The manual is intended to assist parents in improving the quality of television viewing for their hearing impaired children. Basic concepts associated with the technology of captioning (e.g., open and closed captions and script editing) are described, and information and suggestions are offered that can make caption reading easier for children. Recent advances in captioning are noted, and a brief resource list for parents is appended. (JW)
Captioned Media for Hearing-Impaired Youngsters: What Parents Need to Know

He said he loves TV best when it's captioned.
Did you know that hearing youngsters...

... watch almost six hours of TV every day?

... spend more hours watching TV in a week than they spend in school?

... before entering kindergarten have usually watched more hours of TV than a liberal arts student spends in four years of college?

And that...

... 97% of homes in America have at least one TV?

... the average TV set is on 44 hours each week?
Do hearing-impaired children watch as much TV as their hearing peers?

Yes! Even though many deaf children do not have access to captioned television, studies show they probably watch more hours of TV than their hearing peers! While hearing children watch a variety of program formats (i.e., documentaries, sports, situation comedies, movies, game shows, cop and action shows, talk shows, soaps, etc.), hearing-impaired youngsters usually prefer action-oriented TV programs which convey information visually rather than verbally.

Studies indicate that hearing-impaired youngsters watch few documentaries, game shows, talk shows and other programs which rely heavily on dialogue. Their viewing selections are limited primarily to cartoons, crime dramas, sports and other programs which are high in visual imagery.
Why do hearing-impaired children watch so much TV?

Many people are surprised to learn that children with severe hearing losses watch any TV at all! It certainly can be a frustrating experience to watch programs without benefit of the sound track, but hearing-impaired youngsters often have little else to do with their time.

Friendships are formed between people who communicate comfortably together. As young children, when play is primarily physical in nature, hearing-impaired children often have neighborhood playmates with whom they spend leisure time. As children mature, however, and especially as they approach adolescence, deafness interferes. Deafness is a communication handicap which isolates those who can communicate comfortably from those who cannot. Simply because they cannot hear, many deaf students are hindered from partaking of "typical teenage activities" such as gossiping for hours on the telephone, listening to records, chatting on the corner, comparing movie star favorites.

Reading books is often a chore and even a simple shopping trip can become difficult because of communication problems which can—and often do—arise. Instead of buddies next door, friends become distanced by geography: friends are usually other hearing-impaired students from school, but not a local school where students live relatively near each other. Most deaf students are brought to a central location from many surrounding, and often distant, communities.

Therefore, when the need to belong, to be the same, becomes intense, many deaf youngsters find themselves cut off from activities which their hearing peers enjoy. This can be a lonely experience and their repeated complaint, "I have nothing to do," is often painfully true. Filling time can be a problem and it is common for many deaf children to turn to television for companionship... hours and hours of television...
Acknowledgments

Special thanks to the following friends and colleagues who offered suggestions and support to make this booklet accurate and meaningful for parents of deaf children:

Sandra Fleishman
Lynn Brenner Ganek
Daniel B. Glisson, Jr.
Jackie Mendelsohn

Captioning is a unique technology which can bring the same information at the same time to both hearing and hearing-impaired viewers. This brochure is designed for you—parents of hearing-impaired children—to help you and your family improve the quality of TV viewing.
Captioned Media for Hearing-Impaired Youngsters: What Parents Need to Know

by Annette Posell

Hey! Hey! Hey! Play today!
What is captioning?

Captions are like subtitles on the TV screen. They translate the soundtrack of a program for hearing-impaired viewers. Captions can transmit:
<table>
<thead>
<tr>
<th>Other information (i.e., who is speaking, tone of voice, emphasis, etc.)</th>
<th>A narrator's voice</th>
<th>Sound effects (growls, barking, dog barking, phone ringing, etc.)</th>
<th>Music</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
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<td><img src="image23.png" alt="Image" /></td>
<td><img src="image24.png" alt="Image" /></td>
</tr>
</tbody>
</table>
Can our TV set receive all captioned programs?

No! You can receive all open-captioned programs on your present TV set, but you need a special decoder to receive closed-captioned programs.
What is the difference between open and closed captions?

If a TV program is open captioned, the captions appear on every television screen which is tuned to that program. All viewers see the captions whether they want them or not. Many hearing viewers complain that captions are distracting. When captioned TV first became available in 1971, all captioned programs were broadcast in open format.

