

Captioning with CPC

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Definitions

Caption	A group of one to four lines of text to be displayed simultaneously on video
Captioning Locations	Video is divided into thirty-two columns and fifteen rows for purposes of positioning and displaying captioning.
Character Generator	A device that inserts text directly onto a video image (used for subtitling and open captioning).
Closed Caption Encoder	A device that inserts captioning data into the vertical blanking interval of a video program.
Closed Captioning	The inclusion of textual information in a video signal that can be viewed using a closed captioning decoder. Closed-captioning is generally white capital letters encased in a black box. A decoder or television with a decoder chip is necessary to view them. However, newer technology will soon allow color text and color background, as well as latitude in the type of fonts that can be used and where captions can appear.
Digital Captioning	A developing captioning technology that permits access to DVDs, CD-ROMs, and the Internet. This technology will allow developers of Web pages and multimedia software to incorporate captioning into their products.
Off-line Captioning	Describes the preparation of captioning for prerecorded programs. At time of playback, captions are part of the videocassette. These captions may be "open" or "closed."
On-line Captioning	Provided at the time of television program origination.
Open Captioning	Textual information in a video signal that is seen by all viewers of a program. Open-captioning is similar to subtitling. These captions are "burned" onto the videotape and are always visible—no decoder is needed. A wide variety of fonts is available for open-captioning, allowing the use of upper- and lowercase letters with descenders that drop below the baseline. The options for caption placement are great, permitting location anywhere on the screen. Open captions are usually white letters with a black rim or drop shadow.
Paint-on Caption	Adds each new line of captioning while only clearing the oldest line, there can be four lines of captioning on the screen. Individual words are "painted on" from left to right, not popped on with all captions at once, and usually are verbatim
Pop-on or Pop-up Captions	Displays all lines in a caption simultaneously, clearing any previous displayed caption. They are usually one or two lines of captions that appear onscreen and remain visible for one to several seconds before they disappear. A few frames of videotape are left without captions before the next line(s) of captions "pop-on."

Real-time Captioning	Provides simultaneous, word-for-word transcription of a speaker's words. Real-time captioning is used for live programs such as presidential speech, sporting event, newscast, or other events that do not allow time to prepare prerecorded captions. This type of captioning is performed by a trained stenocaptioner who can write in excess of 250 words per minute, with a minimum accuracy rate of 99%.
Roll-up Caption	Displays captions one line at a time, scrolling for the bottom of the viewing monitor. Roll-up captions are usually verbatim and synchronized. Captions follow double chevrons ("greater than" symbols), and are used to indicate different speaker identifications. Each sentence "rolls up" to about three lines. The top line of the three disappears as a new bottom line is added, allowing the continuous rolling up of new lines of captions.
Script	A list of captions to be displayed with a video program.
Time Base Corrector (TBC)	Device used to correct for time base errors and stabilize the timing of the video output from a tape machine.
Time Code Reader Card	An add-on card for personal computers that allows software to monitor the time code output from a professional video deck.
Vertical Blanking Interval (VBI)	The portion of the video signal that occurs between the end of one field and the beginning of the next. During this time, the electron beams in the cameras and monitors are turned off (invisible) so that they can return from the bottom of the screen to top to begin another scan.
Definitions provided by	<i>RAPIDTEXT</i> and CMP (Captioned Media Program of the National Association of the Deaf)

Captioning and the Law

Explanation

Many people mistakenly believe that the Americans with Disabilities Act mandates captioning. The ADA *does* require government-funded public service announcements to be captioned, but makes no specific mention of captioning beyond that. It is rife with implications, most of which have never been sorted out. Could failing to caption a city council meeting be considered a denial of government services to a class of citizens based on their disabilities? If a court said yes, it would have massive ramifications, causing hundreds or thousands of cities and towns to either caption their meetings or stop broadcasting them. As of this time, however, that particular aspect of the ADA has never been tested.

