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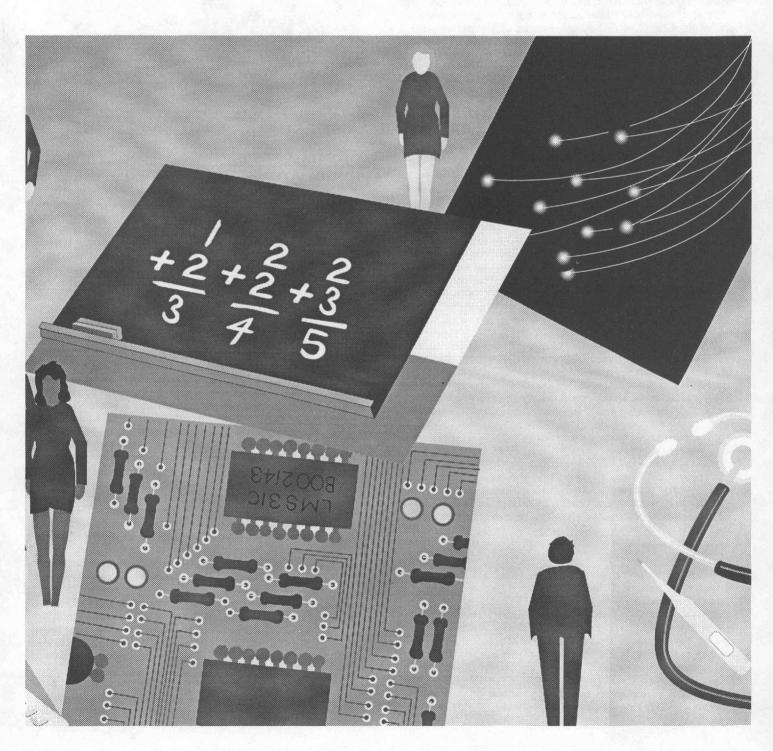


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Adult Education Teachers

(D.O.T. 075.127-010; 090.222, .227-018; 097.221, .227; 099.223, .224-014, .227-014, -018, -026, -030, -038; 149.021; 150.027-014; 151.027-014; 152.021; 153.227-014; 159.227; 166.221, .227; 235.222; 239.227; 375.227; 522.264; 621.221; 683.222; 689.324; 715.221; 740.221; 788.222; 789.222; 919.223; and 955.222)

Nature of the Work

Adult education teachers work in three main areas—adult vocational-technical, adult basic, and adult continuing education. Some adult education teachers instruct people who have graduated or left school for occupations that do not require a college degree, such as welder, dental hygeinist, automated systems manager, x-ray technician, farmer, and cosmetologist. Other instructors help people update their job skills or adapt to technological advances. For example, an adult education teacher may train students how to use new computer software programs. Other teachers provide instruction in basic education courses for school dropouts or others who need to upgrade their skills to find a job. Adult education teachers also teach courses which students take for personal enrichment, such as cooking, dancing, writing, exercise and physical fitness, photography, and finance.

Adult education teachers may lecture in classrooms and also give students hands-on experience. Increasingly, adult vocational-technical education teachers integrate academic and vocational curriculums so that students obtain a variety of skills. For example, an electronics student may be required to take courses in principles of mathematics and science in conjunction with hands-on electronics skills. Generally, teachers demonstrate techniques, have students apply them, and critique the students' work so that they can learn from their mistakes. For example, welding instructors show students various welding techniques, including the use of tools and equipment, watch students use the techniques, and have them repeat procedures until students meet specific standards required by the trade.

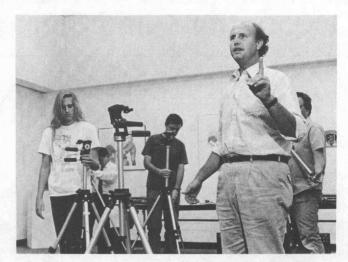
Adult education teachers who instruct in adult basic education programs may work with students who do not speak English; teach adults reading, writing, and mathematics up to the 8th-grade level; or teach adults through the 12th-grade level in preparation for the General Educational Development Examination (GED). The GED offers the equivalent of a high school diploma. These teachers may refer students for counseling or job placement. Because many people who need adult basic education are reluctant to seek it, teachers also may recruit participants.

Adult education teachers also prepare lessons and assignments, grade papers and do related paperwork, attend faculty and professional meetings, and stay abreast of developments in their field. (For information on vocational education teachers in secondary schools, see the *Handbook* statement on kindergarten, elementary, and secondary school teachers.)

Working Conditions

Since adult education teachers work with adult students, they do not encounter some of the behavioral or social problems sometimes found when teaching younger students. The adults are there by choice, and usually are highly motivated—attributes that can make teaching these students rewarding and satisfying. However, teachers in adult basic education deal with students at different levels of development who may lack effective study skills and self-confidence, and who may require more attention and patience than other students.

Many adult education teachers work part time. To accommodate students who may have job or family responsibilities, many courses



Adult education teachers often work at night or on weekends.

are offered at night or on weekends, and range from 2- to 4-hour workshops and 1-day minisessions to semester-long courses.

Employment

Adult education teachers held about 540,000 jobs in 1992. About 4 out of 10 taught part time, a larger proportion than for other teachers, and many taught only intermittently. However, many of them also held other jobs, in many cases doing work related to the subject they taught. Many adult education teachers are self-employed.

Adult education teachers are employed by public school systems; community and junior colleges; universities; businesses that provide formal education and training for their employees; automotive repair, bartending, business, computer, electronics, medical technology, and similar schools and institutes; dance studios; health clubs; job training centers; community organizations; labor unions; and religious organizations.

Training, Other Qualifications, and Advancement

Training requirements vary widely by State and by subject. In general, teachers need work or other experience in their field, and a license or certificate in fields where these usually are required for full professional status. In some cases, particularly at educational institutions, a bachelor's, master's, or doctoral degree is required, especially to teach courses which can be applied toward a 4-year degree program. In other cases, an acceptable portfolio of work is required. For example, to secure a job teaching a flower arranging course, an applicant would need to show examples of previous work.

Most States and the District of Columbia require adult basic education teachers to have a bachelor's degree from an approved teacher training program, and some require teacher certification.

Adult education teachers update their skills through continuing education to maintain certification—requirements vary among institutions. Teachers may take part in seminars, conferences, or graduate courses in adult education, training and development, or human resources development, or may return to work in business or industry for a limited time.

Adult education teachers should communicate and relate well with students, enjoy working with them, and be able to motivate them. Adult basic education instructors, in particular, must be patient, understanding, and supportive to make students comfortable, develop trust, and help them better understand their needs and aims.

Some teachers advance to administrative positions in departments of education, colleges and universities, and corporate training departments. Such positions may require advanced degrees, such as

a doctorate in adult and continuing education. (See statement on education administrators elsewhere in the *Handbook*.)

Job Outlook

Employment of adult education teachers is expected to grow faster than the average for all occupations through the year 2005 as the demand for adult education programs continues to rise. Participation in continuing education increases as the educational attainment of the population increases. More people are realizing that life-long learning is important to success in their careers. To keep abreast of changes in their fields and advances in technology, an increasing number of adults are taking courses for career advancement, skills upgrading, and personal enrichment, spurring demand for adult education teachers. In addition, enrollment in adult basic education programs is increasing because of changes in immigration policy that require basic competency in English and civics, and an increased awareness of the difficulty in finding a good job without basic academic skills.

Employment growth of adult vocational-technical education teachers will result from the need to train young adults for entry level jobs, and experienced workers who want to switch fields or whose jobs have been eliminated due to changing technology or business reorganization. In addition, increased cooperation between businesses and educational institutions to insure that students are taught the skills employers desire should result in greater demand for adult education teachers, particularly at community and junior colleges. Since adult education programs receive State and Federal funding, employment growth may be affected by government budgets.

Many job openings for adult education teachers will stem from the need to replace persons who leave the occupation. Many teach part time and move into and out of the occupation for other jobs, family responsibilities, or to retire. Opportunities will be best in fields such as computer technology, automotive mechanics, and medical technology, which offer very attractive, and often higher paying, job opportunities outside of teaching.

Earnings

In 1992, salaried adult education teachers who usually worked full time had median earnings around \$26,900 a year. The middle 50 percent earned between \$18,700 and \$38,800. The lowest 10 percent earned less than \$13,500, while the top 10 percent earned more than \$49,200. Earnings varied widely by subject, academic credentials, experience, and region of the country. Part-timers generally are paid hourly wages and do not receive benefits or pay for preparation time outside of class.

Related Occupations

Adult education teaching requires a wide variety of skills and aptitudes, including the power to influence, motivate, and train others; organizational, administrative, and communication skills; and creativity. Workers in other occupations that require these aptitudes include other teachers, counselors, school administrators, public relations specialists, employee development specialists and interviewers, and social workers.

Sources of Additional Information

Information on adult basic education programs and teacher certification requirements is available from State departments of education and local school districts.

For information about adult vocational-technical education teaching positions, contact State departments of vocational-technical education.

For information on adult continuing education teaching positions, contact departments of local government, State adult education departments, schools, colleges and universities, religious organizations, and a wide range of businesses that provide formal training for their employees.

General information on adult education is available from:

American Association for Adult and Continuing Education, 1101 Connecticut Ave. NW., Suite 700, Washington, DC 20036.

American Vocational Association, 1410 King St., Alexandria, VA

ERIC Clearinghouse on Adult, Career, and Vocational Education, 1900 Kenny Rd., Columbus, OH 43210-1090.

Archivists and Curators

(D.O.T. 099.167-030; 101; 102 except .261-014 and .367- 010; 109.067-014, .267-010, .281, .361, .364)

Nature of the Work

Archivists, curators, museum and archives technicians, and conservators search for, acquire, appraise, analyze, describe, arrange, catalog, restore, preserve, exhibit, maintain, and store items of lasting value so that they can be used by researchers or for exhibitions, publications, broadcasting, and other educational programs. These may consist of historical documents, audiovisual materials, institutional records, works of art, coins, stamps, minerals, clothing, maps, living and preserved plants and animals, buildings, computer records, or historic sites.

Archivists and curators plan and oversee the work of maintaining collections and, along with technicians and conservators, work directly on 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 conduct research on 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 three-dimensional objects, such as sculptures, textiles, and paintings, while archivists mainly handle documents, or objects that are retained because they originally accompanied and relate specifically to the document.

Archivists determine what portion of the vast amount of records maintained by various organizations, such as government agencies, corporations, or educational institutions, or by families and individuals, should be made part of permanent historical holdings, and which of these records should be put on exhibit. They maintain records in their original arrangement according to the creator's organizational scheme, and describe records so they can be located easily. Records may be saved on any medium, including paper, microfilm, or computer. They also may be copied onto some other format to protect the original from repeated handling, and to make them more accessible to researchers who use the records.

Archives may be part of a library, museum, or historical society, or may exist as a distinct archival unit within an organization. Archivists consider any medium containing information as documents, including letters, books, and other paper documents, photographs, blueprints, audiovisual materials, and computer records, among others. Any document which reflects organizational transactions, hierarchy, or procedures can be considered a record. Archivists often specialize in an area of history or technology so they can better 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—for example, manuscripts, electronic records, photographs, cartographic records, motion pictures, and sound recordings.

Curators, sometimes called collections managers, oversee collections in museums, zoos, aquariums, botanic gardens, nature centers, and historic sites. They acquire items through purchases, gifts, field exploration, intermuseum loans, or, in the case of some plants and animals, hybridization and breeding. Curators also plan and prepare exhibits. In natural history museums, curators collect and observe specimens in their natural habitat. Much of their work involves describing and classifying species. They conduct more research than other curators, who spend much of their time managing collections.

Most curators specialize in fields such as botany, art, paleontology, or history. Those working in large institutions may be highly specialized. A large natural history museum, for example, would

have specialists in birds, fishes, insects, and mollusks. Furthermore, in large institutions, most curators specialize in particular functions. Some maintain the collection while others perform administrative tasks. Registrars, for example, are responsible for keeping track of and moving objects in the collection. In small institutions, with only one or a few curators, they are responsible for almost everything, from maintaining collections to directing the affairs of museums.

Museum directors formulate policies, plan budgets, and raise funds for their museum. They coordinate activities of their staff to establish and maintain collections.

Conservators oversee, manage, examine, care for, and preserve works of art, artifacts, and specimens. They coordinate the activities of workers engaged in the examination, repair, and conservation of museum objects. This may require substantial historical and archaeological research. They use xrays, microscopes, special lights, and other laboratory equipment in examining objects to determine their condition, the need for repair, and the appropriate method for preservation. Conservators usually specialize in treating various items—paintings, objects and sculptures, architectural material, glass, or furniture, for example.

Museum technicians assist curators and conservators by performing various preparatory and maintenance tasks on museum items. Archives technicians help archivists organize and classify records.

Archivists, curators, and conservators increasingly use computers to catalog and organize collections, as well as to perform original research.



Archivists and curators preserve and maintain articles of lasting value.

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 one or two other persons. Those who restore and install exhibits or work with bulky, heavy record containers may climb, stretch, or lift, and those in zoos, botanical gardens, and other outdoor museums or historic sites frequently walk great distances.

Curators may travel extensively to evaluate potential additions to the collection, to organize exhibitions, and to conduct research in their area of expertise.

Employment

Archivists and curators held about 19,000 jobs in 1992. About 3 out of 10 were employed in museums, botanical gardens, and zoos, and approximately 1 in 5 was in public and private education, particularly in college and university libraries. Over one-third worked in Federal, State, and local government. Most Federal archivists work for the National Archives and Records Administration; others manage military archives in the 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 managed by the Department of Interior. All State governments have archival or historical records sections employing archivists. State and local governments have numerous historical museums, parks, libraries, and zoos employing curators.

Some large corporations have archives or records centers, employing 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, and research firms also employ archivists and curators.

Conservators may work under contract to treat particular items, rather than work as a regular employee of a museum or other institution.

Training, Other Qualifications, and Advancement

Employment as an archivist, conservator, or curator generally requires graduate education and substantial practical or work experience. Many archivists and curators work in archives or museums while completing their formal education, in order to gain the "hands-on" experience that many employers seek when hiring.

Employers generally look for archivists with undergraduate and graduate degrees in history or library science, with courses in archival science. Some positions may require knowledge of the discipline related to the collection, such as business or medicine. An increasing number of archivists have a double master's degree in history and library science. Approximately 65 colleges and universities offer courses or practical training in archival science as part of history, library science, or other discipline; some also offer a master's degree in archival studies. The Academy of Certified Archivists offers voluntary certification for archivists. Certification requires the applicant to have experience in the field and to pass an examination offered by the Academy.

Archivists need 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. Archivists also must be able to organize large amounts of information and write clear instructions for its retrieval and use.

Many archives are very small, including one-person shops, with limited promotion opportunities. Advancement generally is through 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 archives.

In most museums, a master's degree in an appropriate discipline of the museum's specialty—for example, art, history, or archaeology—or museum studies is required for employment as a curator. Many employers prefer a doctoral degree, particularly for curators

in natural history or science museums. 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.