If a TV program is closed captioned, the captions appear only on those TV screens which are attached to a special caption decoder. Closed captions are not visible to the general audience watching the same broadcast without a decoder. Closed captioning is sometimes referred to as Line 21 captioning.

Because the two captioning systems are based on different technologies, they look different on the TV screen. Closed captions are always framed in a black box. The letters are a standard size and may seem smaller than those used in open captions.

Note: The terms open and closed captions refer only to television. Captions on movies are always visible to all viewers.
Can my hearing-impaired child benefit from captioned media?

Yes! Captioned TV and films can expand your child's world by exposing him or her to numerous events and situations which otherwise might be inaccessible. Hearing-impaired children deserve access to as much information and entertainment as possible. Because their social, cultural and academic opportunities are generally less expansive than those of their hearing peers, captioned media can provide a rich, enjoyable and visually oriented learning activity.
Are captions easy to read?

Unfortunately, many hearing-impaired children do not find it easy to read captions. Captions are printed words, but unlike words in a book, they disappear quickly. Viewers cannot refer back as they can to previous pages in a book to clear confusion. Also, children may have difficulty processing the captions accurately, especially when they are written on a level intended for adults. Another potential source of confusion for hearing-impaired viewers, regardless of age, arises when several people—either on or off-screen—speak at the same time. While hearing people can identify voices in a crowd, it is often necessary to provide such identification in captions.

In order to make caption-reading easier, sometimes scripts are edited for the following reasons:

**Time**
While a comfortable caption-reading speed for hearing-impaired children seems to be about 90 words per minute, movies and television often have dialogue segments where the speaking rate is as fast as 250 to 300 words per minute! In such cases, the words of the script are rewritten and the captions appear at a rate which is readable for the viewing audience.

**English Difficulty**
Because deafness is primarily a communication handicap affecting both written and spoken English, some hearing-impaired children have a much harder time learning to read than their hearing peers. Often the language of TV and movie scripts is colloquial and sophisticated and can be difficult to understand. When this occurs, the sentences of the script are sometimes rewritten in simpler form.

See script editing chart, next page
### Samples of Script Editing at Three Levels of Reading Difficulty

<table>
<thead>
<tr>
<th>Verbatim Script</th>
<th>Level III</th>
<th>Level II</th>
<th>Level I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Look, we gotta have a talk. I'm gonna tell you something and you gotta listen and you gotta believe that I'm telling you the truth 'cause I am. I'm glad that your father is married again. I mean I care about your Dad and I like him a lot. I want him to be happy. All those things. He feels the same way about me, darling. We tried very hard to make it work and it just didn't work. And now we're both much happier. I only wish you were, darling. Just believe me, please. If you'll accept what I'm telling you, I know you'll be a lot better off. Things aren't as bad as they seem.</td>
<td>• I'm going to tell you something.</td>
<td>• We must talk.</td>
<td>• I want to talk.</td>
</tr>
<tr>
<td></td>
<td>• You have to believe</td>
<td>• Listen to me.</td>
<td>• Listen.</td>
</tr>
<tr>
<td></td>
<td>• that I'm telling you the truth.</td>
<td>• Your father is married again</td>
<td>• Dad is married again.</td>
</tr>
<tr>
<td></td>
<td>• I'm glad</td>
<td>• and he's very happy now.</td>
<td>• Dad has a new wife.</td>
</tr>
<tr>
<td></td>
<td>• that Dad married again.</td>
<td>• I'm glad.</td>
<td>• I am happy.</td>
</tr>
<tr>
<td></td>
<td>• We tried very hard</td>
<td>• We were married</td>
<td>• We were married.</td>
</tr>
<tr>
<td></td>
<td>• to have a good marriage</td>
<td>• but we weren't happy together.</td>
<td>• We had many fights.</td>
</tr>
<tr>
<td></td>
<td>• but we failed.</td>
<td>• Then we got a divorce.</td>
<td>• We were sad.</td>
</tr>
<tr>
<td></td>
<td>• Now Dad and I were divorced</td>
<td>• Now Dad has another wife</td>
<td>• We are not married now.</td>
</tr>
<tr>
<td></td>
<td>• and we are much happier.</td>
<td>• and Dad and I are happier.</td>
<td>• We are divorced.</td>
</tr>
<tr>
<td></td>
<td>• If you'll just believe me</td>
<td>• Nina, believe me.</td>
<td>• Dad is married again.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• But I like Dad.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Dad likes me, too.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• No more crying.</td>
</tr>
<tr>
<td></td>
<td>• I know you'll feel better.</td>
<td>• Then you can be happy, too.</td>
<td></td>
</tr>
</tbody>
</table>
Is there anything I can do to make caption reading easier for my hearing-impaired child?

