# From court reporting to Web casting: Captioning in the new millennium

by Tamara Dillon

ritten words are more permanent than spoken ones. Written words are also more easily saved, searched, and repackaged. New technology and media—such as computer search engines, video conferences, and Web casts—give text even more importance. And providing access to everyone, including people who are deaf or hard of hearing, has created a need for workers who can "capture" spoken words and then translate them into text.

For court reporters and captioners, who make their living by turning speech into text, those trends spell opportunity.

Court reporters continue to be guardians of the record in legal proceedings: They create word-for-word, written accounts of everything that is said in depositions and trials. In doing so, these workers help to ensure fairness and accuracy.

Many court reporters work as captioners in a broad range of settings; however, some captioners aren't trained to work in a courtroom. When collecting data, the U.S. Bureau of Labor Statistics (BLS) defines the occupation of court reporter to include captioners who create a written record of spoken events using court reporting techniques.

Read on to learn how court reporters and captioners turn spoken words into perfect text at more than 200 words a minute. Then, see how technology lets them take their skills out of the courtroom and into television

and Web broadcasting and the captioning of live, in-person presentations. This ability is part of what is driving employment and earnings growth in the occupation and changing the way people train for the profession.

# The technology of court reporting and captioning

David Rogala uses his fast fingers and exceptional shorthand skills in the traditional arena of the courtroom. He records trial testimony, oral arguments, and legal decisions as they are spoken. But he also provides other services, such as creating instant and searchable transcripts.

Rogala is typical of others in his occupation. Whether they work in a courtroom, a classroom, or nearly anyplace else, court reporters and captioners can type almost as fast as people can speak. But to do that, these workers need more than a standard-issue typewriter.

**Recording speech.** Court reporters and captioners use computers and a specialized machine, called a stenotype, to do their job. The stenotype works like a portable word processor but with a modified 22-button keyboard, instead of the standard (QWERTY) setup.

Modern stenotypes have two rows of consonant keys and four vowel keys. By striking multiple keys at the same time, court reporters and captioners type entire words at once. The left hand spells out the beginning of a syllable while the right hand spells out the end; the keys are pressed simultaneously to create a word.

But the text from a stenotype is gibberish to anyone



not trained in machine shorthand. Although court reporters and captioners spell out syllables phonetically, there are not enough keys on the keyboard to cover every sound. Certain combinations of adjacent keys correspond to the missing sounds.

What's more, each court reporter uses different conventions to represent homonyms or other ambiguous words. And court reporters also create their own abbreviations, especially for words and phrases particular to a given job.

Court reporters and captioners save their special spellings and abbreviations in a dictionary on their personal computers and download them into their stenotype machines. "The software is updated regularly," says Lisa Romanak, a captioner of live broadcasts. "The advancements in software allow captioners to manage our dictionaries more easily, which aids in cleaner translation."

**Technology for translation.** In the past, everything that court reporters and captioners typed printed to a narrow roll of paper. Court reporters later translated the notes into English, and sometimes another court reporter, called a scopist, checked the translation.

Now, computers do the translation; more sophisticated stenotype machines translate as they go, in a process called Computer-Aided Transcription (CAT). The paper still records the original notes, but the words appear in translated form on the machine's monitor.

Some captioners use CAT to send instantaneous, but unofficial, transcripts directly to readers' computer screens. This process is called Communication Access Realtime Transcription (CART).

With instant transcripts, court officials and others can review information at will. But more commonly, CART is used to allow people who are deaf or hard of hearing to participate more easily in classroom lectures and business presentations. Using CART technology takes special training and a willingness to keep up with changing software and techniques.

Remote CART, which uses a CART provider at a location that differs from the intended consumer, transmits verbatim text via either direct computer-to-computer software or, more commonly now, over the Internet.