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

When hiring conservators, employers look for a master's degree in conservation, with an undergraduate background in science and art. There are only a few graduate programs in the United States. Competition for entry to these programs is keen; to qualify for these programs, a student must have a background in chemistry, studio art, and art history. These graduate programs last 3 to 4 years; the latter years include internship training. A few individuals may enter the profession through apprenticeship programs, available through museums, nonprofit organizations, and private practice conservators. In order to advance, those who enter the profession through apprenticeship programs usually must take courses in chemistry, art history, and studio art. The length of apprenticeship training varies widely, depending upon one's specialty.

Students interested in museum work may take courses or obtain a bachelor's or master's degree in museum studies. Colleges and universities throughout the country offer bachelor's and master's degrees in museum studies. 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.

Curatorial positions often require knowledge in a number of fields. For historic and artistic conservation, courses in chemistry, physics, and art are desirable. Since curators—particularly those in small museums—may have administrative and managerial responsibilities, courses in business administration and public relations also are recommended.

Curators must be flexible because of their wide variety of duties. They need an aesthetic sense to design and present exhibits, and, in small museums, manual dexterity is needed to erect exhibits or restore objects. Leadership ability is important for museum directors, while public relations skills are valuable in increasing museum attendance and fundraising.

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

Continuing education, which enables archivists, curators, museum technicians, and conservators to keep up with developments in the field, is available through meetings, conferences, and workshops sponsored by archival, historical, and curatorial associations.

Job Outlook

Employment of archivists and curators is expected to increase about as fast as the average for all occupations through the year 2005. 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.

While Federal Government archival jobs are not expected to grow, new archival jobs are expected in other areas, such as educational services and State and local government. Archival jobs also will become available as institutions put more emphasis on establishing archives and organizing records and information. Museums and botanical and zoological gardens, where curators are concentrated, are expected to grow in response to increased public interest in science, art, history, and technology.

Despite the anticipated increase in the employment of archivists and curators, competition for jobs is expected to be keen. Graduates with highly specialized training, such as a master's degree in library science with a concentration in archives or records management, may have the best opportunities for jobs as archivists. A job as a curator is attractive to many people, and many have the necessary subject knowledge; yet there are only a few openings. Consequently, candidates may have to work part time, or as an intern, or even as a volunteer assistant curator or research associate after completing their formal education, and substantial work experience in collection management, exhibit design, or restoration 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 conservator 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, and who are willing to relocate, usually find a job.

Earnings

Earnings of archivists and curators vary considerably by type and size of employer. Average salaries in the Federal Government, for example, are generally higher than those in religious organizations. Salaries of curators in large, well-funded museums may be several times higher than those in small ones.

Salaries in the Federal Government depend upon education and experience. In 1993, inexperienced archivists and curators with a bachelor's degree started at about \$18,300, while those with some experience started at \$22,700. Those with a master's degree started at \$27,800, and with a doctorate, \$33,600 or \$40,300. In 1993, the average annual salary for archivists employed by the Federal Government in nonsupervisory, supervisory, and managerial positions was \$46,000 a year, curators averaged \$48,000, museum specialists and technicians averaged \$29,800, and archives technicians averaged \$26,700.

According to a survey by the Association of Art Museum Directors, salaries generally are highest for museum workers in Western and Mid-Atlantic States and in metropolitan areas with populations over 2 million. The following tabulation shows average salaries for employees in art museums in 1993:

Director	\$91,300
Chief curator	49,800
Curator	45,100
Curatorial assistant	22,000
Senior conservator	50,600

Related Occupations

Archivists' and curators' interests in preservation and display are shared by anthropologists, arborists, archaeologists, artifacts conservators, botanists, ethnologists, folklorists, genealogists, historians, horticulturists, information specialists, librarians, paintings restorers, records managers, and zoologists.

Sources of Additional Information

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

rs Society of American Archivists, 600 South Federal St., Suite 504, Chicago, IL 60605.

For information about certification for archivists, contact:

Academy of Certified Archivists, 600 South Federal St., Suite 504, Chicago, II. 60605.

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

American Association of Museums, 1225 I St. NW., Suite 200, Washington, DC 20005.

For information about curatorial careers and internships in botanical gardens, contact:

☐ American Association of Botanical Gardens and Arboreta, 786 Church Rd., Wayne, PA 19087.

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

American Institute for Conservation of Historic and Artistic Works, 1400 16th St. NW., Suite 340, Washington, DC 20036.

For information on curatorial and other positions in natural history museums, contact:

Association of Systematics Collections, 730 11th St. NW., Second Floor, Washington, DC 20001.

College and University Faculty

(D.O.T. 090.227-010)

Nature of the Work

College and university faculty teach and advise over 14 million fulltime and part-time college students and perform a significant part of our Nation's research. They also study and meet with colleagues to keep up with developments in their field and consult with government, business, nonprofit, and community organizations.

Faculty generally are organized into departments or divisions, based on subject or field. They usually teach several different courses in their department—algebra, calculus, and differential equations, 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, and supervise students in laboratories. They also prepare lectures, exercises, and laboratory experiments, grade exams and papers, and advise and work with students individually. In universities, they also counsel, advise, teach, and supervise graduate student research. They may use closed-circuit and cable television, computers, videotapes, and other teaching aids.

Faculty keep abreast of developments in their field by reading current literature, talking with colleagues, and participating in professional conferences. They also do their own research to expand knowledge in their field. They experiment, collect and analyze data, and examine original documents, literature, and other source material. From this, they develop hypotheses, arrive at conclusions, and write about their findings in scholarly journals and books.

Most faculty members serve on academic or administrative committees which deal with the policies of their institution, departmental matters, academic issues, curricula, budgets, equipment purchases, and hiring. Some work with student organizations. Department heads generally have heavier administrative responsibilities.

The amount of time spent on each of these activities varies by individual circumstance and type of institution. Faculty members at universities generally spend a significant part of their time doing research; those in 4-year colleges, somewhat less; and those in 2-year colleges, relatively little. However, the teaching load usually is heavier in 2-year colleges.



College faculty generally have flexible schedules.

Working Conditions

College faculty generally have flexible schedules. They must be present for classes, usually 12 to 16 hours a week, and for faculty and committee meetings. Most establish regular office hours for student consultations, usually 3 to 6 hours per week. Otherwise, they are relatively free to decide when and where they will work, and how much time to devote to course preparation, grading papers and exams, study, research, and other activities. They may work staggered hours and teach classes at night and on weekends, particularly those faculty who teach older students who may have full-time jobs or family responsibilities on weekdays. They have even greater flexibility during the summer and school holidays, when they may teach or do research, travel, or pursue nonacademic interests. Most colleges and universities have funds used to support faculty research or other professional development needs, including travel to conferences and research sites.

Part-time faculty generally spend little time on campus, since they usually don't have an office. In addition, they may teach at more than one college, requiring travel between their various places of employment.

Faculty may experience a conflict between their responsibilities to teach students and the pressure to do research. This may be a particular problem for young faculty seeking advancement. Increasing emphasis on undergraduate teaching performance, particularly at small liberal arts colleges, in tenure decisions may alleviate some of this pressure, however.

Employment

College and university faculty held about 812,000 jobs in 1992, mostly in public institutions.

About 3 out of 10 college and university faculty members work part time. Some part-timers, known as "adjunct faculty," have primary jobs outside of academia—in government, private industry, or in nonprofit research—and teach "on the side." Others want full-time jobs but can't find them. Some work part time in more than one institution.

Training, Other Qualifications, and Advancement

Most college and university faculty are in four academic ranks: Professor, associate professor, assistant professor, and instructor. A small number are lecturers.

Most faculty members are hired as instructors or assistant professors. Four-year colleges and universities generally hire 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. In 2-year colleges, master's degree holders often qualify for full-time positions.

Doctoral programs usually take 4 to 7 years of full-time study beyond the bachelor's degree. Candidates usually specialize in a subfield of a discipline, for example, organic chemistry, counseling psychology, or European history, but also take courses covering the whole discipline. Programs include 20 or more increasingly specialized courses and seminars plus comprehensive examinations on all major areas of the field. They also include a dissertation. This is a report on original research to answer some significant question in the field; it 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, done under the guidance of one or more faculty advisors, 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.

A major step in the traditional academic career is attaining tenure. Newly hired faculty serve a certain period (usually 7 years) under term contracts. Then, their record of teaching, research, and overall contribution to the institution is reviewed; tenure is granted if the review is favorable and positions are available. With tenure, a professor cannot be fired without just cause and due process. Those denied tenure usually must leave the institution. 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 stability for faculty members. About 60 percent of full-time faculty are tenured, and many others are in the probationary period.

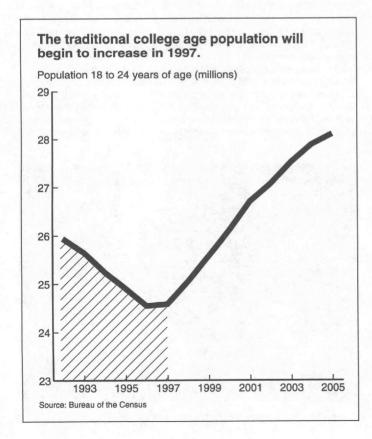
Some faculty—based on teaching experience, research, publication, and service on campus committees and task forces—move into administrative and managerial positions, such as departmental chairperson, dean, and president. At 4-year institutions, such advancement requires a doctoral degree. At 2-year colleges, a doctorate is helpful but not generally required, except for advancement to some top administrative postitions. (Deans and departmental chairpersons are covered in the *Handbook* statement on education administrators, while college presidents are included in the *Handbook* statement on general managers and top executives.)

College faculty need intelligence, inquiring and analytical minds, and a strong desire to pursue and disseminate knowledge. They must be able to communicate clearly and logically, both orally and in writing. They should be able to establish rapport with students and, as models for them, be dedicated to the principles of academic integrity and intellectual honesty. Finally, they must be able to work in an environment where they receive little direct supervision.

Job Outlook

Employment of college and university faculty is expected to increase about as fast as the average for all occupations through the year 2005 as enrollments in higher education increase. Many additional openings will arise as faculty members retire. Faculty retirements should increase significantly from the late 1990's through 2005 as a large number of faculty who entered the profession during the 1950's and 1960's reach retirement age at this time.

Enrollments increased in the early and mid-1980's despite a decline in the traditional college-age (18-24) population. This resulted from a higher proportion of 18- to 24-year-olds attending college, along with a growing number of part-time, female, and older students. Enrollments are expected to continue to grow through the year 2005, particularly as the traditional college-age population begins increasing after 1996, when the leading edge of the baby-boom "echo" generation (children of the baby boomers) reaches college age.



In the past two decades, keen competition for faculty jobs forced some applicants to accept part-time or short-term academic appointments that offered little hope of tenure, and others to seek non-academic positions. This trend of hiring adjunct or part-time faculty should continue through the mid-1990s due to financial difficulties universities and colleges are facing. Many States have reduced funding for higher education. As a result, colleges increased the hiring of part-time faculty to save money on pay and benefits.

Once enrollments and retirements increase in the late 1990's, opportunities should improve for college faculty positions and for tenure, and fewer faculty should have to take part-time or short-term appointments. Job prospects will continue to be better in certain fields—business, engineering, health science, computer science, physical sciences, and mathematics, for example—largely because very attractive nonacademic jobs will be available for many potential faculty.

Employment of college faculty also is related to the nonacademic job market through an "echo effect." Excellent job prospects in a field—for example, computer science from the late 1970's to the mid-1980's—cause more students to enroll, increasing faculty needs in that field. On the other hand, poor job prospects in a field, such as history in recent years, discourages students and reduces demand for faculty.

Earnings

Earnings vary according to faculty rank and type of institution and, in some cases, by field. Faculty in 4-year institutions earn higher salaries, on the average, than those in 2-year schools. According to a 1992-93 survey by the American Association of University Professors, salaries for full-time faculty on 9-month contracts averaged \$46,300. By rank, the average for professors was \$59,500; associate professors, \$44,100; assistant professors, \$36,800; and instructors, \$27,700. Those on 11- or 12-month contracts obviously earned more. In fields where there are high-paying nonacademic alternatives—notably medicine and law but also engineering and business, among others—earnings exceed these averages. In others—the fine arts, for example—they are lower.

Many faculty members have added earnings, both during the academic year and the summer, from consulting, teaching additional courses, research, writing for publication, or other employment.

Most 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 have fewer benefits than full-time faculty.

Related Occupations

College and university faculty function both as teachers and researchers. They communicate information and ideas. Related occupations include elementary and secondary school teachers, librarians, writers, consultants, lobbyists, trainers and employee development specialists, and policy analysts. Faculty research activities often are similar to those of scientists, project managers, and administrators in industry, government, and nonprofit research organizations.

Sources of Additional Information

Professional societies generally provide information on academic and nonacademic employment opportunities in their fields. Names and addresses of these societies appear in statements elsewhere in the *Handbook*.

For information about faculty union activities on 2- and 4-year college campuses, contact:

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

For information on college teaching careers, contact:

American Association of University Professors, 1012 14th St. NW., Washington, DC 20005.

Special publications on higher education, available in libraries, list specific employment opportunities for faculty.

Counselors

(D.O.T. 045.107-010, -014, -018, -038, -042 -050, -054, .117; 090.107; and 169.267-026)

Nature of the Work

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

School and college counselors help students understand their abilities, interests, talents, and personality characteristics so that the student can develop realistic academic and career options. Counselors use interviews, counseling sessions, tests, or other tools to assist them in evaluating and advising students. They may operate career information centers and career education programs. High school counselors advise on college majors, admission requirements, entrance exams, and financial aid, and on trade, technical school, and apprenticeship programs. They help students develop jobfinding skills such as resume writing and interviewing techniques.

Counselors also help students understand and deal with their social, behavioral, and personal problems. They emphasize preventive and developmental counseling to provide students with the life skills needed to deal with problems before they occur, and to enhance personal, social, and academic growth. Counselors provide special services, including alcohol and drug prevention programs, and classes that teach students to handle conflicts without resorting to violence.

Counselors work with students individually, in small groups, or with entire classes. Counselors consult and work with parents, teachers, school administrators, school psychologists, school nurses, and social workers. Elementary school counselors do more social and personal counseling, and less vocational and academic counseling than secondary school counselors. They observe younger children during classroom and play activities and confer with their teachers and parents to evaluate their strengths, problems, or special needs. They also help students develop good study habits.

College career planning and placement counselors help students and alumni with career development and job hunting. They may assist with writing resumes and improving job interviewing tech-

Rehabilitation counselors help persons deal with the personal, social, and vocational impact of their disabilities. They evaluate the strengths and limitations of individuals, provide personal and vocational counseling, and may arrange for medical care, vocational training, and job placement. Rehabilitation counselors interview individuals with disabilities and their families, evaluate school and medical reports, and confer and plan with physicians, psychologists, occupational therapists, employers, and others. Conferring with the client, they develop and implement a rehabilitation program, which may include training to help the person become more independent and employable. They also work toward increasing the client's capacity to adjust and live independently.

Employment counselors help individuals make wise career decisions. They help clients explore and evaluate their education, training, work history, interests, skills, personal traits, and physical capacities, and may arrange for aptitude and achievement tests. They also work with individuals in developing jobseeking skills and assist clients in locating and applying for jobs.

