required by law or necessary to the firms' operations. Religious and fraternal organizations, professional associations, conservation organizations, major private collectors, and research firms also employ archivists and curators.

Conservators may work under contract to treat particular items, rather than as regular employees of a museum or other institution. These conservators may work on their own as private contractors, or they may work as an employee of a conservation laboratory or regional conservation center that contracts their services to museums.

### **Training, Other Qualifications, and Advancement**

Employment as an archivist, conservator, or curator usually requires graduate education and related work experience. While completing their formal education, many archivists and curators work in archives or museums to gain the "hands-on" experience that many employers seek.

Although most archivists have a variety of undergraduate degrees, a graduate degree in history or library science, with courses in archival science, is preferred by most employers. Some positions may require knowledge of the discipline related to the collection, such as business or medicine. Currently, no programs offer bachelor's or master's degrees in archival science. However, approximately 65 colleges and universities offer courses or practical training in archival science as part of their history, library science, or other curriculum. The Academy of Certified Archivists offers voluntary certification for archivists. The designation "Certified Archivist" is obtained by those with at least a master's degree and a year of appropriate archival experience. The certification process requires candidates to pass a written examination, and they must renew their certification periodically.

Archivists need research and analytical ability to understand the content of documents and the context in which they were created and to decipher deteriorated or poor-quality printed matter, handwritten manuscripts, or photographs and films. A background in preservation management is often required of archivists because they are responsible for taking proper care of their records. Archivists also must be able to organize large amounts of information and write clear instructions for its retrieval and use. In addition, computer skills and the ability to work with electronic records and databases are becoming increasingly important.

Many archives, including one-person shops, are very small and have limited opportunities for promotion. Archivists typically advance by transferring to a larger unit with supervisory positions. A doctorate in history, library science, or a related field may be needed for some advanced positions, such as director of a State archive.

For employment as a curator, most museums require a master's degree in an appropriate discipline of the museum's specialty—art, history, or archaeology—or museum studies. Many employers prefer a doctoral degree, particularly for curators in natural history or science museums. Earning two graduate degrees—in museum studies (museumology) and a specialized subject—gives a candidate a distinct advantage in this competitive job market. In small museums, curatorial positions may be available to individuals with a bachelor's degree. For some positions, an internship of full-time museum work supplemented by courses in museum practices is needed.

Curatorial positions often require knowledge in a number of fields. For historic and artistic conservation, courses in chemis-

try, physics, and art are desirable. Since curators—particularly those in small museums—may have administrative and managerial responsibilities, courses in business administration, public relations, marketing, and fundraising also are recommended. Like archivists, curators need computer skills and the ability to work with electronic databases. Many curators are responsible for posting information on the Internet, so they also need to be familiar with digital imaging, scanning technology, and copyright law.

Curators must be flexible because of their wide variety of duties, among which are the design and presentation of exhibits. In small museums, curators need manual dexterity, to build exhibits or restore objects. Leadership ability and business skills are important for museum directors, while marketing skills are valuable in increasing museum attendance and fundraising.

In large museums, curators may advance through several levels of responsibility, eventually becoming the museum director. Curators in smaller museums often advance to larger ones. Individual research and publications are important for advancement in larger institutions.

When hiring conservators, employers look for a master's degree in conservation or in a closely related field, together with substantial experience. There are only a few graduate programs in museum conservation techniques in the United States. Competition for entry to these programs is keen; to qualify, a student must have a background in chemistry, archaeology or studio art, and art history, as well as work experience. For some programs, knowledge of a foreign language is also helpful. Conservation apprenticeships or internships as an undergraduate can enhance one's admission prospects. Graduate programs last 2 to 4 years, the latter years of which include internship training. A few individuals enter conservation through apprenticeships with museums, nonprofit organizations, and conservators in private practice. Apprenticeships should be supplemented with courses in chemistry, studio art, and history. Apprenticeship training, although accepted, usually is a more difficult route into the conservation profession.

Museum technicians usually need a bachelor's degree in an appropriate discipline of the museum's specialty, training in museum studies, or previous experience working in museums, particularly in the design of exhibits. Similarly, archives technicians usually need a bachelor's degree in library science or history, or relevant work experience. Technician positions often serve as a steppingstone for individuals interested in archival and curatorial work. Except in small museums, a master's degree is needed for advancement.

Relatively few schools grant a bachelor's degree in museum studies. More common are undergraduate minors or tracks of study that are part of an undergraduate degree in a related field, such as art history, history, or archaeology. Students interested in further study may obtain a master's degree in museum studies, offered in colleges and universities throughout the country. However, many employers feel that, while museum studies are helpful, a thorough knowledge of the museum's specialty and museum work experience are more important.

Continuing education, which enables archivists, curators, and museum technicians to keep up with developments in the field, is available through meetings, conferences, and workshops sponsored by archival, historical, and museum associations. Some larger organizations, such as the National Archives, offer such training in-house.

## **Job Outlook**

Competition for jobs as archivists, curators, and museum technicians is expected to be keen because qualified applicants outnumber job openings. Graduates with highly specialized training, such as master's degrees in both library science and history, with a concentration in archives or records management and extensive computer skills should have the best opportunities for jobs as archivists. A curator job also is attractive to many people, and many applicants have the necessary training and knowledge of the subject, but there are only a few openings. Consequently, candidates may have to work part time, as an intern, or even as a volunteer assistant curator or research associate after completing their formal education. Substantial work experience in collection management, exhibit design, or restoration, as well as database management skills, will be necessary for permanent status. Job opportunities for curators should be best in art and history museums, since these are the largest employers in the museum industry.

The job outlook for conservators may be more favorable, particularly for graduates of conservation programs. However, competition is stiff for the limited number of openings in these programs, and applicants need a technical background. Students who qualify and successfully complete the program, have knowledge of a foreign language, and are willing to relocate will have an advantage over less qualified candidates.

Employment of archivists, curators, and museum technicians is expected to increase about as fast as the average for all occupations through 2012. Jobs are expected to grow as public and private organizations emphasize establishing archives and organizing records and information and as public interest in science, art, history, and technology increases. Museum and zoo attendance has been on the rise and is expected to continue increasing, which will generate demand for curators and museum technicians and conservators. However, museums and other cultural institutions can be subject to cuts in funding during recessions or periods of budget tightening, reducing demand for archivists and curators. Although the rate of turnover among archivists and curators is relatively low, the need to replace workers who leave the occupation or stop working will create some additional job openings.

## **Earnings**

Median annual earnings of archivists, curators, and museum technicians in 2002 were \$35,270. The middle 50 percent earned between \$26,400 and \$48,460. The lowest 10 percent earned less than \$20,010, and the highest 10 percent earned more than \$66,050.

Earnings of archivists and curators vary considerably by type and size of employer and often by specialty. Median annual earnings of archivists, curators, and museum technicians in 2002 were \$33,720 in museums, historical sites, and similar institutions. Salaries, though, of curators in large, well-funded museums can be several times higher than those in small ones. The average annual salary for archivists in the Federal Government in nonsupervisory, supervisory, and managerial positions was \$69,706 in 2003; for museum curators, \$70,100; museum specialists and technicians, \$48,414; and for archives technicians, \$37,067.

### **Related Occupations**

The skills that archivists, curators, and museum technicians use in preserving, organizing, and displaying objects or information of historical interest are shared by artists and related workers; librarians; and anthropologists and archeologists, historians, and other social scientists.

### **Sources of Additional Information**

For information on archivists and on schools offering courses in archival studies, contact

► Society of American Archivists, 527 South Wells St., 5th floor, Chicago, IL 60607-3922. Internet: <http://www.archivists.org>

For general information about careers as a curator and schools offering courses in museum studies, contact

► American Association of Museums, 1575 Eye St. NW., Suite 400, Washington, DC 20005. Internet: <http://www.aam-us.org>

For information about careers and education programs in conservation and preservation, contact

► American Institute for Conservation of Historic and Artistic Works, 1717 K St. NW., Suite 200, Washington, DC 20006. Internet: <http://aic.stanford.edu>

# Clergy

(0\*NET 21-2011.00)

## Significant Points

- Many denominations require that clergy complete a bachelor's degree and a graduate-level program of theological study; others will admit anyone who has been "called" to the vocation.
- Individuals considering a career in the clergy should realize they are choosing not only a career but also a way of life; members of the clergy typically work irregular hours and many put in longer than average work days.
- Opportunities are expected in all faiths, but in some denominations competition is likely for positions leading large urban worship groups.

## Nature of the Work

Religious beliefs—such as Buddhist, Christian, Jewish, or Muslim—are significant influences in the lives of millions of Americans, and prompt many to participate in organizations that reinforce their faith. Even within a religion many denominations may exist, with each group having unique traditions and responsibilities assigned to its clergy. For example, Christianity has more than 70 denominations, while Judaism has 4 major branches, as well as groups within each branch, with diverse customs.

Clergy are religious and spiritual leaders, and teachers and interpreters of their traditions and faith. Most members of the clergy serve in a pulpit. They organize and lead regular religious services and officiate at special ceremonies, including confirmations, weddings, and funerals. They may lead worshippers in prayer, administer the sacraments, deliver sermons, and read from sacred texts such as the Bible, Torah, or Koran. When not conducting worship services, clergy organize, supervise, and lead religious education programs for their congregations. Clergy visit the sick or bereaved to provide comfort and counsel persons who are seeking religious or moral guidance or who are troubled by family or personal problems. They also may work to expand the membership of their congregations and solicit donations to support their activities and facilities.

Clergy who serve large congregations often share their duties with associates or more junior clergy. Senior clergy may spend considerable time on administrative duties. They oversee the management of buildings, order supplies, contract for services and repairs, and supervise the work of staff and volunteers. Associate or assistant members of the clergy sometimes specialize in an area of religious service, such as music, education, or youth counseling. Clergy also work with committees and officials, elected by the congregation, who guide the management of the congregation's finances and real estate.

Other members of the clergy serve their religious communities in ways that do not call for them to hold positions in congregations. Some serve as chaplains in the U.S. Armed Forces and in hospitals, while others help to carry out the missions of religious community and social services agencies. A few members of the clergy serve in administrative or teaching posts in schools at all grade levels, including seminaries.

## Working Conditions

Members of the clergy typically work irregular hours and many put in longer than average work days. Those who do not work in congregational settings may have more routine schedules. In 2002, almost one-fifth of full-time clergy worked 60 or more hours a week, more than 3 times that of all workers in professional occupations. Although many of their activities are sedentary and intellectual in nature, clergy frequently are called on short notice to visit the sick, comfort the dying and their families, and provide counseling to those in need. Involvement in community, administrative, and educational activities sometimes require clergy to work evenings, early mornings, holidays, and weekends.

Because of their roles as leaders regarding spiritual and morality issues, some members of the clergy often feel obligated to address and resolve both societal problems and the personal problems of their congregants, which can lead to stress.

## Training, Other Qualifications, and Advancement

Educational requirements for entry into the clergy vary greatly. Similar to other professional occupations, about 3 out of 4 members of the clergy have completed at least a bachelor's degree. Many denominations require that clergy complete a bachelor's degree and a graduate-level program of theological study; others will admit anyone who has been "called" to the vocation. Some faiths do not allow women to become clergy; however, others, mainly in Protestant churches, do. Men and women considering careers in the clergy should consult their religious leaders to verify specific entrance requirements.

Individuals considering a career in the clergy should realize they are choosing not only a career but also a way of life. In fact, most members of the clergy remain in their chosen vocation throughout their lives; in 2002, almost 10 percent of clergy were 65 or older, compared with only 3 percent of workers in all occupations.

Religious leaders must exude confidence and motivation, while remaining tolerant and able to listen to the needs of others. They should be capable of making difficult decisions, working under pressure, and living up to the moral standards set by their faith and community.

The sections that follow provide more detailed information on the three largest groups of clergy: Protestant ministers, Rabbis, and Roman Catholic priests.

## Sources of Additional Information

For more information on careers in the ministry, contact the association affiliated with a particular denomination.

The following website provides links to many of these denominations. Internet:

[http://www.hirr.hartsem.edu/org/faith\\_denominations\\_homepages.html](http://www.hirr.hartsem.edu/org/faith_denominations_homepages.html)

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# Protestant Ministers

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## Significant Points

- Entry requirements vary greatly; many denominations require a bachelor's degree followed by study at a theological seminary, whereas others have no formal educational requirements.
- Competition for positions will vary among denominations and geographic regions.

## Nature of the Work

Protestant ministers lead their congregations in worship services and administer the various rites of the church, such as baptism, confirmation, and Holy Communion. The services that ministers conduct differ among the numerous Protestant denominations and even among congregations within a denomination. In many denominations, ministers follow a traditional order of worship; in others, they adapt the services to the needs of youth and other groups within the congregation. Most services include Bible readings, hymn singing, prayers, and a sermon. In some denominations, Bible readings by members of the congregation and individual testimonials constitute a large part of the service. In addition to these duties, ministers officiate at weddings, funerals, and other occasions.

Each Protestant denomination has its own hierarchical structure. Some ministers are responsible only to the congregation they serve, whereas others are assigned duties by elder ministers or by the bishops of the diocese they serve. In some denominations, ministers are reassigned to a new pastorate by a central governing body or diocese every few years.

Ministers who serve small congregations usually work personally with parishioners. Those who serve large congregations may share specific aspects of the ministry with one or more associates or assistants, such as a minister of education or a minister of music.

## Employment

There are many denominations; however, most ministers are employed by the five largest Protestant bodies—Baptist, Episcopalian, Lutheran, Methodist, and Presbyterian.

Although most ministers are located in urban areas, many serve two or more smaller congregations in less densely populated areas. Some small churches increasingly employ part-time ministers who are seminary students, retired ministers, or holders of secular jobs. Unpaid pastors serve other churches with meager funds. In addition, some churches employ specially trained members of the laity to conduct nonliturgical functions.

## Training and Other Qualifications

Educational requirements for entry into the Protestant ministry vary greatly. Many denominations require, or at least strongly prefer, a bachelor's degree followed by study at a theological seminary. However, some denominations have no formal educational requirements, and others ordain persons having various types of training from Bible colleges or liberal arts colleges. Many denominations now allow women to be ordained, but some do not. Persons considering a career in the ministry should first verify the ministerial requirements with their particular denomination.

In general, each large denomination has its own schools of theology that reflect its particular doctrine, interests, and needs. However, many of these schools are open to students from other denominations. Several interdenominational schools associated with universities give both undergraduate and graduate training covering a wide range of theological points of view.

In 2002, the Association of Theological Schools in the United States and Canada accredited 216 Protestant denominational theological schools. These schools only admit students who have received a bachelor's degree or its equivalent from an accredited college. After college graduation, many denominations require a 3-year course of professional study in one of these accredited schools, or seminaries, for the degree of Master of Divinity.

The standard curriculum for accredited theological schools consists of four major categories: Biblical studies, church history, theology and ethics, and practical theology. Other subjects taught include sociology and anthropology, comparative religions, spiritual formation, religion and the arts, and speech, among others. Many accredited schools require that students work under the supervision of a faculty member or experienced minister. Some institutions offer Doctor of Ministry degrees to students who have completed additional study—usually 2 or more years—and served at least 2 years as a minister. Scholarships and loans often are available for students of theological institutions.

Persons who have denominational qualifications for the ministry usually are ordained after graduation from a seminary or after serving a probationary pastoral period. Denominations that do not require seminary training ordain clergy at various appointed times. Some churches ordain ministers with only a high school education.

Women and men entering the clergy often begin their careers as pastors of small congregations or as assistant pastors in large churches. Pastor positions in large metropolitan areas or in large congregations often require many years of experience.

## Job Outlook

Job opportunities as Protestant ministers should be best for graduates of theological schools. The degree of competition for positions will vary among denominations and geographic regions. For example, relatively favorable prospects are expected



*Protestant ministers are trained to administer a particular denomination's unique expression of worship.*

for ministers in evangelical churches. Competition, however, will be keen for responsible positions serving large, urban congregations. Ministers willing to work part time or for small, rural congregations should have better opportunities. Many job openings will stem from the need to replace ministers who retire, die, or leave the ministry.

For newly ordained Protestant ministers who are unable to find parish positions, employment alternatives include working in youth counseling, family relations, and social welfare organizations; teaching in religious educational institutions; or serving as chaplains in the Armed Forces, hospitals, universities, and correctional institutions.

### **Earnings**

Salaries of Protestant clergy vary substantially, depending on experience, denomination, size and wealth of the congregation, and geographic location. For example, some denominations tie a minister's pay to the average pay of the congregation or the community. As a result, ministers serving larger, wealthier congregations often earned significantly higher salaries than those in smaller, less affluent areas or congregations. Ministers with modest salaries sometimes earn additional income from employment in secular occupations.

### **Sources of Additional Information**

Persons who are interested in entering the Protestant ministry should seek the counsel of a minister or church guidance worker. Theological schools can supply information on admission requirements. For information on special requirements for ordination, prospective ministers also should contact the ordination supervision body of their particular denomination.



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## Rabbis

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### Significant Points

- Ordination usually requires completion of a college degree followed by a 4- to 6-year program at a Jewish seminary.
- Job opportunities for rabbis are expected in all four major branches of Judaism through the year 2012.

### Nature of the Work

Rabbis serve Orthodox, Conservative, Reform, Reconstructionist, and unaffiliated Jewish congregations. Regardless of the branch of Judaism they serve or their individual points of view, all rabbis preserve the substance of Jewish religious worship. Congregations differ in the extent to which they follow the traditional form of worship—for example, in the wearing of head coverings, in the use of Hebrew as the language of prayer, and in the use of instrumental music or a choir. Additionally, the format of the worship service and, therefore, the ritual that the rabbi uses may vary even among congregations belonging to the same branch of Judaism.

Rabbis have greater independence in religious expression than other clergy, because of the absence of a formal religious hierarchy in Judaism. Instead, rabbis are responsible directly to the board of trustees of the congregation they serve. Those serving large congregations may spend considerable time in administrative duties, working with their staffs and committees. Large congregations frequently have associate or assistant rabbis, who often serve as educational directors. All rabbis play a role in community relations. For example, many rabbis serve on committees, alongside business and civic leaders in their communities to help find solutions to local problems.

Rabbis also may write for religious and lay publications and teach in theological seminaries, colleges, and universities.

### Employment

Although the majority of rabbis served congregations representing the four main branches of Judaism, many rabbis functioned in other settings. Some taught in Jewish studies programs at colleges and universities, whereas others served as chaplains in hospitals, colleges, or the military. Additionally, some rabbis held positions in one of the many social service or Jewish community agencies.

Although rabbis serve Jewish communities throughout the Nation, they are concentrated in major metropolitan areas with large Jewish populations.

### Training, Other Qualifications, and Advancement

To become eligible for ordination as a rabbi, a student must complete a course of study in a seminary. Entrance requirements and the curriculum depend upon the branch of Judaism with which the seminary is associated. Most seminaries require applicants to be college graduates.

Jewish seminaries typically take 5 years for completion of studies, with an additional preparatory year required for students without sufficient grounding in Hebrew and Jewish studies. In addition to the core academic program, training generally includes fieldwork and internships providing hands-on experience and, in some cases, study in Jerusalem. Seminary graduates are awarded the title Rabbi and earn the Master of Arts

in Hebrew Letters degree. After more advanced study, some earn the Doctor of Hebrew Letters degree.

In general, the curricula of Jewish theological seminaries provide students with a comprehensive knowledge of the Bible, the Torah, rabbinic literature, Jewish history, Hebrew, theology, and courses in education, pastoral psychology, and public speaking. Students receive extensive practical training in dealing with social problems in the community. Training for alternatives to the pulpit, such as leadership in community services and religious education, is increasingly stressed. Some seminaries grant advanced academic degrees in such fields as biblical and Talmudic research. All Jewish theological seminaries make scholarships and loans available.

Major rabbinical seminaries include the Jewish Theological Seminary of America, which educates rabbis for the Conservative branch; the Hebrew Union College—Jewish Institute of Religion, which educates rabbis for the Reform branch; and the Reconstructionist Rabbinical College, which educates rabbis in the newest branch of Judaism. Orthodox rabbis may be trained at The Rabbi Isaac Elchanan Theological Seminary and the Beth Medrash Govoha Seminary. The number of Orthodox seminaries is relatively high, but the number of students attending each seminary is low. In all cases, rabbinic training is rigorous. When students have become sufficiently learned in the Torah, the Bible, and other religious texts, they may be ordained with the approval of an authorized rabbi, acting either independently or as a representative of a rabbinical seminary.



*Newly ordained rabbis often begin as spiritual leaders of small congregations or as assistants to more experienced rabbis.*

Newly ordained rabbis usually begin as spiritual leaders of small congregations, assistants to experienced rabbis, directors of Hillel Foundations on college campuses, teachers in educational institutions, or chaplains in the U.S. Armed Forces. As a rule, experienced rabbis fill the pulpits of large, well-established Jewish congregations.

### **Job Outlook**

Job opportunities for rabbis are expected in all four major branches of Judaism through the year 2012. Rabbis willing to work in small, underserved communities should have the best prospects.

Graduates of Orthodox seminaries who seek pulpits should have opportunities as growth in enrollments slows and as many graduates seek alternatives to the pulpit. Rapidly expanding membership is expected to create employment opportunities for Reconstructionist rabbis. Conservative and Reform rabbis should have job opportunities serving congregations or in other settings because of the large size of these two branches of Judaism.

### **Earnings**

In addition to their annual salary, benefits received by rabbis may include housing, health insurance, and a retirement plan. Income varies widely, depending on the size and financial status of the congregation, as well as denominational branch and geographic location. Rabbis may earn additional income from gifts or fees for officiating at ceremonies such as bar or bat mitzvahs and weddings.

### **Sources of Additional Information**

Persons who are interested in becoming rabbis should discuss their plans with a practicing rabbi. Information on the work of rabbis and allied occupations can be obtained from:

- ▶ Rabbinical Council of America, 305 7th Ave., New York, NY 10001. Internet: <http://www.rabbis.org> (Orthodox)
- ▶ The Jewish Theological Seminary of America, 3080 Broadway, New York, NY 10027. Internet: <http://www.jtsa.edu> (Conservative)
- ▶ Hebrew Union College-Jewish Institute of Religion, One West 4th St., New York, NY 10012. Internet: <http://www.huc.edu> (Reform)
- ▶ Reconstructionist Rabbinical College, 1299 Church Rd., Wyncote, PA 19095. Internet: <http://www.rrc.edu> (Reconstructionist)

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## Roman Catholic Priests

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### Significant Points

- Preparation generally requires 8 years of study beyond high school, usually including a college degree followed by 4 or more years of theology study at a seminary.
- The shortage of Roman Catholic priests is expected to continue, resulting in a very favorable outlook.

### Nature of the Work

Priests in the Catholic Church may be categorized as either diocesan or religious. Both types of priests have the same priesthood faculties, acquired through ordination by a bishop. Differences lie in their way of life, type of work, and the Church authority to which they are responsible. *Diocesan priests* commit their lives to serving the people of a diocese, a church administrative region, and generally work in parishes, schools, or other Catholic institutions as assigned by the bishop of their diocese. Diocesan priests take oaths of celibacy and obedience. *Religious priests* belong to a religious order, such as the Jesuits, Dominicans, or Franciscans. In addition to the vows taken by diocesan priests, religious priests take a vow of poverty.

Diocesan priests attend to the spiritual, pastoral, moral, and educational needs of the members of their church. A priest's day usually begins with morning meditation and mass and may end with an individual counseling session or an evening visit to a hospital or home. Many priests direct and serve on church committees, work in civic and charitable organizations, and assist in community projects. Some counsel parishioners preparing for marriage or the birth of a child.

Religious priests receive duty assignments from their superiors in their respective religious orders. Some religious priests specialize in teaching, whereas others serve as missionaries in foreign countries, where they may live under difficult and primitive conditions. Other religious priests live a communal life in monasteries, where they devote their lives to prayer, study, and assigned work.

Both religious and diocesan priests hold teaching and administrative posts in Catholic seminaries, colleges and universities, and high schools. Priests attached to religious orders staff many of the Church's institutions of higher education and many high schools, whereas diocesan priests usually are concerned with the parochial schools attached to parish churches and with diocesan high schools. Members of religious orders do much of the missionary work conducted by the Catholic Church in this country and abroad.