Yes! Be available to respond to his/her questions. That is the most important thing a parent can do to make it easier for hearing-impaired children to understand captions. Whenever possible, watch captioned programs with your child. Check occasionally for understanding; offer explanations if your child looks puzzled but doesn’t ask for help. Remember that your child is faced with a difficult task of associating moving pictures with rapidly disappearing printed words. Whereas you have two senses at your disposal when watching T.V. — your eyes scan the picture while your ears interpret the sound — your hearing-impaired child must process all the information in the program, both the audio and video tracks, through the eyes only. To do so requires concentration and energy; do not be surprised if your child misunderstands the story or misses information.

Chances are that your child may not realize that:

- Captions represent actual voices.
- Captions represent sound effects.
- Captions represent sounds of things which are not seen on the screen, including narrators.
- Captions are often placed on the speaker to help identify who is talking.
Explain that:

Captions may move from person to person to help the viewer understand who is speaking. When in doubt, watch the lips for clues.

A narrator is a person who sometimes speaks off-camera. A narrator is not a character in the story, but is a person who tells us about the story. Sometimes a narrator is seen on the screen, but often he or she speaks off-camera. Captions represent the narrator's voice.

Sometimes the captions do not exactly match the words the person says on TV. For someone who lipreads, it is important to understand that captions are sometimes edited.
Captions are often longer than one line. Read until you see a period or other punctuation mark.

Captions represent sound effects, some of which have a visual component (for example, a person knocking on a door), and some of which have no visual component (for example, a phone ringing). Sound effects are sounds which are important to the story. They are not words that are spoken.

Captions often represent off-camera sounds or speakers. Off-camera (or off-screen) refers to something or someone which you can't see on the screen.

Captions represent voices of actual characters in the story.
Will captioned viewing improve my child's reading and English skills?

This question cannot be answered with a simple yes or no because research is still being conducted on this subject. However, it seems fair to state that repeated exposure to captioned media will have a positive effect on reading and English test scores of hearing-impaired viewers. It seems obvious that the more one is exposed to the task of reading, the more likely one is to improve one's ability to read. And reading captions on TV or in movies is a FUN way to practice reading.

Often it is very difficult for hearing-impaired children to learn to read well. Hearing loss deprives children of natural opportunities to learn English—by listening to it, overhearing it and practicing with it. As a result, learning to understand English receptively and to use it expressively can be a long, tedious and unrewarding task for many hearing-impaired children. Learning to read can be particularly difficult because, among other things, it requires an understanding of vocabulary and an ability to make sense of the sentence structure of English grammar. Despite dedicated classroom efforts to teach deaf students to read, the average hearing-impaired high school graduate reads on a fourth grade level. It seems highly probable that caption-reading will develop vocabulary, familiarize the viewer with grammatical structures and idiomatic expressions, and facilitate understanding of the elements and structure of a story. Most important, caption reading may broaden the knowledge base of hearing-impaired viewers, stimulate curiosity and encourage an interest in, and enthusiasm for, reading.
How can I help make captioned TV viewing more meaningful for my hearing-impaired child?

Television viewing is a common family activity, but one which until recently has excluded those with hearing problems. In the typical American home, the TV set is on for most of the evening hours. When there is no captioning available, chances are that the hearing-impaired family member is doing an activity alone, or perhaps s/he is demanding attention from someone who would rather be watching TV, or perhaps interrupting with the never-ending question, “What’s happening???” And those with normal hearing who are trying to relax and enjoy a program possibly experience, among other emotions, occasional pangs of guilt for their involvement in something which is so unavailable to another member of their family. Consider also the exclusion of deaf people from discussions which are carried on about TV: “Who shot J.R.?” “Did you see Brideshead last night?” “The latest news report said . . . .” all serve as conversation starters and sources of common interest. But until captions became available, deaf people had little, if anything, to add to these conversations simply because of their unfamiliarity with TV programming.