Some court reporters and captioners use their voices instead of a stenotype machine. Called voice writers, these workers speak directly into a voice silencer—a hand-held mask containing a microphone. As they repeat the testimony or other speech into the recorder, the mask prevents them from being heard. Speech recognition CAT technology instantly transcribes the voice writer's spoken words into text on a laptop computer or computer workstation. The text is then ready for distribution.

# Working beyond the law: Entertainment, education, and business

Some court reporters and captioners use CAT and CART to transcribe testimony, legal arguments, and other proceedings as they occur. Other captioners use the same technology to transcribe spoken words from television broadcasts, Web casts, classroom lectures, and business meetings. A transcript aids people who are deaf or hard of hearing, but it also provides a searchable text file for use by anyone.

Captioners specialize in certain types of work, either onsite or offsite; some work for themselves and do a little of everything. For example, Karen Yates provides CART services onsite to a college student. But she also works from home as a Web cast reporter, providing instant text transmissions of sales meetings or other broadcasts.

Broadcasting and Web casting. Broadcast captioners, like Lisa Romanak, use real-time technology to convert speech from television broadcasts into onscreen print for viewers who are hearing impaired. Broadcast

captioners work for television or cable stations; they caption news, emergency broadcasts, sporting events, and other programs. Some captioners simulcast the text of talk shows, news, and sports onto the Internet or an online service.

Web cast Internet reporters caption sales meetings, press conferences, product introductions, and technical training seminars and instantly transmit them via computer. As participants speak into telephones or microphones, the words appear on all participants' computer monitors simultaneously.

**Education.** In her captioning work for a college student, Yates is unfazed by foreign names and places, technical jargon, instructors' accents, and lecture halls' distorting acoustics. She acclimates to accents and reviews materials ahead of time to familiarize herself with the subjects that her client studies.

Captioners like Yates work with students who are deaf or hard of hearing, capturing instruction and lectures from courses and providing a transcript. Educational captioners also work with people who are learning English as a second language. In these situations, the students attend courses with other classmates and receive text, usually on a laptop that is connected to the Internet.

**Business.** Yates also works in businesses, either to assist participants who are deaf or hard of hearing or to create a written record for other purposes. Business events can range from a local training seminar to an international telephone conference.

In these settings, CART services are often seamless—and unknown to hearing participants. Captioning may be provided only to selected participants, who may be present with other attendees or may be in a remote location.

# More captioning jobs, more money

There were 16,260 wage-and-salary court reporters and captioners employed in November 2004, according to BLS. And BLS projects the number of jobs for court reporters and captioners to grow about 15 percent between 2004 and 2014. This rate is about as fast as the average for all occupations.

About 60 percent of the court reporters in the United States in 2004 worked for Federal, State, or local govern-

Technology has increased the efficiency of captioning.

ments; almost all of these probably worked in courts. But Federal rules that require the captioning of hundreds of hours of live television programming each week are creating opportunities outside of court for broadcast captioners, CART providers, and others.

Technology and job growth. Steady improvements in technology have mixed effects on job openings. In some ways, technology is expected to create many job openings for court reporters and captioners because it allows them to provide CART services to the deaf and hard-of-hearing community. However, the number of self-employed court reporters and captioners is projected to decline slightly because technological advances are expensive and deter many of these workers from going into business on their own.

Technology has increased the efficiency of captioning companies that employ broadcast captioners and CART providers, creating employment growth. BLS projects that in 2014, nearly 60 percent of jobs for court reporters and captioners will continue to be in government. But employment growth is expected to be faster for workers in other industries, including employment and business support services.

Advanced technological skills have improved the employment prospects for court reporters and captioners. Government employers seeking to hire court reporters must now compete with large captioning companies, television networks, and universities who supply CART services to their students who are deaf or hard of hearing. "Because of the increased use of, and popularity of, closed captioning of television programs," says Yates, "highly skilled court reporters have been lured into that field."

Earnings. In addition to having more occupational choices, industry sources suggest that tech-savvy court reporters and captioners may have higher earnings.

