film and video editors worked for motion picture studios. Most camera operators and editors worked in metropolitan areas.

Training, Other Qualifications, and Advancement

Employers usually seek applicants with a “good eye,” imagination, and creativity, as well as a good technical understanding of camera operation. Camera operators and editors usually acquire their skills through on-the-job training or formal postsecondary training at vocational schools, colleges, universities, or photographic institutes. Formal education may be required for some positions.

Many universities, community and junior colleges, vocational-technical institutes, and private trade and technical schools offer courses in camera operation and videography. Basic courses cover equipment, processes, and techniques. Bachelor’s degree programs, especially those including business courses, provide a well-rounded education.

Individuals interested in camera operations should subscribe to videographic newsletters and magazines, join clubs, and seek summer or part-time employment in cable and television networks, motion picture studios, or camera and video stores.

Camera operators in entry-level jobs learn to set up lights, cameras, and other equipment. They may receive routine assignments requiring camera adjustments or decisions on what subject matter to capture. Camera operators in the film and television industries usually are hired for a job based on recommendations from individuals such as producers, directors of photography, and camera assistants from previous projects, or through interviews with the producer. ENG and studio camera operators who work for television affiliates usually start in small markets to gain experience.

Camera operators need good eyesight, artistic ability, and hand-eye coordination. They should be patient, accurate, and detail-oriented. Camera operators also should have good communication skills, and, if needed, the ability to hold a camera by hand for extended periods.

Camera operators who operate their own businesses, or freelance, need business skills as well as talent. These individuals must know how to submit bids; write contracts; get permission to shoot on locations that normally are not open to the public; obtain releases to use film or tape of people; price their services; secure copyright protection for their work; and keep financial records.

With increased experience, operators may advance to more demanding assignments or positions with larger or network television stations. Advancement for ENG operators may mean moving to larger media markets. Other camera operators and editors may become directors of photography for movie studios, advertising agencies, or television programs. Some teach at technical schools, film schools, or universities.

Job Outlook

Camera operators and editors can expect keen competition for job openings because the work is attractive to many people. The number of individuals interested in positions as videojournalists and movie camera operators usually is much greater than the number of openings. Those who succeed in landing a salaried job or attracting enough work to earn a living by freelancing are likely to be the most creative, highly motivated, able to adapt to rapidly changing technologies, and adept at operating a business. Related work experience or job-related training also are beneficial to prospective camera operators.

Employment of camera operators and editors is expected to grow faster than the average for all occupations through 2010. Rapid expansion of the entertainment market, especially motion picture production and distribution, will spur growth of camera operators. In addition, computer and Internet services provide new outlets for interactive productions. Camera operators will be needed to film made-for-the-Internet broadcasts such as live music videos, digital movies, sports, and general information or entertainment programming. These images can be delivered directly into the home either on compact discs or over the Internet. Modest growth also is expected in radio and television broadcasting.

Earnings

Median annual earnings for television, video, and motion picture camera operators were $27,870 in 2000. The middle 50 percent earned between $19,230 and $44,150. The lowest 10 percent earned less than $14,130, and the highest 10 percent earned more than $63,690. Median annual earnings were $31,560 in motion picture production and services and $23,470 in radio and television broadcasting.

Median annual earnings for film and video editors were $34,160 in 2000. The middle 50 percent earned between $24,800 and $52,000. The lowest 10 percent earned less than $18,970, and the highest 10 percent earned more than $71,280. Median annual earnings were $36,770 in motion picture production and services, the industry employing the largest numbers of film and video editors.

Many camera operators who work in film or video are freelancers; their earnings tend to fluctuate each year. Because most freelance camera operators purchase their own equipment, they incur considerable expense acquiring and maintaining cameras and accessories.

Related Occupations

Related arts and media occupations include artists and related workers, broadcast and sound engineering technicians and radio operators, designers, and photographers.

Sources of Additional Information

Information about career and employment opportunities for camera operators and film and video editors is available from local offices of State employment service agencies, local offices of the relevant trade unions, and local television and film production companies who employ these workers.

Writers and Editors

(O*NET 27-3041.00, 27-3042.00, 27-3043.01, 27-3043.02, 27-3043.04)

Significant Points

• Most jobs require a college degree either in the liberal arts—communications, journalism, and English are preferred—or a technical subject for technical writing positions.

• Competition is expected to be less for lower paying, entry-level jobs at small daily and weekly newspapers, trade publications, and radio and television broadcasting stations in small markets.