One of the most positive side effects of captions is that they allow hearing and hearing-impaired family members to share viewing experiences. Watch captioned programs with your hearing-impaired youngster; encourage the rest of the family
to join you—you will enjoy it! Consider your child's viewing experience: turn off the sound and try to imagine how your child processes the moving pictures and the captions simultaneously. Keep in mind that because you undoubtedly read faster and with better comprehension than your child, and because you probably have a more sophisticated knowledge base for the subject of the program than your child, you cannot exactly duplicate his/her experience. But you can appreciate how tiring it is to concentrate intensely with the eyes for extended time periods. You can learn why it is so easy to misunderstand subtleties which captions simply cannot convey (i.e., someone purring “No,” but really meaning yes). You can learn why your child often may be confused about characters, since it is not always easy to identify who is speaking, and you can get a keener sense of how difficult it can be to pick up meaning of unfamiliar vocabulary when the words slip out of view so quickly.

Stay right there! Be there to clarify for your child and to explain any vocabulary or idiomatic expressions which may make reading captions difficult. If your child looks puzzled, don't wait for a request for help—offer quick explanations, try to remember them and refer back to them when the program is over.

Later, encourage family discussions of programs. Did the story make sense? What were the main conflicts and how were they resolved? Who agrees/doesn't agree with their resolution? Were the characters realistic? How was the acting? Could the characters have been portrayed by someone other than the actor in the show? Talk about when the story occurred: life depicted on *Little House on the Prairie*, for example, looks extremely different from the setting of *Happy Days*. Compare differences in clothing and hair styles. How have morals and attitudes about stereotypes changed? Talk together about feelings and issues raised in the programs: "How would you feel if that had been you?," etc. Learn from TV: if your hearing-impaired child is particularly interested in something seen on TV, take advantage of that interest by getting more information on it from a library, perhaps, or from a field trip.

Any interest at all can be nurtured and curiosity can be encouraged by sharing the TV viewing experience. And most important, viewing together can be a FUN and informal means of encouraging communication.
What captioned media can my hearing-impaired child enjoy?

Hearing-impaired children can watch captioned media at home, in school and in dormitories, and at social functions with other hearing-impaired youngsters. They now have access to many of the same full-length feature films and popular TV broadcasts which hearing children have always enjoyed.

Probably the most common exposure hearing-impaired children have to captioned media is in the classroom. Captioned Films for the Deaf (CFD) is the primary source of both entertainment and educational movies for children (and, in fact, for deaf people of all ages). Founded in 1958 under the Eisenhower Administration, CFD currently offers approximately 1,100 educational and 800 entertainment titles, available free of charge to hearing-impaired audiences. CFD catalogs are continually updated to include recent Hollywood hits as well as the most up-to-date educational films. In addition, many social organizations borrow captioned entertainment films for viewing by their hearing-impaired members. Most selections are 16mm format with a small number of videocassettes. For additional information regarding CFD catalogs and registration forms contact:

Modern Talking Pictures Service, Inc.
Captioned Films for the Deaf
5000 Park Street, North
St. Petersburg, FL 33709

Captioned television, a relatively new phenomenon, has opened doors to hearing-impaired viewers which previously were closed to them. Captions first became available in 1971 when The Caption Center at WGBH-TV, Boston, developed technology to provide open captions. Since that time dedicated efforts have resulted in more advanced and practical ways to increase the number of captioned programs on television for both children and adults. The National Captioning Institute was established in 1979 to close caption TV programs. Sears, Roebuck and Co. agreed to sell two models of decoding devices: one a portable model which attaches to any TV set and the other a 19-inch color TV set with the decoder built in. In March, 1980, the first closed-captioned programs were aired over national networks. Now that The Caption Center and the National Captioning Institute both provide closed captioning, hearing-impaired viewers whose TV sets are connected to a special decoder can watch approximately 40 hours of captioned programs each week. Decoders have made it possible for deaf children to watch broadcast programs at home in the company of their families, as well as in classrooms and in dormitories with their friends.
Captioned television is rapidly gaining acceptance as a creative supplement to the educational curriculum. Once looked upon as "the evil doer," television—with captions—has earned its place in education as an effective teaching tool. It is easy and fun to build on motivation already established for children who love TV and who regard learning from it as incidental and painless!