### Employment

According to *The Official Catholic Directory*, there were approximately 45,000 priests in 2002; about 30,000 were diocesan priests. Priests are found in nearly every city and town and in many rural communities; however, the majority is in metropolitan areas, where most Catholics reside.

### Training and Other Qualifications

Men exclusively are ordained as priests. Women may serve in church positions that do not require priestly ordination. Preparation for the priesthood generally requires 8 years of study

beyond high school, usually including a college degree followed by 4 or more years of theology study at a seminary.

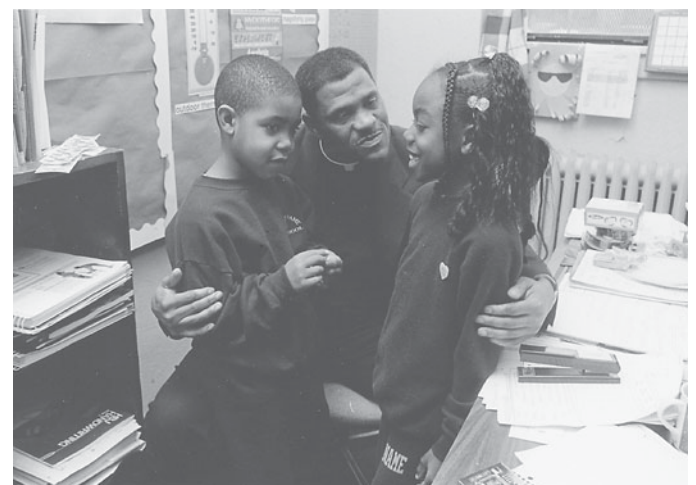
Preparatory study for the priesthood may begin in the first year of high school, at the college level, or in theological seminaries after college graduation. Seven high-school seminary programs—four free-standing high school seminaries and three programs within Catholic high schools—provided a college preparatory program in 2002. Programs emphasize and support religious formation in addition to a regular, college-preparatory curriculum. Latin may be required, and modern languages are encouraged. In Hispanic communities, knowledge of Spanish is mandatory.

Those who begin training for the priesthood in college do so in one of 39 priesthood formation programs offered either through Catholic colleges or universities or in freestanding college seminaries. Preparatory studies usually include training in philosophy, religious studies, and prayer.

Today, most candidates for the priesthood have a 4-year degree from an accredited college or university, then attend one of 46 theological seminaries (also called theologates) and earn either the Master of Divinity or the Master of Arts degree. Thirty-four theologates primarily train diocesan priests, whereas 12 theologates provide information mostly for priesthood candidates from religious orders. (Slight variations in training reflect the differences in their expected duties.) Theology coursework includes sacred scripture; dogmatic, moral, and pastoral theology; homiletics (art of preaching); church history; liturgy (sacraments); and canon (church) law. Fieldwork experience usually is required.

Young men are never denied entry into seminaries because of lack of funds. In seminaries for diocesan priests, scholarships or loans are available, and contributions of benefactors and the Catholic Church finance those in religious seminaries—who have taken a vow of poverty and are not expected to have personal resources.

Graduate work in theology beyond that required for ordination also is offered at a number of American Catholic universities or at ecclesiastical universities around the world, particularly in Rome. Also, many priests do graduate work in fields unrelated to theology. Priests are encouraged by the Catholic Church to continue their studies, at least informally, after ordination. In recent years, the Church has stressed continuing edu-



*Many priests work with civic and charitable organizations and assist in community projects.*

cation for ordained priests in the social sciences, such as sociology and psychology.

A newly ordained diocesan priest usually works as an assistant pastor. Newly ordained priests of religious orders are assigned to the specialized duties for which they have been trained. Depending on the talents, interests, and experience of the individual, many opportunities for additional responsibility exist within the Church.

### **Job Outlook**

The shortage of Roman Catholic priests is expected to continue, resulting in a very favorable job outlook through the year 2012. Many priests will be needed in the years ahead to provide for the spiritual, educational, and social needs of the increasing number of Catholics. In recent years, the number of ordained priests has been insufficient to fill the needs of newly established parishes and other Catholic institutions and to replace priests who retire, die, or leave the priesthood. This situation is likely to continue, as seminary enrollments remain below the levels needed to overcome the current shortfall of priests.

In response to the shortage of priests, permanent deacons and teams of clergy and laity increasingly are performing certain traditional functions within the Catholic Church. The number of ordained deacons has increased 30 percent over the past 20 years, and this trend should continue. Throughout most of the country, permanent deacons have been ordained to preach and perform liturgical functions, such as baptisms, marriages, and funerals, and to provide service to the community. Deacons are not authorized to celebrate Mass, nor are they allowed to administer the Sacraments of Reconciliation and the Anointing of the Sick. Teams of clergy and laity undertake some liturgical and nonliturgical functions, such as hospital visits and religious teaching.

### **Earnings**

Salaries of diocesan priests vary from diocese to diocese. According to a biennial survey of the National Federation of Priests' Council, low-end salaries averaged \$15,291 per year in 2002; high-end salaries averaged \$18,478 per year. In addition to a salary, diocesan priests receive a package of benefits that may include a car allowance, room and board in the parish rectory, health insurance, and a retirement plan.

Diocesan priests who do special work related to the church, such as teaching, usually receive a salary which is less than a lay person in the same position would receive. The difference between the usual salary for these jobs and the salary that the priest receives is called "contributed service." In some situations, housing and related expenses may be provided; in other cases, the priest must make his own arrangements. Some priests doing special work receive the same compensation that a lay person would receive.

Religious priests take a vow of poverty and are supported by their religious order. Any personal earnings are given to the order. Their vow of poverty is recognized by the Internal Revenue Service, which exempts them from paying Federal income tax.

### **Sources of Additional Information**

Young men interested in entering the priesthood should seek the guidance and counsel of their parish priests and diocesan vocational office. For information regarding the different religious orders and the diocesan priesthood, as well as a list of the seminaries that prepare students for the priesthood, contact the diocesan director of vocations through the office of the local pastor or bishop.

Individuals seeking additional information about careers in the Catholic Ministry should contact their local diocese.

For information on training programs for the Catholic ministry, contact:

► Center for Applied Research in the Apostolate (CARA), Georgetown University, 2300 Wisconsin Ave. NW., Suite 400, Washington, DC 20007. Internet: <http://cara.georgetown.edu>

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## Counselors

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(0\*NET 21-1011.00, 21-1012.00, 21-1013.00, 21-1014.00, 21-1015.00))

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### Significant Points

- A master's degree is often required to be licensed or certified as a counselor.
- All but three States require some form of licensure or certification for practice outside of schools; all States require school counselors to hold a State school counseling certification.

### Nature of the Work

Counselors assist people with personal, family, educational, mental health, and career decisions and problems. Their duties depend on the individuals they serve and on the settings in which they work.

*Educational, vocational, and school counselors* provide individuals and groups with career and educational counseling. In school settings—elementary through postsecondary—they are usually called school counselors and they work with students, including those considered to be at risk and those with special needs. They advocate for students and work with other individuals and organizations to promote the academic, career, and personal and social development of children and youths. School counselors help students evaluate their abilities, interests, talents, and personality characteristics in order to develop realistic academic and career goals. Counselors use interviews, counseling sessions, tests, or other methods in evaluating and advising students. They also operate career information centers and career education programs. High school counselors advise students regarding college majors, admission requirements, entrance exams, financial aid, trade or technical schools, and apprenticeship programs. They help students develop job search skills such as resume writing and interviewing techniques. College career planning and placement counselors assist alumni or students with career development and job-hunting techniques.

Elementary school counselors observe younger children during classroom and play activities and confer with their teachers and parents to evaluate the children's strengths, problems, or special needs. They also help students develop good study habits. Elementary school counselors do less vocational and academic counseling than do secondary school counselors.

School counselors at all levels help students understand and deal with social, behavioral, and personal problems. These counselors emphasize preventive and developmental counseling to provide students with the life skills needed to deal with problems before they occur and to enhance the student's personal, social, and academic growth. Counselors provide special services, including alcohol and drug prevention programs and conflict resolution classes. Counselors also try to identify cases of domestic abuse and other family problems that can affect a student's development. Counselors work with students individually, with small groups, or with entire classes. They consult and collaborate with parents, teachers, school administrators, school psychologists, medical professionals, and social workers in order to develop and implement strategies to help students be successful in the education system.

Vocational counselors who provide mainly career counseling outside the school setting are also referred to as *employment counselors* or *career counselors*. Their chief focus is helping

individuals with their career decisions. Vocational counselors explore and evaluate the client's education, training, work history, interests, skills, and personality traits, and arrange for aptitude and achievement tests to assist in making career decisions. They also work with individuals to develop their job search skills, and they assist clients in locating and applying for jobs. In addition, career counselors provide support to persons experiencing job loss, job stress, or other career transition issues.

*Rehabilitation counselors* help people deal with the personal, social, and vocational effects of disabilities. They counsel people with disabilities resulting from birth defects, illness or disease, accidents, or the stress of daily life. They evaluate the strengths and limitations of individuals, provide personal and vocational counseling, and arrange for medical care, vocational training, and job placement. Rehabilitation counselors interview both individuals with disabilities and their families, evaluate school and medical reports, and confer and plan with physicians, psychologists, occupational therapists, and employers to determine the capabilities and skills of the individual. Confering with the client, they develop a rehabilitation program that often includes training to help the person develop job skills. Rehabilitation counselors also work toward increasing the client's capacity to live independently.

Mental health counselors work with individuals, families, and groups to address and treat mental and emotional disorders and to promote optimum mental health. They are trained in a variety of therapeutic techniques used to address a wide range of issues, including depression, addiction and substance abuse, suicidal impulses, stress management, problems with self-esteem, issues associated with aging, job and career concerns, educational decisions, issues related to mental and emotional health, and family, parenting, and marital or other relationship problems. Mental health counselors often work closely with other mental health specialists, such as psychiatrists, psychologists, clinical social workers, psychiatric nurses, and school counselors. (Information on other mental health specialists appears in the *Handbook* statements on physicians and surgeons, psychologists, registered nurses, and social workers.)

Substance abuse and behavioral disorder counselors help people who have problems with alcohol, drugs, gambling, and eating disorders. They counsel individuals who are addicted to drugs, helping them identify behaviors and problems related to their addiction. These counselors hold sessions for one person, for families, or for groups of people.



*Counselors must be able to inspire respect, trust, and confidence in order to assist people with their problems.*

*Marriage and family therapists* apply principles, methods, and therapeutic techniques to individuals, family groups, couples, or organizations for the purpose of resolving emotional conflicts. In doing so, they modify people's perceptions and behaviors, enhance communication and understanding among all family members, and help to prevent family and individual crises. Marriage and family therapists also may engage in psychotherapy of a nonmedical nature, with appropriate referrals to psychiatric resources, and in research and teaching in the overall field of human development and interpersonal relationships.

Other counseling specialties include gerontological, multicultural, and genetic counseling. A gerontological counselor provides services to elderly persons who face changing lifestyles because of health problems; the counselor helps families cope with the changes. A multicultural counselor helps employers adjust to an increasingly diverse workforce. Genetic counselors provide information and support to families who have members with birth defects or genetic disorders and to families who may be at risk for a variety of inherited conditions. These counselors identify families at risk, investigate the problem that is present in the family, interpret information about the disorder, analyze inheritance patterns and risks of recurrence, and review available options with the family.

**Working Conditions**

Most school counselors work the traditional 9- to 10-month school year with a 2- to 3-month vacation, although increasing numbers are employed on 10½- or 11-month contracts. They usually work the same hours that teachers do. College career planning and placement counselors work long and irregular hours during student recruiting periods.

Rehabilitation counselors usually work a standard 40-hour week. Self-employed counselors and those working in mental health and community agencies, such as substance abuse and behavioral disorder counselors, frequently work evenings to counsel clients who work during the day. Both mental health counselors and marriage and family therapists also often work flexible hours, to accommodate families in crisis or working couples who must have evening or weekend appointments.

Counselors must possess high physical and emotional energy to handle the array of problems they address. Dealing daily with these problems can cause stress. Because privacy is essential for confidential and frank discussions with clients, counselors usually have private offices.

**Employment**

Counselors held about 526,000 jobs in 2002. Employment was distributed among the counseling specialties as follows:

Educational, vocational, and school counselors .....	228,000
Rehabilitation counselors .....	122,000
Mental health counselors .....	85,000
Substance abuse and behavioral disorder counselors .....	67,000
Marriage and family therapists .....	23,000

Educational, vocational, and school counselors work primarily in elementary and secondary schools and colleges and universities. Other types of counselors work in a wide variety of public and private establishments, including health care facilities; job training, career development, and vocational rehabilitation centers; social agencies; correctional institutions; and residential care facilities, such as halfway houses for criminal offenders and group homes for children, the elderly, and the disabled. Some substance abuse and behavioral disorder counselors work in therapeutic com-

munities where addicts live while undergoing treatment. Counselors also work in organizations engaged in community improvement and social change and work as well in drug and alcohol rehabilitation programs and State and local government agencies. A growing number of counselors are self-employed and working in group practices or private practice. This growth has been helped by laws allowing counselors to receive payments from insurance companies and the growing recognition that counselors are well-trained professionals.

**Training, Other Qualifications, and Advancement**

All States require school counselors to hold State school counseling certification and to have completed at least some graduate course work; most require the completion of a master's degree. Some States require public school counselors to have both counseling and teaching certificates and to have had some teaching experience before receiving certification. For counselors based outside of schools, 47 States and the District of Columbia had some form of counselor credentialing, licensure, certification, or registration that governed their practice of counseling. Requirements typically include the completion of a master's degree in counseling, the accumulation of 2 years or 3,000 hours of supervised clinical experience beyond the master's degree level, the passage of a State-recognized exam, adherence to ethical codes and standards, and the satisfaction of annual continuing education requirements.

Counselors must be aware of educational and training requirements that are often very detailed and that vary by area and by counseling specialty. Prospective counselors should check with State and local governments, employers, and national voluntary certification organizations in order to determine which requirements apply.

As mentioned, a master's degree is typically required to be licensed or certified as a counselor. A bachelor's degree often qualifies a person to work as a counseling aide, rehabilitation aide, or social service worker. Some States require counselors in public employment to have a master's degree; others accept a bachelor's degree with appropriate counseling courses. Counselor education programs in colleges and universities usually are in departments of education or psychology. Fields of study include college student affairs, elementary or secondary school counseling, education, gerontological counseling, marriage and family counseling, substance abuse counseling, rehabilitation counseling, agency or community counseling, clinical mental health counseling, counseling psychology, career counseling, and related fields. Courses are grouped into eight core areas: Human growth and development, social and cultural diversity, relationships, group work, career development, assessment, research and program evaluation, and professional identity. In an accredited master's degree program, 48 to 60 semester hours of graduate study, including a period of supervised clinical experience in counseling, are required for a master's degree.

In 2003, 176 institutions offered programs in counselor education—including career, community, gerontological, mental health, school, student affairs, and marriage and family counseling—that were accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). CACREP also recognizes many counselor education programs, apart from those in the 176 accredited institutions, that use alternative instruction methods, such as distance learning. Programs that use such alternative instruction methods are evaluated on the basis of the same standards for accreditation that CACREP applies to programs that employ the more traditional

methods. Another organization, the Council on Rehabilitation Education (CORE), accredits graduate programs in rehabilitation counseling. Accredited master's degree programs include a minimum of 2 years of full-time study, including 600 hours of supervised clinical internship experience.

Many counselors elect to be nationally certified by the National Board for Certified Counselors, Inc. (NBCC), which grants the general practice credential "National Certified Counselor." To be certified, a counselor must hold a master's or higher degree, with a concentration in counseling, from a regionally accredited college or university; must have at least 2 years of supervised field experience in a counseling setting (graduates from counselor education programs accredited by CACREP are exempted); must provide two professional endorsements, one of which must be from a recent supervisor; and must have a passing score on the NBCC's National Counselor Examination for Licensure and Certification (NCE). This national certification is voluntary and is distinct from State certification. However, in some States, those who pass the national exam are exempted from taking a State certification exam. NBCC also offers specialty certification in school, clinical mental health, and addiction counseling. Beginning January 1, 2004, new candidates for NBCC's National Certified School counselor (NCSC) credential must pass a practical simulation examination in addition to fulfilling the current requirements. To maintain their certification, counselors retake and pass the NCE or complete 100 hours of acceptable continuing education credit every 5 years.

Another organization, the Commission on Rehabilitation Counselor Certification, offers voluntary national certification for rehabilitation counselors. Many employers require rehabilitation counselors to be nationally certified. To become certified, rehabilitation counselors usually must graduate from an accredited educational program, complete an internship, and pass a written examination. (Certification requirements vary according to an applicant's educational history. Employment experience, for example, is required for those with a counseling degree in a specialty other than rehabilitation.) After meeting these requirements, candidates are designated "Certified Rehabilitation Counselors." To maintain their certification, counselors must successfully retake the certification exam or complete 100 hours of acceptable continuing education credit every 5 years.

Other counseling organizations also offer certification in particular counseling specialties. Usually these are voluntary, but having one may enhance one's job prospects.

Some employers provide training for newly hired counselors. Others may offer time off or provide help with tuition if it is needed to complete a graduate degree. Counselors must participate in graduate studies, workshops, and personal studies to maintain their certificates and licenses.

Persons interested in counseling should have a strong interest in helping others and should possess the ability to inspire respect, trust, and confidence. They should be able to work independently or as part of a team. Counselors must follow the code of ethics associated with their respective certifications and licenses.

Prospects for advancement vary by counseling field. School counselors can move to a larger school; become directors or supervisors of counseling, guidance, or pupil personnel services; or, usually with further graduate education, become counselor educators, counseling psychologists, or school administrators. (See the statements on psychologists and education administrators elsewhere in the *Handbook*.) Some counselors choose to work for a State's department of education. For marriage and family therapists, doctoral education in family therapy empha-

sizes the training of supervisors, teachers, researchers, and clinicians in the discipline.

Counselors can become supervisors or administrators in their agencies. Some counselors move into research, consulting, or college teaching or go into private or group practice.

### **Job Outlook**

Overall employment of counselors is expected to grow faster than the average for all occupations through 2012, and job opportunities should be very good because there are usually more job openings than graduates of counseling programs. In addition, numerous job openings will occur as many counselors retire or leave the profession.

Employment of educational, vocational, and school counselors is expected to grow as fast as the average for all occupations as a result of: increasing student enrollments, particularly in secondary and postsecondary schools; State legislation requiring counselors in elementary schools; and an expansion in the responsibilities of counselors. For example, counselors are becoming more involved in crisis and preventive counseling, helping students deal with issues ranging from drug and alcohol abuse to death and suicide. Although schools and governments realize the value of counselors in achieving academic success in their students, budget constraints at every school level will dampen job growth of school counselors. However, Federal grants and subsidies may fill in the gaps and allow the current ongoing reduction in student-to-counselor ratios to continue.

Demand for vocational or career counselors should grow as the notion of staying in one job over a lifetime continues to be rejected and replaced by the concept of managing one's own career and taking responsibility for it. In addition, changes in welfare laws that require beneficiaries to work will continue to create demand for counselors by State and local governments. Other opportunities for employment counselors will arise in private job-training centers that provide training and other services to laid-off workers, as well as to those seeking a new or second career or wanting to upgrade their skills.

Demand is expected to be strong for substance abuse and behavioral, mental health, and marriage and family therapists and for rehabilitation counselors, for a variety of reasons. For one, California and a few other States have recently passed laws requiring substance abuse treatment instead of jail for people caught possessing a drug. This shift will require more substance abuse counselors in those States. Second, the increasing availability of funds to build statewide networks to improve services for children and adolescents with serious emotional disturbances and for their family members should increase employment opportunities for counselors. Under managed care systems, insurance companies are increasingly providing for reimbursement of counselors as a less costly alternative to psychiatrists and psychologists. Also, legislation is pending that may provide counseling services to Medicare recipients.

The number of people who will need rehabilitation counseling is expected to grow as the population continues to age and as advances in medical technology continue to save lives that only a few years ago would have been lost. In addition, legislation requiring equal employment rights for people with disabilities will spur demand for counselors, who not only will help these people make a transition into the workforce, but also will help companies comply with the law.

Employment of mental health counselors and marriage and family therapists will grow as the Nation becomes more comfortable seeking professional help for a variety of health and

personal and family problems. Employers also are increasingly offering employee assistance programs that provide mental health and alcohol and drug abuse services. More people are expected to use these services as society focuses on ways of developing mental well-being, such as controlling stress associated with job and family responsibilities.

**Earnings**

Median annual earnings of educational, vocational, and school counselors in 2002 were \$44,100. The middle 50 percent earned between \$33,160 and \$56,770. The lowest 10 percent earned less than \$24,930, and the highest 10 percent earned more than \$70,320. School counselors can earn additional income working summers in the school system or in other jobs. Median annual earnings in the industries employing the largest numbers of educational, vocational, and school counselors in 2002 were as follows:

Educational, vocational, and school counselors .....	228,000
Rehabilitation counselors .....	122,000
Mental health counselors .....	85,000
Substance abuse and behavioral disorder counselors .....	67,000
Marriage and family therapists .....	23,000

Median annual earnings of substance abuse and behavioral disorder counselors in 2002 were \$30,180. The middle 50 percent earned between \$24,350 and \$37,520. The lowest 10 percent earned less than \$19,540, and the highest 10 percent earned more than \$45,570.

Median annual earnings of mental health counselors in 2002 were \$29,940. The middle 50 percent earned between \$23,950 and \$39,160. The lowest 10 percent earned less than \$19,760, and the highest 10 percent earned more than 50,170.

Median annual earnings of rehabilitation counselors in 2002 were \$25,840. The middle 50 percent earned between \$20,350 and \$34,000. The lowest 10 percent earned less than \$16,840, and the highest 10 percent earned more than \$44,940.

For substance abuse, mental health, and rehabilitation counselors, government employers generally pay the highest wages, followed by hospitals and social service agencies. Residential care facilities often pay the lowest wages.

Median annual earnings of marriage and family therapists in 2002 were \$35,580. The middle 50 percent earned between \$26,790 and \$44,620. The lowest 10 percent earned less than 20,960, and the highest 10 percent earned more than \$59,030. Median annual earnings in 2002 were \$29,160 in individual and family social services, the industry employing the largest numbers of marriage and family therapists.

Self-employed counselors who have well-established practices, as well as counselors employed in group practices, usually have the highest earnings.

**Related Occupations**

Counselors help people evaluate their interests, abilities, and disabilities and deal with personal, social, academic, and career problems. Others who help people in similar ways include teachers, social and human service assistants, social workers, psychologists, physicians and surgeons, registered nurses, members of the clergy, occupational therapists, and human resources, training, and labor relations managers and specialists.

**Sources of Additional Information**

For general information about counseling, as well as information on specialties such as school, college, mental health, reha-

bilitation, multicultural, career, marriage and family, and gerontological counseling, contact:

► American Counseling Association, 5999 Stevenson Ave., Alexandria, VA 22304-3300. Internet: <http://www.counseling.org>

For information on accredited counseling and related training programs, contact:

► Council for Accreditation of Counseling and Related Educational Programs, American Counseling Association, 5999 Stevenson Ave., 4th floor, Alexandria, VA 22304. Internet: <http://www.counseling.org/cacrep>

For information on national certification requirements for counselors, contact:

► National Board for Certified Counselors, Inc., 3 Terrace Way, Suite D, Greensboro, NC 27403-3660. Internet: <http://www.nbcc.org>

State departments of education can supply information on those colleges and universities which offer guidance and counseling training that meets State certification and licensure requirements.

State employment service offices have information about job opportunities and about entrance requirements for counselors.



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# Education Administrators

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(0\*NET 11-9031.00, 11-9032.00, 11-9033.00, 11-9039.99)

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## Significant Points

- Many jobs require a master's or doctoral degree and experience in a related occupation, such as a teacher or admissions counselor.
- Strong interpersonal and communication skills are essential because much of an administrator's job involves working and collaborating with others.
- Job outlook is expected to be excellent because a large proportion of education administrators are expected to retire over the next 10 years.