• Persons who fail to gain better paying jobs or earn enough as independent writers usually are able to transfer readily to communications-related jobs in other occupations.

Nature of the Work

Writers and editors communicate through the written word. Writers and editors generally fall into one of three categories. Writers and authors develop original fiction and nonfiction for books, magazines and trade journals, newspapers, online publications, company
newsletters, radio and television broadcasts, motion pictures, and advertisements. *Technical writers* develop scientific or technical materials, such as scientific and medical reports, equipment manuals, appendices, or operating and maintenance instructions. They also may assist in layout work. *Editors* select and prepare material for publication or broadcast and review and prepare a writer’s work for publication or dissemination.

Nonfiction writers either select a topic or are assigned one, often by an editor or publisher. Then, they gather information through personal observation, library and Internet research, and interviews. Writers select the material they want to use, organize it, and use the written word to express ideas and convey information. Writers also revise or rewrite sections, searching for the best organization or the right phrasing. Reporters and correspondents—including newswriters, columnists, and editorial writers—are described elsewhere in the *Handbook*.

*Creative writers, poets, and lyricists,* including novelists, playwrights, and screenwriters, create original works—such as prose, poems, plays, and song lyrics—for publication or performance. Some works may be commissioned (at the request of a sponsor); others may be written for hire (based on completion of a draft or an outline). *Copy writers* prepare advertising copy for use by publication or broadcast media, or to promote the sale of goods and services. *Newsletter writers* produce information for distribution to association members, corporate employees, organizational clients, or the public. Writers and authors also construct crossword puzzles and prepare speeches.

*Technical writers* put scientific and technical information into easily understandable language. They prepare scientific and technical reports, operating and maintenance manuals, catalogs, parts lists, assembly instructions, sales promotion materials, and project proposals. They also plan and edit technical reports and oversee preparation of illustrations, photographs, diagrams, and charts. *Science and medical writers* prepare a range of formal documents presenting detailed information on the physical or medical sciences. They impart research findings for scientific or medical professions, organize information for advertising or public relations needs, and interpret data and other information for a general readership.

Many writers prepare material directly for the Internet. For example, they may write for electronic newspapers or magazines, create short fiction, or produce technical documentation only available online. Also, they may write the text of Web sites. These writers should be knowledgeable about graphic design, page layout and desktop publishing software. Additionally, they should be familiar with interactive technologies of the Web so they can blend text, graphics, and sound together.

Freelance writers sell their work to publishers, publication enterprises, manufacturing firms, public relations departments, or advertising agencies. Sometimes, they contract with publishers to write a book or article. Others may be hired on a job-basis to complete specific assignments such as writing about a new product or technique. *Editors* review, rewrite, and edit the work of writers. They may also do original writing. An editor’s responsibilities vary depending on the employer and type and level of editorial position held. In the publishing industry, an editor’s primary duties are to plan the contents of books, technical journals, trade magazines, and other general interest publications. Editors decide what material will appeal to readers, review and edit drafts of books and articles, offer comments to improve the work, and suggest possible titles. Additionally, they oversee the production of the publications.

Major newspapers and newsmagazines usually employ several types of editors. The *executive editor* oversees *assistant editors* who have responsibility for particular subjects, such as local news, national news, feature stories, or sports. Executive editors generally have the final say about what stories are published and how they are covered. The *managing editor* usually is responsible for the daily operation of the news department. *Assignment editors* determine which reporters will cover a given story. *Copy editors* mostly review and edit a reporter’s copy for accuracy, content, grammar, and style.

In smaller organizations, like small daily or weekly newspapers or membership newsletter departments, a single editor may do everything or share responsibility with only a few other people. Executive and managing editors typically hire writers, reporters, or other employees. They also plan budgets and negotiate contracts with freelance writers, sometimes called “stringers” in the news industry. In broadcasting companies, *program directors* have similar responsibilities.

Editors and program directors often have assistants. Many assistants, such as copy editors or *production assistants,* hold entry-level jobs. They review copy for errors in grammar, punctuation, and spelling, and check copy for readability, style, and agreement with editorial policy. They suggest revisions, such as changing words or rearranging sentences to improve clarity or accuracy. They also do research for writers and verify facts, dates, and statistics. Production assistants arrange page layouts of articles, photographs, and advertising; compose headlines; and prepare copy for printing. *Publication assistants* who work for publishing houses may read and evaluate manuscripts submitted by freelance writers, proofread printers’ galleys, or answer letters about published material. Production assistants on small papers or in radio stations compile articles available from wire services or the Internet, answer phones, and make photocopies.