Mental health counselors emphasize prevention and work with individuals and groups to promote optimum mental health. They help individuals deal with addictions and substance abuse, family, parenting, and marital problems, suicide, stress management, problems with self-esteem, issues associated with aging, job and career concerns, educational decisions, and issues of mental and emotional health. Mental health counselors work closely with other mental health specialists, including psychiatrists, psychologists, clinical social workers, psychiatric nurses, and school counselors. (See the statements on psychologists and social workers elsewhere in the Handbook.)

Some counselors specialize in a particular social issue or population group, such as marriage and family, multicultural, and gerontological counseling. A gerontological counselor may provide services to elderly persons who face changing lifestyles due to health problems, as well as help families cope with these changes. A multicultural counselor might help employers adjust to an increasingly diverse workforce.

Working Conditions

Most school counselors work the traditional 9- to 10- month school year with a 2- to 3-month vacation, although an increasing number are employed on 10 1/2- or 11-month contracts. They generally have the same hours as teachers.

Rehabilitation and employment counselors generally work a standard 40-hour week. Self-employed counselors and those working in mental health and community agencies often work evenings to counsel clients who work during the day. College career planning and placement counselors may work long and irregular hours during recruiting periods.

Since privacy is essential for confidential and frank discussions with clients, counselors usually have private offices.

Employment

Counselors held about 154,000 jobs in 1992. About 7 out of 10 were school counselors.

In addition to elementary and secondary schools and colleges and universities, counselors worked in a wide variety of public and private establishments. These include 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 aged, and the disabled. Counselors also worked in organizations engaged in community improvement and social change, as well as drug and alcohol rehabilitation programs and State and local government agencies. A growing number of counselors work in health maintenance organizations, insurance companies, group practice, and private practice, spurred by laws allowing counselors to receive payments from insurance companies, and requiring employers to provide rehabilitation services to injured workers.

Training, Other Qualifications, and Advancement

Generally, counselors have a master's degree in college student affairs, elementary or secondary school counseling, gerontological counseling, marriage and family counseling, substance abuse counseling, rehabilitation counseling, agency or community counseling, mental health counseling, counseling psychology, career counseling, or a related field.

Graduate level counselor education programs in colleges and universities usually are in departments of education or psychology. Courses are grouped into eight core areas: Human growth and development; social and cultural foundations; helping relationships; groups; lifestyle and career development; appraisal; research and evaluation; and professional orientation. In an accredited program,



Counselors must inspire respect, trust, and confidence.

48 to 60 semester hours of graduate study, including a period of supervised clinical experience in counseling, are required for a master's degree. The Council for Accreditation of Counseling and Related Educational Programs (CACREP) accredits graduate counseling programs in counselor education, and in community, gerontological, mental health, school, student affairs, and marriage and family counseling.

In 1993, 39 States and the District of Columbia had some form of counselor credentialing legislation—licensure, certification, or registry—for practice outside schools. Requirements vary from State to State. In some States, credentialing is mandatory; in others, volun-

tary.

Many counselors elect to be nationally certified by the National Board for Certified Counselors (NBCC), which grants the general practice credential, "National Certified Counselor." In order to be certified, a counselor must hold a master's degree in counseling, have at least 2 years of professional counseling experience, and pass NBCC's National Counselor Examination. This national certification is voluntary and distinct from State certification. However, in some States those who pass the national exam are exempt from taking a State certification exam. NBCC also offers specialty certification in career, gerontological, school, and clinical mental health counseling.

All States require school counselors to hold State school counseling certification; however, certification varies from State to State. Some States require public school counselors to have both counseling and teaching certificates. Depending on the State, a master's degree in counseling and 2 to 5 years of teaching experience may be re-

quired for a counseling certificate.

Vocational and related rehabilitation agencies generally require a master's degree in rehabilitation counseling, counseling and guidance, or counseling psychology for rehabilitation counselor jobs. Some, however, may accept applicants with a bachelor's degree in rehabilitation services, counseling, psychology, or related fields. A bachelor's degree in counseling qualifies a person to work as a counseling aide, rehabilitation aide, or social service worker. Experience in employment counseling, job development, psychology, education, or social work may be helpful.

The Council on Rehabilitation Education (CORE) accredits graduate programs in rehabilitation counseling. A minimum of 2 years of study—including a period of supervised clinical experience—are required for the master's degree. Some colleges and universities offer a bachelor's degree in rehabilitation services educa-

tion.

In most State vocational rehabilitation agencies, applicants must pass a written examination and be evaluated by a board of examiners. Many employers require rehabilitation counselors to be certified. To become certified by the Commission on Rehabilitation Counselor Certification, counselors must graduate from an accredited educational program, complete an internship, and pass a written examination. They are then designated as "Certified Rehabilitation Counselors."

Some States require counselors in public employment offices to have a master's degree; others accept a bachelor's degree with ap-

propriate counseling courses.

Mental health counselors generally have a master's degree in mental health counseling, another area of counseling, or in psychology or social work. They are voluntarily certified by the National Board of Certified Clinical Mental Health Counselors. Generally, to receive this certification as a mental health counselor, a counselor must have a master's degree in counseling, 2 years of post-master's experience, a period of supervised clinical experience, a taped sample of clinical work, and a passing grade on a written examination.

Some employers provide training for newly hired counselors. Many have work-study programs so that employed counselors can earn graduate degrees. Counselors must participate in graduate studies, workshops, institutes, and personal studies to maintain

their certificates and licenses.

Persons interested in counseling should have a strong interest in helping others and the ability to inspire respect, trust, and confidence. They should be able to work independently or as part of a team.

Prospects for advancement vary by counseling field. School counselors may move to a larger school; become directors or supervisors

of counseling 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*.)

Rehabilitation, mental health, and employment counselors may become supervisors or administrators in their agencies. Some counselors move into research, consulting, or college teaching, or go into private practice.

Job Outlook

Overall employment of counselors is expected to grow faster than the average for all occupations through the year 2005. In addition, replacement needs should increase significantly by the end of the decade as a large number of counselors reach retirement age.

Employment of school counselors is expected to grow because of increasing enrollments, particularly in secondary schools, State legislation requiring counselors in elementary schools, and the expanded responsibilities of counselors. Counselors increasingly are becoming involved in crisis and preventive counseling, helping students deal with issues ranging from drug and alcohol abuse to death and suicide. Despite the increasing use of counselors, however, employment growth may be dampened by budgetary constraints—some counselors serve more than one school.

Rehabilitation and mental health counselors should be in strong demand. Insurance companies increasingly provide for reimbursement of counselors, enabling many counselors to move from schools and government agencies to private practice. The number of people who need rehabilitation services will rise 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 persons with disabilites will spur demand for counselors. Counselors not only will help individuals with disabilities with their transition into the work force, but also will help companies comply with the law. More rehabilitation and mental health counselors also will be needed as the elderly population grows, and as society focuses on ways of developing mental well-being, such as controlling stress associated with job and family responsibilities.

Similar to other government jobs, the number of employment counselors, who work primarily for State and local governments, could be limited by budgetary constraints. Employment counselors working in private job training services, however, should grow rapidly as counselors provide skill training and other services to a growing number of laid-off workers, experienced workers seeking a new or second career, full-time homemakers seeking to enter or reenter the work force, and workers who want to upgrade their skills.

Earnings

Median earnings for full-time educational and vocational counselors were about \$30,000 a year in 1992. The middle 50 percent earned between \$24,000 and \$41,500 a year. The bottom 10 percent earned less than \$17,800 a year, while the top 10 percent earned over \$51,900 a year.

The average salary of school counselors in the 1992-93 academic year was about \$40,400, according to the Educational Research Service. Some school counselors earn additional income working summers in the school system or in other jobs.

Self-employed counselors who have well-established practices generally have the highest earnings, as do some counselors working for private companies, such as insurance companies and private rehabilitation companies.

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 college and student personnel workers, teachers, personnel workers and managers, human services workers, social workers, psychologists, psychiatrists, members of the clergy, occupational therapists, training and employee development specialists, and equal employment opportunity/affirmative action specialists.

Sources of Additional Information

For general information about counseling, as well as information on specialties such as school, college, mental health, rehabilitation, multicultural, career, marriage and family, and gerontological counseling, contact:

American Counseling Association, 5999 Stevenson Ave., Alexandria,

VA 22304.

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

Touncil for Accreditation of Counseling and Related Educational Programs, American Counseling Association, 5999 Stevenson Ave., Alexandria, VA 22304.

For information on national certification requirements and procedures for counselors, contact:

P National Board for Certified Counselors, 3-D Terrace Way, Greensboro, NC 27403.

For information about rehabilitation counseling, contact: The National Rehabilitation Counseling Association, 1910 Association Dr., Reston, VA 22091.

Pational Council on Rehabilitation Education, Department of Special Education, Utah State University, Logan, UT 84322-2870.

For information on certification requirements for rehabilitation

Commission on Rehabilitation Counselor Certification, 1835 Rohlwing Rd., Suite E, Rolling Meadows, IL 60008.

For general information about school counselors, contact: American School Counselor Association, 5999 Stevenson Ave., Alexandria, VA 22304.

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

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

Education Administrators

(D.O.T. 075.117-010, -018, -030; 090.117 except -034, .167; 091.107; 092.167; 094.107, .117-010, .167-014; 096.167; 097.167; 099.117 except -022, .167-034; 100.117-010; 169.267-022; 188.167-094; 239.137-010)

Nature of the Work

Smooth operation of an educational institution requires competent administrators. Education administrators provide direction, leadership, and day-to-day management of educational activities in schools, colleges and universities, 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 aid in establishing policies and procedures to carry them out. They develop academic programs; train and motivate teachers and other staff; manage guidance and other student services; administer recordkeeping; prepare budgets; handle relations with parents, prospective students, employers, or others outside of education; and perform numerous other activities.

They supervise subordinate managers, management support staff, teachers, counselors, librarians, coaches, and others. In an organization such as a small daycare center, there may be one administrator who handles all functions. In a major university or large school system, responsibilities are divided among many administrators, each

with a specific function.

Principals manage elementary and secondary schools. They set the academic tone—high-quality instruction is their main responsibility. Principals assign teachers and other staff, help them improve their skills, and evaluate them. They confer with them—advising, explaining, or answering procedural questions. They visit classrooms, review instructional objectives, and examine learning materials. They also meet with other administrators, students, parents, and representatives of community organizations. They prepare budgets and reports on various subjects, including finances, health, and attendance, and oversee the requisitioning and allocation of

supplies. As school budgets become tighter, many principals are trying to encourage financial support for their schools from local businesses.

In recent years, as schools have become more involved with a student's emotional welfare as well as academic achievement, schools are providing more services to students. As a result, principals face new responsibilities. For example, in response to the growing number of dual-income and single-parent families and teenage parents, more schools have before- and after-school child-care programs or family resource centers, which also may offer parenting classes and social service referrals. With the help of other community organizations, principals also may establish programs to combat the increase in crime, drug and alcohol abuse, and sexually transmitted disease among students.

Assistant principals aid the principal in the overall administration of the school. Depending on the number of students, a school may have more than one assistant principal, or may not have any. They are responsible for programming student classes and coordinating transportation, custodial, cafeteria, and other support services. They usually handle discipline, social and recreational programs, and health and safety. They also may counsel students on personal, educational, or vocational matters.

Public schools also are managed by administrators in school district central offices. This group includes those who direct subject area programs such as English, music, vocational education, special education, and mathematics. They plan, evaluate, and improve curriculums and teaching techniques and help teachers improve their skills and learn about new methods and materials. They oversee career counseling programs, and testing which measures students' abilities and helps place them in appropriate classes. Central office administrators also include directors of programs such as guidance, school psychology, athletics, curriculum and instruction, and professional development. With the trend toward site-based management, principals and assistant principals, along with teachers and other staff, have primary responsibility for many of these programs in their individual schools.

In colleges and universities, academic deans, also known as deans of faculty, provosts, or university deans, assist presidents and develop budgets and academic policies and programs. They direct and coordinate activities of deans of individual colleges and chairpersons of academic departments.

College or university department heads or chairpersons are in charge of departments such as English, biological science, or mathematics. They coordinate schedules of classes and teaching assignments, propose budgets, recruit, interview, and hire applicants for teaching positions, evaluate faculty members, and perform other administrative duties in addition to teaching.

Higher education administrators also provide student services. Deans of students—also known as vice presidents of student affairs or student life, or directors of student services-direct and coordinate admissions, foreign student services, and health and counseling services, as well as social, recreation, and related programs. In a small college, they may counsel students. Registrars are custodians of students' education records. They register students, prepare student transcripts, evaluate academic records, oversee the preparation of college catalogs and schedules of classes, and analyze registration statistics. Directors of admissions manage the process of recruiting and admitting students, and work closely with financial aid directors, who oversee scholarship, fellowship, and loan programs. Directors of student activities plan and arrange social, cultural, and recreational activities, assist student-run organizations, and may orient new students. Athletic directors plan and direct intramural and intercollegiate athletic activities, including publicity for athletic events, preparation of budgets, and supervision of coaches.

Working Conditions

Education administrators hold management positions with significant responsibility. Coordinating and interacting with faculty, parents, and students can be fast-paced and stimulating, but also stressful and demanding. Some jobs include travel. Principals and assistant principals whose main duty is discipline may find working with difficult students frustrating, but challenging.



Education administrators, unlike teachers, usually work year round.

Most education administrators work more than 40 hours a week, including many nights and weekends when school activities take place. Unlike teachers, they usually work year round.

Employment

Education administrators held about 351,000 jobs in 1992. About 9 out of 10 were in educational services—in elementary, secondary, and technical schools and colleges and universities. The rest worked in child daycare centers, religious organizations, job training centers, State departments of education, and businesses and other organizations that provide training activities for their employees.

Training, Other Qualifications, and Advancement

Education administrator is not usually an entry level job. Many 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, and academic deans usually have taught or held another related job before moving into administration. Some teachers move directly into principalships; however, most first gain experience as an assistant principal or in a central office administrative job. In some cases, administrators move up from related staff jobs such as recruiter, residence hall director, or financial aid or admissions counselor. Earning a higher degree generally improves one's advancement opportunities in education administration.

To be considered for education administrator positions, workers must first prove themselves in their current jobs. In evaluating candidates, supervisors look for determination, confidence, innovativeness, motivation, and managerial attributes, such as ability to make sound decisions and to organize and coordinate work efficiently. Since much of an administrator's job involves interacting with others, from students to parents to teachers, they must have strong interpersonal skills and be effective communicators and motivators. Knowledge of management principles and practices, gained through work experience and formal education, is important.

In public schools, principals, assistant principals, and school administrators in central offices generally need a master's degree in education administration or educational supervision, and a State teaching certificate. Some principals and central office administrators have a doctorate in education administration. In private schools, they often have a master's or doctoral degree, but may hold only a bachelor's degree since they are not subject to State certification requirements.

Academic deans usually have a doctorate in their specialty. Admissions, student affairs, and financial aid directors and registrars often start in related staff jobs with bachelor's degrees—any field usually is acceptable—and get advanced degrees in college student affairs or higher education administration. A Ph.D. or Ed.D. usually is necessary for top student affairs positions. Computer literacy and a background in mathematics 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 accredits programs. Education administration degree programs include courses in school management, school law, school finance and budgeting, curriculum development and evaluation, research design and data analysis, community relations, politics in education, counseling, and leadership. Educational supervision degree programs include courses in supervision of instruction and curriculum, human relations, curriculum development, research, and advanced pedagogy courses.