## Nature of the Work

Smooth operation of an educational institution requires competent administrators. *Education administrators* provide instructional leadership as well as manage the day-to-day activities in schools, pre-schools, daycare centers, and colleges and universities. They also direct the educational programs of businesses, correctional institutions, museums, and job training and community service organizations. (College presidents and school superintendents are covered in the *Handbook* statement on general managers and top executives.) Education administrators set educational standards and goals and establish the policies and procedures to carry them out. They also supervise managers, support staff, teachers, counselors, librarians, coaches, and others. They develop academic programs; monitor students' educational progress; train and motivate teachers and other staff; manage guidance and other student services; administer recordkeeping; prepare budgets; handle relations with parents, prospective and current students, employers, and the community; and perform many other duties. In an organization such as a small daycare center, one administrator may handle all these functions. In universities or large school systems, responsibilities are divided among many administrators, each with a specific function.

Those who manage elementary, middle, and secondary schools are called *principals*. They set the academic tone and hire, evaluate, and help improve the skills of teachers and other staff. Principals confer with staff to advise, explain, or answer procedural questions. They visit classrooms, observe teaching methods, review instructional objectives, and examine learning materials. They actively work with teachers to develop and maintain high curriculum standards, develop mission statements, and set performance goals and objectives. Principals must use clear, objective guidelines for teacher appraisals, because pay often is based on performance ratings.

Principals also meet and interact with other administrators, students, parents, and representatives of community organizations. Decisionmaking authority has increasingly shifted from school district central offices to individual schools. Thus, parents, teachers, and other members of the community play an important role in setting school policies and goals. Principals must pay attention to the concerns of these groups when making administrative decisions.

Principals prepare budgets and reports on various subjects, including finances and attendance, and oversee the requisition and allocation of supplies. As school budgets become tighter, many principals have become more involved in public relations and fundraising to secure financial support for their schools from local businesses and the community.

Principals must take an active role to ensure that students meet national, State, and local academic standards. Many principals develop school/business partnerships and school-to-work transition programs for students. Increasingly, principals must be sensitive to the needs of the rising number of non-English speaking and culturally diverse students. Growing enrollments, which are leading to overcrowding at many existing schools, also are a cause for concern. When addressing problems of inadequate resources, administrators serve as advocates for the building of new schools or the repair of existing ones. During summer months, principals are responsible for planning for the upcoming year, overseeing summer school, participating in workshops for teachers and administrators, supervising building repairs and improvements, and working to be sure the school has adequate staff for the school year.

Schools continue to be involved with students' emotional welfare as well as their academic achievement. As a result, principals face responsibilities outside the academic realm. For example, in response to the growing numbers of dual-income and single-parent families and teenage parents, schools have established before- and after-school childcare programs or family resource centers, which also may offer parenting classes and social service referrals. With the help of community organizations, some principals have established programs to combat increases in crime, drug and alcohol abuse, and sexually transmitted diseases among students.

*Assistant principals* aid the principal in the overall administration of the school. Some assistant principals hold this position for several years to prepare for advancement to principal jobs; others are career assistant principals. They are primarily responsible for scheduling student classes, ordering textbooks and supplies, and coordinating transportation, custodial, cafeteria, and other support services. They usually handle student discipline and attendance problems, social and recreational programs, and health and safety matters. They also may counsel students on personal, educational, or vocational matters. With the advent of site-based management, assistant principals are playing a greater role in ensuring the academic success of students by helping to develop new curriculums, evaluating teachers, and dealing with school-community relations—responsibilities previously assumed solely by the principal. The number of assistant principals that a school employs may vary, depending on the number of students.

In preschools and childcare centers, education administrators are the director or supervisor of the school or center. Their job is similar to that of other school administrators in that they oversee daily



*Strong interpersonal and communication skills are essential for education administrators.*

activities and operation of the schools, hire and develop staff, and make sure that the school meets required regulations.

*Administrators* in school district central offices oversee public schools under their jurisdiction. This group includes those who direct subject-area programs such as English, music, vocational education, special education, and mathematics. They supervise instructional coordinators and curriculum specialists, and work with them to evaluate curriculums and teaching techniques and improve them. (Instructional coordinators are covered elsewhere in the *Handbook*.) Administrators also may oversee career counseling programs and testing that measures students' abilities and helps to place them in appropriate classes. Others may also direct programs such as school psychology, athletics, curriculum and instruction, and professional development. With site-based management, administrators have transferred primary responsibility for many of these programs to the principals, assistant principals, teachers, instructional coordinators, and other staff in the schools.

In colleges and universities, *academic deans, deans of faculty, provosts, and university deans* assist presidents, make faculty appointments, develop budgets, and establish academic policies and programs. They also direct and coordinate the activities of deans of individual colleges and chairpersons of academic departments. Fundraising also is becoming an essential part of their job.

*College or university department heads or chairpersons* are in charge of departments that specialize in particular fields of study, such as English, biological science, or mathematics. In addition to teaching, they coordinate schedules of classes and teaching assignments; propose budgets; recruit, interview, and hire applicants for teaching positions; evaluate faculty members; encourage faculty development; serve on committees; and perform other administrative duties. In overseeing their departments, chairpersons must consider and balance the concerns of faculty, administrators, and students.

Higher education administrators also direct and coordinate the provision of student services. *Vice presidents of student affairs or student life, deans of students, and directors of student services* may direct and coordinate admissions, foreign student services, health and counseling services, career services, financial aid, and housing and residential life, as well as social, recreational, and related programs. In small colleges, they may counsel students. In larger colleges and universities, separate administrators may handle each of these services. *Registrars* are custodians of students' records. They register students, record grades, prepare student transcripts, evaluate academic records, assess and collect tuition and fees, plan and implement commencement, oversee the preparation of college catalogs and schedules of classes, and analyze enrollment and demographic statistics. *Directors of admissions* manage the process of recruiting, evaluating, and admitting students, and work closely with *financial aid directors*, who oversee scholarship, fellowship, and loan programs. Registrars and admissions officers at most institutions need computer skills because they use electronic student information systems. For example, for those whose institutions present information—such as college catalogs and schedules—on the Internet, knowledge of online resources, imaging, and other computer skills is important. *Athletic directors* plan and direct intramural and intercollegiate athletic activities, seeing to publicity for athletic events, preparation of budgets, and supervision of coaches. Other increasingly important administrators direct fundraising, public relations, distance learning, and technology.

### **Working Conditions**

Education administrators hold leadership positions with significant responsibility. Most find working with students extremely reward-

ing, but as the responsibilities of administrators have increased in recent years, so has the stress. Coordinating and interacting with faculty, parents, students, community members, business leaders, and State and local policymakers can be fast-paced and stimulating, but also stressful and demanding. Principals and assistant principals, whose varied duties include discipline, may find working with difficult students challenging. The pressures associated with education administrator jobs have multiplied in recent years, as workers in these positions are increasingly being held accountable for ensuring that their schools meet recently imposed State and Federal guidelines for student performance and teacher qualifications, and as they must cope with the additional challenges presented by current budget shortfalls.

Many education administrators work more than 40 hours a week, often including school activities at night and on weekends. Most administrators work 11 or 12 months out of the year. Some jobs include travel.

### **Employment**

Education administrators held about 427,000 jobs in 2002. About 2 in 10 worked for private education institutions, and 6 in 10 worked for State and local governments, mainly in schools, colleges and universities, and departments of education. Less than 5 percent were self-employed. The rest worked in child daycare centers, religious organizations, job training centers, and businesses and other organizations that provided training for their employees.

### **Training, Other Qualifications, and Advancement**

Most education administrators begin their careers in related occupations, and prepare for a job in education administration by completing a master's or doctoral degree. Because of the diversity of duties and levels of responsibility, their educational backgrounds and experience vary considerably. Principals, assistant principals, central office administrators, academic deans, and preschool directors usually have held teaching positions before moving into administration. Some teachers move directly into principal positions; others first become assistant principals, or gain experience in other central office administrative jobs at either the school or district level in positions such as department head, curriculum specialist, or subject matter advisor. In some cases, administrators move up from related staff jobs such as recruiter, guidance counselor, librarian, residence hall director, or financial aid or admissions counselor.

To be considered for education administrator positions, workers must first prove themselves in their current jobs. In evaluating candidates, supervisors look for leadership, determination, confidence, innovativeness, and motivation. The ability to make sound decisions and to organize and coordinate work efficiently is essential. Because much of an administrator's job involves interacting with others—such as students, parents, teachers, and the community—a person in such a position must have strong interpersonal skills and be an effective communicator and motivator. Knowledge of leadership principles and practices, gained through work experience and formal education, is important. A familiarity with computer technology is a necessity for principals, who are required to gather information and coordinate technical resources for their students, teachers, and classrooms.

In most public schools, principals, assistant principals, and school administrators in central offices need a master's degree in education administration or educational supervision. Some principals and central office administrators have a doctorate or specialized degree in education administration. In private schools, which are not subject to State licensure requirements, some principals and assistant

principals hold only a bachelor's degree; however, the majority have a master's or doctoral degree. Most States require principals to be licensed as school administrators. License requirements vary by State. National standards for school leaders, including principals and supervisors, have been developed by the Interstate School Leaders Licensure Consortium. Many States use these national standards as guidelines to assess beginning principals for licensure. Increasingly, on-the-job training, often with a mentor, is required for new school leaders. Some States require administrators to take continuing education courses to keep their license, thus ensuring that administrators have the most up-to-date skills. The number and types of courses required to maintain licensure vary by State.

Educational requirements for administrators of preschools and childcare centers vary depending on the setting of the program and the State of employment. Administrators who oversee school-based preschool programs are often required to have at least a bachelor's degree. Child care directors are generally not required to have a degree; however, most States require a credential such as the Child Development Associate credential (CDA) sponsored by the Council for Professional Recognition or other credential specifically designed for administrators. The National Child Care Association, offers a National Administration Credential, which some recent college graduates voluntarily earn to better qualify for positions as childcare center directors.

Academic deans and chairpersons usually have a doctorate in their specialty. Most have held a professorship in their department before advancing. Admissions, student affairs, and financial aid directors and registrars sometimes start in related staff jobs with bachelor's degrees—any field usually is acceptable—and obtain advanced degrees in college student affairs, counseling, or higher education administration. A Ph.D. or Ed.D. usually is necessary for top student affairs positions. Computer literacy and a background in accounting or statistics may be assets in admissions, records, and financial work.

Advanced degrees in higher education administration, educational supervision, and college student affairs are offered in many colleges and universities. The National Council for Accreditation of Teacher Education and the Educational Leadership Constituent Council accredit these programs. Education administration degree programs include courses in school leadership, school law, school finance and budgeting, curriculum development and evaluation, research design and data analysis, community relations, politics in education, and counseling. Educational supervision degree programs include courses in supervision of instruction and curriculum, human relations, curriculum development, research, and advanced teaching courses.

Education administrators advance through promotion to more responsible administrative positions or by transferring to more responsible positions at larger schools or systems. They also may become superintendents of school systems or presidents of educational institutions.

### **Job Outlook**

Employment of education administrators is projected to grow faster than the average for all occupations through 2012. As education and training take on greater importance in everyone's lives, the need for people to administer education programs will grow. Job opportunities for many of these positions should also be excellent because a large proportion of education administrators are expected to retire over the next 10 years.

A significant portion of growth will stem from growth in the private and for-profit segments of education. Many of these schools cater to working adults, many of whom might not ordinarily participate in postsecondary education. These schools allow students to earn a degree, receive job-specific training or update their skills, in a convenient manner, such as through part-time programs or distance learning. As the number of these schools continues to grow, more administrators will be needed to oversee them.

Enrollments of school-age children will also have an impact on the demand for education administrators. The U.S. Department of Education projects enrollment of elementary and secondary school students to grow between 5 and 7 percent over the next decade. Preschool and childcare center administrators are expected to experience substantially more growth as enrollments in formal child care programs continues to expand as fewer private households care for young children. Additionally, if mandatory preschool becomes more widespread more preschool directors will be needed. The number of postsecondary school students is projected to grow more rapidly than other student populations, creating significant demand for administrators at that level. In addition, enrollments are expected to increase the fastest in the West and South, where the population is growing, and to decline or remain stable in the Northeast and the Midwest. School administrators also are in greater demand in rural and urban areas, where pay is generally lower than in the suburbs.

Principals and assistant principals should have favorable job prospects. A sharp increase in responsibilities in recent years has made the job more stressful, and has discouraged teachers from taking positions in administration. Principals are now being held more accountable for the performance of students and teachers, while at the same time they are required to adhere to a growing number of government regulations. In addition, overcrowded classrooms, safety issues, budgetary concerns, and teacher shortages in some areas all are creating additional stress for administrators. The increase in pay is often not high enough to entice people into the field.

Job prospects also are expected to be favorable for college and university administrators, particularly those seeking nonacademic positions. Colleges and universities may be subject to funding shortfalls during economic downturns, but increasing enrollments over the projection period will require that institutions replace the large numbers of administrators who retire, and even hire additional administrators. While competition among faculty for prestigious positions as academic deans and department heads is likely to remain keen, fewer applicants are expected for nonacademic administrative jobs, such as director of admissions or student affairs. Furthermore, many people are discouraged from seeking administrator jobs by the requirement that they have a master's or doctoral degree in education administration—as well as by the opportunity to earn higher salaries in other occupations.

### **Earnings**

In 2002, elementary and secondary school administrators had median annual earnings of \$71,490; postsecondary school administrators had median annual earnings of \$64,640, while preschool and childcare center administrators earned a median of \$33,340 per year. Salaries of education administrators depend on several factors, including the location and enrollment level in the school or school district. According to a survey of public schools, conducted by the Educational Research Service, average salaries for principals and assistant principals in the 2002-03 school year were as follows:

Directors, managers, coordinators, and supervisors, finance and business .....	\$81,451
Principals:	
Elementary school .....	75,291
Jr. high/middle school .....	80,708
Senior high school .....	86,452
Assistant principals:	
Elementary school .....	\$62,230
Jr. high/middle school .....	67,288
Senior high school .....	70,874

According to the College and University Professional Association for Human Resources, median annual salaries for selected administrators in higher education in 2001-02 were as follows:

Academic deans:	
Business .....	\$107,414
Graduate programs .....	100,391
Education .....	100,227
Arts and sciences .....	98,780
Health-related professions .....	89,234
Nursing .....	88,386
Continuing education .....	84,457
Occupational or vocational education .....	73,595
Other administrators:	
Dean of students .....	\$70,012
Director, admissions and registrar .....	61,519
Director, student financial aid .....	57,036
Director, annual giving .....	49,121
Director, student activities .....	41,050

Benefits for education administrators are generally very good. Many get 4 or 5 weeks vacation every year and have generous health and pension packages. Many colleges and universities offer free tuition to employees and their families.

### Related Occupations

Education administrators apply organizational and leadership skills to provide services to individuals. Workers in related occupations include administrative services managers; office and administrative support worker supervisors and managers; human resource, training, and labor relations managers and specialists; and archivists, curators, and museum technicians. Education administrators also work with students and have backgrounds similar to those of counselors; librarians; instructional coordinators; teachers—pre-school, kindergarten, elementary, middle, and secondary; and teachers—postsecondary.

### Sources of Additional Information

For information on principals and other management staff in public schools, contact:

- Educational Research Service, 2000 Clarendon Boulevard, Arlington, VA 22201-2908. Internet: <http://www.ers.org>

For information on principals, contact:

- The National Association of Elementary School Principals, 1615 Duke St., Alexandria, VA 22314-3483. Internet: <http://www.naesp.org>
- The National Association of Secondary School Principals, 1904 Association Drive, Reston, VA 20191-1537. Internet: <http://www.nassp.org>

For information on collegiate registrars and admissions officers, contact:

- American Association of Collegiate Registrars and Admissions Officers, One Dupont Circle NW., Suite 520, Washington, DC 20036-1171. Internet: <http://www.aacrao.org>

For information on professional development and graduate programs for college student affairs administrators, contact:

- NASPA, Student Affairs Administrators in Higher Education, 1875 Connecticut Ave. NW., Suite 418, Washington, DC 20009. Internet: <http://www.naspa.org>

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## Instructional Coordinators

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### Significant Points

- Many instructional coordinators are former teachers or principals.
- A bachelor's degree is the minimum educational requirement, but a graduate degree is preferred.
- The need to meet new educational standards will create more demand for instructional coordinators to train teachers and develop new materials.

### Nature of the Work

Instructional coordinators, also known as curriculum specialists, staff development specialists, or directors of instructional material, play a large role in improving the quality of education in the classroom. They develop instructional materials, train teachers, and assess educational programs in terms of quality and adherence to regulations and standards. They also assist in implementing new technology in the classroom. Instructional coordinators often specialize in specific subjects, such as reading, language arts, mathematics, or social studies.

Instructional coordinators evaluate how well a school's curriculum, or plan of study, meets students' needs. They research teaching methods and techniques and develop procedures to determine whether program goals are being met. To aid in their evaluation, they may meet with members of educational committees and advisory groups to learn about subjects—English, history, or mathematics, for example—and to relate curriculum materials to these subjects, to students' needs, and to occupations for which these subjects are good preparation. They also may develop questionnaires and interview school staff about the curriculum. Based on their research and observations of instructional practice, they recommend instruction and curriculum improvements.

Another duty instructional coordinators have is to review textbooks, software, and other educational materials and make recommendations on purchases. They monitor materials ordered and the ways in which teachers use them in the classroom. They also supervise workers who catalogue, distribute, and maintain a school's educational materials and equipment.

Instructional coordinators develop effective ways to use technology to enhance student learning. They monitor the introduction of new technology, including the Internet, into a school's curriculum. In addition, instructional coordinators might recommend installing educational computer software, such as interactive books and exercises designed to enhance student literacy and develop math skills. Instructional coordinators may invite experts—such as computer hardware, software, and library or media specialists—into the classroom to help integrate technological materials into a school's curriculum.

Many instructional coordinators plan and provide onsite education for teachers and administrators. They may train teachers about the use of materials and equipment or help them to improve their skills. Instructional coordinators also mentor new teachers and train experienced ones in the latest instructional methods. This role becomes especially important when a school district introduces new content, program innovations, or a different organizational structure. For example, when a State or

school district introduces standards or tests that must be met by students in order to pass to the next grade, instructional coordinators often must advise teachers on the content of the standards and provide instruction on implementing the standards in the classroom.

### Working Conditions

Instructional coordinators, including those employed by school districts, often work year round, usually in offices or classrooms. Some spend much of their time traveling between schools meeting with teachers and administrators. The opportunity to shape and improve instructional curricula and work in an academic environment can be satisfying. However, some instructional coordinators find the work stressful because the occupation requires continual accountability to school administrators and it is not uncommon for people in this occupation to work long hours.

### Employment

Instructional coordinators held about 98,000 jobs in 2002. More than 1 in 3 worked in local government education. About 1 in 5 worked in private education, and about 1 in 10 worked in State government education. The remainder worked mostly in the following industries: individual and family services; child daycare services; scientific research and development services; and management, scientific, and technical consulting services.

### Training, Other Qualifications, and Advancement

The minimum educational requirement for instructional coordinators is a bachelor's degree, usually in education. Most employers, however, prefer candidates with a master's or higher degree. Many instructional coordinators have training in curriculum development and instruction, or in a specific academic field, such as mathematics or history. Instructional coordinators must have a good understanding of how to teach specific groups of students, in addition to expertise in developing educational materials. As a result, many persons transfer into instructional coordinator jobs after working for several years as teachers. Work experience in an education administrator position, such as principal or assistant principal, also is beneficial. Specific requirements for instructional coordinator jobs vary depending on the particular position or school district. They may also vary by State.



*Instructional coordinators train teachers in the use of materials and equipment.*

Helpful college courses may include those in curriculum development and evaluation, instructional approaches, or research design, which teaches how to create and implement research studies to determine the effectiveness of a given method of curriculum or instruction, or to measure and improve student performance. Moreover, instructional coordinators usually are required to take continuing education courses to keep their skills current. Topics for continuing education courses may include teacher evaluation techniques, curriculum training, new teacher induction, consulting and teacher support, and observation and analysis of teaching.

Instructional coordinators must be able to make sound decisions about curriculum options and to organize and coordinate work efficiently. They should have strong interpersonal and communication skills. Familiarity with computer technology also is important for instructional coordinators, who are increasingly involved in gathering and coordinating technical information for students and teachers.

Depending on experience and educational attainment, instructional coordinators may advance to higher positions in a school system, or to management or executive positions in private industry.

### **Job Outlook**

Employment of instructional coordinators is expected to grow faster than the average for all occupations through the year 2012. Over the next decade, instructional coordinators will be instrumental in developing new curricula to meet the demands of a changing society and in training the teacher workforce. Although budget cuts, particularly in the near term, may negatively impact employment to some extent, a continuing emphasis on improving the quality of education is expected to result in a relatively steady and increasing demand for these workers. As increasing Federal, State and local standards impel more schools to focus on improving educational quality and student performance, growing numbers of coordinators will be needed to incorporate the standards into curriculums and make sure teachers and administrators are informed of the changes. Opportunities are expected to be best for those who specialize in subject areas that have been targeted for improvement by the No Child Left Behind Act—namely, reading, math, and science.

Instructional coordinators also will be needed to provide classes on using technology in the classroom, to keep teachers up-to-date on changes in their fields, and to demonstrate new teaching techniques. Additional job growth for instructional coordinators will stem from the increasing emphasis on lifelong learning and on programs for students with special needs, including those for whom English is a second language. These students often require more educational resources and consolidated planning and management within the educational system.

### **Earnings**

Median annual earnings of instructional coordinators in 2002 were \$47,350. The middle 50 percent earned between \$34,450 and \$62,460. The lowest 10 percent earned less than \$25,880, and the highest 10 percent earned more than \$76,820.

### **Related Occupations**

Instructional coordinators are professionals involved in education and training and development, which requires organizational, administrative, teaching, research, and communication

skills. Occupations with similar characteristics include preschool, kindergarten, elementary, middle, and secondary school teachers; postsecondary teachers; education administrators; counselors; and human resources, training, and labor relations managers and specialists.

### **Sources of Additional Information**

Information on requirements and job opportunities for instructional coordinators is available from local school systems and State departments of education.

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# Librarians

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## Significant Points

- A master's degree in library science usually is required; special librarians often need an additional graduate or professional degree.
- A large number of retirements in the next decade is expected to result in many job openings for librarians to replace those who leave.
- Librarians increasingly use information technology to perform research, classify materials, and help students and library patrons seek information.

## Nature of the Work

The traditional concept of a library is being redefined from a place to access paper records or books to one that also houses the most advanced media, including CD-ROM, the Internet, virtual libraries, and remote access to a wide range of resources. Consequently, librarians, or information professionals, increasingly are combining traditional duties with tasks involving quickly changing technology. Librarians assist people in finding information and using it effectively for personal and professional purposes. Librarians must have knowledge of a wide variety of scholarly and public information sources and must follow trends related to publishing, computers, and the media in order to oversee the selection and organization of library materials. Librarians manage staff and develop and direct information programs and systems for the public, to ensure that information is organized in a manner that meets users' needs.

Most librarian positions incorporate three aspects of library work: User services, technical services, and administrative services. Still, even librarians specializing in one of these areas have other responsibilities. Librarians in user services, such as reference and children's librarians, work with patrons to help them find the information they need. The job involves analyzing users' needs to determine what information is appropriate, as well as searching for, acquiring, and providing the information. The job also includes an instructional role, such as showing users how to access information. For example, librarians commonly help users navigate the Internet so they can search for relevant information efficiently. Librarians in technical services, such as acquisitions and cataloguing, acquire and prepare materials for use and often do not deal directly with the public. Librarians in administrative services oversee the management and planning of libraries: negotiate contracts for services, materials, and equipment; supervise library employees; perform public-relations and fundraising duties; prepare budgets; and direct activities to ensure that everything functions properly.

