



Northern Virginia Resource Center for Deaf and Hard of Hearing Persons

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Realtime Captioning and Communication Access Realtime Translation (CART)

What is realtime captioning?

Realtime captioning is done for television viewing of programs that are being broadcast live. Realtime captions are seen as text on a television screen when the TV's internal caption decoder is activated. All televisions sold in the U.S. are required to have this decoder chip built in.

Captions give text for the spoken parts of a program and other auditory information. Television captions are similar to the subtitles of foreign language movies. When done for television, realtime captioning is called "broadcast captioning".

What is CART?

Communication Access Realtime Translation (CART) is provided directly to consumers in a variety of settings. The Massachusetts Department for the Deaf and Hard of Hearing, a leader in providing CART services, contracts with CART writers who have been trained to work with deaf and hard of hearing consumers. The Department also set up a mentoring process and state certification exam. Virginia has no such program.

Both realtime captioning and CART services are provided by trained court reporters using a stenotype machine, a computer, and realtime translation software to create the text that appears on a computer screen, TV set or monitor, or by projection onto a screen. Many realtime providers also use software to enlarge the text and make it easier to read.

With the growth of broadband access, improved software, and need for CART in many settings, providers are now offering remote CART services. The CART provider, located elsewhere, uses a telephone line to pick up audio and an Internet account to transmit the captions to a computer at the location where the deaf or hard of hearing individual needs the captions.

Where are realtime captioning/CART used?

Realtime captioning is a valuable communication tool for deaf and hard of hearing individuals. It is being used in virtually every setting: education, business, organizations, and government. You can find it in classrooms, doctors' offices, courtrooms, staff meetings, community events, conferences, weddings, and almost any other place you can think of.

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How is realtime captioning different from CAN (Computer Assisted Notetaking)?

Realtime captioning provides near word-for-word translation of what is being said, thanks to technology and the skill of the realtime writer. Computer Assisted Notetaking uses a regular computer keyboard instead of the stenotype machine. It can only present a rough summary of what is being said, since the average person speaks at about 180 to 200 words per minute.

Where can I find a realtime writer?

The National Court Reporters Association offers a certification program for realtime reporters and maintains a registry of all reporters who have been certified. Recently the organization, recognizing the growing demand for captioners and CART providers, introduced new certifications: Certified Broadcast Captioner (CBC) and the Certified CART Provider (CCP).

The National Court Reporters Association headquarters is in Vienna, VA . Call 703-556-6272 V or 556-6289 TTY for more information. Better yet, see the many other resources on their website at www.ncra.online.org or those at: <http://www.cartinfo.org>

How do I know if the writer is qualified?

The best way to find a good realtime writer is through the recommendation of another deaf or hard of hearing person.

Other things you can use to judge qualifications:

- Ask the writer about his or her certification
- Ask how long the writer has been writing realtime and in what settings.
- Ask how much experience the writer has had in working with others who are deaf and hard of hearing.

If you need a writer for a very specific or very technical subject such as a class in computer protocols or brain surgery, look for one with experience or familiarity in that area. You can help improve their accuracy by giving them as much information and potential vocabulary as possible before a class or meeting.

How long does training a realtime writer take?

The first step is to become a Registered Professional Reporter (RPR). This training, on the average, takes from one to three years, but varies greatly from individual to individual. A writer should not begin realtime work until after he or she has had a few years of experience.

To pass the CRR exam, the reporter must demonstrate the ability to set up and operate his or her equipment, accurately write realtime for five minutes at speeds ranging from 180 to 200 words per minute with a maximum of 38 errors (96% accuracy), and convert the material to an ASCII text file.

Why does realtime have strange spelling mistakes?

The stenotype machine used by realtime writers, unlike a computer keyboard, has 24 keys. The writer commonly holds down several at the same time to type phonetic shorthand that the computer software recognizes and translates to text. Sometimes an error is caused by a mistake in the keystrokes, similar to the mistake made by hitting the wrong piano key. With realtime, the error would result in a strange or unintelligible word, just as a pianist would produce the wrong sound.

A more common reason for the errors is the absence of a word from the realtime writer's dictionary of words in his or her computer. This dictionary is very important. Many experienced realtime writers create a separate dictionary for each assignment. A beginning writer may have only 20,000 words in his or her dictionary, but a more experienced writer will have two or three times as many. When the writer's keystrokes send a phonetic sequence that the computer does not recognize because the word isn't in the computer dictionary, it will print as wrong word or non-sense word which may or may not be understandable.

How much does realtime cost?

NVRC's survey of realtime providers in the area shows a wide variation in price, ranging from \$100 to \$350 per hour. There may be an additional setup fee or charges for providing equipment such as overhead projectors and television monitors. Transcripts and disks also commonly add to the fee.

Who pays for realtime captioning?

The party responsible for payment depends on the situation. Laws such as the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973 require many service providers to cover the cost of accommodations for persons who are deaf and hard of hearing. College classes and government meetings are two examples where realtime may be provided free of charge. For information about your right to realtime captioning under the Americans with Disabilities Act we recommend calling the Mid Atlantic ADA Information Center, 301-424-2002 V/TTY.

Why does it cost so much?

Realtime reporters must make a significant investment in equipment. They will need steno machines, laptop computers, cables, interface equipment and software. It is wise for them to always care backup equipment. In addition to these equipment costs, reporters must put in many hours and pay for the additional expense of training to write realtime.

An additional factor is that truly professional writers care about accuracy and may put in many hours of "homework" to build their dictionaries before arriving for an assignment.

Will the cost come down?

It is possible that the cost will come down in the future. Equipment costs have dropped. Congress has provided funding for more training of realtime writers and schools are attempting to do a better job of education. In the past, the majority of court reporting schools did not have realtime programs. New reporters will now graduate “realtime ready” instead of having the expense of post-graduate workshops and materials to learn to modify their writing skills for realtime use. However, there is a shortage of qualified CART writers as federal mandates require an increasing amount of captioning for TV programs.

Can I get a copy of what the realtime writer types?

Yes, but there may be a delay in receiving the transcript or disk, and some writers have an additional charge for the service.

How often do realtime writers need breaks?

Realtime writers prefer breaks every hour to 90 minutes.

What about confidentiality?

Certified writers have a Code of Ethics similar to that of sign language interpreters who are certified by the Registry of Interpreters for the Deaf. CART writers cannot discuss personal information learned during an assignment. They cannot participate in activities for which they are providing realtime services, and they cannot divulge the identity of the consumer for whom they work or the location of the assignment. It is inappropriate for a CART writer to step outside of the role of providing a translation of the spoken word.

What can I do to help make sure the realtime at my meeting is the best it can be?

1. Provide the realtime writer with as much information as possible about the assignment, and send it as far in advance as you can. Give the reporter a copy of the agenda or program, the names of all the speakers, and a seating chart to help identify speakers. Placing cards with the name of the speaker in large letters in front of them will also help. It is very important to provide any special vocabulary that the writer might be unfamiliar with so that he or she can add it to the dictionary.
2. The realtime writer will need access to an electric outlet and a comfortable chair. He or she may also need a table.
3. Reserve a space at your meeting so that the writer can see all the speakers and hear them clearly. Be strict about allowing only one person to speak at a time.