There is also a widespread belief that one or more of these laws require captioning of movies that you rent in the video store. Not true. The FCC has jurisdiction only over the airwaves, so it can enact no rules relating to videotapes. Aside from the fuzzy implications of the ADA and some specific requirements for government-funded materials, no Federal law covers captioning for videotapes.

--Gary D. Robson from www.robson.org

Captioning and the AMX Database

Q. If there is a video that our college would like to use and it is listed on the AMX site how do we obtain a captioned copy?

A. That will depend on a couple of things, the first one being who has the copy. We have a number of captioning vendors, and we hope eventually to have some of the actual educational video publishers, in the database. With those folks, you would have to buy the CC version from them.

For a number of reasons, some legal and some ethical, we encourage you to buy captioned versions whenever they are available.

If a commercial CC version is not available and a campus has done a video themselves, you have a couple of options. (1) If you own an uncaptioned version of the video, you can ask the other campus for an e-text copy of the transcript. From the transcript, you can sync the text to speech using your CPC or Rapid/Text equipment to create your own captioned version. (2) The other option is that if the campus still has a time-coded first-generation working copy, they could send you a copy of that, and you could duplicate it. However, those versions are supposed to be destroyed as soon as the captioning process is completed, so unless your timing is perfect, you probably won't get one.

In theory, as long as your campus owns a copy of the video, you could have another campus duplicate their in-house-produced version, but you will be getting at least a third- and perhaps even a fourth-generation version. Unless you have a real time-critical need, this option will not be your best one as video quality will be poor.

Remember that under copyright law as it applies to video, you are allowed to have a non-circulating master and one circulating copy. Once you have a closed-captioned copy, that becomes your one circulating copy. You are never allowed to have more than a master and a copy at any one time. That's why the working copies are in existence for only a short time. They must be destroyed as soon as you make your circulating copy from them.

One reason to keep your e-text transcripts and computer files of the captioning process is so that if anything happens to the CC copy you have created, you can create another one without too much difficulty.

Q. Do we contact the college that is listed and send them a blank tape?

A. The campus may ask you for a blank tape in the rare cases where you might get a copy of the working video.

Q. Is there a charge from the college?

A. No. Legally the college cannot charge you as the intellectual property is not theirs to profit from.

Q. How does that college know that our campus has an original uncaptioned version of the tape?

A. I would recommend a written request stating that you have an original uncaptioned version.

Q. Are we required to have an original copy of the video?

A. Whether you need to already own the original depends on the source of the CC version. For videos captioned by CPC, RapidText, or one of the campuses, you will need to own an original. In the case of an educational publisher selling their own captioned versions, you would not need to already own a copy (because the publisher owns the copyright).

Credit Line

If you had to get permission to caption a video that was not produced on campus, it is a good idea to include a permissions disclaimer at the beginning of the video. At the end of the video, you may add a notice stating who did the captions (i.e., which campus) and add the date the media was captioned.

Steps in the Captioning Process

These steps can be done in various orders. Some campuses will do the first five steps simultaneously. They'll type in one caption, clean it up, set the timing and positioning, and move on to the next one, through the tape. Others will do these as discrete steps, even using different people.

Taking into consideration the time to make the dub of the original master tape for the captioner to work from, all the steps in between, and the time to encode the final master tape, a 1-hour videotape can take anywhere from 8 to 20 hours to caption.

1. Transcript

An accurate transcript is essential for captioning. If a transcript does not exist, it must be created. Transcripts can be created in the following formats:

Court reporter or stenocaptioner or typist. Must have a stop and start control on the VCR or work from a cassette tape of the audio from the VCR. A foot pedal for the cassette tape is useful for controlling the play of the tape. You may use Dragon NaturallySpeaking to dictate the transcript.)

Script. When you request permission to caption, see if you can get a script, preferably electronic text. Although, a printed script is also useful if it can be scanned accurately. The scanner works best with clean, even-toned, typed scripts.

2. Formatting

The script is then divided into individual captions. You must decide on the quantity of text to be shown on the screen at a time. Where possible, the split is usually by sentences.