In small libraries or information centers, librarians usually handle all aspects of the work. They read book reviews, publishers' announcements, and catalogues to keep up with current literature and other available resources, and they select and purchase materials from publishers, wholesalers, and distributors. Librarians prepare new materials by classifying them by subject matter and describe books and other library materials to make them easy to find. Librarians supervise assistants, who prepare cards, computer records, or other access tools that

direct users to resources. In large libraries, librarians often specialize in a single area, such as acquisitions, cataloguing, bibliography, reference, special collections, or administration. Teamwork is increasingly important to ensure quality service to the public.

Librarians also compile lists of books, periodicals, articles, and audiovisual materials on particular subjects; analyze collections; and recommend materials. They collect and organize books, pamphlets, manuscripts, and other materials in a specific field, such as rare books, genealogy, or music. In addition, they coordinate programs such as storytelling for children and literacy skills and book talks for adults; conduct classes; publicize services; provide reference help; write grants; and oversee other administrative matters.

Librarians are classified according to the type of library in which they work: A public library; school library media center; college, university, or other academic library; or special library. Some librarians work with specific groups, such as children, young adults, adults, or the disadvantaged. In school library media centers, librarians—often called school media specialists—help teachers develop curricula, acquire materials for classroom instruction, and sometimes team teach.

Librarians also work in information centers or libraries maintained by government agencies, corporations, law firms, advertising agencies, museums, professional associations, medical centers, hospitals, religious organizations, and research laboratories. They acquire and arrange an organization's information resources, which usually are limited to subjects of special interest to the organization. These special librarians can provide vital information services by preparing abstracts and indexes of current periodicals, organizing bibliographies, or analyzing background information and preparing reports on areas of particular interest. For example, a special librarian working for a corporation could provide the sales department with information on competitors or new developments affecting the field. A medical librarian may provide information about new medical treatments, clinical trials, and standard procedures to health professionals, patients, consumers, and corporations. Government document librarians, who work for government agencies and depository libraries in each of the States, preserve government publications, records, and other documents that make up a historical record of government actions and decisionmaking.



*Librarians assist people in finding information and using it effectively.*

Many libraries have access to remote databases and maintain their own computerized databases. The widespread use of automation in libraries makes database-searching skills important to librarians. Librarians develop and index databases and help train users to develop searching skills for the information they need. Some libraries are forming consortiums with other libraries through electronic mail. This practice allows patrons to submit information requests to several libraries simultaneously. The Internet also is expanding the amount of available reference information. Librarians must be aware of how to use these resources in order to locate information.

Librarians with computer and information systems skills can work as automated-systems librarians, planning and operating computer systems, and information architect librarians, designing information storage and retrieval systems and developing procedures for collecting, organizing, interpreting, and classifying information. These librarians analyze and plan for future information needs. (See the statements on computer support specialists and systems administrators; and systems analysts, computer scientists, and database administrators elsewhere in the *Handbook*.) The increasing use of automated information systems is enabling librarians to focus on administrative and budgeting responsibilities, grant writing, and specialized research requests, while delegating more technical and user services responsibilities to technicians. (See the statement on library technicians elsewhere in the *Handbook*.)

More and more, librarians are applying their information management and research skills to arenas outside of libraries—for example, database development, reference tool development, information systems, publishing, Internet coordination, marketing, web content management and design, and training of database users. Entrepreneurial librarians sometimes start their own consulting practices, acting as freelance librarians or information brokers and providing services to other libraries, businesses, or government agencies.

### **Working Conditions**

Librarians spend a significant portion of time at their desks or in front of computer terminals; extended work at video display terminals can cause eyestrain and headaches. Assisting users in obtaining information or books for their jobs, homework, or recreational reading can be challenging and satisfying, but working with users under deadlines can be demanding and stressful. Some librarians lift and carry books, and some climb ladders to reach high stacks. Librarians in small organizations sometimes shelve books themselves.

More than 2 out of 10 librarians work part time. Public and college librarians often work weekends and evenings, as well as some holidays. School librarians usually have the same workday and vacation schedules as classroom teachers. Special librarians usually work normal business hours, but in fast-paced industries—such as advertising or legal services—they can work longer hours when needed.

### **Employment**

Librarians held about 167,000 jobs in 2002. Most worked in school and academic libraries, but nearly a third worked in public libraries. The remainder worked in special libraries or as information professionals for companies and other organizations.

### **Training, Other Qualifications, and Advancement**

A master's degree in library science (MLS) is necessary for librarian positions in most public, academic, and special libraries and in some school libraries. The Federal Government requires an MLS or the equivalent in education and experience. Many colleges and universities offer MLS programs, but employers often prefer graduates of the approximately 56 schools accredited by the American Library Association. Most MLS programs require a bachelor's degree; any liberal arts major is appropriate.

Most MLS programs take 1 year to complete; some take 2. A typical graduate program includes courses in the foundations of library and information science, including the history of books and printing, intellectual freedom and censorship, and the role of libraries and information in society. Other basic courses cover the selection and processing of materials, the organization of information, reference tools and strategies, and user services. Courses are adapted to educate librarians to use new resources brought about by advancing technology, such as online reference systems, Internet search methods, and automated circulation systems. Course options can include resources for children or young adults; classification, cataloguing, indexing, and abstracting; library administration; and library automation. Computer-related course work is an increasingly important part of an MLS degree. Some programs offer interdisciplinary degrees combining technical courses in information science with traditional training in library science.

The MLS degree provides general preparation for library work, but some individuals specialize in a particular area, such as reference, technical services, or children's services. A Ph.D. degree in library and information science is advantageous for a college teaching position or for a top administrative job in a college or university library or large library system.

Usually, an MLS also is required of librarians working in special libraries. In addition, most special librarians supplement their education with knowledge of the subject in which they are specializing, sometimes earning a master's, doctoral, or professional degree in the subject. Areas of specialization include medicine, law, business, engineering, and the natural and social sciences. For example, a librarian working for a law firm may also be a licensed attorney, holding both library science and law degrees. In some jobs, knowledge of a foreign language is needed.

State certification requirements for public school librarians vary widely. Most States require school librarians, often called library media specialists, to be certified as teachers and to have had courses in library science. An MLS is needed in some cases, perhaps with a library media specialization, or a master's in education with a specialty in school library media or educational media. Some States require certification of public librarians employed in municipal, county, or regional library systems.

Librarians participate in continuing education and training once they are on the job, in order to keep abreast of new information systems brought about by changing technology.

Experienced librarians can advance to administrative positions, such as department head, library director, or chief information officer.



## Job Outlook

Employment of librarians is expected to grow about as fast as the average for all occupations over the 2002-12 period. However, job opportunities are expected to be very good because a large number of librarians are expected to retire in the coming decade, creating many job openings. Also, the number of people going into this profession has fallen in recent years, resulting in more jobs than applicants in some cases. Colleges and universities report the greatest difficulty in hiring librarians, because the pay is often less than the prospective employees can get elsewhere.

Offsetting the need for librarians are government budget cuts and the increasing use of computerized information storage and retrieval systems. Both will result in the hiring of fewer librarians and the replacement of librarians with less costly library technicians. Computerized systems make cataloguing easier, allowing library technicians to perform the work. In addition, many libraries are equipped for users to access library computers directly from their homes or offices. That way, users can bypass librarians altogether and conduct research on their own. However, librarians will still be needed to manage staff, help users develop database-searching techniques, address complicated reference requests, and define users' needs.

Jobs for librarians outside traditional settings will grow the fastest over the decade. Nontraditional librarian jobs include working as information brokers and working for private corporations, nonprofit organizations, and consulting firms. Many companies are turning to librarians because of their research and organizational skills and their knowledge of computer databases and library automation systems. Librarians can review vast amounts of information and analyze, evaluate, and organize it according to a company's specific needs. Librarians also are hired by organizations to set up information on the Internet. Librarians working in these settings may be classified as systems analysts, database specialists and trainers, webmasters or web developers, or local area network (LAN) coordinators.

## Earnings

Salaries of librarians vary according to the individual's qualifications and the type, size, and location of the library. Librarians with primarily administrative duties often have greater earnings. Median annual earnings of librarians in 2002 were \$43,090. The middle 50 percent earned between \$33,560 and \$54,250. The lowest 10 percent earned less than \$24,510, and the highest 10 percent earned more than \$66,590. Median annual earnings in the industries employing the largest numbers of librarians in 2002 were as follows:

Elementary and secondary schools .....	\$45,660
Colleges, universities, and professional schools .....	45,600
Local government .....	37,970
Other information services .....	37,770

The average annual salary for all librarians in the Federal Government in nonsupervisory, supervisory, and managerial positions was \$70,238 in 2003.

Nearly one in three librarians is a member of a union or is covered under a union contract.

## Related Occupations

Librarians play an important role in the transfer of knowledge and ideas by providing people with access to the information they need and want. Jobs requiring similar analytical, organizational, and communicative skills include archivists, curators,

and museum technicians; and computer and information scientists, research. School librarians have many duties similar to those of schoolteachers. Librarians are increasingly storing, cataloguing, and accessing information with computers. Other jobs that use similar computer skills include systems analysts, computer scientists, and database administrators.

## Sources of Additional Information

For information on a career as a librarian and information on accredited library education programs and scholarships, contact

► American Library Association, Office for Human Resource Development and Recruitment, 50 East Huron St., Chicago, IL 60611. Internet: <http://www.ala.org>

For information on a career as a special librarian, write to  
► Special Libraries Association, 1700 18th St. NW., Washington, DC 20009. Internet: <http://www.sla.org>

Information on graduate schools of library and information science can be obtained from

► Association for Library and Information Science Education, 1009 Commerce Park Dr., Suite 150, PO Box 4219, Oak Ridge, TN 37839. Internet: <http://www.alise.org>

For information on a career as a law librarian, scholarship information, and a list of ALA-accredited schools offering programs in law librarianship, contact

► American Association of Law Libraries, 53 West Jackson Blvd., Suite 940, Chicago, IL 60604. Internet: <http://www.aallnet.org>

For information on employment opportunities for health sciences librarians and for scholarship information, credentialing information, and a list of MLA-accredited schools offering programs in health sciences librarianship, contact

► Medical Library Association, 65 E Wacker Place, Suite 1900, Chicago, IL 60601. Internet: <http://www.mlanet.org>

Information on acquiring a job as a librarian with the Federal Government may be obtained from the Office of Personnel Management through a telephone-based system. Consult your telephone directory under "U.S. Government" for a local number, or call (703) 724-1850 (Federal Relay Service (800) 877-8339). The first number is not toll free, and charges may result. Information also is available on the Internet at <http://www.usajobs.opm.gov>.

Information concerning requirements and application procedures for positions in the Library of Congress can be obtained directly from

► Human Resources Office, Library of Congress, 101 Independence Ave. SE., Washington, DC 20540-2231.

State library agencies can furnish information on scholarships available through their offices, requirements for certification, and general information about career prospects in the particular State of interest. Several of these agencies maintain job hot lines reporting openings for librarians.

State departments of education can furnish information on certification requirements and job opportunities for school librarians.

# Library Technicians

(0\*NET 25-4031.00)

## Significant Points

- Training requirements range from a high school diploma to an associate's or bachelor's degree, but computer skills are needed for many jobs.
- Increasing use of computerized circulation and information systems should continue to spur job growth, but many libraries' budget constraints should moderate growth.
- Employment should grow rapidly in special libraries because growing numbers of professionals and other workers use those libraries.

## Nature of the Work

Library technicians both help librarians acquire, prepare, and organize material and assist users in finding information. Library technicians usually work under the supervision of a librarian, although they work independently in certain situations. Technicians in small libraries handle a range of duties; those in large libraries usually specialize. As libraries increasingly use new technologies—such as CD-ROM, the Internet, virtual libraries, and automated databases—the duties of library technicians will expand and evolve accordingly. Library technicians are assuming greater responsibilities, in some cases taking on tasks previously performed by librarians. (See the statement on librarians elsewhere in the *Handbook*.)

Depending on the employer, library technicians can have other titles, such as library technical assistant or media aide. Library technicians direct library users to standard references, organize and maintain periodicals, prepare volumes for binding, handle interlibrary loan requests, prepare invoices, perform routine cataloguing and coding of library materials, retrieve information from computer databases, and supervise support staff.

The widespread use of computerized information storage and retrieval systems has resulted in technicians handling technical services—such as entering catalogue information into the library's computer—that were once performed by librarians. Technicians assist with customizing databases. In addition, technicians instruct patrons in how to use computer systems to access data. The increased automation of recordkeeping has reduced the amount of clerical work performed by library technicians. Many libraries now offer self-service registration and circulation areas with computers, decreasing the time library technicians spend manually recording and inputting records.

Some library technicians operate and maintain audiovisual equipment, such as projectors, tape recorders, and videocassette recorders, and assist users with microfilm or microfiche readers. They also design posters, bulletin boards, or displays.

Library technicians in school libraries encourage and teach students to use the library and media center. They also help teachers obtain instructional materials, and they assist students with special assignments. Some work in special libraries maintained by government agencies, corporations, law firms, advertising agencies, museums, professional societies, medical centers, and research laboratories, where they conduct

literature searches, compile bibliographies, and prepare abstracts, usually on subjects of particular interest to the organization.

To extend library services to more patrons, many libraries operate bookmobiles, often run by library technicians. The technicians take trucks stocked with books, or bookmobiles, to designated sites on a regular schedule, frequently stopping at shopping centers, apartment complexes, schools, and nursing homes. Bookmobiles also may be used to extend library service to patrons living in remote areas. Depending on local conditions, the technicians may operate a bookmobile alone or may be accompanied by another library employee.

Library technicians who drive bookmobiles, answer patrons' questions, receive and check out books, collect fines, maintain the book collection, shelve materials, and occasionally operate audiovisual equipment to show slides or films. They participate, and may assist, in planning programs sponsored by the library, such as reader advisory programs, used-book sales, or outreach programs. Technicians who drive the bookmobile keep track of their mileage, the materials lent out, and the amount of fines collected. In some areas, they are responsible for maintenance of the vehicle and any photocopiers or other equipment in it. They record statistics on circulation and the number of people visiting the bookmobile. Technicians also may record requests for special items from the main library and arrange for the materials to be mailed or delivered to a patron during the next scheduled visit. Many bookmobiles are equipped with personal computers and CD-ROM systems linked to the main library system, allowing technicians to reserve or locate books immediately. Some bookmobiles now offer Internet access to users.

## Working Conditions

Technicians answer questions and provide assistance to library users. Those who prepare library materials sit at desks or computer terminals for long periods and can develop headaches or eyestrain from working with the terminals. Some duties, like calculating circulation statistics, can be repetitive and boring. Others, such as performing computer searches with the use of local and regional library networks and cooperatives, can be interesting and challenging. Library technicians may lift and



*Library technicians direct library users to standard references, organize and maintain periodicals, and perform routine cataloguing and coding of library materials.*

carry books climb ladders to reach high stacks, and bend low to shelve books on bottom shelves.

Library technicians in school libraries work regular school hours. Those in public libraries and college and university (academic) libraries also work weekends, evenings and some holidays. Library technicians in special libraries usually work normal business hours, although they often work overtime as well.

The schedules of library technicians who drive bookmobiles depend on the size of the area being served. Some bookmobiles operate every day, while others go only on certain days. Some bookmobiles operate in the evenings and weekends, to give patrons as much access to the library as possible. Because library technicians who operate bookmobiles may be the only link some people have to the library, much of their work consists of helping the public. They may assist handicapped or elderly patrons to the bookmobile or shovel snow to ensure their safety. They may enter hospitals or nursing homes to deliver books to patrons who are bedridden.

### Employment

Library technicians held about 119,000 jobs in 2002. Most worked in school, academic, or public libraries. Some worked in hospitals and for religious organizations, mainly parochial schools. The Federal Government—primarily the U.S. Department of Defense and the U.S. Library of Congress—and State and local governments also employed library technicians.

### Training, Other Qualifications, and Advancement

Training requirements for library technicians vary widely, ranging from a high school diploma to specialized postsecondary training. Some employers hire individuals with work experience or other training; others train inexperienced workers on the job. Still other employers require that technicians have an associate's or bachelor's degree. Given the rapid spread of automation in libraries, computer skills are needed for many jobs. Knowledge of databases, library automation systems, online library systems, online public access systems, and circulation systems is valuable. Many bookmobile drivers are required to have a commercial driver's license.

Some 2-year colleges offer an associate-of-arts degree in library technology. Programs include both liberal arts and library-related study. Students learn about library and media organization and operation, as well as how to order, process, catalogue, locate, and circulate library materials and work with library automation. Libraries and associations offer continuing education courses to keep technicians abreast of new developments in the field.

Library technicians usually advance by assuming added responsibilities. For example, technicians often start at the circulation desk, checking books in and out. After gaining experience, they may become responsible for storing and verifying information. As they advance, they may become involved in budget and personnel matters in their departments. Some library technicians advance to supervisory positions and are in charge of the day-to-day operation of their departments.

### Job Outlook

Employment of library technicians is expected to grow about as fast as the average for all occupations through 2012. In addition to jobs opening up through employment growth, some job openings will result from the need to replace library technicians who transfer to other fields or leave the labor force.

The increasing use of library automation is expected to continue to spur job growth among library technicians. Computerized information systems have simplified certain tasks, such as descriptive cataloguing, which can now be handled by technicians instead of librarians. For example, nowadays technicians can easily retrieve information from a central database and store it in the library's computer. Although efforts to contain costs could dampen employment growth of library technicians in school, public, and college and university libraries, cost containment efforts could also result in more hiring of library technicians than librarians. Growth in the number of professionals and other workers who use special libraries should result in good job opportunities for library technicians in those settings.

### Earnings

Median annual earnings of library technicians in 2002 were \$24,090. The middle 50 percent earned between \$18,150 and \$31,140. The lowest 10 percent earned less than \$14,410, and the highest 10 percent earned more than \$38,000. Median annual earnings in the industries employing the largest numbers of library technicians in 2002 were as follows:

Colleges, universities, and professional schools .....	\$27,280
Local government .....	23,310
Elementary and secondary schools .....	21,770
Other information services .....	20,950

Salaries of library technicians in the Federal Government averaged \$36,788 in 2003.

### Related Occupations

Library technicians perform organizational and administrative duties. Workers in other occupations with similar duties include library assistants, clerical; information and record clerks; and medical records and health information technicians.

### Sources of Additional Information

For information on training programs for library/media technical assistants, write to

► American Library Association, Office for Human Resource Development and Recruitment, 50 East Huron St., Chicago, IL 60611. Internet: <http://www.ala.org>

Information on acquiring a job as a library technician with the Federal Government may be obtained from the Office of Personnel Management through a telephone-based system. Consult your telephone directory under "U.S. Government" for a local number, or call (703) 724-1850 (Federal Relay Service (800) 877-8339). The first number is not toll free, and charges may result. Information also is available on the Internet at <http://www.usajobs.opm.gov>.

Information concerning requirements and application procedures for positions in the Library of Congress can be obtained directly from

► Human Resources Office, Library of Congress, 101 Independence Ave. SE., Washington, DC 20540-2231.

State library agencies can furnish information on requirements for technicians and general information about career prospects in the State. Several of these agencies maintain job hot lines reporting openings for library technicians.

State departments of education can furnish information on requirements and job opportunities for school library technicians.

# Probation Officers and Correctional Treatment Specialists

(0\*NET 21-1092.00)

## Significant Points

- State and local governments employ most workers.
- A bachelor's degree in social work, criminal justice, or a related field usually is required.
- Employment growth, which is projected to be about as fast as average, depends on government funding.

## Nature of the Work

Many people who are convicted of crimes are placed on probation, instead of being sent to prison. During probation, offenders must stay out of trouble and meet various other requirements. *Probation officers*, who are called community supervision officers in some States, supervise people who have been placed on probation. *Correctional treatment specialists*, who may also be known as case managers, counsel prison inmates and help them plan for their release from incarceration.

*Parole officers* and *pretrial services officers* perform many of the same duties that probation officers perform. However, parole officers supervise offenders who have been released from prison on parole to ensure that they comply with the conditions of their parole. In some States, the job of parole and probation officer is combined. Pretrial services officers conduct pretrial investigations of criminal suspects when they are arrested by police. Their findings help to determine whether a suspect should be released before their trial. When suspects are released before their trial, pretrial services officers have the responsibility of supervising them to make sure they adhere to the terms of their release and that they show up for their trial. Occasionally, in the Federal courts system, probation officers perform the functions of pretrial services officers.

Probation officers supervise offenders on probation or parole through personal contact with the offenders and their families. Instead of requiring offenders to meet officers in their offices, many officers meet offenders in their homes and at their places of employment or therapy. Probation and parole agencies also seek the assistance of community organizations, such as religious institutions, neighborhood groups, and local residents, to monitor the behavior of many offenders. Some offenders are required to wear an electronic device so that probation officers can monitor their location and movements. Officers may arrange for offenders to get substance abuse rehabilitation or job training. Probation officers usually work with either adults or juveniles exclusively. Only in small, usually rural, jurisdictions do probation officers counsel both adults and juveniles.

Probation officers also spend much of their time working for the courts. They investigate the background of offenders brought before the court, write presentence reports, and make sentencing recommendations for each offender. Officers review sentencing recommendations with offenders and their families before submitting them to the court. Officers may be required to testify in court as to their findings and recommendations. They also attend court hearings to update the court on the offender's compliance with the terms of his or her sentence and on the offender's efforts at rehabilitation.

Correctional treatment specialists work in correctional institutions (jails and prisons) or in parole or probation agencies. In

jails and prisons, they evaluate the progress of inmates. They also work with inmates, probation officers, and other agencies to develop parole and release plans. Their case reports are provided to the appropriate parole board when their clients are eligible for release. In addition, they plan education and training programs to improve offenders' job skills and provide them with coping, anger management, and drug or sexual abuse counseling either individually or in groups. They usually write treatment plans and summaries for each client. Correctional treatment specialists working in parole and probation agencies perform many of the same duties as their counterparts who work in correctional institutions.

The number of cases a probation officer or correctional treatment specialist handles at one time depends on the needs of offenders and the risks they pose. Higher risk offenders and those who need more counseling usually command more of the officer's time and resources. Caseload size also varies by agency jurisdiction. Consequently, officers may handle from 20 to more than 100 active cases at a time.

Computers, telephones, and fax machines enable the officers to handle the caseload. Probation officers may telecommute from their own homes. Other technological advancements, such as electronic monitoring devices and drug screening, also have assisted probation officers and correctional treatment specialists in supervising and counseling offenders.

## Working Conditions

Probation officers and correctional treatment specialists work with criminal offenders, some of whom may be dangerous. In the course of supervising offenders, they usually interact with many other individuals, such as family members and friends of their clients, who may be angry, upset, or difficult to work with. Workers may be assigned to fieldwork in high crime areas or in institutions where there is a risk of violence or communicable disease. Probation officers and correctional treatment specialists are required to meet many deadlines, most of which are imposed by courts, which contributes to their heavy workloads.

In addition, extensive travel and fieldwork may be required to meet with offenders who are on probation or parole. Workers may be required to carry a firearm or other weapon for protection. They generally work a 40-hour workweek, but some may



*Through personal contact with offenders and their families, probation officers supervise offenders who are on probation or parole.*

work longer. They may be on call 24 hours a day to supervise and assist offenders at any time. They also may be required to collect and transport urine samples of offenders for drug testing. All of these factors make for a stressful work environment. Although the high stress levels can make these jobs very difficult at times, this work also can be very rewarding. Many workers obtain personal satisfaction from counseling members of their community and helping them become productive citizens.

### **Employment**

Probation officers and correctional treatment specialists held about 84,000 jobs in 2002. Most jobs are found in State or local governments. In some States, the State government employs all probation officers and correctional treatment specialists; in other States, local governments are the only employers. In still other States, both levels of government employ these workers. Jobs are more plentiful in urban areas. Probation officers and correctional treatment specialists who work for the Federal Government are employed by the U.S. courts and the U.S. Department of Justice's Bureau of Prisons.

### **Training, Other Qualifications, and Advancement**

Background qualifications for probation officers and correctional treatment specialists vary by State, but a bachelor's degree in social work, criminal justice, or a related field from a 4-year college or university is usually required. Some employers require previous experience or a master's degree in criminal justice, social work, psychology, or a related field.