Education administrators advance by moving up an administrative ladder or transferring to larger schools or systems. They also may become superintendent of a school system or president of an educational institution.

Job Outlook

Substantial competition is expected for prestigious jobs as education administrators. Many teachers and other staff meet the education and experience requirements for these jobs, and seek promotion. However, the number of openings is relatively small, so generally only the most highly qualified are selected. Candidates who have the most formal education and who are willing to relocate should have the best job prospects.

Employment of education administrators is expected to grow about as fast as the average for all occupations through the year 2005. Most job openings, particularly for principals and assistant principals, are likely to result from the need to replace administrators who retire. Additional openings will be created by workers who transfer to other occupations.

Employment of education administrators will grow as school enrollments increase; as more services are provided to students; as efforts to improve the quality of education continue; and as institutions comply with government regulations, such as those regarding financial aid.

The number of education administrators employed depends largely on State and local expenditures for education. Budgetary constraints could result in fewer administrators than anticipated; pressures to increase spending to improve the quality of education could result in more.

Earnings

Salaries of education administrators vary according to position, level of responsibility and experience, and the size and location of the institution.

According to the Educational Research Service, Inc., average salaries for principals and assistant principals in the school year 1992-93 were as follows:

Principals:

Elementary school	\$54,900	
Junior high/middle school	58,600	
Senior high school	63,000	
Assistant principals:		
Elementary school	45,400	
Junior high/middle school	49,900	
Senior high school	52,300	

In 1992-93, according to the College and University Personnel Association, median annual salaries for selected administrators in higher education were as follows:

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Medicine	\$182,600
Law	129,000
Engineering	97,000
Arts and sciences	74,100
Business	73,700
Education	72,500
Social sciences	54,500
Mathematics	53,400
Student services directors:	
Admissions and registrar	47,500
Student financial aid	40,500
Student activities	30,900

Related Occupations

Education administrators apply organizational and leadership skills to provide services to individuals. Workers in related occupations include health services administrators, social service agency administrators, recreation and park managers, museum directors, library directors, and professional and membership organization executives. Since principals and assistant principals generally have extensive teaching experience, their backgrounds are similar to those of teachers and many school counselors.

Sources of Additional Information

For information on elementary and secondary school principals, assistant principals, and central office administrators, contact:

F American Federation of School Administrators, 1729 21st St. NW., Washington, DC 20009.

P American Association of School Administrators, 1801 North Moore St., Arlington, VA 22209.

For information on elementary school principals and assistant principals, contact:

The National Association of Elementary School Principals, 1615 Duke St., Alexandria, VA 22314-3483.

For information on secondary school principals and assitant principals, contact:

The National Association of Secondary School Principals, 1904 Association Dr., Reston, VA 22091.

For information on college student affairs administrators, contact:

P National Association of Student Personnel Administrators, 1875 Connecticut Ave. NW., Suite 418, Washington, DC 20009-5728.

For information on collegiate registrars and admissions officers, contact:

127 American Association of Collegiate Registrars and Admissions Officers, One Dupont Circle NW., Suite 330, Washington, DC 20036-1171.

Human Services Workers

(D.O.T. 195.367 except -026 and -030)

Nature of the Work

"Human services worker" is a generic term for people with various job titles, such as social service technician, case management aide, social work assistant, residential counselor, alcohol or drug abuse counselor, mental health technician, child abuse worker, community outreach worker, and gerontology aide. They generally work under the direction of social workers or, in some cases, psychologists. The amount of responsibility and supervision they are given varies a great deal. Some are on their own most of the time and have little direct supervision; others work under close direction.

Human services workers help clients obtain benefits or services. They assess the needs and establish the eligibility of clients for services. They examine financial documents such as rent receipts and tax returns to determine whether the client is eligible for food stamps, Medicaid, or other welfare programs, for example. They also inform clients how to obtain services; arrange for transportation and escorts, if necessary; and provide emotional support. Human services workers monitor and keep case records on clients and report progress to supervisors.

Human services workers may transport or accompany clients to group meal sites, adult daycare programs, or doctors' offices; telephone or visit clients' homes to make sure services are being received; or help resolve disagreements, such as those between tenants and landlords.

Human services workers play a variety of roles in community settings. 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 and group homes, they oversee adult residents who need some supervision or support on a daily basis, but who do not need to live in an institution. They review clients' records, talk with their families, and confer with medical personnel to gain better insight into their background and needs. Human services workers may teach residents to prepare their own meals and to do other housekeeping activities. They also provide emotional support and lead recreation activities.

In mental hospitals and psychiatric clinics, they may help clients master everyday living skills and teach them how to communicate more effectively and get along better with others. They also assist with music, art, and dance therapy and with individual and group counseling and lead recreational activities.

Working Conditions

Working conditions of human services workers vary. Many spend part of their time in an office or group residential facility and the



Human services workers help clients obtain benefits and services.

rest in the field-visiting clients or taking them on trips, or meeting with people who provide services to the clients. Most work a regular 40-hour week, although some work may be in the evening and on weekends. Human services workers in residential settings generally work in shifts because residents need supervision around the clock.

The work, while satisfying, can be emotionally draining. Understaffing and lack of equipment may add to the pressure. Turnover is reported to be high, especially among workers without academic

preparation for this field.

Employment

Human services workers held about 189,000 jobs in 1992. About one-fourth were employed by State and local governments, primarily in public welfare agencies and facilities for the mentally retarded and developmentally disabled. Another fourth worked in private social services agencies offering a variety of services, including adult daycare, group meals, crisis intervention, and counseling. Still another fourth supervised residents of group homes and halfway houses. Human services workers also held jobs in clinics, community mental health centers, and psychiatric hospitals.

Training, Other Qualifications, and Advancement

While some employers hire high school graduates, most prefer applicants with some college preparation in human services, social work, or one of the social or behavioral sciences. Some prefer to hire persons with a 4-year college degree. The level of formal education of human service workers often influences the kind of work they are assigned and the amount of responsibility entrusted to them. Workers with no more than a high school education are likely to perform clerical duties, while those with a college degree might be assigned to do direct counseling, coordinate program activities, or manage a group home. Employers may also look for experience in other occupations or leadership experience in school or in a youth group. Some enter the field on the basis of courses in social work, psychology, sociology, rehabilitation, or special education. Most employers provide in-service training such as seminars and workshops.

Because so many human services jobs involve direct contact with people who are vulnerable to exploitation or mistreatment, employers try to select applicants with appropriate personal qualifications. Relevant academic preparation is generally required, and volunteer or work experience is preferred. A strong desire to help others, patience, and understanding are highly valued characteristics. Other important personal traits include communication skills, a strong sense of responsibility, and the ability to manage time effectively. Hiring requirements in group homes tend to be more stringent than

In 1992, 375 certificate and associate degree programs in human services or mental health were offered at community and junior colleges, vocational-technical institutes, and other postsecondary institutions. In addition, 390 programs offered a bachelor's degree in human services. A small number of programs leading to master's degrees in human services administration were offered as well.

Generally, academic programs in this field educate students for specialized roles—work with developmentally disabled adults, for example. Students are exposed early and often to the kinds of situations they may encounter on the job. Programs typically include courses in psychology, sociology, crisis intervention, social work, family dynamics, therapeutic interviewing, rehabilitation, and gerontology. Through classroom simulation internships, students learn interview, observation, and recordkeeping skills; individual and group counseling techniques; and program planning.

Formal education is almost always necessary for advancement. In group homes, completion of a 1-year certificate in human services along with several years of experience may suffice for promotion to supervisor. In general, however, advancement requires a bachelor's or master's degree in counseling, rehabilitation, social work, or a re-

lated field.

Job Outlook

Opportunities for human services workers are expected to be excellent for qualified applicants. The number of human services workers is projected to more than double between 1992 and the year 2005making it among the most rapidly growing occupations. Also, the need to replace workers who retire or stop working for other reasons will create additional job opportunities. However, these jobs are not attractive to everyone because the work is responsible and emotionally draining and most offer relatively poor pay, so qualified applicants should have little difficulty finding employment.

Opportunities are expected to be best in job training programs, residential settings, and private social service agencies, which include such services as adult daycare and meal delivery programs. Demand for these services will expand with the growing number of older people, who are more likely to need services. In addition, human services workers will continue to be needed to provide services to the mentally impaired and developmentally disabled, those with substance abuse problems, and a wide variety of others. Faced with rapid growth in the demand for services, but slower growth in resources to provide the services, employers are expected to rely increasingly on human services workers rather than other occupations that command higher pay.

Job training programs are expected to require additional human services workers as the economy grows and businesses change their mode of production and workers need to be retrained. Human services workers help determine workers' eligibility for public assistance programs and help them obtain services while unemployed.

Residential settings should expand also as pressures to respond to the needs of the chronically mentally ill persist. For many years, chronic mental patients have been deinstitutionalized and left to their own devices. Now, more community-based programs and group residences are expected to be established to house and assist the homeless and chronically mentally ill, and demand for human services workers will increase accordingly.

Although overall employment in State and local governments will grow only as fast as the average for all industries, jobs for human services workers will grow more rapidly. State and local governments employ most of their human services workers in correctional and public assistance departments. Correctional departments are growing faster than other areas of government, so human services workers should find their job opportunities increase along with other corrections jobs. Public assistance programs have been relatively stable within governments' budgets, but they have been employing more human services workers in an attempt to employ fewer social workers, who are more educated and higher paid.

Earnings

According to limited data available, starting salaries for human services workers ranged from about \$12,000 to \$20,000 a year in 1992. Experienced workers generally earned between \$15,000 and \$25,000 annually, depending on their education, experience, and employer.

Related Occupations

Workers in other occupations that require skills similar to those of human services workers include social workers, community outreach workers, religious workers, occupational therapy assistants, physical therapy assistants and aides, psychiatric aides, and activity leaders.

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, con-

National Organization for Human Service Education, Brookdale Community College, Lyncroft, NJ 07738.

Council for Standards in Human Service Education, Montgomery Community College, 340 Dekalb Pike, Blue Bell, PA 19422.

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.

Librarians

(D.O.T. 100 except .367-018; 109.267-014)

Nature of the Work

Librarians make information available to people. They manage staff, oversee the collection and cataloging of library materials, and develop and direct information programs for the public. They help users find information from printed and other materials.

Library work is divided into three basic functions: User services, technical services, and administrative services. Librarians in user services—for example, reference and children's librarians—work directly with users to help them find the information they need. This may involve analyzing users' needs to determine what information is appropriate, and searching for, acquiring, and providing the information to users. Librarians in technical services, such as acquisitions librarians and catalogers, acquire and prepare materials for use and may not deal directly with the public. Librarians in administrative services oversee the management of the library, supervising library employees, preparing budgets, and directing activities to see that all parts of the library function properly. Depending on the employer, librarians may perform a combination of user, technical, and administrative services.

In small libraries or information centers, librarians generally handle all aspects of the work. They read book reviews, publishers' announcements, and catalogs to keep up with current literature and other available resources, and select and purchase materials from publishers, wholesalers, and distributors. Librarians prepare new materials for use by classifying them by subject matter, and describe books and other library materials in a way that users can easily find them. They supervise assistants who prepare cards, computer records, or other access tools that indicate the title, author, subject, publisher, date of publication, and location in the library. In large libraries, librarians often specialize in a single area, such as acquisitions, cataloging, bibliography, reference, special collections, circulation, or administration.

Librarians also compile lists of books, periodicals, articles, and audiovisual materials on particular subjects, and recommend materials to be acquired. They may 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 book talks for adults; publicize services; provide reference help; supervise staff; prepare the budget; and oversee other administrative matters.

Librarians may be classified according to the type of library in which they work: Public libraries, school library/media centers, academic libraries, and special libraries. They may work with specific groups, such as children, young adults, adults, or disadvantaged individuals. In school library/media centers, librarians help teachers develop curricula, acquire materials for classroom instruction, and sometimes team teach.

Librarians may also work in information centers or libraries maintained by government agencies, corporations, law firms, advertising agencies, museums, professional associations, medical centers, religious organizations, and research laboratories. They build and arrange the organization's information resources, usually 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 on areas of particular interest. For instance, a special librarian working for a corporation may provide the sales department with information on competitors or new developments affecting their field.

Many libraries are tied into remote data bases through their computer terminals, and many also maintain their own computerized data bases. The widespread use of automation in libraries makes data base searching skills important to librarians. Librarians develop and index data bases and help users develop searching skills to obtain the information they need. Libraries may employ automated systems librarians who plan and operate computer systems, and information scientists who design information storage and retrieval

systems and develop procedures for collecting, organizing, interpreting, and classifying information. (See statement on computer scientists and systems analysts elsewhere in the *Handbook*.) The increasing use of automated information systems enables some librarians to spend more time analyzing future information needs as well as on administrative and budgeting responsibilities, and to delegate more technical and user services to technicians. (See statement on library technicians elsewhere in the *Handbook*.)

Working Conditions

Working conditions in user services are different from those in technical services. Assisting users in obtaining the information for their jobs or for recreational and other needs can be challenging and satisfying. When working with users under deadlines, the work may be busy, demanding, and stressful. In technical services, selecting and ordering new materials can be stimulating and rewarding. However, librarians may sit at desks or at computer terminals all day. Extended work at video display terminals may cause eyestrain and headaches. They may also have their performance monitored for errors or for quantity of tasks completed each hour or day.

Nearly 1 out of 4 librarians works part time. Public and college librarians often work weekends and evenings. School librarians generally have the same workday schedule as classroom teachers and similar vacation schedules. Special librarians usually work normal business hours. Librarians in fast-paced industries, such as advertising or legal services, may work over 40 hours a week under stressful conditions.

Employment

Librarians held about 141,000 jobs in 1992. Most were in school and academic libraries; others were in public libraries and special libraries. A small number of librarians worked for hospitals and religious organizations. Others worked for governments at all levels.

Training, Other Qualifications, and Advancement

A master's degree in library science (M.L.S.) is necessary for librarian positions in most public, academic, and special libraries, and in some school libraries. In the Federal Government, an M.L.S. or the equivalent in education and experience is needed. Many colleges and universities offer M.L.S. programs, but many employers prefer graduates of the approximately 60 schools accredited by the American Library Association. Most M.L.S. programs require a bachelor's degree; any liberal arts major is appropriate.

Some programs take 1 year to complete; others 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 material selection and processing; the organization of information; reference tools and



Librarians are using automated information systems to collect, organize, and classify information.

strategies; and user services. Course options include resources for children or young adults; classification, cataloging, indexing, and abstracting; library administration; and library automation.

The M.L.S. provides general, all-round preparation for library work, but some people specialize in a particular area such as archives, media, or library automation. A Ph.D. degree in library and information science is advantageous for a college teaching or top administrative position, particularly in a college or university library or in a large library system.

In special libraries, a knowledge of the subject specialization, or a master's, doctoral, or professional degree in the subject is highly desirable. Subject specializations 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 that school librarians—often called library media specialists—be certified as teachers and have courses in library science. In some cases, an M.L.S., perhaps with a library media specialization, or a master's in education with a specialty in school library media or educational media is needed. Some States require certification of public librarians employed in municipal, county, or regional library systems.