Most writers and editors use personal computers or word processors. Many use desktop or electronic publishing systems, scanners, and other electronic communications equipment.

**Working Conditions**

Some writers and editors work in comfortable, private offices; others work in noisy rooms filled with the sound of keyboards and computer printers as well as the voices of other writers tracking
down information over the telephone. The search for information sometimes requires travel to diverse workplaces, such as factories, offices, or laboratories, but many have to be content with telephone interviews, the library, and the Internet.

For some writers, the typical workweek runs 35 to 40 hours. However, writers occasionally may work overtime to meet production deadlines. Those who prepare morning or weekend publications and broadcasts work some nights and weekends. Freelance writers generally work more flexible hours, but their schedules must conform to the needs of the client. Deadlines and erratic work hours, often part of the daily routine for these jobs, may cause stress, fatigue, or burnout.

Changes in technology and electronic communications also affect a writer’s work environment. For example, laptops allow writers to work from home or while on the road. Writers and editors who use computers for extended periods may experience back pain, eyestrain, or fatigue.

**Employment**

Writers and editors held about 305,000 jobs in 2000. About 126,000 jobs were for writers and authors; 57,000 were for technical writers; and 122,000 were for editors. Nearly one-fourth of jobs for writers and editors were salaried positions with newspapers, magazines, and book publishers. Substantial numbers, mostly technical writers, work for computer software firms. Other salaried writers and editors work in educational facilities, advertising agencies, radio and television broadcasting studios, public relations firms, and business and nonprofit organizations, such as professional associations, labor unions, and religious organizations. Some develop publications and technical materials for government agencies or write for motion picture companies.

Jobs with major book publishers, magazines, broadcasting companies, advertising agencies, and public relations firms are concentrated in New York, Chicago, Los Angeles, Boston, Philadelphia, and San Francisco. Jobs with newspapers, business and professional journals, and technical and trade magazines are more widely dispersed throughout the country.

Thousands of other individuals work as freelance writers, earning some income from their articles, books, and less commonly, television and movie scripts. Most support themselves with income derived from other sources.

**Training, Other Qualifications, and Advancement**

A college degree generally is required for a position as a writer or editor. Although some employers look for a broad liberal arts background, most prefer to hire people with degrees in communications, journalism, or English. For those who specialize in a particular area, such as fashion, business, or legal issues, additional background in the chosen field is expected. Knowledge of a second language is helpful for some positions.

Technical writing requires a degree in, or some knowledge about, a specialized field—engineering, business, or one of the sciences, for example. In many cases, people with good writing skills can learn specialized knowledge on the job. Some transfer from jobs as technicians, scientists, or engineers. Others begin as research assistants, or trainees in a technical information department, develop technical communication skills, and then assume writing duties.

Writers and editors must be able to express ideas clearly and logically and should love to write. Creativity, curiosity, a broad range of knowledge, self-motivation, and perseverance also are valuable. Writers and editors must demonstrate good judgment and a strong sense of ethics in deciding what material to publish. Editors also need tact and the ability to guide and encourage others in their work.

For some jobs, the ability to concentrate amid confusion and to work under pressure is essential. Familiarity with electronic publishing, graphics, and video production equipment increasingly is needed. Online newspapers and magazines require knowledge of computer software used to combine online text with graphics, audio, video, and 3-D animation.

High school and college newspapers, literary magazines, community newspapers, and radio and television stations all provide valuable, but sometimes unpaid, practical writing experience. Many magazines, newspapers, and broadcast stations have internship programs for students. Interns write short pieces, conduct research and interviews, and learn about the publishing or broadcasting business.

In small firms, beginning writers and editors hired as assistants may actually begin writing or editing material right away. Opportunities for advancement can be limited, however. In larger businesses, jobs usually are more formally structured. Beginners generally do research, factchecking, or copy editing. They take on full-scale writing or editing duties less rapidly than do the employees of small companies. Advancement often is more predictable, though, coming with the assignment of more important articles.