Applicants usually are administered written, oral, psychological, and physical examinations. Most probation officers and some correctional treatment specialists are required to complete a training program sponsored by their State government or the Federal Government, after which a certification test may be required.

Prospective probation officers or correctional treatment specialists should be in good physical and emotional condition. Most agencies require applicants to be at least 21 years old and, for Federal employment, not older than 37. Those convicted of felonies may not be eligible for employment in this occupation. Familiarity with the use of computers often is required due to the increasing use of computer technology in probation and parole work. Candidates also should be knowledgeable about laws and regulations pertaining to corrections. Probation officers and correctional treatment specialists should possess strong writing skills due to the large numbers of reports they are required to prepare.

Most probation officers and correctional treatment specialists work as trainees or on a probationary period for up to a year. After successfully completing the training period, workers obtain a permanent position. A typical agency has several levels of probation and parole officers and correctional treatment specialists, as well as supervisors. A graduate degree, such as a master's degree in criminal justice, social work, or psychology, may be helpful for advancement.

### **Job Outlook**

Employment of probation officers and correctional treatment specialists is projected to grow about as fast as the average for all occupations through 2012. In addition to openings due to growth, many openings will be created by replacement needs, especially openings due to the large number of these workers who are expected to retire over the 2002-12 projection period.

This occupation is not attractive to some potential entrants due to relatively low earnings, heavy workloads, and high stress.

Vigorous law enforcement is expected to result in a continuing increase in the prison population. Overcrowding in prisons also has increased the probation population, as judges and prosecutors search for alternate forms of punishment, such as electronic monitoring and day reporting centers. The number of offenders released on parole also is expected to increase to create room in prison for other offenders. The increasing prison, parole, and probation populations should spur demand for probation and parole officers and correctional treatment specialists. However, the job outlook depends primarily on the amount of government funding that is allocated to corrections, and especially to probation systems. Although community supervision is far less expensive than keeping offenders in prison, a change in political trends toward more imprisonment and away from community supervision could result in reduced employment opportunities.

### **Earnings**

Median annual earnings of probation officers and correctional treatment specialists in 2002 were \$38,360. The middle 50 percent earned between \$30,770 and \$50,550. The lowest 10 percent earned less than \$25,810, and the highest 10 percent earned more than \$62,520. In 2002, median annual earnings for probation officers and correctional treatment specialists employed in State government were \$38,720; those employed in local government earned \$39,450. Higher wages tend to be found in urban areas.

### **Related Occupations**

Probation officers and correctional treatment specialists counsel criminal offenders as they reenter society. Other occupations that involve similar responsibilities include social workers, social and human service assistants, and counselors.

Probation officers and correctional treatment also play a major role in maintaining public safety. Other occupations related to corrections and law enforcement include police and detectives, correctional officers, and firefighting occupations.

### **Sources of Additional Information**

For information about criminal justice job opportunities in your area, contact your State's Department of Corrections, Criminal Justice, or Probation.

Further information about probation officers and correctional treatment specialists is available from:

- ▶ American Probation and Parole Association, P.O. Box 11910, Lexington, KY 40578. Internet: <http://www.appa-net.org>
- ▶ American Correctional Association, 4380 Forbes Blvd., Lanham, MD 20706. Internet: <http://www.aca.org>

# Social and Human Service Assistants

(0\*NET 21-1093.00)

## Significant Points

- While a bachelor's degree usually is not required, employers increasingly seek individuals with relevant work experience or education beyond high school.
- Employment is projected to grow much faster than average.
- Job opportunities should be excellent, particularly for applicants with appropriate postsecondary education, but pay is low.

## Nature of the Work

Social and human service assistant is a generic term for people with a wide array of job titles, including human service worker, case management aide, social work assistant, community support worker, mental health aide, community outreach worker, life skill counselor, or gerontology aide. They usually work under the direction of professionals from a variety of fields, such as nursing, psychiatry, psychology, rehabilitative or physical therapy, or social work. The amount of responsibility and supervision they are given varies a great deal. Some have little direct supervision; others work under close direction.

Social and human service assistants provide direct and indirect client services to ensure that individuals in their care reach their maximum level of functioning. They assess clients' needs, establish their eligibility for benefits and services such as food stamps, Medicaid, or welfare, and help to obtain them. They also arrange for transportation and escorts, if necessary, and provide emotional support. Social and human service assistants monitor and keep case records on clients and report progress to supervisors and case managers.

Social and human service assistants play a variety of roles in a community. They may organize and lead group activities, assist clients in need of counseling or crisis intervention, or administer a food bank or emergency fuel program. In halfway houses, group homes, and government-supported housing programs, they assist adults who need supervision with personal hygiene and daily living skills. They review clients' records, ensure that they take correct doses of medication, talk with family members, and confer with medical personnel and other caregivers to gain better insight into clients' backgrounds and needs. Social and human service assistants also provide emotional support and help clients become involved in their own well-being, in community recreation programs, and in other activities.

In psychiatric hospitals, rehabilitation programs, and outpatient clinics, social and human service assistants work with professional care providers, such as psychiatrists, psychologists, and social workers, to help clients master everyday living skills, communicate more effectively, and get along better with others. They support the client's participation in a treatment plan, such as individual or group counseling or occupational therapy.

## Working Conditions

Working conditions of social and human service assistants vary. Some work in offices, clinics, and hospitals, while others work in group homes, shelters, sheltered workshops, and day pro-

grams. Many spend their time in the field visiting clients. Most work a 40-hour week, although some work in the evening and on weekends.

The work, while satisfying, can be emotionally draining. Understaffing and relatively low pay may add to the pressure. Turnover is reported to be high, especially among workers without academic preparation for this field.

## Employment

Social and human service assistants held about 305,000 jobs in 2002. More than half worked in the health care and social assistance industries. Almost one third were employed by State and local governments, primarily in public welfare agencies and facilities for mentally disabled and developmentally challenged individuals.

## Training, Other Qualifications, and Advancement

While a bachelor's degree usually is not required for entry into this occupation, employers increasingly seek individuals with relevant work experience or education beyond high school. Certificates or associate degrees in subjects such as social work, human services, gerontology, or one of the social or behavioral sciences meet most employers' requirements. Some jobs may require a bachelor's or master's degree in human services or a related field such as counseling, rehabilitation, or social work.

Human services degree programs have a core curriculum that trains students to observe patients and record information, conduct patient interviews, implement treatment plans, employ problem-solving techniques, handle crisis intervention matters, and use proper case management and referral procedures. General education courses in liberal arts, sciences, and the humanities also are part of the curriculum. Many degree programs require completion of a supervised internship.

Educational attainment often influences the kind of work employees may be assigned and the degree of responsibility that may be entrusted to them. For example, workers with no more than a high school education are likely to receive extensive on-the-job training to work in direct-care services, while employees with a college degree might be assigned to do supportive counseling, coordinate program activities, or manage a group home. Social and human service assistants with proven leadership ability, either from previous experience or as a volunteer in the field, often have greater autonomy in their work.



*Social and human service assistants provide direct and indirect client services to ensure that individuals in their care reach their maximum level of functioning.*

Regardless of the academic or work background of employees, most employers provide some form of inservice training, such as seminars and workshops, to their employees.

There may be additional hiring requirements in group homes. For example, employers may require employees to have a valid driver's license or to submit to a criminal background investigation.

Employers try to select applicants who have effective communication skills, a strong sense of responsibility, and the ability to manage time effectively. Many human services jobs involve direct contact with people who are vulnerable to exploitation or mistreatment; therefore, patience, understanding, and a strong desire to help others are highly valued characteristics.

Formal education almost always is necessary for advancement. In general, advancement requires a bachelor's or master's degree in human services, counseling, rehabilitation, social work, or a related field.

### Job Outlook

Job opportunities for social and human service assistants are expected to be excellent, particularly for applicants with appropriate postsecondary education. The number of social and human service assistants is projected to grow much faster than the average for all occupations between 2002 and 2012—ranking the occupation among the most rapidly growing. Many additional job opportunities will arise from the need to replace workers who advance into new positions, retire, or leave the workforce for other reasons. There will be more competition for jobs in urban areas than in rural areas, but qualified applicants should have little difficulty finding employment. Faced with rapid growth in the demand for social and human services many employers increasingly rely on social and human service assistants to undertake greater responsibility for delivering services to clients.

Opportunities are expected to be good in private social service agencies, which provide such services as adult daycare and meal delivery programs. Employment in private agencies will grow as State and local governments continue to contract out services to the private sector in an effort to cut costs. Demand for social services will expand with the growing elderly population, who are more likely to need these services. In addition, more social and human service assistants will be needed to provide services to pregnant teenagers, the homeless, the mentally disabled and developmentally challenged, and substance abusers. Some private agencies have been employing more social and human service assistants in place of social workers, who are more educated and, thus, more highly paid.

Job training programs also are expected to require additional social and human service assistants. As social welfare policies shift focus from benefit-based programs to work-based initiatives, there will be more demand for people to teach job skills to the people who are new to, or returning to, the workforce.

Residential care establishments should face increased pressures to respond to the needs of the mentally and physically disabled. Many of these patients have been deinstitutionalized and lack the knowledge or the ability to care for themselves. Also, more community-based programs, supported independent-living sites, and group residences are expected to be established to house and assist the homeless and the mentally and physically disabled. As substance abusers are increasingly being sent to treatment programs instead of prison, employment of social

and human service assistants in substance abuse treatment programs also will grow.

The number of jobs for social and human service assistants in State and local governments will grow but not as fast as employment for social and human service assistants in other industries. Employment in the public sector may fluctuate with the level of funding provided by State and local governments. Also, some State and local governments are contracting out selected social services to private agencies in order to save money.

### Earnings

Median annual earnings of social and human service assistants were \$23,370 in 2002. The middle 50 percent earned between \$18,670 and \$29,520. The top 10 percent earned more than \$37,550, while the lowest 10 percent earned less than \$15,420.

Median annual earnings in the industries employing the largest numbers of social and human service assistants in 2002 were:

State government .....	\$31,280
Local government .....	26,570
Individual and family services .....	22,210
Community food and housing, and emergency and other relief services .....	21,840
Residential mental retardation, mental health and substance abuse facilities .....	20,010

### Related Occupations

Workers in other occupations that require skills similar to those of social and human service assistants include social workers; clergy; counselors; childcare workers; occupational therapist assistants and aides; physical therapist assistants and aides; and nursing, psychiatric, and home health aides.

### Sources of Additional Information

Information on academic programs in human services may be found in most directories of 2- and 4-year colleges, available at libraries or career counseling centers.

For information on programs and careers in human services, contact:

- National Organization for Human Service Education, 375 Myrtle Ave., Brooklyn, NY 11205. Internet: <http://www.nohse.org>
- Council for Standards in Human Services Education, Harrisburg Area Community College, Human Services Program, One HACC Dr., Harrisburg, PA 17110-2999. Internet: <http://www.cshse.org>

Information on job openings may be available from State employment service offices or directly from city, county, or State departments of health, mental health and mental retardation, and human resources.

## Social Workers

(0\*NET 21-1021.00, 21-1022.00, 21-1023.00)

### Significant Points

- While a bachelor's degree is the minimum requirement, a master's degree in social work or a related field has become the standard for many positions.
- Employment is projected to grow faster than average.
- Competition for jobs is expected in cities, but opportunities should be good in rural areas.

### Nature of the Work

Social work is a profession for those with a strong desire to help improve people's lives. Social workers help people function the best way they can in their environment, deal with their relationships, and solve personal and family problems. Social workers often see clients who face a life-threatening disease or a social problem. These problems may include inadequate housing, unemployment, serious illness, disability, or substance abuse. Social workers also assist families that have serious domestic conflicts, including those involving child or spousal abuse.

Social workers often provide social services in health-related settings that now are governed by managed care organizations. To contain costs, these organizations are emphasizing short-term intervention, ambulatory and community-based care, and greater decentralization of services.

Most social workers specialize. Although some conduct research or are involved in planning or policy development, most social workers prefer an area of practice in which they interact with clients.

*Child, family, and school social workers* provide social services and assistance to improve the social and psychological functioning of children and their families and to maximize the family well-being and academic functioning of children. Some social workers assist single parents; arrange adoptions; and help find foster homes for neglected, abandoned, or abused children. In schools, they address such problems as teenage pregnancy, misbehavior, and truancy. They also advise teachers on how to cope with problem students. Some social workers may specialize in services for senior citizens. They run support groups for family caregivers or for the adult children of aging parents. Some advise elderly people or family members about choices in areas such as housing, transportation, and long-term care; they also coordinate and monitor services. Through employee assistance programs, they may help workers cope with job-related pressures or with personal problems that affect the quality of their work. Child, family, and school social workers typically work in individual and family services agencies, schools, or State or local governments. These social workers may be known as child welfare social workers, family services social workers, child protective services social workers, occupational social workers, or gerontology social workers.

*Medical and public health social workers* provide persons, families, or vulnerable populations with the psychosocial support needed to cope with chronic, acute, or terminal illnesses, such as Alzheimer's disease, cancer, or AIDS. They also advise family caregivers, counsel patients, and help plan for patients' needs after discharge by arranging for at-home services—from meals-on-wheels to oxygen equipment. Some work on interdis-

ciplinary teams that evaluate certain kinds of patients—geriatric or organ transplant patients, for example. Medical and public health social workers may work for hospitals, nursing and personal care facilities, individual and family services agencies, or local governments.

*Mental health and substance abuse social workers* assess and treat individuals with mental illness, or substance abuse problems, including abuse of alcohol, tobacco, or other drugs. Such services include individual and group therapy, outreach, crisis intervention, social rehabilitation, and training in skills of everyday living. They may also help plan for supportive services to ease patients' return to the community. Mental health and substance abuse social workers are likely to work in hospitals, substance abuse treatment centers, individual and family services agencies, or local governments. These social workers may be known as clinical social workers. (Counselors and psychologists, who may provide similar services, are discussed elsewhere in the *Handbook*.)

Other types of social workers include social work planners and policymakers, who develop programs to address such issues as child abuse, homelessness, substance abuse, poverty, and violence. These workers research and analyze policies, programs, and regulations. They identify social problems and suggest legislative and other solutions. They may help raise funds or write grants to support these programs.

### Working Conditions

Full-time social workers usually work a standard 40-hour week; however, some occasionally work evenings and weekends to meet with clients, attend community meetings, and handle emergencies. Some, particularly in voluntary nonprofit agencies, work part time. Social workers usually spend most of their time in an office or residential facility, but also may travel locally to visit clients, meet with service providers, or attend meetings. Some may use one of several offices within a local area in which to meet with clients. The work, while satisfying, can be emotionally draining. Understaffing and large caseloads add to the pressure in some agencies. To tend to patient care or client needs, many hospitals and long-term care facilities are employing social workers on teams with a broad mix of occupations—including clinical specialists, registered nurses, and health aides.



*Social workers often see clients who face inadequate housing, unemployment, serious illness, disability, or substance abuse.*



## Employment

Social workers held about 477,000 jobs in 2002. About 4 out of 10 jobs were in State or local government agencies, primarily in departments of health and human services. Most private sector jobs were in the health care and social assistance industry. Although most social workers are employed in cities or suburbs, some work in rural areas. The following tabulation shows 2002 employment by type of social worker.

Child, family, and school social workers .....	274,000
Medical and public health social workers .....	107,000
Mental health and substance abuse social workers .....	95,000

## Training, Other Qualifications, and Advancement

A bachelor's degree in social work (BSW) degree is the most common minimum requirement to qualify for a job as a social worker; however, majors in psychology, sociology, and related fields may be adequate to qualify for some entry-level jobs, especially in small community agencies. Although a bachelor's degree is sufficient for entry into the field, an advanced degree has become the standard for many positions. A master's degree in social work (MSW) is typically required for positions in health settings and is required for clinical work. Some jobs in public and private agencies also may require an advanced degree, such as a master's degree in social services policy or administration. Supervisory, administrative, and staff training positions usually require an advanced degree. College and university teaching positions and most research appointments normally require a doctorate in social work (DSW or Ph.D.).

As of 2002, the Council on Social Work Education (CSWE) accredited 436 BSW programs and 149 MSW programs. The Group for the Advancement of Doctoral Education (GADE) listed 78 doctoral programs in social work (DSW or Ph.D.). BSW programs prepare graduates for direct service positions such as caseworker. They include courses in social work values and ethics, dealing with a culturally diverse clientele, at-risk-populations, promotion of social and economic justice, human behavior and the social environment, social welfare policy and services, social work practice, social research methods, and field education. Accredited BSW programs require a minimum of 400 hours of supervised field experience.

Master's degree programs prepare graduates for work in their chosen field of concentration and continue to develop the skills required to perform clinical assessments, manage large caseloads, and explore new ways of drawing upon social services to meet the needs of clients. Master's programs last 2 years and include a minimum of 900 hours of supervised field instruction, or internship. A part-time program may take 4 years. Entry into a master's program does not require a bachelor's in social work, but courses in psychology, biology, sociology, economics, political science, and social work are recommended. In addition, a second language can be very helpful. Most master's programs offer advanced standing for those with a bachelor's degree from an accredited social work program.

All States and the District of Columbia have licensing, certification, or registration requirements regarding social work practice and the use of professional titles. Although standards for licensing vary by State, a growing number of States are placing greater emphasis on communications skills, professional ethics, and sensitivity to cultural diversity issues. Additionally, the National Association of Social Workers (NASW) offers voluntary credentials. Social workers with an MSW may be eligible for the Academy of Certified Social Workers (ACSW),

the Qualified Clinical Social Worker (QCSW), or the Diplomate in Clinical Social Work (DCSW) credential based on their professional experience. Credentials are particularly important for those in private practice; some health insurance providers require social workers to have them in order to be reimbursed for services.

Social workers should be emotionally mature, objective, and sensitive to people and their problems. They must be able to handle responsibility, work independently, and maintain good working relationships with clients and coworkers. Volunteer or paid jobs as a social work aide offer ways of testing one's interest in this field.

Advancement to supervisor, program manager, assistant director, or executive director of a social service agency or department is possible, but usually requires an advanced degree and related work experience. Other career options for social workers include teaching, research, and consulting. Some of these workers also help formulate government policies by analyzing and advocating policy positions in government agencies, in research institutions, and on legislators' staffs.

Some social workers go into private practice. Most private practitioners are clinical social workers who provide psychotherapy, usually paid for through health insurance or by the client themselves. Private practitioners must have at least a master's degree and a period of supervised work experience. A network of contacts for referrals also is essential. Many private practitioners work part time while they work full time elsewhere.

## Job Outlook

Competition for social worker jobs is stronger in cities, where demand for services often is highest and training programs for social workers are prevalent. However, opportunities should be good in rural areas, which often find it difficult to attract and retain qualified staff. By specialty, job prospects may be best for those social workers with a background in gerontology and substance abuse treatment.

Employment of social workers is expected to increase faster than the average for all occupations through 2012. The rapidly growing elderly population and the aging baby boom generation will create greater demand for health and social services, resulting in particularly rapid job growth among gerontology social workers. Many job openings also will stem from the need to replace social workers who leave the occupation.

As hospitals continue to limit the length of patient stays, the demand for social workers in hospitals will grow more slowly than in other areas. Because hospitals are releasing patients earlier than in the past, social worker employment in home healthcare services is growing. However, the expanding senior population is an even larger factor. Employment opportunities for social workers with backgrounds in gerontology should be good in the growing numbers of assisted-living and senior-living communities. The expanding senior population will also spur demand for social workers in nursing homes, long-term care facilities, and hospices.

Employment of substance abuse social workers will grow rapidly over the 2002-12 projection period. Substance abusers are increasingly being placed into treatment programs instead of being sentenced to prison. As this trend grows, demand will increase for treatment programs and social workers to assist abusers on the road to recovery.

Employment of social workers in private social service agencies will increase. However, agencies increasingly will restructure services and hire more lower-paid social and human service

assistants instead of social workers. Employment in State and local government agencies may grow somewhat in response to increasing needs for public welfare, family services, and child protection services; however, many of these services will be contracted out to private agencies. Employment levels in public and private social services agencies may fluctuate, depending on need and government funding levels.

Employment of school social workers also is expected to steadily grow. Expanded efforts to respond to rising student enrollments and continued emphasis on integrating disabled children into the general school population may lead to more jobs. Availability of State and local funding will be a major factor in determining the actual job growth in schools.

Opportunities for social workers in private practice will expand but growth may be somewhat hindered by restrictions that managed care organizations put on mental health services. The growing popularity of employee assistance programs is expected to spur some demand for private practitioners, some of whom provide social work services to corporations on a contractual basis. However, the popularity of employee assistance programs will fluctuate with the business cycle, as businesses are not likely to offer these services during recessions.

### Earnings

Median annual earnings of child, family, and school social workers were \$33,150 in 2002. The middle 50 percent earned between \$26,310 and \$42,940. The lowest 10 percent earned less than \$21,270, and the top 10 percent earned more than \$54,250. Median annual earnings in the industries employing the largest numbers of child, family, and school social workers in 2002 were:

Elementary and secondary schools .....	\$44,100
Local government .....	38,140
State government .....	34,000
Individual and family services .....	29,150
Other residential care facilities .....	28,470

Median annual earnings of medical and public health social workers were \$37,380 in 2002. The middle 50 percent earned between \$29,700 and \$46,540. The lowest 10 percent earned less than \$23,840, and the top 10 percent earned more than \$56,320. Median annual earnings in the industries employing the largest numbers of medical and public health social workers in 2002 were:

General medical and surgical hospitals .....	\$42,730
Local government .....	37,620
State government .....	35,250
Nursing care facilities .....	33,330
Individual and family services .....	31,000

Median annual earnings of mental health and substance abuse social workers were \$32,850 in 2002. The middle 50 percent earned between \$25,940 and \$42,160. The lowest 10 percent earned less than \$21,050, and the top 10 percent earned more than \$52,240. Median annual earnings in the industries employing the largest numbers of mental health and substance abuse social workers in 2002 were:

State government .....	\$38,430
Local government .....	35,700
Psychiatric and substance abuse hospitals .....	34,610
Outpatient care centers .....	31,370
Individual and family services .....	31,300

### Related Occupations

Through direct counseling or referral to other services, social workers help people solve a range of personal problems. Workers in occupations with similar duties include the clergy, counselors, probation officers and correctional treatment specialists, psychologists, and social and human services assistants.

### Sources of Additional Information

For information about career opportunities in social work and voluntary credentials for social workers, contact:

► National Association of Social Workers, 750 First St. NE., Suite 700, Washington, DC 20002-4241. Internet: <http://www.socialworkers.org>

For a listing of accredited social work programs, contact:

► Council on Social Work Education, 1725 Duke St., Suite 500, Alexandria, VA 22314-3457. Internet: <http://www.cswe.org>

Information on licensing requirements and testing procedures for each State may be obtained from State licensing authorities, or from:

► Association of Social Work Boards, 400 South Ridge Pkwy., Suite B, Culpeper, VA 22701. Internet: <http://www.aswb.org>

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## Teacher Assistants

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(0\*NET 25-9041.00)

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### Significant Points

- About 4 in 10 teacher assistants work part time.
- Educational requirements range from a high school diploma to some college training.
- Workers with experience in special education, or who can speak a foreign language, will be especially in demand.

### Nature of the Work

Teacher assistants provide instructional and clerical support for classroom teachers, allowing teachers more time for lesson planning and teaching. Teacher assistants tutor and assist children in learning class material using the teacher's lesson plans, providing students with individualized attention. Teacher assistants also supervise students in the cafeteria, schoolyard, and hallways, or on field trips. They record grades, set up equipment, and help prepare materials for instruction. Teacher assistants also are called teacher aides or instructional aides. Some assistants refer to themselves as paraeducators or paraprofessionals.