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

Job Outlook

Employment of librarians is expected to grow more slowly than the average for all occupations through the year 2005. The limited growth in employment of librarians during the 1980's is expected to continue. However, the number of job openings resulting from the need to replace librarians who leave the occupation is expected to increase by 2005, as many workers reach retirement age. Willingness to relocate will greatly enhance job prospects.

Budgetary constraints will likely contribute to the slow growth in employment of librarians in school, public, and college and university libraries. The increasing use of computerized information storage and retrieval systems may also dampen the demand for librarians. For example, computerized systems make cataloging easier, and this task can now be handled by other library staff. In addition, many libraries are equipped for users to access library computers directly from their homes or offices. These systems allow users to bypass librarians and conduct research on their own. However, librarians will be needed to help users develop data base searching techniques and to define users' needs. Childrens' librarians will be the least affected by information technology since children need special assistance.

Opportunities will be best for librarians outside traditional settings. Nontraditional library settings include information brokers, private corporations, and consulting firms. Many companies are turning to librarians because of their excellent research and organizational skills, and knowledge of library automation systems. Librarians can review the vast amount of information that is available and analyze, evaluate, and organize it according to a company's specific needs. Librarians working in these settings are often classified as systems analysts, data base specialists, managers, and researchers.

Earnings

Salaries of librarians vary by the individual's qualifications and the type, size, and location of the library.

Based on a survey published in the Library Journal, starting salaries of graduates of library school master's degree programs accredited by the American Library Association averaged \$25,900 in 1992, and ranged from \$23,800 in public libraries to \$27,400 in school libraries. In college and university libraries, they averaged \$25,400, and in special libraries, they averaged \$27,700.

According to the Educational Research Service, experienced school librarians averaged about \$37,900 during the 1992-93 school year.

According to the Special Libraries Association, 1992 salaries for special librarians with 1 to 2 years of library experience averaged \$29,200, and those with 3 to 5 years of experience average \$31,800. Salaries for special library managers averaged \$45,200.

The average annual salary for all librarians in the Federal Government in nonsupervisory, supervisory, and managerial positions was \$44,500 in 1993.

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, information scientists, museum curators, publishers' representatives, research analysts, information brokers, and records managers. The management aspect of a librarian's work is similar to the work of managers in a variety of business and government settings. School librarians have many duties similar to those of school teachers.

Sources of Additional Information

Information on librarianship, including a listing of accredited education programs and information on scholarships or loans, is available from:

American Library Association (ALA), Office for Library Personnel Resources, 50 East Huron St., Chicago, IL 60611.

For information on a career as a special librarian, write to: Special Libraries Association, 1700 18th St. NW., Washington, DC 20009.

Material about a career in information science is available from: American Society for Information Science, 8720 Georgia Ave., Suite 501, Silver Spring, MD 20910.

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

Association for Library and Information Science Education, 4101 Lake Boone Trail, Suite 201, Raleigh, NC 27607.

Information on schools receiving Federal financial assistance for library training is available from:

Poffice of Educational Research and Improvement, Library Programs, Library Development Staff, U.S. Department of Education, 555 New Jersey Ave. NW., Room 402, Washington, DC 20208-5571.

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

American Association of Law Libraries, 53 West Jackson Blvd., Suite 940, Chicago, IL 60604.

For information on employment opportunities as a health science librarian, contact:

P Medical Library Association, 6 N. Michigan Ave., Suite 300, Chicago, IL 60602.

Those interested in a position as a librarian in the Federal service should write to:

Poffice of Personnel Management, 1900 E St. NW., Washington, DC 20415.

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

Personnel Office, Library of Congress, 101 Independence Ave. SE., Washington, DC 20540.

State library agencies can furnish information on scholarships available through their offices, requirements for certification, and general information about career prospects in the State. Several of these agencies maintain job "hotlines" which report openings for librarians.

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

Library Technicians

(D.O.T. 100.367-018)

Nature of the Work

Library technicians help librarians acquire, prepare, and organize material, and assist users in finding materials and information. Technicians in small libraries handle a wide range of duties; those in large libraries usually specialize.

Depending on the employer, library technicians may have other titles, such as library technical assistants. Technicians assist in the use of public catalogs, direct library users to standard references, organize and maintain periodicals, handle interlibrary loan requests, perform routine cataloging and coding of library materials, verify information on order requests, retrieve information from computer data bases, and supervise other support staff, such as circulation desk workers. The widespread use of computerized information storage and retrieval systems has resulted in technicians handling more technical and user services, such as entering catalog information into the library's computer, that were once performed by librarians. Technicians also may assist with customizing data bases. (See the statement on librarians elsewhere in the *Handbook*.)

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

Those in school libraries teach students to use the school library/media center and encourage them to do so. They also help teachers get instructional materials and help 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.

Working Conditions

Technicians who work with users answer questions and provide assistance. Technicians who prepare library materials sit at desks or computer terminals for long periods and may develop headaches or eyestrain from working with video display terminals. Some duties like calculating circulation statistics can be repetitive and boring. Others, such as computer searches using local and regional library networks and cooperatives, can be interesting and challenging.

Library technicians in school libraries work regular school hours. Those in public libraries and college and university (academic) libraries may work weekends and evenings. Library technicians in



Library technicians may retrieve information from computer data bases.

special libraries usually work normal business hours, although they are often called upon to work overtime.

Employment

Library technicians held about 71,000 jobs in 1992. Most worked in school, academic, or public libraries. Some worked in hospitals and religious organizations. The Federal Government, primarily the Department of Defense and the 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 postsecondary training as a library technician. Some libraries may require that tecnicians have a bachelor's degree. Employers may hire individuals with work experience or other training, or may train inexperienced workers on the job. Given the widespread use of automation in libraries, computer skills are needed for many jobs.

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 and how to order, process, catalog, locate, and circulate li-

brary materials, and work with library automation.

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

Job Outlook

Employment of library technicians is expected to grow about as fast as the average for all occupations through the year 2005. The increasing use of library automation may spur job growth among library technicians. Computerized information systems have simplified certain tasks, such as descriptive cataloging, which can now be handled by technicians instead of librarians. For instance, the technician can now easily retrieve information from a central data base and store it in the library's own computer. However, budgetary constraints may dampen employment growth of library technicians in school, public, and college and university libraries. Additional job openings will result from the need to replace library technicians who transfer to other fields or leave the labor force.

Growth in the number of professional and other workers who use special libraries should result in relatively fast employment growth among library technicians in special libraries. Willingness to relocate enhances an aspiring library technician's job prospects.

Earnings

Salaries for library technicians vary widely, depending on the type of library and geographic location. Salaries of library technicians in the Federal Government averaged \$23,900 in 1993.

Related Occupations

Library technicians perform organizational and administrative duties. Workers in other occupations with similar duties include library clerks, information clerks, record clerks, medical record technicians, and title searchers. Library technicians also assist librarians. Other workers who assist professional workers include museum technicians, teacher aides, legal assistants, and engineering and science technicians.

Sources of Additional Information

Information about a career as a library technician and a directory of schools offering training programs in this field can be obtained from:

P Council on Library/Media Technicians, P.O. Box 951, Oxon Hill, MD 20750.

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

tar American Library Association, Office for Library Personnel Resources, 50 East Huron St., Chicago, IL 60611.

Information on schools receiving Federal financial assistance for library training is available from:

Diffice of Educational Research and Improvement, Library Programs, Library Development Staff, U.S. Department of Education, 555 New Jersey Ave. NW., Washington, DC 20208-5571.

Those interested in a position as a library technician in the Federal service should write to:

F Office of Personnel Management, 1900 E St. NW., Washington, DC 20415.

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

Personnel Office, Library of Congress, Washington, DC 20540.

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 "hotlines" which report openings for library technicians.

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

Protestant Ministers

(D.O.T. 120.007)

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. They prepare and deliver sermons and give religious instruction. They also perform marriages; conduct funerals; counsel individuals who seek guidance; visit the sick, aged, and handicapped at home and in the hospital; comfort the bereaved; and serve church members in other ways. Many Protestant ministers write articles for publication, give speeches, and engage in interfaith, community, civic, educational, and recreational activities sponsored by or related to the interests of the church. Some ministers teach in seminaries, colleges and universities, and church- affiliated preparatory or high schools.

The services that ministers conduct differ among Protestant denominations and also 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 reading, hymn singing, prayers, and a sermon. In some denominations, Bible reading by a member of the congregation and individual testimonials may constitute a large part of the service.

Ministers serving small congregations generally work personally with parishioners. Those serving large congregations have greater administrative responsibilities and spend considerable time working with committees, church officers, and staff, besides other duties. They may share specific aspects of the ministry with one or more associates or assistants, such as a minister of education who assists in educational programs for different age groups, or a minister of music.

Working Conditions

Ministers are "on call" for any serious troubles or emergencies that affect members of their churches. They also may work long and irregular hours in administrative, educational, and community service activities.

Many of the ministers' duties are sedentary, such as reading or doing research in a study or a library to prepare sermons or write articles.

In some denominations, ministers are reassigned by a central body to a new pastorate every few years.



Many Protestant denominations now allow women to be ordained.

Employment

In 1992, there were an estimated 290,000 Protestant ministers who served individual congregations. Thousands of others served without a regular congregation, or worked in closely related fields, such as chaplains in hospitals, the Armed Forces, universities, and correctional institutions. While there are numerous denominations, most ministers are employed by the five largest Protestant bodies—Baptist, Episcopalian, Lutheran, Methodist, and Presbyterian.

All cities and most towns in the United States have at least one Protestant church with a full-time minister. Although most ministers are located in urban areas, many serve two or more small congregations in less densely populated areas. Some small churches increasingly are employing part-time ministers who may be seminary students, retired ministers, or holders of secular jobs. Unpaid pastors serve other churches with meager funds. 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 college bachelor's degree followed by study at a theological school. However, some denominations have no formal educational requirements, and others ordain persons having various types of training in Bible colleges, Bible institutes, or liberal arts colleges. Many denominations now allow women to be ordained, but others do not. Persons considering a career in the ministry should verify the entrance requirements with their particular denomination before deciding on a career as a minister.

In general, each large denomination has its own school or 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 1992, over 200 American Protestant theological schools were accredited by the Association of Theological Schools in the United States and Canada. These admit only students who have received a bachelor's degree or its equivalent in liberal arts 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.

College students considering theological study should prepare by taking courses that will aid them later. At the earliest possible date, they should contact their denominations and the schools to which they intend to apply, to learn how to prepare for the program they hope to enter. Recommended preseminary or undergraduate college courses generally include English, history, philosophy, natural sciences, social sciences, fine arts, music, religion, and foreign languages. These courses provide a knowledge of modern social, cultural, and scientific institutions and problems.

The standard curriculum for accredited theological schools consists of four major categories: Biblical, historical, theological, and practical. Courses of a practical nature include pastoral care, preaching, religious education, and administration. 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 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 evangelical churches may ordain ministers with only a high school education.

Men and women entering the clergy often begin their careers as pastors of small congregations or as assistant pastors in large churches.

Job Outlook

Competition is expected to continue for paid Protestant ministers through the year 2005 due to slow growth of church membership and the large number of qualified candidates. Opportunities are expected to be best for graduates of theological schools. The amount of competition for paid positions will vary among denominations and geographic regions. Competition will still be strong for more responsible positions serving large, urban congregations. Relatively favorable prospects are expected for ministers in evangelical churches. Ministers willing to work part time or for smaller, rural congregations also should have relatively favorable opportunities. Most of the openings for ministers through the year 2005 will arise from the need to replace retirees and, to a lesser extent, those who die or leave the ministry.

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

Earnings

Salaries of Protestant clergy vary substantially, depending on age, experience, denomination, size and wealth of congregation, and geographic location. Based on limited information, the estimated average annual income of Protestant ministers was about \$27,000 in 1992. Including benefits such as housing, insurance, and transportation, average compensation was an estimated \$44,000. In large, wealthier denominations, ministers often earned significantly higher salaries. Increasingly, ministers with modest salaries earn additional income from employment in secular occupations.

Related Occupations

Protestant ministers advise and counsel individuals and groups regarding their religious as well as personal, social, and vocational development. Other occupations involved in this type of work include social workers, clinical and counseling psychologists, teachers, and counselors.

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. Prospective ministers also should contact the ordination supervision body of their particular denomination for information on special requirements for ordination.

Rabbis

(D.O.T. 120.007)

Nature of the Work

Rabbis are the spiritual leaders of their congregations, and teachers and interpreters of Jewish law and tradition. They conduct religious services and deliver sermons on the Sabbath and on Jewish holidays. Like other clergy, rabbis conduct weddings and funeral services, visit the sick, help the poor, comfort the bereaved, supervise religious education programs, engage in interfaith activities, and involve themselves in community affairs.

Rabbis serving large congregations may spend considerable time in administrative duties, working with their staffs and committees. Large congregations frequently have an associate or assistant rabbi. Many assistant rabbis serve as educational directors.

Rabbis serve either Orthodox, Conservative, Reform, or Reconstructionist congregations. Regardless of their particular point of view, all Jewish congregations 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, the use of Hebrew as the language of prayer, or the use of instrumental music or a choir. 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 also may write for religious and lay publications and teach in theological seminaries, colleges, and universities.

Working Conditions

Rabbis work long hours and are "on call" to visit the sick, comfort the bereaved, and counsel those who seek it. Community and educational activities may also require long or irregular hours.

Some of their duties are intellectual and sedentary, such as studying religious texts, researching and writing sermons and articles for publication, and preparing lectures for adult education.

Rabbis have a good deal of independent authority, since they have no formal hierarchy. They are responsible only to the board of trustees of the congregations they serve.



Rabbis serving large congregations may spend considerable time in administrative duties.

Employment

In 1992, there were approximately 1,600 Reform, 1,300 Conservative, 850 Orthodox, and 160 Reconstructionist rabbis. Although the majority served congregations, many rabbis functioned in other settings. Some taught in Jewish Studies programs at colleges and universities. Others served as chaplains in the military services, in hospitals, in college settings, and other institutions, or in one of the many Jewish community service agencies.

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

Jewish populations.

Training and Other Qualifications

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.

In general, the curriculums of Jewish theological seminaries provide students with a comprehensive knowledge of the Bible, Talmud, Rabbinic literature, Jewish history, theology, and courses in education, pastoral psychology, and public speaking. Students get 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.

About 35 seminaries educate and ordain Orthodox rabbis. The Rabbi Isaac Elchanan Theological Seminary and the Beth Medrash Govoha Seminary are representative of the two basic kinds of Orthodox seminaries. The former requires a bachelor's degree for entry and has a formal 4-year ordination program. The latter has no formal admission requirements but may require more years of study for ordination. The training is rigorous. When students have become sufficiently learned in the Talmud, the Bible, and other religious studies, they may be ordained with the approval of an authorized rabbi, acting either independently or as a representative of a

rabbinical seminary.

The Jewish Theological Seminary of America educates rabbis for the Conservative branch. The Hebrew Union College—Jewish Institute of Religion educates rabbis for the Reform branch. For admission to their rabbinical programs leading to ordination, both seminaries require the completion of a 4-year college course, as well as earlier preparation in Jewish studies. The Conservative seminary usually requires 5 years to complete the course of study. Normally, 5 years of study are also required to complete the rabbinical course at the Reform seminary, including 1 year of preparatory study in Jerusalem. Exceptionally well- prepared students can shorten this 5-year period to a minimum of 3 years.