**Job Outlook**

Employment of writers and editors is expected to increase faster than the average for all occupations through the year 2010. Employment of salaried writers and editors for newspapers, periodicals, book publishers, and nonprofit organizations is expected to increase as demand grows for their publications. Magazines and other periodicals increasingly are developing market niches, appealing to readers with special interests. Also, online publications and services are growing in number and sophistication, spurring the demand for writers and editors. Businesses and organizations are developing newsletters and Internet websites and more companies are experimenting with publishing materials directly for the Internet. Advertising and public relations agencies, which also are growing, should be another source of new jobs. Demand for technical writers and writers with expertise in specialty areas, such as law, medicine, or economics, is expected to increase because of the continuing expansion of scientific and technical information and the need to communicate it to others.

In addition to job openings created by employment growth, many openings will occur as experienced workers retire, transfer to other occupations, or leave the labor force. Replacement needs are relatively high in this occupation; many freelancers leave because they cannot earn enough money.

Despite projections of fast employment growth and numerous replacement needs, the outlook for most writing and editing jobs is expected to be competitive. Many people with writing or journalism training are attracted to the occupation. Opportunities should be best for technical writers and those with training in a specialized field. Rapid growth and change in the high technology and electronics industries result in a greater need for people to write users’ guides, instruction manuals, and training materials. Developments and discoveries in the law, science, and technology generate demand for people to interpret technical information for a more general audience. This work requires people who are not only technically skilled as writers, but also familiar with the subject area. Also, individuals with the technical skills for working on the Internet may have an advantage finding a job as a writer or editor.

Opportunities for editing positions on small daily and weekly newspapers and in small radio and television stations, where the pay is low, should be better than those in larger media markets. Some small publications hire freelance copy editors as backup for staff editors or as additional help with special projects. Aspiring writers and editors benefit from academic preparation in another
discipline as well, either to qualify them as writers specializing in that discipline or as a career alternative if they are unable to get a job in writing.

Earnings
Median annual earnings for salaried writers and authors were $42,270 in 2000. The middle 50 percent earned between $29,090 and $57,330. The lowest 10 percent earned less than $20,290, and the highest 10 percent earned more than $81,370. Median annual earnings were $26,470 in the newspaper industry.

Median annual earnings for salaried technical writers were $47,790 in 2000. The middle 50 percent earned between $37,280 and $60,000. The lowest 10 percent earned less than $28,890, and the highest 10 percent earned more than $74,360. Median annual earnings in computer and data processing services were $51,220.

Median annual earnings for salaried editors were $39,370 in 2000. The middle 50 percent earned between $28,880 and $54,320. The lowest 10 percent earned less than $22,460, and the highest 10 percent earned more than $73,330. Median annual earnings in the industries employing the largest numbers of editors were as follows:

<table>
<thead>
<tr>
<th>Industry</th>
<th>Median Annual Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer and data processing services</td>
<td>$45,800</td>
</tr>
<tr>
<td>Periodicals</td>
<td>$42,560</td>
</tr>
<tr>
<td>Newspapers</td>
<td>$37,560</td>
</tr>
<tr>
<td>Books</td>
<td>$37,550</td>
</tr>
</tbody>
</table>

Related Occupations
Writers and editors communicate ideas and information. Other communications occupations include announcers; interpreters and translators; news analysts, reporters, and correspondents; and public relations specialists.

Sources of Additional Information
For information on careers in technical writing, contact:

For information on union wage rates for newspaper and magazine editors, contact:
- The Newspaper Guild-CWA, Research and Information Department, 501 Third St. NW., Suite 250, Washington, DC 20001.

Community and Social Services Occupations

Clergy

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

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

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

Other members of the clergy serve their religious communities in ways that do not call for them to hold positions in congregations.

Some serve as chaplains in the U.S. Armed Forces and in hospitals, while others help to carry out the missions of religious community and social services agencies. A few members of the clergy serve in administrative or teaching posts in schools at all grade levels, including seminaries.

Working Conditions
Members of the clergy typically work irregular hours and many put in longer than average work days. Those who do not work in congregational settings may have more routine schedules. In 2000, almost one-fifth of full-time clergy worked 60 or more hours a week, more than 3 times that of all workers in professional occupations. Although many of their activities are sedentary and intellectual in nature, clergy frequently are called on short notice to visit the sick, comfort the dying and their families, and provide counseling to those in need. Involvement in community, administrative, and educational activities sometimes require clergy to work evenings, early mornings, holidays, and weekends.

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

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

Individuals considering a career in the clergy should realize they are choosing not only a career but also a way of life. In fact, most members of the clergy remain in their chosen vocation throughout