Some teacher assistants perform exclusively noninstructional or clerical tasks, such as monitoring nonacademic settings. Playground and lunchroom attendants are examples of such assistants. Most teacher assistants, however, perform a combination of instructional and clerical duties. They generally provide instructional reinforcement to children, under the direction and guidance of teachers. They work with students individually or in small groups—listening while students read, reviewing or reinforcing class lessons, or helping them find information for reports. At the secondary school level, teacher assistants often specialize in a certain subject, such as math or science. Teacher assistants often take charge of special projects and prepare equipment or exhibits, such as for a science demonstration. Some assistants work in computer laboratories, helping students using computers and educational software programs.

In addition to instructing, assisting, and supervising students, teacher assistants grade tests and papers, check homework, keep health and attendance records, do typing and filing, and duplicate materials. They also stock supplies, operate audiovisual equipment, and keep classroom equipment in order.

Many teacher assistants work extensively with special education students. As schools become more inclusive, integrating special education students into general education classrooms, teacher assistants in general education and special education classrooms increasingly assist students with disabilities. Teacher assistants attend to a disabled student's physical needs, including feeding, teaching good grooming habits, or assisting students riding the schoolbus. They also provide personal attention to students with other special needs, such as those from disadvantaged families, those who speak English as a second language, or those who need remedial education. Teacher assistants help assess a student's progress by observing performance and recording relevant data.

Teacher assistants also work with infants and toddlers who have developmental delays or other disabilities. Under the guidance of a teacher or therapist, teacher assistants perform exercises or play games to help the child develop physically and

behaviorally. Some teacher assistants work with young adults to help them obtain a job or to apply for community services for the disabled.

### Working Conditions

Approximately 4 in 10 teacher assistants work part time. However, even among full-time workers, nearly 40 percent work less than 8 hours per day. Most assistants who provide educational instruction work the traditional 9- to 10-month school year. Teacher assistants work in a variety of settings—including private homes and preschools, and local government offices, where they would deal with young adults—but most work in classrooms in elementary, middle, and secondary schools. They also work outdoors supervising recess when weather allows, and they spend much of their time standing, walking, or kneeling.

Seeing students develop and gain appreciation of the joy of learning can be very rewarding. However, working closely with students can be both physically and emotionally tiring. Teacher assistants who work with special education students often perform more strenuous tasks, including lifting, as they help students with their daily routine. Those who perform clerical work may tire of administrative duties, such as copying materials or typing.

### Employment

Teacher assistants held almost 1.3 million jobs in 2002. Nearly 3 in 4 work for State and local government education institutions; mostly at the preschool and elementary school level. Private schools, daycare centers, and religious organizations hire most of the rest.

### Training, Other Qualifications, and Advancement

Educational requirements for teacher assistants vary by State or school district and range from a high school diploma to some college training, although employers increasingly prefer applicants with some college training. Teacher assistants with instructional responsibilities usually require more training than do those who do not perform teaching tasks. In addition, as a



*Teacher assistants provide students with individual attention.*

result of the No Child Left Behind Act of 2001, teacher assistants in Title 1 schools—those with a large proportion of students from low-income households—will be required to meet one of three requirements: have a minimum of 2 years of college, hold a 2-year or higher degree, or pass a rigorous state and local assessment. Many schools also require previous experience in working with children and a valid driver's license. Some schools may require the applicant to pass a background check.

A number of 2-year and community colleges offer associate degree programs that prepare graduates to work as teacher assistants. However, most teacher assistants receive on-the-job training. Those who tutor and review lessons with students must have a thorough understanding of class materials and instructional methods, and should be familiar with the organization and operation of a school. Teacher assistants also must know how to operate audiovisual equipment, keep records, and prepare instructional materials, as well as have adequate computer skills.

Teacher assistants should enjoy working with children from a wide range of cultural backgrounds, and be able to handle classroom situations with fairness and patience. Teacher assistants also must demonstrate initiative and a willingness to follow a teacher's directions. They must have good writing skills and be able to communicate effectively with students and teachers. Teacher assistants who speak a second language, especially Spanish, are in great demand for communicating with growing numbers of students and parents whose primary language is not English.

Advancement for teacher assistants—usually in the form of higher earnings or increased responsibility—comes primarily with experience or additional education. Some school districts provide time away from the job or tuition reimbursement so that teacher assistants can earn their bachelor's degrees and pursue licensed teaching positions. In return for tuition reimbursement, assistants are often required to teach a certain length of time for the school district.

### **Job Outlook**

Employment of teacher assistants is expected to grow somewhat faster than the average for all occupations through 2012. Although school enrollments are projected to increase only slowly over the next decade, the student population for which teacher assistants are most needed—special education students and students for whom English is not their first language—is expected to increase more rapidly than the general school-age population. Legislation that requires students with disabilities and non-native English speakers to receive an education “equal” to that of other students, will generate jobs for teacher assistants to accommodate these students' special needs. Children with special needs require much personal attention, and special education teachers, as well as general education teachers with special education students, rely heavily on teacher assistants.

Additionally, a greater focus on educational quality and accountability, as required by the No Child Left Behind Act, is likely to lead to an increased demand for teacher assistants. Growing numbers of teacher assistants will be needed to help teachers prepare students for standardized testing and to pro-

vide extra assistance to students who perform poorly on standardized tests. An increasing number of afterschool programs and summer programs also will create new opportunities for teacher assistants. In addition to those stemming from employment growth, numerous job openings will arise as assistants transfer to other occupations or leave the labor force to assume family responsibilities, to return to school, or for other reasons characteristic of occupations that require limited formal education and offer relatively low pay.

Opportunities for teacher assistant jobs are expected to be best for persons with at least 2 years of formal education after high school. Persons who can speak a foreign language should be in particular demand in school systems with large numbers of students whose families do not speak English at home. Demand is expected to vary by region of the country. Areas in which the population and school enrollments are expanding rapidly, such as many communities in the South and West, should have rapid growth in the demand for teacher assistants.

### **Earnings**

Median annual earnings of teacher assistants in 2002 were \$18,660. The middle 50 percent earned between \$14,880 and \$23,600. The lowest 10 percent earned less than \$12,900, and the highest 10 percent earned more than \$29,050.

Teacher assistants who work part time ordinarily do not receive benefits. Full-time workers usually receive health coverage and other benefits.

In 2002, about 3 out of 10 teacher assistants belonged to unions—mainly the American Federation of Teachers and the National Education Association—which bargain with school systems over wages, hours, and the terms and conditions of employment.

### **Related Occupations**

Teacher assistants who instruct children have duties similar to those of preschool, kindergarten, elementary, middle, and secondary school teachers, special education teachers, and school librarians. However, teacher assistants do not have the same level of responsibility or training. The support activities of teacher assistants and their educational backgrounds are similar to those of childcare workers, library technicians, and library assistants. Teacher assistants who work with children with disabilities perform many of the same functions as occupational therapy assistants and aides.

### **Sources of Additional Information**

For information on teacher assistants, including training and certification, contact:

- ▶ American Federation of Teachers, Paraprofessional and School Related Personnel Division, 555 New Jersey Ave. NW., Washington, DC 20001.
- ▶ National Education Association, Educational Support Personnel division, 1201 16th Street, NW | Washington, DC 20036.

For information on a career as a teacher assistant, contact:

- ▶ National Resource Center for Paraprofessionals, 6526 Old Main Hill, Utah State University, Logan, UT 84322. Internet: <http://www.nrcpara.org>

Human resource departments of school systems, school administrators, and State departments of education also can provide details about employment opportunities and required qualifications for teacher assistant jobs.

# Teachers—Adult Literacy and Remedial and Self-Enrichment Education

(0\*NET 25-3011.00, 25-3021.00)

## Significant Points

- Many adult literacy and remedial and self-enrichment teachers work part time and receive no benefits; unpaid volunteers also teach these subjects.
- Opportunities for teachers of English as a second language are expected to be very good, due to the expected increase in the number of residents with limited English skills who seek classes.
- Demand for self-enrichment courses is expected to rise with growing numbers of people who embrace lifelong learning and of retirees who have more free time to take classes.

## Nature of the Work

*Self-enrichment teachers* teach courses that students take for pleasure or personal enrichment; these classes are not usually intended to lead to a particular degree or vocation. Self-enrichment teachers may instruct children or adults in a wide variety of areas, such as cooking, dancing, creative writing, photography, or personal finance. In contrast, *adult literacy and remedial education teachers* provide adults and out-of-school youths with the education they need to read, write, and speak English and to perform elementary mathematical calculations—basic skills that equip them to solve problems well enough to become active participants in our society, to hold a job, and to further their education. The instruction provided by these teachers can be divided into three principle categories: *remedial or adult basic education (ABE)*, which is geared toward adults whose skills are either at or below an eighth-grade level; *adult secondary education (ASE)*, which is geared towards students who wish to obtain their General Educational Development (GED) certificate or other high school equivalency credential; and *English literacy*, which provides instruction for adults with limited proficiency in English. Traditionally, the students in adult literacy and remedial (basic) education classes were made up primarily of those who did not graduate high school or who passed through school without the knowledge needed to meet their educational goals or to participate fully in today's high-skill society. Increasingly, however, students in these classes are immigrants or other people whose native language is not English. Educators who work with adult English-language learners are usually called *teachers of English as a second language (ESL)* or *teachers of English to speakers of other languages (ESOL)*.

Self-enrichment teachers, due to the wide range of classes and subjects they teach, may have styles and methods of instruction that differ greatly. The majority of self-enrichment classes are relatively informal and nonintensive in terms of instructional demands. Some classes, such as pottery or sewing, may be largely hands-on, requiring students to practice doing things themselves in order to learn. In that case, teachers may demonstrate methods or techniques for their class and subsequently supervise students' progress as they attempt to carry out the same or similar tasks or actions. Other classes, such as those involving financial planning or religion and spirituality, may

be somewhat more academic in nature. Teachers of these classes are likely to rely more heavily on lectures and group discussions as methods of instruction. Classes offered through religious institutions, such as marriage preparation or classes in religion for children, may also be taught by self-enrichment teachers.

Many of the classes that self-enrichment educators teach are shorter in duration than classes taken for academic credit; some finish in 1 or 2 days to several weeks. These brief classes tend to be introductory in nature and generally focus on only one topic—for example, a cooking class that teaches students how to make bread. Some self-enrichment classes introduce children and youths to activities such as piano or drama, and may be designed to last anywhere from 1 week to several months. These and other self-enrichment classes may be scheduled to occur after school or during school vacations.

Remedial education teachers, more commonly called adult basic education teachers, teach basic academic courses in mathematics, languages, history, reading, writing, science, and other areas, using instructional methods geared toward adult learning. They teach these subjects to students 16 years of age and older who demonstrate the need to increase their skills in one or more of the subject areas mentioned. Classes are taught to appeal to a variety of learning styles and usually include large-group, small-group, and one-on-one instruction. Because the students often are at different proficiency levels for different



English literacy teachers often use real-life situations to promote learning.

subjects, adult basic education teachers must make individual assessments of each student's abilities beforehand. In many programs, the assessment is used to develop an individualized education plan for each student. Teachers are required to evaluate students periodically to determine their progress and potential for advancement to the next level.

Teachers in remedial or adult basic education may have to assist students in acquiring effective study skills and the self-confidence they need to reenter an academic environment. Teachers also may encounter students with a learning or physical disability that requires additional expertise. Teachers should possess an understanding of how to help these students achieve their goals, but they also may need to have the knowledge to detect challenges their students may have and provide them with access to a broader system of additional services that are required to address their challenges.

For students who wish to get a GED credential in order to get a job or qualify for postsecondary education, adult secondary education or GED teachers provide help in acquiring the necessary knowledge and skills to pass the test. The GED tests students in subject areas such as reading, writing, mathematics, science, and social studies, while at the same time measuring students' communication, information-processing, problem-solving, and critical-thinking skills. The emphasis in class is on acquiring the knowledge needed to pass the GED test, as well as preparing students for success in further educational endeavors.

ESOL teachers help adults to speak, listen, read, and write in English, often in the context of real-life situations to promote learning. More advanced students may concentrate on writing and conversational skills or focus on learning more academic or job-related communication skills. ESOL teachers teach adults who possess a wide range of cultures and abilities and who speak a variety of languages. Some of their students have a college degree and many advance quickly through the program owing to a variety of factors, such as their age, previous language experience, educational background, and native language. Others may need additional time due to these same factors. Because the teacher and students often do not share a common language, creativity is an important part of fostering communication in the classroom and achieving learning goals.

All adult literacy, remedial, and self-enrichment teachers must prepare lessons beforehand, do any related paperwork, and stay current in their fields. Attendance for students is mostly voluntary and course work is rarely graded. Many teachers also must learn the latest uses for computers in the classroom, as computers are increasingly being used to supplement instruction in basic skills and in teaching ESOL.

### **Working Conditions**

A large number of adult literacy and remedial and self-enrichment education teachers work part time. Some have several part-time teaching assignments or work full time in addition to their part-time teaching job. Classes for adults are held on days and at times that best accommodate students who may have a job or family responsibilities. Similarly, self-enrichment classes for children are usually held after school or during school vacation periods.

Because many of these teachers work with adult students, they do not encounter some of the behavioral or social problems sometimes found with younger students. Adults attend by choice, are highly motivated, and bring years of experience to the classroom—attributes that can make teaching these students rewarding and satisfying. Self-enrichment teachers must have a

great deal of patience, particularly when working with young children.

### **Employment**

Teachers of adult literacy, remedial, and self-enrichment education held about 280,000 jobs in 2002. About 1 in 5 was self-employed. Many additional teachers worked as unpaid volunteers.

Nearly three-quarters, or 200,000, of the jobs were held by self-enrichment teachers. The largest numbers of these workers were employed by public and private educational institutions, religious organizations, and providers of social assistance and amusement and recreation services.

Adult literacy, basic education, and GED teachers and instructors held about 80,000 jobs. Many of the jobs are federally funded, with additional funds coming from State and local governments. The education industry employs the majority of these teachers, who work in adult learning centers, libraries, or community colleges. Others work for social service organizations such as job-training or residential care facilities. Still others work for State and local governments, providing basic education at juvenile detention and corrections institutions, among other places.

### **Training, Other Qualifications, and Advancement**

The main qualification for self-enrichment teachers is expertise in their subject area; however, requirements may vary greatly with both the type of class taught and the place of employment. In some cases, a portfolio of one's work may be required. For example, to secure a job teaching a photography course, an applicant would need to show examples of previous work. Special certification may be required to teach some subjects, such as a Red Cross water safety instructor certificate to teach swimming. Some self-enrichment teachers are trained educators or other professionals who teach enrichment classes in their spare time. In some disciplines, such as art or music, specific teacher training programs are available. Prospective dance teachers, for example, may complete programs that prepare them to instruct any number of types of dance—from ballroom dancing to ballet. Self-enrichment teachers also should have good speaking skills and a talent for making the subject interesting. Patience and the ability to explain and instruct students at a basic level are important as well, particularly when one is working with children.

Requirements for teaching adult literacy and basic and secondary education vary by State and by program. Federally funded programs run by State and local governments require high accountability and student achievement standards. Those programs run by religious, community, or volunteer organizations, rather than State-run, federally funded programs, generally develop standards based on their own needs and organizational goals. Most State and local governments and educational institutions require that adult teachers have at least a bachelor's degree and, preferably, a master's degree. Some—especially school districts that hire adult education teachers—require an elementary or secondary school teaching certificate. A few have begun requiring a special certificate in ESOL or adult education. Teaching experience, especially with adults, also is preferred or required. Volunteers usually do not need a bachelor's degree, but often must attend a training program before they are allowed to work with students.

Most programs recommend that adult literacy and basic and secondary education teachers take classes or workshops on teach-

ing adults, using technology to teach, working with learners from a variety of cultures, and teaching adults with learning disabilities. ESOL teachers also should have courses or training in second-language acquisition theory and linguistics. In addition, knowledge of the citizenship and naturalization process may be useful. Knowledge of a second language is not necessary to teach ESOL students, but can be helpful in understanding the students' perspectives. GED teachers should know what is required to pass the GED and be able to instruct students in the subject matter. Training for literacy volunteers usually consists of instruction on effective teaching practices, needs assessment, lesson planning, the selection of appropriate instructional materials, characteristics of adult learners, and cross-cultural awareness.

Adult education and literacy teachers must have the ability to work with a variety of cultures, languages, and educational and economic backgrounds. They must be understanding and respectful of their students' circumstances and be familiar with their concerns. All teachers, both paid and volunteer, should be able to communicate well and motivate their students.

Professional development among adult education and literacy teachers varies widely. Both part-time and full-time teachers are expected to participate in ongoing professional development activities in order to keep current on new developments in the field and to enhance skills already acquired. Each State's professional development system reflects the unique needs and organizational structure of that State. Attendance by teachers at professional development workshops and other activities is often outlined in State or local policy. Some teachers are able to access professional development activities through alternative delivery systems such as the Internet or distance learning.

Opportunities for advancement in these professions, particularly for adult education and literacy teachers, again vary from State to State and program to program. Some part-time teachers are able to move into full-time teaching positions or program administrator positions, such as coordinator or director, when such vacancies occur. Others may decide to use their classroom experience to move into policy work at a nonprofit organization or with the local, State, or Federal government or to perform research. Self-enrichment teachers also may advance to administrative positions or may even go on to start their own school or program. Experienced self-enrichment teachers may mentor new instructors and volunteers.

### **Job Outlook**

Opportunities for jobs as adult literacy, remedial, and self-enrichment education teachers are expected to be favorable. Employment is expected to grow faster than the average for all occupations through 2012, and a large number of job openings is expected, due to the need to replace people who leave the occupation or retire.

Self-enrichment education teachers account for the largest proportion of jobs in these occupations. The need for self-enrichment teachers is expected to grow as more people embrace lifelong learning and as the baby boomers begin to retire and have more time to take classes. Subjects that are not easily researched on the Internet and those that provide hands-on experiences, such as cooking, crafts, and the arts, will be in greater demand. Also, classes on spirituality and self-improvement are expected to be popular.

As employers increasingly require a more literate workforce, workers' demand for adult literacy, basic education, and sec-

ondary education classes is expected to grow. Significant employment growth is anticipated especially for ESOL teachers, who will be needed by the increasing number of immigrants and other residents living in this country who need to learn, or enhance their skills in, English. In addition, a greater proportion of these groups is expected to take ESOL classes. Demand for ESOL teachers will be greatest in States such as California, Florida, Texas, and New York, due to their large populations of residents who have limited English skills. However, parts of the Midwest and Plains States have begun to attract large numbers of immigrants, making for especially good opportunities in those areas as well.

The demand for adult literacy and basic and secondary education often fluctuates with the economy. When the economy is good and workers are hard to find, employers relax their standards and hire workers without a degree or GED or those with limited proficiency in English. As the economy softens, more students find that they need additional education to get a job. However, adult education classes often are subject to changes in funding levels, which can cause the number of teaching jobs to fluctuate from year to year. In addition, factors such as immigration policies and the relative prosperity of the United States compared with other countries may have an impact on the number of immigrants entering this country and, consequently, on the demand for ESOL teachers.

### **Earnings**

Median hourly earnings of self-enrichment teachers were \$14.09 in 2002. The middle 50 percent earned between \$9.86 and \$19.69. The lowest 10 percent earned less than \$7.37, and the highest 10 percent earned more than \$26.49. Self-enrichment teachers are generally paid by the hour or for each class that they teach.

Median hourly earnings of adult literacy, remedial education, and GED teachers and instructors were \$17.50 in 2002. The middle 50 percent earned between \$13.21 and \$24.00. The lowest 10 percent earned less than \$10.08, and the highest 10 percent earned more than \$34.30. Part-time adult literacy and remedial education and GED instructors are usually paid by the hour or for each class that they teach, and receive few benefits or none at all. Full-time teachers are generally paid a salary and receive health insurance and other benefits if they work for a school system or government.

### **Related Occupations**

The work of adult literacy, remedial, and self-enrichment teachers is closely related to that of other types of teachers, especially preschool, kindergarten, elementary school, middle school, and secondary school teachers. In addition, adult literacy and basic and secondary education teachers require a wide variety of skills and aptitudes. Not only must they be able to teach and motivate students (including, at times, those with learning disabilities), but they also must often take on roles as advisers and mentors. Workers in other occupations that require these aptitudes include special-education teachers, counselors, and social workers. Self-enrichment teachers teach a wide variety of subjects that may be related to the work done by those in many other occupations, such as dancers and choreographers; artists and related workers; musicians, singers, and related workers; recreation and fitness workers; and athletes, coaches, umpires, and related workers.

### **Sources of Additional Information**

Information on adult literacy, basic and secondary education programs, and teacher certification requirements is available from State departments of education, local school districts, and literacy resource centers. Information also may be obtained through local religious and charitable organizations.

For information on adult education and family literacy programs, contact

► The U.S. Department of Education, Office of Vocational and Adult Education, 4090 MES, 400 Maryland Ave. SW., Washington, DC 20202. Internet: <http://www.ed.gov/offices/OVAE>

For information on teaching English as a second language, contact

► The National Center for ESL Literacy Education, 4646 40th St. NW., Washington, DC 20016. Internet: <http://www.cal.org/nclle>



## Teachers—Postsecondary

(0\*NET 25-1011.00, 25-1021.00, 25-1022.00, 25-1031.00, 25-1032.00, 25-1041.00, 25-1042.00, 25-1043.00, 25-1051.00, 25-1052.00, 25-1053.00, 25-1054.00, 25-1061.00, 25-1062.00, 25-1063.00, 25-1064.00, 25-1065.00, 25-1066.00, 25-1067.00, 25-1069.99, 25-1071.00, 25-1072.00, 25-1081.00, 25-1082.00, 25-1111.00, 25-1112.00, 25-1113.00, 25-1121.00, 25-1122.00, 25-1123.00, 25-1124.00, 25-1125.00, 25-1126.00, 25-1191.00, 25-1192.00, 25-1193.00, 25-1194.00, 25-1199.99)

### Significant Points

- Opportunities for college and university teaching jobs are expected to improve, but many new openings will be for part-time or non-tenure-track positions.
- Prospects for teaching jobs will continue to be better in academic fields that offer attractive alternative nonacademic job opportunities—health specialties, business, and computer science, for example—which attract fewer applicants for academic positions.
- Educational qualifications for postsecondary teacher jobs range from expertise in a particular field to a Ph.D, depending on the subject being taught and the type of educational institution.
- One out of eight postsecondary teachers is a graduate teaching assistant—and one out of ten is a vocational or career and technical education teacher.

### Nature of the Work

Postsecondary teachers instruct students in a wide variety of academic and vocational subjects beyond the high school level that may lead to a degree or simply to improvement in one's knowledge or skills. These teachers include college and university faculty, postsecondary career and technical education teachers, and graduate teaching assistants.

*College and university faculty* make up the majority of postsecondary teachers. They teach and advise more than 15 million full- and part-time college students and perform a significant part of our Nation's research. Faculty also keep up with new developments in their field and may consult with government, business, nonprofit, and community organizations.

Faculty usually are organized into departments or divisions, based on academic subject or field. They usually teach several different related courses in their subject—algebra, calculus, and statistics, for example. They may instruct undergraduate or graduate students, or both. College and university faculty may give lectures to several hundred students in large halls, lead small seminars, or supervise students in laboratories. They prepare lectures, exercises, and laboratory experiments; grade exams and papers; and advise and work with students individually. In universities, they also supervise graduate students' teaching and research. College faculty work with an increasingly varied student population made up of growing shares of part-time, older, and culturally and racially diverse students.