The Reconstructionist Rabbinical College educates rabbis in the newest branch of Judaism. A bachelor's degree is required for admission. The rabbinical program is based on a 5-year course of study which emphasizes, in each year, a period in the history of Jewish civilization. A preliminary preparatory year is required for students without sufficient grounding in Hebrew and Jewish studies. Graduates are awarded the title "Rabbi" and the Master of Arts in Hebrew Letters and, with special study, can earn the Doctor of Hebrew Let-

ters degree.

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 Armed Forces. As a rule, experienced rabbis fill the pulpits of large and well-established Jewish congregations.

Job Outlook

Job opportunities for rabbis are expected to be generally favorable in the four major branches of Judaism through the year 2005. Present unmet needs for rabbis, together with the need to replace the many rabbis approaching retirement age, should insure that the numbers of persons completing rabbinical training in the years ahead will encounter good job prospects. Since most rabbis prefer to serve in large, urban areas, employment opportunities generally are best in

nonmetropolitan areas, particularly in smaller communities in the South, Midwest, and Northwest.

Graduates of Orthodox seminaries who seek pulpits should have good opportunities as growth in enrollments slows and as many graduates choose not to seek pulpits. Orthodox rabbis willing to work in small communities should have particularly good prospects.

Conservative and Reform rabbis are expected to have good employment opportunities throughout the country.

Reconstructionist rabbis are expected to have very good employment opportunities since membership is expanding rapidly.

Earnings

Income varies widely, depending on the size and financial status of the congregation, as well as its denominational branch and geographic location. Rabbis may earn additional income from gifts or fees for officiating at ceremonies such as bar mitzvahs and weddings.

Based on limited information, annual average earnings of rabbis generally ranged from \$38,000 to \$60,000 in 1992, including benefits. Benefits may include housing, health insurance, and a retire-

ment plan.

Related Occupations

Rabbis advise and counsel individuals and groups regarding their religious, personal, social, and vocational development. Others involved in this type of work include social workers, clinical and counseling psychologists, teachers, and counselors.

Sources of Additional Information

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

| Rabbinical Council of America, 275 7th Ave., New York, NY 10001.

(Orthodox)

The Jewish Theological Seminary of America, 3080 Broadway, New York, NY 10027. (Conservative)

B Hebrew Union College—Jewish Institute of Religion, Director of Placement, at any one of three campuses: 1 W. 4th St., New York, NY 10012; 3101 Clifton Ave., Cincinnati, OH 45220; 3077 University Mall, Los Angeles, CA 90007. (Reform)

Reconstructionist Rabbinical College, Church Rd. and Greenwood Ave., Wyncote, PA 19095.

Recreation Workers

(D.O.T. 153.137-010; 159.124-010; 187.167-238; 195.227-010 and -014; and 352.167-010)

Nature of the Work

Many people spend some of their leisure time participating in organized recreation ranging from aerobics or crafts to hiking or softball. Recreation programs as diverse as the people they serve are offered at local playgrounds and recreation areas, parks, community centers, health clubs, churches and synagogues, camps, theme parks and tourist attractions, correctional institutions, and a variety of other places. Recreation workers plan, organize, and direct the activities these places offer.

Recreation workers organize and lead programs and watch over recreational facilities and equipment. They help people to pursue their interest in crafts, art, or sports. They enable people to share common interests in basketball, basket weaving, or body building for their mutual entertainment, physical fitness, and self-improvement. Recreation workers organize teams and leagues so young people and adults can practice fair play and good sportsmanship through competitive sports. They also teach people the correct use of equipment and facilities so maximum benefit can be derived from their use without injury.

Recreation workers at workplaces organize and direct leisure activities and athletic programs for employees and their families, such

as bowling and softball leagues, social functions, travel programs, discount services, and, to an increasing extent, exercise and fitness

programs. These activities are generally for adults.

Camp counselors lead and instruct child and teenage campers in outdoor-oriented forms of recreation, such as swimming, hiking, and horseback riding as well as camping. Activities often are intended to enhance campers' appreciation of nature and responsible use of the environment. In addition, counselors provide campers with specialized instruction in activities such as archery, boating, music, drama, gymnastics, tennis, or computers. In resident camps, counselors also provide guidance and supervise daily living tasks and general socialization.

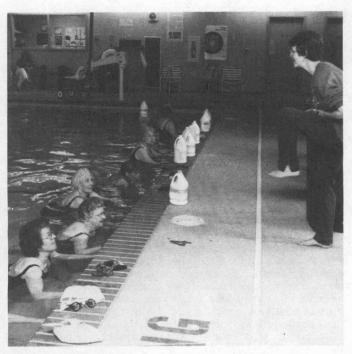
Recreation workers occupy a variety of positions at different levels of responsibility. Recreation leaders are responsible for a recreation program's daily operation and organize and direct participants. They may lead and give instruction in dance, drama, crafts, games, and sports; schedule use of facilities and keep records of equipment use; and monitor the use of recreation facilities and equipment to make sure they are used properly. Workers who provide instruction in specialties such as art, music, drama, swimming, or tennis may be called activity specialists. They often conduct classes and coach teams in the activity in which they specialize.

Recreation supervisors plan programs to meet the needs of the population they serve and supervise recreation leaders and activity specialists, sometimes over a large region. They may also direct specialized activities and special events. A growing number of supervisors are using computers in their work.

In a related occupation, recreational therapists who help individuals recover or adjust to illness, disability, or specific social problems; this occupation is described elsewhere in the Handbook.

Working Conditions

Recreation workers must work while others engage in leisure time activities. While the majority of recreation workers worked about 40 hours a week, people entering this field should expect some night work, weekend work, and irregular hours. About one-fifth worked part time. Also, many jobs are seasonal. The work setting for recreation workers may be anywhere from a vacation cruise ship to a woodland recreational park. Recreation workers often spend much of their time outdoors and may work under a variety of weather conditions. Recreation supervisors may spend most of their time in an office. Since full-time recreation workers spend more time acting as



Recreation workers who work at pools conduct swimming and exercise classes.

managers than hands-on activities leaders, they engage in less physical activity. However, as is the case for anyone engaged in physical activity, recreation workers risk injuries, and the work can be physically tiring.

Employment

Recreation workers held about 204,000 jobs in 1992, and many additional workers held summer jobs in the occupation. Of those who held full-time jobs as recreation workers, about half worked for government agencies, primarily in park and recreation departments at the municipal and county levels. About 15 percent worked in membership organizations with a civic, social, fraternal, or religious orientation—the Boy Scouts, the YWCA, and Red Cross, for example. Another 12 percent were in programs run by social service organizations (senior centers and adult daycare programs, for example) or in residential care facilities such as halfway houses, group homes, and institutions for delinquent youth. An additional 10 percent worked for nursing and other personal care facilities.

Other employers included commercial recreation establishments, amusement parks, sports and entertainment centers, wilderness and survival enterprises, tourist attractions, vacation excursion companies, hotels and resorts, summer camps, health and athletic clubs,

and apartment complexes.

The recreation field has an unusually large number of part-time, seasonal, and volunteer jobs. These jobs include summer camp counselors, lifeguards, craft specialists, and after-school and weekend recreation program leaders. Teachers and college students take many jobs as recreation workers when school is not in session.

Many unpaid volunteers assist paid recreation workers. The vast majority of volunteers serve as activity leaders at local day-camp programs, or in youth organizations, camps, nursing homes, hospitals, senior centers, YMCA's, and other settings. Some volunteers serve on local park and recreation boards and commissions. Volunteer experience, part-time work during school, or a summer job may lead to a full-time job.

Training, Other Qualifications, and Advancement

Education needed for recreation worker jobs ranges from a high school diploma, or sometimes less, for many summer jobs to graduate education for some administrative positions in large public systems. Full-time career professional positions usually require a college degree with a major in parks and recreation or leisure studies, but a bachelor's degree in any liberal arts field may be sufficient for some jobs in the private sector. In industrial recreation, or "employee services" as it is more commonly called, companies prefer to hire persons with a bachelor's degree in recreation or leisure studies and a strong background in business administration.

A background with specialized training or experience in a particular field, such as art, music, drama, or athletics is an asset for many jobs. Some jobs also require a special certificate, such as a lifesaving certificate when there are water related activities. Graduates of associate degree programs in parks and recreation, social work, and other human services disciplines also enter some career recreation positions. Occasionally high school graduates are able to enter career positions, but this is not common. Some college students work part time as recreation workers while earning degrees.

Persons with academic preparation in parks and recreation, leisure studies, physical education, fitness management, and related fields generally have better prospects for career advancement, although this varies from one employer to another. In some organizations, it is possible to reach the top of the career ladder without a college education, but this is becoming increasingly difficult.

A bachelor's degree and experience are preferred for most recreation supervisor jobs and required for most higher level administrator jobs. However, increasing numbers of recreation workers who aspire to administrator positions are obtaining master's degrees in parks and recreation or related disciplines. Also, many persons in other disciplines, including social work, forestry, and resource management, pursue graduate degrees in recreation.

Programs leading to an associate or bachelor's degree in parks and recreation, leisure studies, or related fields are offered at about 350 colleges and universities. Many also offer master's or doctoral degrees in this field.

In 1993, 90 bachelor's degree programs in parks and recreation were accredited by the Council on Accreditation, sponsored by the National Recreation and Park Association (NRPA) in cooperation with the American Association for Leisure and Recreation (AALR). Accredited programs provide broad exposure to the history, theory, and philosophy of park and recreation management. Courses offered include community organization; supervision and administration; recreational needs of special populations such as older adults or the disabled; and supervised fieldwork. Students may specialize in areas such as therapeutic recreation, park management, outdoor recreation, industrial or commercial recreation, and camp management.

The American Camping Association has developed a curriculum for camp director education. Many national youth associations offer training courses for camp directors at the local and regional levels.

Persons planning recreation careers should be outgoing, good at motivating people, and sensitive to the needs of others. Good health and physical fitness are required. Activity planning calls for creativity and resourcefulness. Willingness to accept responsibility and the ability to exercise good judgment are important qualities since recreation personnel often work without close supervision. Part-time or summer recreation work experience while in high school or college may help students decide whether their interests really point to a human services career. Such experience also may increase their leadership skills and understanding of people.

Individuals contemplating careers in recreation at the supervisory or administrative level should develop managerial skills. College courses in management, business administration, accounting, and

personnel management are likely to be useful.

Certification for this field is offered by the NRPA National Certification Board and the American Camping Association. The National Recreation and Parks Association, along with its State chapters, offers certification as a Certified Leisure Professional (CLP) for those with a college degree in recreation, and as a Certified Leisure Technician (CLT) for those with less than 4 years of college. The American Camping Association offers a certification program for camp directors. Continuing education is necessary to remain certified in either field.

Certification is not usually required for employment or advancement in this field, but it is an asset. Employers choosing among qualified job applicants may opt to hire the person with a demonstrated record of professional achievement represented by certification.

Job Outlook

Employment of recreation workers is expected to grow faster than the average for all occupations through the year 2005 as growing numbers of people possess both leisure time and the money to purchase leisure services. Growth in these jobs will also be due to increased interest in fitness and health and rising demand for recreational opportunities for older adults in senior centers and retirement communities. Opportunities for part-time and seasonal jobs are expected to be plentiful, but competition is likely for full-time career positions.

Overall job growth in local government—where half of all recreation workers are employed—is expected to be slow due to budget constraints, and local park and recreation departments are expected to do less hiring for permanent, full-time positions than in the past. As a result, this sector's share of recreation worker employment will shrink by the end of the century. Nonetheless, opportunities will vary widely by region, since resources as well as priorities for public services differ from one community to another. Thus, hiring prospects for recreation workers will be much better in some park and recreation departments than overall projections would suggest, but worse in others.

Recreation worker jobs should also increase in the fast-growing social services industry. More recreation workers will be needed to develop and lead activity programs in senior centers, halfway houses, children's homes, and daycare programs for the mentally retarded or developmentally disabled.

Recreation worker jobs in employee services and recreation will continue to increase as more businesses recognize the benefits to their employees of recreation programs and other services such as wellness programs and elder care. Job growth will also occur in the commercial recreation industry, composed of amusement parks, athletic clubs, camps, sports clinics, and swimming pools.

Full-time career jobseekers will face keen competition. All college graduates can enter recreation worker jobs, regardless of major, as well as some high school and junior college graduates, so applications for career positions in recreation often greatly exceed the number of job openings. Opportunities for staff positions should be best for persons with job experience gained in part-time or seasonal recreation jobs, together with formal recreation training. Those with graduate degrees should have the best opportunities for supervisory or administrative positions.

Prospects are much better for the very large number of temporary seasonal jobs. Demand for seasonal recreation workers is great, and job opportunities should be good. These positions, typically filled by high school or college students, do not generally have formal education requirements and are open to anyone with the desired personal qualities. Employers compete for a share of the vacationing student labor force, and while salaries in recreation are often lower than those in other fields, the nature of the work and the opportunity to work outdoors is nevertheless attractive to many. Seasonal employment prospects should be very good for applicants with specialized training and certification in an activity like swimming. These workers may obtain jobs as program directors.

Earnings

Median annual earnings of recreation workers who worked full time in 1992 were about \$14,900. The middle 50 percent earned between about \$10,700 and \$19,900. The lowest 10 percent earned about \$7,700 or less, while the top 10 percent earned about \$27,200 or more. However, earnings of recreation directors and others in supervisory or managerial positions can be much higher—anywhere from \$22,000 to \$95,000, depending on the level of responsibility and the size of the staff.

Most public and private recreation agencies provide full-time recreation workers with vacation and other benefits such as paid vacation and sick leave and health insurance. Part-time workers receive few, if any, benefits.

Related Occupations

Recreation workers must exhibit leadership and sensitivity in dealing with people. Other occupations that require similar personal qualities include recreational therapists, social workers, parole officers, human relations counselors, school counselors, clinical and counseling psychologists, and teachers.

Sources of Additional Information

For information on local government jobs in recreation, contact the nearest department of parks and recreation.

Ordering information for materials describing careers and academic programs in recreation is available from:

P National Recreation and Park Association, Division of Professional Services, 2775 South Quincy St., Suite 300, Arlington, VA 22206.

The American Association for Leisure and Recreation publishes information sheets on 25 separate careers in parks and recreation. For price and ordering information, contact:

ALR, 1900 Association Dr., Reston, VA 22091.

For information on careers in employee services and recreation,

ta National Employee Services and Recreation Association, 2211 York Rd., Suite 207, Oakbrook, IL 60521.

For information on careers in camping and summer counselor opportunities, contact:

American Camping Association, 5000 State Rd. 67 North, Martinsville, IN 46151.

For information on careers with the YMCA, contact:

YMCA of the USA, 101 North Wacker Dr., Chicago, IL 60606.

Roman Catholic Priests

(D.O.T. 120.007)

Nature of the Work

Roman Catholic priests attend to the spiritual, pastoral, moral, and educational needs of the members of their church. They deliver sermons, administer the sacraments, and preside at liturgical functions such as marriages, baptisms, and funerals. They also comfort the sick, console and counsel those in need of guidance, and assist the poor. Some priests are involved in nonliturgical concerns such as human rights and social welfare.

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.