As with most occupations, earnings for court reporters and captioners vary for reasons that include geographic area, the type of reporting job, and the court reporter's experience. But this occupation's workload flexibility is also an influence. "Because we are paid by the hour or on salary, there is no guesswork to our cash flow," says Yates. "For real-time captioning and traditional judicial reporting, the earnings potential is the same—excellent. The technology and nature of real-time captioning and Web casting have given professionals like me more control over our schedule and income."

In November 2004, wage-and-salary court reporters and captioners earned \$42,720 at the median, according to BLS. This means that half of all court reporters and captioners earned more than this amount, and half earned less. The highest earning 10 percent made more than \$78,840; the lowest earning 10 percent made less than \$23,730. The figures do not include the earnings of the self-employed.

# Ups and downs of captioning

Court reporters and captioners, like most workers in any occupation, have job-related ups and downs. And also like other workers, there are differences of opinion within the occupation about the positive and negative aspects of the work. For example, some may consider it a boon to work at home; others might view that as a bane. As always, individual preferences vary.

Advantages. People who like variety in their work should consider court reporting and captioning because of its myriad possibilities. The need for real-time captioning has taken these workers around the world to press conferences, courtrooms, professional sporting events, boardrooms, entertainment functions, academic settings, and more.

Romanak, for example, covered the late Pope John Paul II's funeral processional. "Everyone's eyes were glued on Rome," she says. "That event was particularly interesting to caption because it seemed as though the broadcasters were learning on air about John Paul II, his death, and the funeral procedures—and then, of course, the election of a new pope, Benedict XVI."

Court reporters and captioners who provide CART services say that they enjoy providing a means of access to the deaf and hard-of-hearing community. Yates began offering CART services 5 years ago and has found the appreciation she receives from the deaf and hard-of hearing community rewarding.

CART reporting in the classroom has also enabled captioners to attend interesting college courses for free. Classroom captioners essentially audit the courses, gaining knowledge from lectures that they attend but without being required to complete homework, research papers, or tests.

Another advantage for captioners is schedule flexibility. The Federal Telecommunications Act of 1996 mandates the captioning of local programs around the country. Real-time captioners are needed to cover local news broadcasts nationwide, providing numerous captioning opportunities throughout the morning, afternoon, and evening.

Court reporters and captioners can work as independent contractors, accepting work from captioning companies or attaining their own clients. Court reporters are often self-employed or work for Federal, State, or local government entities. For captioners, employment likewise varies. Some broadcast captioners work from a company's fixed facilities, from home, or from a remote site.

Captioners who work from home do not have to commute to work. Captioners who work for a captioning company don't need to handle sales and marketing, customer relations, and staffing and payroll.

Disadvantages. Like other occupations, court reporting and captioning have disadvantages. Broadcast captioners and CART providers say that providing error-free transcripts, especially now that clients expect faster work, is often stressful.

Having to type for long periods can cause court reporters and captioners to develop repetitive stress injuries. And the frequency and amount of available work contributes to the possibility of injury over the long term. "Because television is broadcast 24/7, a captioner is required all hours of the day," says Romanak. "Of course, holidays are no exception." Captioners might work more than anticipated in order to earn more, and some captioners might have to work some unpopular shifts.

The high cost of rapidly changing technology is another drawback. The better systems that simplify work for court reporters and captioners are also more expensive.

Keeping up with technology can also be hard work. Court reporters and captioners undergo frequent training as new software and equipment emerge. But most say that they welcome the challenge. After all, many court reporters and captioners are drawn to their career by the exciting possibilities that CAT technology offers.

## Training to type

Prospective court reporters and captioners must have some basic knowledge and skills. These include an excellent vocabulary and a strong grasp of grammar rules, above-average computer skills, and the ability to concentrate, work well alone, and handle pressure.

But court reporters and captioners also need technical

training and, often, certification. The details of that training and certification depend on the specialty chosen.

Court reporting. Court reporters need 2 to 4 years of technical training, unless they are voice writers (see below). The National Court Reporters Association has approved about 70 schools that offer courses in stenotype CAT; many also offer courses in CART.