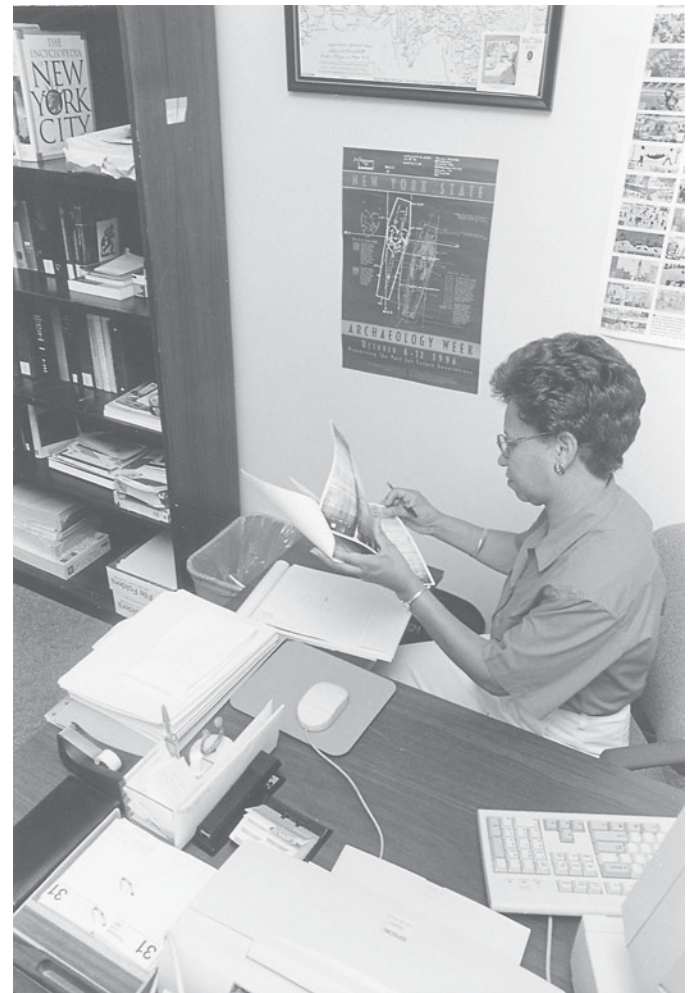
Faculty keep abreast of developments in their field by reading current literature, talking with colleagues, and participating in professional conferences. They may also do their own research to expand knowledge in their field. They may perform experiments; collect and analyze data; and examine original documents, literature, and other source material. From this pro-

cess, they arrive at conclusions, and publish their findings in scholarly journals, books, and electronic media.

Most college and university faculty extensively use computer technology, including the Internet; electronic mail; software programs, such as statistical packages; and CD-ROMs. They may use computers in the classroom as teaching aids and may post course content, class notes, class schedules, and other information on the Internet. Some faculty are increasingly using sophisticated telecommunications and videoconferencing equipment and the Internet to teach courses to students at remote sites. The use of e-mail, chat rooms, and other techniques has greatly improved communications between students and teachers and among students.

Most faculty members serve on academic or administrative committees that deal with the policies of their institution, departmental matters, academic issues, curricula, budgets, equipment purchases, and hiring. Some work with student and community organizations. Department chairpersons are faculty members who usually teach some courses but have heavier administrative responsibilities.

The proportion of time spent on research, teaching, administrative, and other duties varies by individual circumstance and type of institution. Faculty members at universities normally spend a significant part of their time doing research; those in 4-year colleges, somewhat less; and those in 2-year colleges, rela-



*Postsecondary teachers review current research to keep abreast of developments in their field.*

tively little. The teaching load, however, often is heavier in 2-year colleges and somewhat lighter at 4-year institutions. Full professors at all types of institutions usually spend a larger portion of their time conducting research than do assistant professors, instructors, and lecturers.

*Postsecondary vocational education teachers*, also known as *postsecondary career and technical education teachers*, provide instruction for occupations that require specialized training, but may not require a 4-year degree, such as welder, dental hygienist, x-ray technician, auto mechanic, and cosmetologist. Classes often are taught in an industrial or laboratory setting where students are provided hands-on experience. For example, welding instructors show students various welding techniques and essential safety practices, watch them use tools and equipment, and have them repeat procedures until they meet the specific standards required by the trade. Increasingly, career and technical education teachers are integrating academic and vocational curriculums so that students obtain a variety of skills that can be applied to the “real world.”

Career and technical education teachers have many of the same responsibilities that other college and university faculty have. They must prepare lessons, grade papers, attend faculty meetings, and keep abreast of developments in their field. Career and technical education teachers at community colleges and career and technical schools also often play a key role in students’ transition from school to work by helping to establish internship programs for students and by providing information about prospective employers.

*Graduate teaching assistants*, often referred to as *graduate TAs*, assist faculty, department chairs, or other professional staff at colleges and universities by performing teaching or teaching-related duties. In addition to their work responsibilities, assistants have their own school commitments, as they are also students who are working towards earning a graduate degree, such as a Ph.D. Some teaching assistants have full responsibility for teaching a course—usually one that is introductory in nature—which can include preparation of lectures and exams, and assigning final grades to students. Others provide assistance to faculty members, which may consist of a variety of tasks such as grading papers, monitoring exams, holding office hours or help-sessions for students, conducting laboratory sessions, or administering quizzes to the class. Teaching assistants generally meet initially with the faculty member whom they are going to assist in order to determine exactly what is expected of them, as each faculty member may have his or her own needs. For example, some faculty members prefer assistants to sit in on classes, while others assign them other tasks to do during class time. Graduate teaching assistants may work one-on-one with a faculty member or, for large classes, they may be one of several assistants.

### Working Conditions

Postsecondary teachers usually have flexible schedules. They must be present for classes, usually 12 to 16 hours per week, and for faculty and committee meetings. Most establish regular office hours for student consultations, usually 3 to 6 hours per week. Otherwise, teachers are free to decide when and where they will work, and how much time to devote to course preparation, grading, study, research, graduate student supervision, and other activities.

Some teach night and weekend classes. This is particularly true for teachers at 2-year community colleges or institutions with large enrollments of older students who have full-time jobs

or family responsibilities. Most colleges and universities require teachers to work 9 months of the year, which allows them the time to teach additional courses, do research, travel, or pursue nonacademic interests during the summer and school holidays. Colleges and universities usually have funds to support research or other professional development needs, including travel to conferences and research sites.

About 3 out of 10 college and university faculty worked part time in 2002. Some part-timers, known as “adjunct faculty,” have primary jobs outside of academia—in government, private industry, or nonprofit research—and teach “on the side.” Others prefer to work part-time hours or seek full-time jobs but are unable to obtain them due to intense competition for available openings. Some work part time in more than one institution. Many adjunct faculty are not qualified for tenure-track positions because they lack a doctoral degree.

University faculty may experience a conflict between their responsibilities to teach students and the pressure to do research and publish their findings. This may be a particular problem for young faculty seeking advancement in 4-year research universities. Also, recent cutbacks and the hiring of more part-time faculty have put a greater administrative burden on full-time faculty. Requirements to teach online classes also have added greatly to the workloads of postsecondary teachers. Many find that developing the courses to put online, plus learning how to operate the technology and answering large amounts of e-mail, is very time-consuming.

Like college and university faculty, there is usually a great deal of flexibility in graduate TAs’ work schedules, which allows them the time to pursue their own academic coursework and studies. The number of hours that TAs work varies depending on their assignments. Work may be stressful, particularly when assistants are given full responsibility for teaching a class; however, these types of positions allow graduate students the opportunity to gain valuable teaching experience. This experience is especially helpful for those graduate teaching assistants who seek to become faculty members at colleges and universities after completing their degree.

### Employment

Postsecondary teachers held nearly 1.6 million jobs in 2002. Most were employed in public and private 4-year colleges and universities and in 2-year community colleges. Postsecondary career and technical education teachers also are employed by schools and institutes that specialize in training people in a specific field, such as technology centers or culinary schools. Some career and technical education teachers work for State and local governments and job training facilities. The following tabulation shows postsecondary teaching jobs in specialties having 20,000 or more jobs in 2002:

Graduate teaching assistants .....	128,000
Vocational education teachers .....	119,000
Health specialties teachers .....	86,000
Business teachers .....	67,000
Art, drama, and music teachers .....	58,000
English language and literature teachers .....	55,000
Education teachers .....	42,000
Biological science teachers .....	47,000
Mathematical science teachers .....	41,000
Nursing instructors and teachers .....	37,000
Computer science teachers .....	33,000
Engineering teachers .....	29,000
Psychology teachers .....	26,000

### **Training, Other Qualifications, and Advancement**

The education and training required of postsecondary teachers varies widely, depending on the subject taught and educational institution employing them. Educational requirements for teachers are generally the highest at 4-year research universities but, at career and technical institutes, experience and expertise in a related occupation is the most valuable qualification.

Postsecondary teachers should communicate and relate well with students, enjoy working with them, and be able to motivate them. They should have inquiring and analytical minds, and a strong desire to pursue and disseminate knowledge. Additionally, they must be self-motivated and able to work in an environment in which they receive little direct supervision.

Training requirements for postsecondary career and technical education teachers vary by State and by subject. In general, teachers need a bachelor's or higher degree, plus work or other experience in their field. In some fields, a license or certificate that demonstrates one's qualifications may be all that is required. Teachers update their skills through continuing education, in order to maintain certification. They must also maintain ongoing dialogue with businesses to determine the most current skills needed in the workplace.

Four-year colleges and universities usually consider doctoral degree holders for full-time, tenure-track positions, but may hire master's degree holders or doctoral candidates for certain disciplines, such as the arts, or for part-time and temporary jobs. Most college and university faculty are in four academic ranks—professor, associate professor, assistant professor, and instructor. These positions usually are considered to be tenure-track positions. Most faculty members are hired as instructors or assistant professors. A smaller number of additional faculty members, called lecturers, are usually employed on contracts for a single academic term and are not on the tenure track.

In 2-year colleges, master's degree holders fill most full-time positions. However, with increasing competition for available jobs, institutions can be more selective in their hiring practices. Many 2-year institutions increasingly prefer job applicants to have some teaching experience or experience with distance learning. Preference also may be given to those holding dual master's degrees, because they can teach more subjects. In addition, with greater competition for jobs, master's degree holders may find it increasingly difficult to obtain employment as they are passed over in favor of candidates holding a Ph.D.

Doctoral programs take an average of 6 to 8 years of full-time study beyond the bachelor's degree, including time spent completing a master's degree and a dissertation. Some programs, such as those in the humanities, take longer to complete; others, such as those in engineering, usually are shorter. Candidates specialize in a subfield of a discipline—for example, organic chemistry, counseling psychology, or European history—but also take courses covering the entire discipline. Programs include 20 or more increasingly specialized courses and seminars plus comprehensive examinations on all major areas of the field. Candidates also must complete a dissertation—a written report on original research in the candidate's major field of study. The dissertation sets forth an original hypothesis or proposes a model and tests it. Students in the natural sciences and engineering usually do laboratory work; in the humanities, they study original documents and other published material. The dissertation is done under the guidance of one or more faculty advisors and usually takes 1 or 2 years of full-time work.

In some fields, particularly the natural sciences, some students spend an additional 2 years on postdoctoral research and study before taking a faculty position. Some Ph.D.s extend postdoctoral appointments, or take new ones, if they are unable to find a faculty job. Most of these appointments offer a nominal salary.

Obtaining a position as a graduate teaching assistant is a good way to gain college teaching experience. To qualify, candidates must be enrolled in a graduate school program. In addition, some colleges and universities require teaching assistants to attend classes or take some training prior to being given responsibility for a course.

Although graduate teaching assistants usually work at the institution and in the department where they are earning their degree, teaching or internship positions for graduate students at institutions that do not grant a graduate degree have become more common in recent years. For example, a program called Preparing Future Faculty, administered by the Association of American Colleges and Universities and the Council of Graduate Schools, has led to the creation of many now-independent programs that offer graduate students at research universities the opportunity to work as teaching assistants at other types of institutions, such as liberal arts or community colleges. Working with a mentor, the graduate students teach classes and learn how to improve their teaching techniques. They may attend faculty and committee meetings, develop a curriculum, and learn how to balance the teaching, research, and administrative roles that faculty play. These programs provide valuable learning opportunities for graduate students interested in teaching at the postsecondary level, and also help to make these students aware of the differences among the various types of institutions at which they may someday work.

For faculty, a major step in the traditional academic career is attaining tenure. New tenure-track faculty usually are hired as instructors or assistant professors, and must serve a period—usually 7 years—under term contracts. At the end of the period, their record of teaching, research, and overall contribution to the institution is reviewed; tenure is granted if the review is favorable. Those denied tenure usually must leave the institution. Tenured professors cannot be fired without just cause and due process. Tenure protects the faculty's academic freedom—the ability to teach and conduct research without fear of being fired for advocating unpopular ideas. It also gives both faculty and institutions the stability needed for effective research and teaching, and provides financial security for faculty. Some institutions have adopted post-tenure review policies to encourage ongoing evaluation of tenured faculty.

The number of tenure-track positions is expected to decline as institutions seek flexibility in dealing with financial matters and changing student interests. Institutions will rely more heavily on limited term contracts and part-time, or adjunct, faculty, thus shrinking the total pool of tenured faculty. In a trend that is expected to continue, some institutions now offer limited-term contracts to prospective faculty—typically 2-, 3-, or 5-year, full-time contracts. These contracts may be terminated or extended when they expire. Institutions are not obligated to grant tenure to the contract holders. In addition, some institutions have limited the percentage of faculty who can be tenured.

For most postsecondary teachers, advancement involves a move into administrative and managerial positions, such as departmental chairperson, dean, and president. At 4-year institutions, such advancement requires a doctoral degree. At 2-year colleges, a doctorate is helpful but not usually required, except for advancement to some top administrative positions. (Deans and departmental chairpersons are covered in the *Handbook* statement on education administrators, while college presidents are included in the *Handbook* statement on top executives.)

### **Job Outlook**

Overall, employment of postsecondary teachers is expected to grow much faster than the average for all occupations through 2012. A significant proportion of these new jobs will be part-time positions. Good job opportunities are expected as retirements of current postsecondary teachers and continued increases in student enrollments create numerous openings for teachers at all types of postsecondary institutions.

Projected growth in college and university enrollment over the next decade stems largely from the expected increase in the population of 18- to 24-year-olds. Adults returning to college and an increase in foreign-born students also will add to the number of students, particularly in the fastest growing States of California, Texas, Florida, New York, and Arizona. In addition, workers' growing need to regularly update their skills will continue to create new opportunities for postsecondary teachers, particularly at community colleges and for-profit institutions that cater to working adults. However, many postsecondary educational institutions receive a significant portion of their funding from State and local governments, and, over the early years of the projection period, tight State and local budgets will limit the ability of many schools to expand. Nevertheless, a significant number of openings also is expected to arise due to the need to replace the large numbers of postsecondary teachers who are likely to retire over the next decade. Many postsecondary teachers were hired in the late 1960s and 1970s to teach the baby boomers, and they are expected to retire in growing numbers in the years ahead.

Postsecondary institutions are a major employer of workers holding doctoral degrees, and opportunities for Ph.D. recipients seeking jobs as postsecondary teachers are expected to be somewhat better than in previous decades. The number of earned doctorate degrees is projected to rise by only 4 percent over the 2002-12 period, sharply lower than the 10-percent increase over the previous decade. In spite of this positive trend, competition will remain tight for those seeking tenure-track positions at 4-year colleges and universities, as many of the job openings are expected to be either part-time or renewable, term appointments.

Opportunities for graduate teaching assistants are expected to be very good. Graduate enrollments over the 2002-12 period are projected to increase at a rate that is somewhat slower than that of the previous decade, while total undergraduate enrollments in degree-granting institutions are expected to increase at nearly twice the rate of the preceding decade, creating many teaching opportunities. Constituting more than 12 percent of all postsecondary teachers, graduate teaching assistants play an integral role in the postsecondary education system, and they are expected to continue to do so in the future.

Because one of the main reasons why students attend postsecondary institutions is to obtain a job, the best job prospects for postsecondary teachers are likely to be in fields where

job growth is expected to be strong over the next decade. These will include fields such as business, health specialties, nursing, and computer and biological sciences. Community colleges and other institutions offering career and technical education have been among the most rapidly growing, and these institutions are expected to offer some of the best opportunities for postsecondary teachers.

### **Earnings**

Median annual earnings of all postsecondary teachers in 2002 were \$49,040. The middle 50 percent earned between \$34,310 and \$69,580. The lowest 10 percent earned less than \$23,080, and the highest 10 percent earned more than \$92,430.

Earnings for college faculty vary according to rank and type of institution, geographic area, and field. According to a 2002-03 survey by the American Association of University Professors, salaries for full-time faculty averaged \$64,455. By rank, the average was \$86,437 for professors, \$61,732 for associate professors, \$51,545 for assistant professors, \$37,737 for instructors, and \$43,914 for lecturers. Faculty in 4-year institutions earn higher salaries, on average, than do those in 2-year schools. In 2002-03, average faculty salaries in public institutions—\$63,974—were lower than those in private independent institutions—\$74,359—but higher than those in religiously affiliated private colleges and universities—\$57,564. In fields with high-paying nonacademic alternatives—medicine, law, engineering, and business, among others—earnings exceed these averages. In others—such as the humanities and education—they are lower.

Many faculty members have significant earnings, in addition to their base salary, from consulting, teaching additional courses, research, writing for publication, or other employment. In addition, many college and university faculty enjoy some unique benefits, including access to campus facilities, tuition waivers for dependents, housing and travel allowances, and paid sabbatical leaves. Part-time faculty usually have fewer benefits than do full-time faculty.

Earnings for postsecondary career and technical education teachers vary widely by subject, academic credentials, experience, and region of the country. Part-time instructors usually receive few benefits.

### **Related Occupations**

Postsecondary teaching requires the ability to communicate ideas well, motivate students, and be creative. Workers in other occupations that require these skills are teachers—preschool, kindergarten, elementary, middle, and secondary; education administrators; librarians; counselors; writers and editors; public relations specialists; and management analysts. Faculty research activities often are similar to those of scientists, as well as to those of managers and administrators in industry, government, and nonprofit research organizations.

### **Sources of Additional Information**

Professional societies related to a field of study often provide information on academic and nonacademic employment opportunities. Names and addresses of many of these societies appear in statements elsewhere in the *Handbook*.

Special publications on higher education, such as *The Chronicle of Higher Education*, list specific employment opportunities for faculty. These publications are available in libraries.

For information on the Preparing Future Faculty program, contact:

► Association of American Colleges and Universities, 1818 R St. NW., Washington, DC 20009. Internet: <http://www.aacu-edu.org>

For information on postsecondary career and technical education teaching positions, contact State departments of career and technical education.

General information on adult and career and technical education is available from:

► Association for Career and Technical Education, 1410 King St., Alexandria, VA 22314. Internet: <http://www.acteonline.org>

## Teachers—Preschool, Kindergarten, Elementary, Middle, and Secondary

(0\*NET 25-2011.00, 25-2012.00, 25-2021.00, 25-2022.00, 25-2023.00, 25-2031.00, 25-2032.00)

### Significant Points

- Public school teachers must have at least a bachelor's degree, complete an approved teacher education program, and be licensed.
- Many States offer alternative licensing programs to attract people into teaching, especially for hard-to-fill positions.
- Excellent job opportunities are expected as a large number of teachers retire over the next 10 years, particularly at the secondary school level; opportunities will vary somewhat by geographic area and subject taught.

### Nature of the Work

Teachers act as facilitators or coaches, using interactive discussions and “hands-on” approaches to help students learn and apply concepts in subjects such as science, mathematics, or English. They utilize “props” or “manipulatives” to help children understand abstract concepts, solve problems, and develop critical thought processes. For example, they teach the concepts of numbers or of addition and subtraction by playing board games. As the children get older, the teachers use more sophisticated materials, such as science apparatus, cameras, or computers.

To encourage collaboration in solving problems, students are increasingly working in groups to discuss and solve problems together. Preparing students for the future workforce is the major stimulus generating the changes in education. To be prepared, students must be able to interact with others, adapt to new technology, and think through problems logically. Teachers provide the tools and the environment for their students to develop these skills.

Preschool, kindergarten, and elementary school teachers play a vital role in the development of children. What children learn and experience during their early years can shape their views of themselves and the world and can affect their later success or failure in school, work, and their personal lives. Preschool, kindergarten, and elementary school teachers introduce children to mathematics, language, science, and social studies. They use games, music, artwork, films, books, computers, and other tools to teach basic skills.

Preschool children learn mainly through play and interactive activities. *Preschool teachers* capitalize on children's play to further language and vocabulary development (using storytelling, rhyming games, and acting games), improve social skills (having the children work together to build a neighborhood in a sandbox), and introduce scientific and mathematical concepts (showing the children how to balance and count blocks when building a bridge or how to mix colors when painting). Thus, a less structured approach, including small-group lessons, one-on-one instruction, and learning through creative activities such as art, dance, and music, is adopted to teach preschool children. Play and hands-on teaching also are used in kindergarten classrooms, but there academics begin to take priority. Letter recognition, phonics, numbers, and awareness of nature

and science, introduced at the preschool level, are taught primarily by *kindergarten teachers*.

Most *elementary school teachers* instruct one class of children in several subjects. In some schools, two or more teachers work as a team and are jointly responsible for a group of students in at least one subject. In other schools, a teacher may teach one special subject—usually music, art, reading, science, arithmetic, or physical education—to a number of classes. A small but growing number of teachers instruct multilevel classrooms, with students at several different learning levels.

*Middle school teachers* and *secondary school teachers* help students delve more deeply into subjects introduced in elementary school and expose them to more information about the world. Middle and secondary school teachers specialize in a specific subject, such as English, Spanish, mathematics, history, or biology. They also can teach subjects that are career oriented. *Vocational education teachers*, also referred to as career and technical or career-technology teachers, instruct and train students to work in a wide variety of fields, such as healthcare, business, auto repair, communications, and, increasingly, technology. They often teach courses that are in high demand by area employers, who may provide input into the curriculum and offer internships to students. Many vocational teachers play an active role in building and overseeing these partnerships. Additional responsibilities of middle and secondary school teachers may include career guidance and job placement, as well as followups with students after graduation. (Special education teachers—who instruct elementary and secondary school students who have a variety of disabilities—are discussed separately in this section of the *Handbook*.)

Teachers may use films, slides, overhead projectors, and the latest technology in teaching, including computers, telecommunication systems, and video discs. The use of computer resources, such as educational software and the Internet, exposes students to a vast range of experiences and promotes interactive learning. Through the Internet, students can communicate with students in other countries. Students also use the Internet for individual research projects and to gather information. Computers are used in other classroom activities as well, from solving math problems to learning English as a second language. Teachers also may use computers to record grades and perform other administrative and clerical duties. They must continually update their skills so that they can instruct and use the latest technology in the classroom.



*Teachers find that helping students to gain an appreciation of knowledge and learning can be very rewarding.*

Teachers often work with students from varied ethnic, racial, and religious backgrounds. With growing minority populations in most parts of the country, it is important for teachers to work effectively with a diverse student population. Accordingly, some schools offer training to help teachers enhance their awareness and understanding of different cultures. Teachers may also include multicultural programming in their lesson plans, to address the needs of all students, regardless of their cultural background.

Teachers design classroom presentations to meet students' needs and abilities. They also work with students individually. Teachers plan, evaluate, and assign lessons; prepare, administer, and grade tests; listen to oral presentations; and maintain classroom discipline. They observe and evaluate a student's performance and potential and increasingly are asked to use new assessment methods. For example, teachers may examine a portfolio of a student's artwork or writing in order to judge the student's overall progress. They then can provide additional assistance in areas in which a student needs help. Teachers also grade papers, prepare report cards, and meet with parents and school staff to discuss a student's academic progress or personal problems.

In addition to conducting classroom activities, teachers oversee study halls and homerooms, supervise extracurricular activities, and accompany students on field trips. They may identify students with physical or mental problems and refer the students to the proper authorities. Secondary school teachers occasionally assist students in choosing courses, colleges, and careers. Teachers also participate in education conferences and workshops.

In recent years, site-based management, which allows teachers and parents to participate actively in management decisions regarding school operations, has gained popularity. In many schools, teachers are increasingly involved in making decisions regarding the budget, personnel, textbooks, curriculum design, and teaching methods.

### **Working Conditions**

Seeing students develop new skills and gain an appreciation of knowledge and learning can be very rewarding. However, teaching may be frustrating when one is dealing with unmotivated or disrespectful students. Occasionally, teachers must cope with unruly behavior and violence in the schools. Teachers may experience stress in dealing with large classes, students from disadvantaged or multicultural backgrounds, or heavy workloads. Inner-city schools in particular, may be run down and lack the amenities of schools in wealthier communities. Accountability standards also may increase stress levels, with teachers expected to produce students who are able to exhibit satisfactory performance on standardized tests in core subjects.