The two main classifications of priests—diocesan (secular) and religious—have the same powers, acquired through ordination by a bishop. The differences lie in their way of life, their type of work, and the church authority to whom they are immediately subject. Diocesan priests commit their lives to serving the people of a diocese and generally work in parishes assigned by the bishop of their diocese. Religious priests generally work as part of a religious order, such as the Jesuits, Dominicans, or Franciscans. They may engage in specialized activities, such as teaching or missionary work, assigned by superiors of their order.

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 a large proportion of the church's institutions of higher education and many high schools, whereas diocesan priests are usually concerned with the parochial schools attached to parish churches and with diocesan high schools. The members of religious orders do most of the missionary work conducted by the Catholic Church in this country and abroad.

Working Conditions

Priests spend long and irregular hours working for the church and the community.

Religious priests are assigned duties by their superiors in their particular orders. Some religious priests serve as missionaries in foreign countries, where they may live under difficult and primitive conditions. Some live a communal life in monasteries, where they devote themselves to prayer, study, and assigned work.



Catholic priests who are part of a religious order may specialize in teaching.

Diocesan priests are "on call" at all hours to serve their parishioners in emergencies. They also have many intellectual duties, including study of the scriptures and keeping abreast of current religious and secular events in order to prepare sermons and teach effectively. Diocesan priests are responsible to the bishop of the diocese.

Employment

There were approximately 53,000 priests in 1992, about two-thirds of them diocesan priests, according to the Official Catholic Directory. There are priests in nearly every city and town and in many rural communities. The majority are in metropolitan areas, where most Catholics reside. Large numbers of priests are located in communities near Catholic educational and other institutions.

Training and Other Qualifications

Preparation for the priesthood generally requires 8 years of study beyond high school in one of about 230 seminaries. Preparatory study may begin in the first year of high school, at the college level, or in theological seminaries after college graduation. Today, most candidates for the priesthood take a 4-year degree at a conventional college or university. After graduation from college, candidates generally receive 2 years of "Pre-theology" preparatory study (philosophy, religious studies, and prayer) before entering the seminary. Theology coursework in the seminary 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; in recent years, this aspect of a priest's training has been emphasized. Diocesan and religious priests attend different major seminaries, where slight variations in the training reflect the differences in their duties. Priests commit themselves to celibacy, remaining unmarried. Only men are ordained as priests; women, however, may serve in many other church

Alternatively, high school seminaries provide a college preparatory program that emphasizes English grammar, speech, literature, and social studies. Latin may be required, and modern languages are encouraged. In Hispanic communities, knowledge of Spanish is mandatory. Candidates may also choose to enter a seminary college that offers a liberal arts program stressing philosophy and religion, the study of humankind through the behavioral sciences and history, and the natural sciences and mathematics. In many college seminaries, a student may concentrate in any one of these fields.

Young men never are denied entry into seminaries because of lack of funds. In seminaries for secular priests, scholarships or loans are available. Those in religious seminaries are financed by contributions of benefactors.

Postgraduate work in theology 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, continuing education for ordained priests has stressed social sciences, such as sociology and psychology.

A newly ordained secular priest usually works as an assistant pastor or curate. Newly ordained priests of religious orders are assigned to the specialized duties for which they are trained. Depending on the talents, interests, and experience of the individual, many opportunities for greater responsibility exist within the church.

Job Outlook

The job outlook for Roman Catholic priests is expected to be very favorable through the year 2005. 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—even if the recent modest increase in seminary enrollments continues—as an increasing proportion of priests approach retirement age.

In response to the shortage of priests, certain traditional functions increasingly are being performed by permanent deacons and by teams of clergy and laity. Presently about 10,300 permanent deacons have been ordained to preach and perform liturgical functions such as baptisms, distributing Holy Communion, and reading the gospel at the mass. The only services a deacon cannot perform are saying mass and hearing confessions. Teams of clergy and laity undertake nonliturgical functions such as hospital visits and religious teaching. Priests will continue to perform mass, administer sacraments, and hear confession, but may be less involved in teaching and administrative work.

Earnings

Diocesan priests' salaries vary from diocese to diocese. Based on limited information, salaries averaged about \$9,000 in 1992. In addition to a salary, diocesan priests received a package of benefits that could include a car allowance, free room and board in the parish rectory, health insurance, and a retirement plan. Including fringe benefits, the total value of a priest's compensation package averages about \$29,000 a year.

Religious priests take a vow of poverty and are supported by their religious order. Any personal earnings are given to the order.

Priests who do special work related to the church, such as teaching, usually receive a partial 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 of these 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.

Related Occupations

Roman Catholic priests advise and counsel individuals and groups regarding their religious as well as personal, social, and vocational development. Other occupations involved in this type of work include social workers, clinical and counseling psychologists, teachers, and counselors.

Sources of Additional Information

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

Information about a career as a diocesan or a religious Roman Catholic priest can also be obtained from:

Mational Conference of Diocesan Vocation Directors, 1603 S. Michigan Ave., Suite 400, Chicago, IL 60616.

Mational Religious Vocation Conference, 1603 S. Michigan Ave., Suite 400, Chicago, IL 60616.

School Teachers—Kindergarten, Elementary, and Secondary

(D.O.T. 091.221, .227; 092.227-010, -014; 094.224, .227, .267; 099.224-010, .227-022, -042; 187.134-010; 195.227-018)

Nature of the Work

The role of a teacher is changing from that of a lecturer or presenter to one of a facilitator or coach. Interactive discussions and "handson" learning are replacing rote memorization. For example, rather than merely telling students about science, mathematics, or psychology, a teacher might ask students to help solve a mathematical problem or perform a laboratory experiment and discuss how these apply to the real world. Similarly, a teacher might arrange to bring 3and 4-year-olds into the classroom to demonstrate certain concepts of child psychology.

As teachers move away from the traditional repetitive drill approaches, they are using more "props" or "manipulatives" to help children understand abstract concepts, solve problems, and develop critical thought processes. For example, young students may be taught the concept of numbers or adding and subtracting by playing board games. As children get older, they may use more sophisticated materials such as tape recorders, science apparatus, or cam-

Classes are becoming less structured, and students are working in groups to discuss and solve problems together. Preparing students for the future work force 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 logically think through problems. Teachers provide the tools and environment for their students to develop these skills.

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 children's views of themselves and the world, and affect later success or failure in school, work, and their personal lives. Kindergarten and elementary school teachers introduce children to numbers, language, science, and social studies. They may use games, music, artwork, films, slides, computers, and other instructional technology to teach basic skills.

Most elementary school teachers instruct one class of children in several subjects. In some schools, two or more teachers teach 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—those with students at several different learning levels.

Secondary school teachers help students delve more deeply into subjects introduced in elementary school and learn more about the world and about themselves. They specialize in a specific subject, such as English, Spanish, mathematics, history, or biology, in junior high/middle school or high school. They may teach a variety of related courses—for example, American history, contemporary American problems, and world geography.

Special education teachers, who are found in lower grades and high schools, instruct students with a variety of disabilities, such as visual and hearing impairments, learning disablilities, and physical disabilities. Special education teachers design and modify instruction to meet a student's special needs. Teachers also work with students who have other special instructional needs, such as those who are very bright or "gifted" or those who have limited English profi-

Teachers may use films, slides, overhead projectors, and the latest technology in teaching, such as computers, telecommunication systems, and video discs. Telecommunication technology can bring the real world into the classroom. Through telecommunications, American students can communicate with students in other countries to share personal experiences or research projects of interest to both groups. Computers are used in many classroom activities, from helping students solve math problems to learning English as a second language. Teachers must continually update their skills to use the latest technology in the classroom.

Teachers design their classroom presentations to meet student needs and abilities. They also may work with students individually. Teachers assign lessons, give tests, hear oral presentations, and maintain classroom discipline. Teachers observe and evaluate a student's performance and potential. Teachers increasingly are using new assessment methods, such as examining a portfolio of a student's artwork or writing to measure student achievement. Teachers assess the portfolio at the end of a learning period to judge a student's overall progress. They may then provide additional assistance

in areas where a student may need help.

In addition to classroom activities, teachers plan and evaluate lessons, sometimes in collaboration with teachers of related subjects. They also prepare tests, grade papers, prepare report cards, oversee study halls and homerooms, supervise extracurricular activities, and meet with parents and school staff to discuss a student's academic progress or personal problems. Secondary school teachers may assist a student in choosing courses, colleges, and careers. Special education teachers may help students with their transition into

special vocational training programs, colleges, or a job. 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, has gained popularity. In many schools, teachers help make decisions regarding the budget, personnel, textbook choices, curriculum design, and teaching methods.

Working Conditions

Seeing students develop new skills and gain an appreciation of the joy of learning can be very rewarding. However, teaching may be frustrating when dealing with unmotivated and disrespectful students.

Including school duties performed outside the classroom, many teachers work more than 40 hours a week. Most teachers work the traditional 10-month school year with a 2-month vacation during the summer. Teachers on the 10-month schedule may teach in summer sessions, take other jobs, travel, or pursue other personal interests. Many enroll in college courses or workshops in order 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.

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 is not a guarantee of a job, but it does provide some security.

Employment

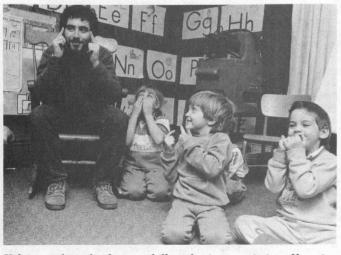
Teachers held about 3,255,000 jobs in 1992; more than 9 out of 10 were in public schools. Employment was distributed as follows:

Elementary	1,634,000
Secondary	1,263,000
Special education	358,000

Employment is distributed geographically much the same as the population.

Training, Other Qualifications, and Advancement

All 50 States and the District of Columbia require public school teachers to be certified. Certification is generally for one or several related subjects. Usually certification is granted by the State board of education or a certification advisory committee. Teachers may be certified to teach the early childhood grades (usually nursery school through grade 3; the elementary grades (grades 1 through 6 or 8); or a special subject, such as reading or music. In most States, special education teachers receive a credential to teach kindergarten through grade 12. These teachers train in the specialty that they



Helping students develop new skills and gain appreciation of learning can be rewarding.

want, such as teaching children with learning disabilities or behavioral disorders.

Requirements for regular certificates vary by State. However, all States require a bachelor's degree and completion of an approved teacher training program with a prescribed number of subject and education credits and supervised practice teaching.

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 either major in the subject they plan to teach while also taking education courses, or major in education and take subject courses. Some States require specific grade point averages for teacher certification.

Many States offer alternative teacher certification programs for people who have college training in the subject they will teach but do not have the necessary education courses required for a regular certificate. Alternative certification programs were originally designed to ease teacher shortages in certain subjects, such as mathematics and science. The programs have expanded to attract other people into teaching, including recent college graduates and midcareer changers. In some programs, individuals begin teaching immediately under provisional certification. After working under the close supervision of experienced educators for 1 or 2 years while taking education courses outside school hours, they receive regular certification if they have progressed satisfactorily. Under other programs, college graduates who do not meet certification requirements take only those courses that they lack, and then become certified. This may take 1 or 2 semesters of full-time study. Aspiring teachers who need certification may also enter programs that grant a master's degree in education, as well as certification. States also issue emergency certificates to individuals who do not meet all requirements for a regular certificate when schools cannot hire enough teachers with regular certificates.

Almost all States require applicants for teacher certification to be tested for competency in basic skills such as reading and writing, teaching skills, or subject matter proficiency. Almost all require continuing education for renewal of the teacher's certificate—some require a master's degree.

Many States have reciprocity agreements that make it easier for teachers certified in one State to become certified in another. Teachers may become board certified by successfully completing the National Board for Professional Teaching Standards certification process. This certification is voluntary, but may result in a higher salary.

In addition to being knowledgeable in their subject, the ability to communicate, inspire trust and confidence, and motivate students, as well as understand their educational and emotional needs, is essential for teachers. They also should be organized, dependable, patient, and creative.

With additional preparation and certification, 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 positions is limited. 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 teaching responsibilities.

Job Outlook

Overall employment of kindergarten, elementary, and secondary school teachers is expected to increase faster than the average for all occupations through the year 2005, fueled by dramatic growth among special education teachers. However, projected employment growth varies among individual teaching occupations. Job openings for all teachers are expected to increase substantially by the end of the decade as the large number of teachers now in their forties and fifties reach retirement age.

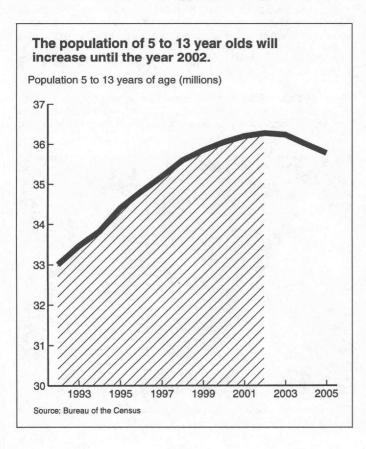
Employment of special education teachers is expected to increase much faster than the average for all occupations through the year 2005 due to legislation emphasizing training and employment for individuals with disabilities; technological advances resulting in more survivors of accidents and illnesses; and growing public interest in individuals with special needs. Qualified persons should have little trouble finding a job, due to increased demand for these workers combined with relatively high turnover among special education teachers. Many special education teachers switch to general education teaching or change careers altogether, often because of job stress associated with teaching special education, particularly excessive paperwork, and inadequate administrative support.

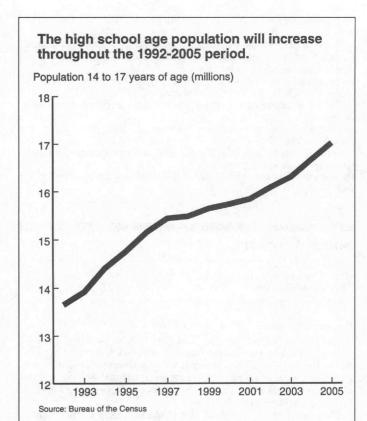
Employment of secondary school teachers is expected to grow faster than the average for all occupations through the year 2005, and average employment growth is projected for kindergarten and elementary school teachers. Assuming relatively little change in average class size, employment growth of teachers depends on the rates of population growth and corresponding student enrollments. The population of 14- to 17-year-olds is expected to experience relatively strong growth through the year 2005, spurring demand for secondary school teachers. The population of 5- to 13-year olds also is projected to increase, but at a slower rate, resulting in divergent growth rates for individual teaching occupations.

The supply of teachers also is expected to increase in response to reports of improved job prospects, more teacher involvement in school policy, greater public interest in education, and higher salaries. In fact, enrollments in teacher training programs already have increased in recent years. In addition, more teachers should be available from alternative certification programs.

Some central cities and rural areas have difficulty attracting enough teachers, so job prospects should continue to be better in these areas than in suburban districts. Mathematics, science, and special education teachers remain in short supply. Concerns over a future work force that may not meet employers' needs could spur demand for teachers who specialize in basic skills instruction—reading, writing, and mathematics. With enrollments of minorities increasing, efforts to recruit minority teachers may intensify.

The number of teachers employed depends on State and local expenditures for education. Pressures from taxpayers to limit spending could result in fewer teachers than projected; pressures to spend more to improve the quality of education could mean more.