Usually text appears as two-line pop-up captions, however, some have the capacity to use from one to four lines in pop-up or roll-up fashion.

Set the "look" of the captions. Add italics, underlining, colors, speaker identification, brackets around sound effects, music notes around song lyrics, and so forth. Some people do this as the script is entered, others go back and add it later.

3. Time Coding

A worktape is made. The worktape includes the original time code. The formatted script along with the time code is then displayed on the computer.

Time code matched. Matching time code is also called "scheduling."

"Grabbed" time codes. "Absorbed" as the tape plays, using the computer keyboard. This is also where the captions may be moved up, down, left or right. Captions are determined where they will appear on the screen. Ensure that essential information is not covered by the captions, and that the positioning gives clues as to who is speaking.

4. Checking and Revision

Viewing. The video and the captions are run together to show what will appear in the final captioned video.

Checking and revision. The captions must always be carefully checked for errors before being recorded. Automated tools can perform spelling checks, reading-rate checks, and look for technical timing errors. Actually *watch* the video with the captions on it in order to catch errors such as captions covering graphics, speaker's mouth, and others; or appearing too early or late.

Crunching. A process called "crunching" fuses the time code to the captions. Any problems with conflicting time codes will cause the captions to move faster than the encoder will transmit and as a result, this may cause a gap, or incorrectly processed words.

5. Encoding

After the results of the completed captioning job are satisfied, it is transferred to the videotape using a caption encoder.

Tips partially based on the Captioned Media Program of the National Association of the Deaf <http://www.cfv.org/>

Video Captioning Checklist

	Task	Tips	Check
1.	Create the transcript	have a stop and start control on the VCR (working from a copy, not master) or work from an audio tape, using a foot pedal, or use Dragon NaturallySpeaking	
2.	Formatting	divide transcript into individual captions, try to split by sentences. Set the "look" of the captions: add italics, underlining, colors, speaker identification, brackets around sound effects, music notes around song lyrics, etc.	
3.	Time Coding	time code your worktape	
4.	Sync the Captions	press the plus key (+) to align the captions with the time code	
5.	Checking and Revision	watch the captioned video--be aware of positioning, covering graphics, words appearing too early or late.	
5.	Encoding	transfer captions to videotape	

Tips from Deaf Users

"Captions need to indicate in detail who is speaking, emotion, background music, etc."

"If the speaker says one word in a different tone, put the word in italics." "Use different colors for different speakers--I want equal access!"

"We need better contrast between letters and background."

Use two-line format whenever possible. Three lines are more of a strain on the eyes."

"Use clear box so less of the picture is covered," "Wider captions from one side of screen to other."

"Different size letters for different readers. Older people with vision problems need larger letters and more contrast with background. Choice, choice, choice for individual situations."

"Yells, screams, higher tones, etc. should be in upper case captions. Others in upper and lower case."

"Upper and lower case letters - start using them."

"Move captions to the top of the screen." "Put captions near the mouth of speakers."

"Use Helvetica or Futura fonts for quicker and easier reading."

There was a high level of consensus among participants. The participants tended to favor captions in mixed case, a sans serif font, and white captions on a black background. There was also a lot of agreement among participants regarding which features they would like to control. The participants would most like to be able to adjust the caption background and control the color and size of the captions. They also expressed a strong desire to be able to move the captions or adjust the picture on those occasions when captions tend to interfere with other information.

Differences tended to occur along expected lines. Older people tended to prefer greater contrast; hard of hearing consumers with higher degrees of hearing tended to rate the black back-ground lower, preferring to see more of the picture; and computer users were more particular about the font.

Information taken from survey by the Captioned Media Program of the National Association of the Deaf
<http://www.cfv.org/>

Reference Web Sites

<http://ncam.wgbh.org/>

<http://www.ncicap.org/>

<http://www.robson.org/gary/writing/jcr-captionlaw2001.html>

<http://www.cfv.org/>

<http://www.cpcweb.com/>