Several States and the Federal Government require court reporters who work in judicial settings to be licensed and to pass an exam.

The National Court Reporters Association offers several certifications in judicial court reporting. The more certifications a court reporter earns, the more competitive he or she usually is in the job market.

Captioning. Web casting, broadcast closed captioning, and CART have skill requirements similar to those of court reporting. But these captioners need additional training on software and hardware, which usually requires an additional 3 to 6 months of specialized classroom or on-the-job training.

Increasingly, students are learning captioning without first training for work in a courtroom. More court reporting schools and colleges, particularly community colleges, are offering broadcast captioning training to meet the increased demand. Some high schools also offer broadcast captioning and CART-related courses.

In anticipation of increased demand for broadcast captioners, the Federal Government provided grants to several colleges to increase the availability of broadcast captioning training and to expand the supply of trained broadcast captioners.

The CART specialty requires other unique skills because CART reporters usually provide on-the-spot services for people who are deaf or hard of hearing. For example, good CART providers have general knowledge of deaf culture and understand that communication preferences may vary based on how a person with hearing loss identifies himself or herself—such as deaf, hard of hearing, or some other designation.

CART providers learn about communication techniques from many sources, including court reporting association seminars, agencies serving people with disabilities, and sign-language courses. They must keep abreast of current trends, laws, literature, and technological advances relating to the provision of CART services.

The National Court Reporters Association offers certifications for broadcast captioners and for CART providers. Broadcast captioners and CART providers can also be credentialed by building on traditional court reporting certifications.

The United States Court Reporters Association, an organization for reporters who work for the Federal Courts, also offers a captioning credential. Applicants must be members of the association and pass an exam.

Voice writing. Voice writers must be able to speak very quickly because they repeat everything that is said and identify the speakers. Voice writers must also be able to insert punctuation and convey nonverbal responses and gestures. A voice writer needs an extensive vocabulary, and his or her speech recognition dictionary must be broad enough to cover a wide range of words, terminology, and subjects, as well as numerous dialects.

According to the National Verbatim Reporters Association, real-time voice writers can complete their training in 1 academic year. Voice writers interested in learning to use only the basic equipment instead of newer technologies can complete training in 6 to 8 months. Most skilled court reporters and captioners who currently use the stenotype method can learn voice recognition techniques within 6 months. The National Verbatim Reporters Association offers three levels of certification to voice writers.

### For more information

When researching career options, it is often helpful to consider occupations that relate to those that interest you. For example, aspiring court reporters and captioners might also be interested in two related occupations: scopists, who proofread court transcripts and depositions, and medical or legal transcriptionists, who specialize in transcribing dictation by physicians, lawyers, and other medical or legal professionals.

Research these occupations as you would any others. Visit your local library or a career counselor and ask for information. Check out both the occupations and the industries that employ them.

Among the sources to look for from BLS are the 2006-07 print editions of the Occupational Outlook Handbook and the Career Guide to Industries. The Handbook describes the duties, earnings, training, and employment outlook for hundreds of occupations, including court reporters; the Career Guide describes dozens of industries with similar detail. Both are also available online—the *Handbook* at **www.bls.gov/oco** and the *Career* 



Some captioners work in business settings.

### Guide at www.bls.gov/oco/cg.

Court reporter and captioner associations are another good source of information. Listed below are some of the organizations affiliated with the occupation. Each offers career and educational advice. These organizations have general career-related information and provide information on specialties.

National Court Reporters Association 8224 Old Courthouse Rd. Vienna, VA 22182 (703) 556-6272 Toll-free: 1 (800) 272-6272

www.ncraonline.org

National Verbatim Reporters Association 207 Third Ave. Hattiesburg, MS 39401 (601) 582-4345

United States Court Reporters Association P.O. Box 465 Chicago, IL 60690-0465

Toll-free: 1 (800) 628-2730

www.nvra.org

www.uscra.org

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