Earnings

According to the National Education Association, public secondary school teachers averaged about \$36,000 a year in 1992-93; public elementary school teachers averaged \$34,800. Earnings for special education teachers are comparable. Earnings in private schools generally are lower.

Many public school teachers belong to unions, such as 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 some 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

Kindergarten, elementary, and secondary school teaching requires a wide 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 college and university faculty, counselors, education administrators, employment interviewers, librarians, preschool workers, public relations specialists, sales representatives, social workers, and trainers and employee development specialists.

Special education teachers work with students with disabilities and special needs. Other occupations that help people with disabilities include school psychologists, speech pathologists, and occupational, physical, and recreational therapists.

Sources of Additional Information

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

Înformation on teachers' unions and education-related issues may be obtained from:

P 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 teacher education programs accredited by the National Council for Accreditation of Teacher Education can be obtained from:

Pational Council for Accreditation of Teacher Education, 2010 Massachusetts Ave. NW., 2nd Floor, Washington, DC 20036.

For information on voluntary teacher certification requirements,

Pational Board for Professional Teaching Standards, 300 River Pl., Detroit, MI 48207.

A list of institutions offering training programs in special education may be obtained from:

Council for Exceptional Children, 1920 Association Dr., Reston, VA 22091.

Social Workers

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Nature of the Work

Social workers help people. They help individuals cope with problems such as inadequate housing, unemployment, lack of job skills, financial mismanagement, serious illness, disability, substance abuse, unwanted pregnancy, or antisocial behavior. They also work with families that have serious conflicts, including those involving child or spousal abuse.

Through direct counseling, social workers help clients identify their real concerns and help them to consider solutions and find resources. Often, social workers provide concrete information such as: Where to go for debt counseling; how to find child care or elder care; how to apply for public assistance or other benefits; or how to get an alcoholic or drug addict admitted to a rehabilitation program. Social workers may also arrange for services in consultation with clients and then follow through to assure the services are actually helpful. They may review eligibility requirements, fill out forms and applications, arrange for services, visit clients on a regular basis, and step in during emergencies.

Most social workers specialize in a clinical field such as child welfare and family services, mental health, medical social work, school social work. Clinical social workers offer psychotherapy or counseling and a range of services in public agencies, clinics, as well as in private practice. Other social workers are employed in community organization, administration, or research.

Social workers in child welfare or family services may counsel children and youths who have difficulty adjusting socially, advise parents on how to care for disabled children, or arrange for homemaker services during a parent's illness. If children have serious problems in school, child welfare workers may consult with parents, teachers, and counselors to identify underlying causes and develop plans for treatment. Some social workers assist single parents, arrange adoptions, and help find foster homes for neglected or abandoned children. Child welfare workers also work in residential institutions for children and adolescents.

Social workers in child or adult protective services investigate reports of abuse and neglect and intervene if necessary. They may institute legal action to remove children from homes and place them temporarily in an emergency shelter or with a foster family.

Mental health social workers provide services for persons with mental or emotional problems, such as 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. (Also see the statements on counselors and psychologists elsewhere in the *Handbook*.)

Medical social workers help patients and their families cope with chronic, acute, or terminal illnesses and handle problems that may stand in the way of recovery or rehabilitation. They may organize support groups for families of patients suffering from cancer, AIDS, Alzheimer's disease, or other illnesses. They also advise family caregivers, and counsel patients and help plan for their needs after discharge by arranging for at-home services—from meals-on-wheels to oxygen equipment. Some work on interdisciplinary teams that

evaluate certain kinds of patients—geriatric or transplant patients,

School social workers diagnose students' problems and arrange needed services, counsel children in trouble, and help integrate disabled students into the general school population. School social workers deal with problems such as student pregnancy, misbehavior in class, and excessive absences. They also advise teachers on how to deal with problem students.

Social workers in criminal justice make recommendations to courts, do pre-sentencing assessments, and provide services for prison inmates and their families. Probation and parole officers provide similar services to individuals on parole or sentenced by a court to probation.

Industrial or occupational social workers generally work in an employer's personnel department or health unit. Through employee assistance programs, they help workers cope with job-related pressures or personal problems that affect the quality of their work. They offer direct counseling to employees, often those whose performance is hindered by emotional or family problems or substance abuse. They also develop education programs and refer workers to specialized community programs.

Some social workers specialize in gerontological services. They run support groups for family caregivers or for the adult children of aging parents; advise elderly people or family members about the choices in such areas as housing, transportation, and long-term care; and coordinate and monitor services.

Working Conditions

Most social workers have a standard 40-hour week. However, they may work some evenings and weekends to meet with clients, attend community meetings, and handle emergencies. Some, particularly in voluntary nonprofit agencies, work part time. They may spend most of their time in an office or residential facility, but may also travel locally to visit clients or meet with service providers.

The work, while satisfying, can be emotionally draining. Understaffing and large caseloads add to the pressure in some agencies.

Employment

Social workers held about 484,000 jobs in 1992. Nearly 40 percent of the jobs were in State, county, or municipal government agencies, primarily in departments of human resources, social services, child welfare, mental health, health, housing, education, and corrections. Most in the private sector were in voluntary social service agencies, community and religious organizations, hospitals, nursing homes, or home health agencies.

Although most social workers are employed in cities or suburbs, some work in rural areas.

Training, Other Qualifications, and Advancement

A bachelor's degree is the minimum requirement for most positions. Besides the bachelor's in social work (BSW), undergraduate majors



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in psychology, sociology, and related fields satisfy hiring requirements in some agencies, especially small community agencies. A master's degree in social work (MSW) is generally necessary for positions in health and mental health settings. Jobs in public agencies may also require an MSW. Supervisory, administrative, and staff training positions usually require at least an MSW. College and University teaching positions and most research appointments normally require a doctorate in social work

În 1991, the Council on Social Work Education accredited 297 BSW programs and 103 MSW programs. There were 49 doctoral programs for Ph.D. in Social Work and for DSW (Doctor of Social Work). BSW programs prepare graduates for direct service positions such as caseworker or group worker. They include courses in social work practice, social welfare policies, human behavior and the social environment, and social research methods. Accredited BSW programs require at least

400 hours of supervised field experience.

An MSW degree prepares graduates to perform assessments, to manage cases, and to supervise other workers. Master's programs usually last 2 years and include 900 hours of supervised field instruction, or internship. Entry into an MSW program does not require a bachelor's in social work, but courses in psychology, biology, sociology, economics, political science, history, social anthropology, urban studies, and social work are recommended. Some schools offer an accelerated MSW program for those with a BSW.
Social workers may advance to supervisor, program manager, as-

sistant director, and finally to executive director of an agency or department. Advancement generally requires an MSW, as well as experience. Other career options for social workers are teaching, research, and consulting. Some help formulate government policies by analyzing and advocating policy positions in government agen-

cies, in research institutions, and on legislators' staffs.

Some social workers go into private practice. Most private practitioners are clinical social workers who provide psychotherapeutic counseling, usually paid through health insurance. Private practitioners must have completed an MSW and a period of supervised work experience. A network of contacts for referrals is also essential.

In 1993, all States and the District of Columbia had licensing, certification, or registration laws regarding social work practice and the use of professional titles. In addition, voluntary certification is offered by the National Association of Social Workers (NASW), which grants the titled ACSW (Academy of Certified Social Workers) or ACBSW (Academy of Certified Baccalaureate Social Workers) ers) to those who qualify. For clinical social workers, professional credentials include listing in the NASW Register of Clinical Social Workers or in the Directory of American Board of Examiners in Clinical Social Work. These credentials are particularly important for those in private practice; some health insurance providers require them for reimbursement.

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.

Job Outlook

Employment of social workers is expected to increase faster than the average for all occupations through the year 2005. The number of older people, who are more likely to need social services, is growing rapidly. In addition, requirements for social workers will grow with increases in the need for and concern about services to the mentally ill, the mentally retarded, and individuals and families in crisis. Many job openings will also arise due to the need to replace social workers who leave the occupation.

Employment of social workers in hospitals is projected to grow much faster than the average for the economy as a whole due to greater emphasis on discharge planning, which facilitates early discharge of patients by assuring that the necessary medical services and social supports are in place when individuals leave the hospital.

Employment of social workers in private social service agencies is projected to grow about as fast as the average. Although demand for their services is expected to increase rapidly, agencies will increasingly restructure services and hire more lower paid human services workers instead of social workers. Employment in government should also grow about as fast as the average in response to increasing needs for public welfare and family services.

Social worker employment in home health care services is growing, not only because hospitals are moving to release patients more quickly, but because a large and growing number of people have impairments or disabilities that make it difficult to live at home without some form of assistance.

Opportunities for social workers in private practice will expand because of the anticipated availability of funding from health insurance and from public sector contracts. Also, with increasing affluence, people will be more willing to pay for professional help to deal with personal problems. The growing popularity of employee assistance programs is also expected to spur demand for private practitioners, some of whom provide social work services to corporations on a contract basis.

Employment of school social workers is expected to grow, due to expanded efforts to respond to the adjustment problems of immigrants, children from single-parent families, and others in difficult situations. Moreover, continued emphasis on integrating disabled children into the general school population—a requirement under the Education for All Handicapped Children Act—will probably lead to more jobs. The availability of State and local funding will dictate the actual increase in jobs in this setting, however.

Competition for social worker jobs is stronger in cities where training programs for social workers abound; rural areas often find

it difficult to attract and retain qualified staff.

Earnings

The median earnings of social workers with MSW degrees were \$30,000 in 1992, according to a membership survey of the National Association of Social Workers. For those with BSW degrees, median earnings were \$20,000 according to the same survey.

In hospitals, social workers who worked full-time averaged about \$30,850 in 1993, according to a survey performed by the University of Texas Medical Branch. Salaries ranged from a minimum of about

\$25,600 to a maximum of nearly \$38,700.

Social workers employed by the Federal Government averaged \$41,400 in 1993.

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, counseling psychologists, and vocational rehabilitation counselors.

Sources of Additional Information

For information about career opportunities in social work, contact: P National Association of Social Workers, 750 First St. NE., Suite 700, Washington, DC 20002-4241.

Managers, Inc., 6501 North Federal

Highway, Suite 5, Boca Raton, FL 33487.

An annual Directory of Accredited BSW and MSW Programs is available for \$10.00 from: 🖙 Council on Social Work Education, 1600 Duke St., Alexandria, VA 22314-3421.

Teacher Aides

(D.O.T. 099.327; 219.467; 249.367-074, -086)

Nature of the Work

Teacher aides, also called paraprofessionals or "paraeducators," provide instructional and clerical support for classroom teachers, allowing teachers more time for lesson planning and teaching. Aides assist and supervise students in the classroom, cafeteria, schoolyard, or on field trips. They record grades, set up equipment, or help prepare materials for instruction. They also tutor and assist children in learning class material.

Aides' responsibilities vary greatly. Some teacher aides just handle routine nonteaching and clerical tasks. They grade tests and pa-pers, check homework, keep health and attendance records, type, file, and duplicate materials. They also may stock supplies, operate audiovisual equipment, and keep classroom equipment in order.

Other aides instruct 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 work, or helping them find information for reports. They may supervise independent study or help students in vocational or work-study programs find jobs. Teacher aides also may provide personal attention to "at-risk" students—those whose families live in poverty, for example—or students with special needs—those who speak English as a second language, for example. Aides help assess a student's progress by observing a student's performance and recording relevant data.

Many aides have a combination of instructional and clerical duties, designed to most effectively assist classroom teachers. Sometimes, aides take charge of special projects and prepare equipment

or exhibits—for a science demonstration, for example.

Working Conditions

About half of all teacher aides work part time during the school year. Most aides who provide educational instruction work the traditional 9- to 10-month school year, usually in a classroom setting. Aides also may work outdoors supervising recess when weather allows, and 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.

Employment

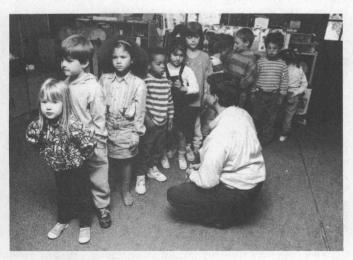
Teacher aides held about 885,000 jobs in 1992. About 8 out of 10 worked in elementary and secondary schools, mostly in the lower grades. A significant number assisted special education teachers in working with children who have disabilities. Most of the others worked in child daycare centers and religious organizations.

Training, Other Qualifications, and Advancement

Educational requirements for teacher aides range from a high school diploma to some college training. Those aides with teaching responsibilities usually require more training than those who don't have teaching tasks. Increasingly, employers prefer aides who have some college training. Many schools require previous experience in working with children.

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

Teacher aides should enjoy working with children and be able to handle classroom situations with fairness and patience. Aides also must demonstrate initiative and a willingness to follow a teacher's



Job openings for teacher aides should be plentiful.

directions. They must have good oral and writing skills and be able to communicate effectively with students and teachers. Some aides must be able to speak a second language to help children whose primary language is not English. Clerical and computer skills also may be necessary.

Some States have established certification and training requirements for general teacher aides. To qualify, an individual may need a high school diploma or general equivalency degree (G.E.D.), or

even some college training.

Advancement for teacher aides, 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 so that aides may take college courses. Aides who earn bachelor's degrees may become certified teachers.

Job Outlook

Employment of teacher aides is expected to grow much faster than the average for all occupations through the year 2005. The increasing number of special education classes, restructuring of schools, and the rising number of students who speak English as a second language will spur rapid growth of teacher aides. Numerous job openings also will arise as workers transfer to other occupations or leave the labor force for family responsibilities, to return to school, or for other reasons—characteristic of occupations that require limited formal education and offer relatively low pay.

Since many teacher aides work in special education, a field that is expected to experience rapid growth through the year 2005, strong demand is expected for teacher aides. The number of special education programs is rising in response to Federal legislation which mandates appropriate education for all children with disabilities. Children with special needs require much personal attention, and special

education teachers rely heavily on teacher aides.

In addition, school reforms which call for more individual instruction should further enhance employment opportunities for teacher aides. More paraprofessionals are being employed to provide students with the personal instruction and remedial education they need; most students greatly benefit from additional attention, individual instruction, and positive feedback.

Teacher aide employment is sensitive to changes in State and local expenditures for education. Pressures on education budgets are greater in some States and localities than in others. A number of teacher aide positions, such as Head Start assistant teachers, are financed through Federal programs, which also may be affected by budget constraints.

Earnings

According to the National Survey of Salaries and Wages in Public Schools, conducted by the Educational Research Service, aides involved in teaching activities averaged \$8.31 an hour in 1992-93; those performing only nonteaching activities averaged \$7.82 an hour. Earnings varied by region, work experience, and academic qualifications. Many aides are covered by collective bargaining agreements and have benefits similar to those of the teachers in their schools.

Related Occupations

Teacher aides who instruct children have duties similar to those of preschool, elementary, and secondary school teachers and librarians. However, teacher aides do not have the same level of responsibility or training. The support activities of teacher aides and their educational backgrounds are similar to those of child-care workers, family daycare providers, library technicians, and library assistants.

Sources of Additional Information

Information on teacher aides and on a wide range of education-related subjects, including teacher aide unionization, can be obtained from:

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

For information on a career as a teacher aide in special education,

contact:

The National Resource Center for Paraprofessionals in Special Education, 25 West 43rd St., Room 620, New York, NY 10036.

School superintendents and State departments of education can provide details about employment requirements.