Teachers are sometimes isolated from their colleagues because they work alone in a classroom of students. However, some schools allow teachers to work in teams and with mentors to enhance their professional development.

Including school duties performed outside the classroom, many teachers work more than 40 hours a week. Part-time schedules are more common among preschool and kindergarten teachers. Although some school districts have gone to all-day kindergartens, most kindergarten teachers still teach two kindergarten classes a day. Most teachers work the traditional 10-month school year with a 2-month vacation during the summer. During the vacation break, those on the 10-month schedule may teach in summer sessions, take other jobs, travel, or pursue personal interests. Many enroll in college courses or

workshops to continue their education. Teachers in districts with a year-round schedule typically work 8 weeks, are on vacation for 1 week, and have a 5-week midwinter break. Preschool teachers working in daycare settings often work year round.

Most States have tenure laws that prevent teachers from being fired without just cause and due process. Teachers may obtain tenure after they have satisfactorily completed a probationary period of teaching, normally 3 years. Tenure does not absolutely guarantee a job, but it does provide some security.

### **Employment**

Preschool, kindergarten, elementary school, middle school, and secondary school teachers, except special education, held about 3.8 million jobs in 2002. Of the teachers in those jobs, about 1.5 million were elementary school teachers, 1.1 million were secondary school teachers, 602,000 were middle school teachers, 424,000 were preschool teachers, and 168,000 were kindergarten teachers. The majority of kindergarten, elementary school, middle school, and secondary school teachers, except special education worked in local government educational services. About 10 percent worked for private schools. Preschool teachers, except special education were most often employed in child daycare services (63 percent), religious organizations (9 percent), local government educational services (9 percent), and private educational services (7 percent). Employment of teachers is geographically distributed much the same as the population is.

### **Training, Other Qualifications, and Advancement**

All 50 States and the District of Columbia require public school teachers to be licensed. Licensure is not required for teachers in private schools. Usually licensure is granted by the State Board of Education or a licensure advisory committee. Teachers may be licensed to teach the early childhood grades (usually preschool through grade 3); the elementary grades (grades 1 through 6 or 8); the middle grades (grades 5 through 8); a secondary-education subject area (usually grades 7 through 12); or a special subject, such as reading or music (usually grades kindergarten through 12).

Requirements for regular licenses to teach kindergarten through grade 12 vary by State. However, all States require general education teachers to have a bachelor's degree and to have completed an approved teacher training program with a prescribed number of subject and education credits, as well as supervised practice teaching. Some States also require technology training and the attainment of a minimum grade point average. A number of States require that teachers obtain a master's degree in education within a specified period after they begin teaching.

Almost all States require applicants for a teacher's license to be tested for competency in basic skills, such as reading and writing, and in teaching. Almost all also require the teacher to exhibit proficiency in his or her subject. Nowadays, school systems are moving toward implementing performance-based systems for licensure, which usually require the teacher to demonstrate satisfactory teaching performance over an extended period in order to obtain a provisional license, in addition to passing an examination in one's subject. Most States require continuing education for renewal of the teacher's license. Many States have reciprocity agreements that make it easier for teachers licensed in one State to become licensed in another.

Many States offer alternative licensure programs for teachers who have bachelor's degrees in the subject they will teach, but

who lack the necessary education courses required for a regular license. Alternative licensure programs originally were designed to ease shortages of teachers of certain subjects, such as mathematics and science. The programs have expanded to attract other people into teaching, including recent college graduates and those changing from another career to teaching. In some programs, individuals begin teaching quickly under provisional licensure. After working under the close supervision of experienced educators for 1 or 2 years while taking education courses outside school hours, they receive regular licensure if they have progressed satisfactorily. In other programs, college graduates who do not meet licensure requirements take only those courses that they lack and then become licensed. This approach may take 1 or 2 semesters of full-time study. States may issue emergency licenses to individuals who do not meet the requirements for a regular license when schools cannot attract enough qualified teachers to fill positions. Teachers who need to be licensed may enter programs that grant a master's degree in education, as well as a license.

In many States, vocational teachers have many of the same requirements for teaching as their academic counterparts. However, because knowledge and experience in a particular field are important criteria for the job, some States will license vocational education teachers without a bachelor's degree, provided they can demonstrate expertise in their field. A minimum number of hours in education courses may also be required.

Licensing requirements for preschool teachers also vary by State. Requirements for public preschool teachers are generally higher than those for private preschool teachers. Some States require a bachelor's degree in early childhood education, others require an associate's degree, and still others require certification by a nationally recognized authority. The Child Development Associate (CDA) credential, the most common type of certification, requires a mix of classroom training and experience working with children, along with an independent assessment of an individual's competence.

In some cases, teachers of kindergarten through high school may attain professional certification in order to demonstrate competency beyond that required for a license. The National Board for Professional Teaching Standards offers a voluntary national certification. To become nationally accredited, experienced teachers must prove their aptitude by compiling a portfolio showing their work in the classroom and by passing a written assessment and evaluation of their teaching knowledge. Currently, teachers may become certified in a variety of areas, on the basis of the age of the students and, in some cases, the subject taught. For example, teachers may obtain a certificate for teaching English language arts to early adolescents (aged 11 to 15), or they may become certified as early childhood generalists. All States recognize national certification, and many States and school districts provide special benefits to teachers holding such certification. Benefits typically include higher salaries and reimbursement for continuing education and certification fees. In addition, many States allow nationally certified teachers to carry a license from one State to another.

The National Council for Accreditation of Teacher Education currently accredits more than 550 teacher education programs across the United States. Generally, 4-year colleges require students to wait until their sophomore year before applying for admission to teacher education programs. Traditional education programs for kindergarten and elementary school teachers include courses—designed specifically for those preparing to teach—in mathematics, physical science, social science,

music, art, and literature, as well as prescribed professional education courses, such as philosophy of education, psychology of learning, and teaching methods. Aspiring secondary school teachers most often major in the subject they plan to teach while also taking a program of study in teacher preparation. Teacher education programs are now required to include classes in the use of computers and other technologies in order to maintain their accreditation. Most programs require students to perform a student-teaching internship.

Many States now offer professional development schools—partnerships between universities and elementary or secondary schools. Students enter these 1-year programs after completion of their bachelor's degree. Professional development schools merge theory with practice and allow the student to experience a year of teaching firsthand, under professional guidance.

In addition to being knowledgeable in their subject, teachers must have the ability to communicate, inspire trust and confidence, and motivate students, as well as understand the students' educational and emotional needs. Teachers must be able to recognize and respond to individual and cultural differences in students and employ different teaching methods that will result in higher student achievement. They should be organized, dependable, patient, and creative. Teachers also must be able to work cooperatively and communicate effectively with other teachers, support staff, parents, and members of the community.

With additional preparation, teachers may move into positions as school librarians, reading specialists, curriculum specialists, or guidance counselors. Teachers may become administrators or supervisors, although the number of these positions is limited and competition can be intense. In some systems, highly qualified, experienced teachers can become senior or mentor teachers, with higher pay and additional responsibilities. They guide and assist less experienced teachers while keeping most of their own teaching responsibilities. Preschool teachers usually work their way up from assistant teacher, to teacher, to lead teacher—who may be responsible for the instruction of several classes—and, finally, to director of the center. Preschool teachers with a bachelor's degree frequently are qualified to teach kindergarten through grade 3 as well. Teaching at these higher grades often results in higher pay.

### **Job Outlook**

Job opportunities for teachers over the next 10 years will vary from good to excellent, depending on the locality, grade level, and subject taught. Most job openings will be attributable to the expected retirement of a large number of teachers. In addition, relatively high rates of turnover, especially among beginning teachers employed in poor, urban schools, also will lead to numerous job openings for teachers. Competition for qualified teachers among some localities will likely continue, with schools luring teachers from other States and districts with bonuses and higher pay.

Through 2012, overall student enrollments, a key factor in the demand for teachers, are expected to rise more slowly than in the past. As the children of the baby-boom generation get older, smaller numbers of young children will enter school behind them, resulting in average employment growth for all teachers, from preschool through secondary grades. Projected enrollments will vary by region. Fast-growing States in the South and West—particularly California, Texas, Georgia, Idaho, Hawaii, Alaska, and New Mexico—will experience the largest enrollment increases. Enrollments in the Northeast and Midwest are



expected to hold relatively steady or decline. The job market for teachers also continues to vary by school location and by subject taught. Many inner cities—often characterized by overcrowded, ill-equipped schools and higher-than-average poverty rates—and rural areas—characterized by their remote location and relatively low salaries—have difficulty attracting and retaining enough teachers, so job prospects should be better in these areas than in suburban districts. Currently, many school districts have difficulty hiring qualified teachers in some subject areas—mathematics, science (especially chemistry and physics), bilingual education, and foreign languages. Qualified vocational teachers, at both the middle school and secondary school levels, also are currently in demand in a variety of fields. Specialties that have an adequate number of qualified teachers include general elementary education, physical education, and social studies. Teachers who are geographically mobile and who obtain licensure in more than one subject should have a distinct advantage in finding a job. Increasing enrollments of minorities, coupled with a shortage of minority teachers, should cause efforts to recruit minority teachers to intensify. Also, the number of non-English-speaking students has grown dramatically, creating demand for bilingual teachers and for those who teach English as a second language. The number of teachers employed is dependent as well on State and local expenditures for education and on the enactment of legislation to increase the quality of education. A number of initiatives, such as reduced class size (primarily in the early elementary grades), mandatory preschool for 4-year-olds, and all-day kindergarten, have been implemented in a few States, but not nationwide. Additional teachers—particularly preschool and early elementary school teachers—will be needed if States or localities implement any of these measures. At the Federal level, legislation that is likely to affect teachers recently was put into place with the enactment of the No Child Left Behind Act. Although the full impact of this act is not yet known, its emphasis on ensuring that all schools hire and retain only qualified teachers, may lead to an increase in funding for schools that currently lack such teachers.

The supply of teachers is expected to increase in response to reports of improved job prospects, better pay, more teacher involvement in school policy, and greater public interest in education. In recent years, the total number of bachelor's and master's degrees granted in education has increased steadily. Because of a shortage of teachers in certain locations, and in anticipation of the loss of a number of teachers to retirement, many States have implemented policies that will encourage more students to become teachers. In addition, more teachers may be drawn from a reserve pool of career changers, substitute teachers, and teachers completing alternative certification programs.

### **Earnings**

Median annual earnings of kindergarten, elementary, middle, and secondary school teachers ranged from \$39,810 to \$44,340 in 2002; the lowest 10 percent earned \$24,960 to \$29,850; the top 10 percent earned \$62,890 to \$68,530. Median earnings for preschool teachers were \$19,270.

According to the American Federation of Teachers, beginning teachers with a bachelor's degree earned an average of \$30,719 in the 2001-02 school year. The estimated average salary of all public elementary and secondary school teachers in the 2001-02 school year was \$44,367. Private school teachers generally earn less than public school teachers.

In 2002, more than half of all elementary, middle, and secondary school teachers belonged to unions—mainly the American Federation of Teachers and the National Education Association—that bargain with school systems over wages, hours, and other terms and conditions of employment. Fewer preschool and kindergarten teachers were union members—about 15 percent in 2002.

Teachers can boost their salary in a number of ways. In some schools, teachers receive extra pay for coaching sports and working with students in extracurricular activities. Getting a master's degree or national certification often results in a raise in pay, as does acting as a mentor. Some teachers earn extra income during the summer by teaching summer school or performing other jobs in the school system.

### **Related Occupations**

Preschool, kindergarten, elementary school, middle school, and secondary school teaching requires a variety of skills and aptitudes, including a talent for working with children; organizational, administrative, and recordkeeping abilities; research and communication skills; the power to influence, motivate, and train others; patience; and creativity. Workers in other occupations requiring some of these aptitudes include teachers—postsecondary; counselors; teacher assistants; education administrators; librarians; child care workers; public relations specialists; social workers; and athletes, coaches, umpires, and related workers.

### **Sources of Additional Information**

Information on licensure or certification requirements and approved teacher training institutions is available from local school systems and State departments of education.

Information on the teaching profession and on how to become a teacher can be obtained from

► Recruiting New Teachers, Inc., 385 Concord Ave., Suite 103, Belmont, MA 02478. Internet: <http://www.rnt.org>

This organization also sponsors another Internet site that provides helpful information on becoming a teacher: Internet: <http://www.recruitingteachers.org>

Information on teachers' unions and education-related issues may be obtained from any of the following sources:

► American Federation of Teachers, 555 New Jersey Ave. NW., Washington, DC 20001.

► National Education Association, 1201 16th St. NW., Washington, DC 20036.

A list of institutions with accredited teacher education programs can be obtained from:

► National Council for Accreditation of Teacher Education, 2010 Massachusetts Ave. NW., Suite 500, Washington, DC 20036-1023. Internet: <http://www.ncate.org>

For information on vocational education and vocational education teachers, contact

► Association for Career and Technical Education, 1410 King St., Alexandria, VA 22314. Internet: <http://www.acteonline.org>

For information on careers in educating children and issues affecting preschool teachers, contact either of the following organizations:

► National Association for the Education of Young Children, 1509 16th St. NW., Washington, DC 20036. Internet: <http://www.naeyc.org>

► Council for Professional Recognition, 2460 16th St. NW., Washington, DC 20009-3575. Internet: <http://www.cdacouncil.org>

For information on teachers and the No Child Left Behind Act, contact

► U.S. Department of Education, 400 Maryland Avenue, SW., Washington, DC, 20202. Internet: <http://www.ed.gov>

## Teachers—Special Education

(0\*NET 25-2041.00, 25-2042.00, 25-2043.00)

### Significant Points

- Excellent job prospects are expected due to rising enrollments of special education students and reported shortages of qualified teachers.
- A bachelor's degree, completion of an approved teacher preparation program, and a license are required to qualify; many States require a master's degree.
- Many States offer alternative licensure programs to attract people into these jobs.

### Nature of the Work

Special education teachers work with children and youths who have a variety of disabilities. A small number of special education teachers work with students with mental retardation or autism, primarily teaching them life skills and basic literacy. However, the majority of special education teachers work with children with mild to moderate disabilities, using the general education curriculum, or modifying it, to meet the child's individual needs. Most special education teachers instruct students at the elementary, middle, and secondary school level, although some teachers work with infants and toddlers.

The various types of disabilities that qualify individuals for special education programs include specific learning disabilities, speech or language impairments, mental retardation, emotional disturbance, multiple disabilities, hearing impairments, orthopedic impairments, visual impairments, autism, combined deafness and blindness, traumatic brain injury, and other health impairments. Students are classified under one of the categories, and special education teachers are prepared to work with specific groups. Early identification of a child with special needs is an important part of a special education teacher's job. Early intervention is essential in educating children with disabilities.

Special education teachers use various techniques to promote learning. Depending on the disability, teaching methods can include individualized instruction, problem-solving assignments, and small-group work. When students need special accommodations in order to take a test, special education teachers see that appropriate ones are provided, such as having the questions read orally or lengthening the time allowed to take the test.

Special education teachers help to develop an Individualized Education Program (IEP) for each special education student. The IEP sets personalized goals for each student and is tailored to the student's individual learning style and ability. The program includes a transition plan outlining specific steps to prepare special education students for middle school or high school or, in the case of older students, a job or postsecondary study. Teachers review the IEP with the student's parents, school administrators, and, often, the student's general education teacher. Teachers work closely with parents to inform them of their child's progress and suggest techniques to promote learning at home.

Special education teachers design and teach appropriate curricula, assign work geared toward each student's ability, and grade papers and homework assignments. They are involved in the students' behavioral and academic development, helping the students develop emotionally, feel comfortable in social

situations, and be aware of socially acceptable behavior. Preparing special education students for daily life after graduation also is an important aspect of the job. Teachers provide students with career counseling or help them learn routine skills, such as balancing a checkbook.

As schools become more inclusive, special education teachers and general education teachers are increasingly working together in general education classrooms. Special education teachers help general educators adapt curriculum materials and teaching techniques to meet the needs of students with disabilities. They coordinate the work of teachers, teacher assistants, and related personnel, such as therapists and social workers, to meet the requirements of inclusive special education programs. A large part of a special education teacher's job involves interacting with others. Special education teachers communicate frequently with parents, social workers, school psychologists, occupational and physical therapists, school administrators, and other teachers.

Special education teachers work in a variety of settings. Some have their own classrooms and teach only special education students; others work as special education resource teachers and offer individualized help to students in general education classrooms; still others teach together with general education teachers in classes composed of both general and special education students. Some teachers work with special education students for several hours a day in a resource room, separate from



*Special education teachers usually modify the general education curriculum to meet an individual student's needs.*

their general education classroom. Considerably fewer special education teachers work in residential facilities or tutor students in homebound or hospital environments.

Special education teachers who work with infants usually travel to the child's home to work with the child and his or her parents. Many of these infants have medical problems that slow or preclude normal development. Special education teachers show parents techniques and activities designed to stimulate the infant and encourage the growth of the child's skills. Toddlers usually receive their services at a preschool where special education teachers help them develop social, self-help, motor, language, and cognitive skills, often through the use of play.

Technology is playing an increasingly important role in special education. Teachers use specialized equipment such as computers with synthesized speech, interactive educational software programs, and audiotapes to assist children.

### **Working Conditions**

Special education teachers enjoy the challenge of working with students with disabilities and the opportunity to establish meaningful relationships with them. Although helping these students can be highly rewarding, the work also can be emotionally and physically draining. Many special education teachers are under considerable stress due to heavy workloads and administrative tasks. They must produce a substantial amount of paperwork documenting each student's progress, and they work under the threat of litigation by students' parents if correct procedures are not followed or if the parents feel that their child is not receiving an adequate education. The physical and emotional demands of the job cause some special education teachers to leave the occupation.

Some schools offer year-round education for special education students, but most special education teachers work only the traditional 10-month school year.

### **Employment**

Special education teachers held a total of about 433,000 jobs in 2002. A great majority, almost 90 percent, work in public schools. Another 7 percent work at private schools. About half work in elementary schools. A few worked for individual and social assistance agencies or residential facilities, or in homebound or hospital environments.

### **Training, Other Qualifications, and Advancement**

All 50 States and the District of Columbia require special education teachers to be licensed. The State board of education or a licensure advisory committee usually grants licenses, and licensure varies by State. In many States, special education teachers receive a general education credential to teach kindergarten through grade 12. These teachers then train in a specialty, such as learning disabilities or behavioral disorders. Some States offer general special education licenses, while others license several different specialties within special education, and still others require teachers to obtain a general education license first and an additional license in special education afterwards.

All States require a bachelor's degree and the completion of an approved teacher preparation program with a prescribed number of subject and education credits and supervised practice teaching. Many States require a master's degree in special education, involving at least 1 year of additional course work, including a specialization, beyond the bachelor's degree.

Some States have reciprocity agreements allowing special education teachers to transfer their licenses from one State to another, but many still require that the teacher pass licensing requirements for the State in which they work. In the future, employers may recognize certification or standards offered by a national organization.

Many colleges and universities across the United States offer programs in special education, at the undergraduate, master's, and doctoral degree levels. Special education teachers usually undergo longer periods of training than do general education teachers. Most bachelor's degree programs are 4-year programs that include general and specialized courses in special education. However, an increasing number of institutions are requiring a 5th year or other postbaccalaureate preparation. Among the courses offered are educational psychology, legal issues of special education, and child growth and development; courses imparting knowledge and skills needed for teaching students with disabilities also are given. Some programs require specialization, while others offer generalized special education degrees or a course of study in several specialized areas. The last year of the program usually is spent student teaching in a classroom supervised by a certified teacher.

Alternative and emergency licenses are available in many States, due to the need to fill special education teaching positions. Alternative licenses are designed to bring college graduates and those changing careers into teaching more quickly. Requirements for an alternative license may be less stringent than for a regular license. Requirements vary by State. In some programs, individuals begin teaching quickly under a provisional license and can obtain a regular license by teaching under the supervision of licensed teachers for a period of 1 to 2 years while taking education courses. Emergency licenses are granted when States have difficulty finding licensed special education teachers to fill positions.

Special education teachers must be patient, able to motivate students, understanding of their students' special needs, and accepting of differences in others. Teachers must be creative and apply different types of teaching methods to reach students who are having difficulty learning. Communication and cooperation are essential traits, because special education teachers spend a great deal of time interacting with others, including students, parents, and school faculty and administrators.

Special education teachers can advance to become supervisors or administrators. They may also earn advanced degrees and become instructors in colleges that prepare others to teach special education. In some school systems, highly experienced teachers can become mentors to less experienced ones, providing guidance to those teachers while maintaining a light teaching load.

### **Job Outlook**

Employment of special education teachers is expected to increase faster than the average for all occupations through 2012. Although slowdowns in student enrollments may constrain employment growth somewhat, additional positions for these workers will be created by continued increases in the number of special education students needing services, by legislation emphasizing training and employment for individuals with disabilities, and by educational reforms requiring higher standards for graduation. The need to replace special education teachers who switch to general education, change careers altogether, or retire will lead to additional job openings. At the same time, many school districts report shortages of qualified teachers. As

a result, special education teachers should have excellent job prospects.

The job outlook varies by geographic area and specialty. Although many areas of the country report difficulty finding qualified applicants, positions in inner cities and rural areas usually are more plentiful than job openings in suburban or wealthy urban areas. Student populations, in general, also are expected to increase significantly in several States in the West and South, resulting in increased demand for special education teachers in those regions. In addition, job opportunities may be better in certain specialties—such as speech or language impairments and learning disabilities—because of large increases in the enrollment of special education students classified under those categories. Legislation encouraging early intervention and special education for infants, toddlers, and preschoolers has created a need for early childhood special education teachers. Bilingual special education teachers and those with multicultural experience also are needed to work with an increasingly diverse student population.

The number of students requiring special education services has grown steadily in recent years, a trend that is expected to continue. Learning disabilities will continue to be identified and diagnosed at earlier ages. In addition, medical advances have resulted in more children surviving serious accidents or illnesses, but with impairments that require special accommodations. The percentage of foreign-born special education students also is expected to grow, as teachers begin to recognize learning disabilities in that population. Finally, more parents are expected to seek special services for those of their children who have difficulty meeting the new, higher standards required of students.

### **Earnings**

Median annual earnings in 2002 of special education teachers who worked primarily in preschools, kindergartens, and elementary schools were \$42,690. The middle 50 percent earned between \$34,160 and \$54,340. The lowest 10 percent earned less than \$28,680, and the highest 10 percent earned more than \$67,810.

Median annual earnings in 2002 of middle school special education teachers were \$41,350. The middle 50 percent earned between \$33,460 and \$52,370. The lowest 10 percent earned less than \$28,560, and the highest 10 percent earned more than \$65,070.

Median annual earnings in 2002 of special education teachers who worked primarily in secondary schools were \$44,130. The middle 50 percent earned between \$35,320 and \$56,850. The lowest 10 percent earned less than \$29,630, and the highest 10 percent earned more than \$71,020.

In 2002, about 62 percent of special education teachers belonged to unions—mainly the American Federation of Teachers and the National Education Association—that bargain with school systems over wages, hours, and the terms and conditions of employment.

In most schools, teachers receive extra pay for coaching sports and working with students in extracurricular activities. Some teachers earn extra income during the summer, working in the school system or in other jobs.

### **Related Occupations**

Special education teachers work with students who have disabilities and special needs. Other occupations involved with the identification, evaluation, and development of students with

disabilities include psychologists, social workers, speech-language pathologists and audiologists, counselors, teacher assistants, occupational therapists, recreational therapists, and teachers—preschool, kindergarten, elementary, middle, and secondary.

### **Sources of Additional Information**

For information on professions related to early intervention and education for children with disabilities, a list of accredited schools, information on teacher certification and financial aid, and general information on related personnel issues—including recruitment, retention, and the supply of, and demand for, special education professionals—contact

► National Clearinghouse for Professions in Special Education, Council for Exceptional Children, 1110 N. Glebe Rd., Suite 300, Arlington, VA 22201. Internet: <http://www.special-ed-careers.org>

To learn more about the special education teacher certification and licensing requirements in your State, contact your State's department of education.