Check your local newspapers and TV Guides for these symbols which indicate that programs are aired with captions:

**CC:** closed captioned

**OC:** open captioned

[cc] all-purpose closed captioning symbol

![logo of The National Captioning Institute](image)
Are there any new advances in captioning?

Yes, the 1980's promise exciting innovations in captioned television:

**Teletext**

Captioning is one of two services provided by teletext. The other is an information system which offers approximately 100 "pages" of continually changing, updated news. Teletext is the first mass communication technology designed for both hearing and deaf populations. To receive the captions and the "information pages," one's TV set must be attached to a teletext decoder.

Teletext is of particular interest to deaf viewers for three reasons. First, the information pages convey text and graphics which relate to the world in its ever-changing condition. In other words, the most "up-to-the-minute" information will always be available by turning on the TV set and tuning in to teletext. This is unique for deaf people, who traditionally are the last to know what is happening, even when there are emergencies or special news reports which they should know about. The "pages" will even provide updated flight schedules so that those wasted trips to the airport can be avoided when you know that, for example, the plane you are planning to meet will arrive three hours late!

Second, and of special interest to deaf viewers, is the fact that it is the user who decides what s/he wants to see on the TV screen, when s/he wants to see it, and how long it is to remain there. Unlike cable TV, there is no "rolling" effect. There is no rush to read the printed information. It remains on the screen steadily until you push a button and change it to something else. Often graphics support the print and provide clues to the meaning of words. This is certainly an encouragement to reading and undoubtedly will have positive educational side-effects.

And third, but of equal importance, are the captions which teletext is able to provide. Teletext captions can be placed anywhere on the screen to help identify who is speaking, or to avoid placing a caption on top of important video. The captions can vary in size and color, which comes in handy when there is a need for emphasis, for example. In addition to verbatim captions, teletext will also be able to provide multiple levels of captions so that viewers with varying reading skills will be able to benefit from them. Similarly, captions can be offered in languages other than English. Technically speaking, teletext has capabilities to generate captions at a faster rate than any other existing technology.
Real-time Captioning

This recent technological advance allows for captions on programs which are broadcast live. Previously, shows such as live news coverage or presidential press conferences could not be captioned unless they were first taped and then played back several hours later to allow for the preparation of captions by conventional methods. Real-time captioning is a recent technology which is quite similar to the courtroom stenographer's. It enables programs without scripts to be captioned as they are being broadcast. In other words, real-time captioning is one of the most exciting prospects for hearing-impaired viewers because it can make more captioned programs available faster.

Dual Mode Captioning

This innovative system, which became available in 1983, permits simultaneous transmission of closed captions to both line-21 and teletext decoders. The dual-mode system ultimately will expand the size of the viewing audience for closed-captioned programs.

Does captioned media play an important role in the lives of deaf people?

Yes! Much of the entertainment enjoyed by the general public—movies, plays, lectures, musical events, TV and radio—depends on the sense of hearing. Although some of these can be made accessible to deaf audiences through the use of sign language interpreters, most of them are not. (It is important to keep in mind that not everyone with a hearing loss understands sign language, and also that interpreter services are expensive and in short supply.) Therefore, captioned materials, because they make accessible some forms of entertainment, have assumed a prominent socializing role in the lives of many deaf people. Many social events, clubs and organizations for the hearing impaired revolve around captioned media, both movies and television.
Will my family benefit from captioned media?

Yes! Captioned media hold the exciting prospect of bringing families together for shared experiences. Now both hearing and hearing-impaired family members can watch programs and discuss them together. In this way, opportunities for increased communication are encouraged.
Captioning: A Resource List for Parents

For general information regarding captioning systems and captioned television, contact:

- The Caption Center
  WGBH-TV
  125 Western Avenue
  Boston, MA 02134

- The National Captioning Institute
  Suite 1500
  5203 Leesburg Pike
  Falls Church, VA 22041

For specific program information, contact your local TV station or one of the following national networks:

- American Broadcasting Company
  1330 Avenue of the Americas
  New York, NY 10023

- CBS Television Network
  51 West 52nd Street
  New York, NY 10019

- National Broadcasting Co., Inc.
  30 Rockefeller Plaza
  New York, NY 10020

- Public Broadcasting Service
  475 L'Enfant Plaza West, S.W.
  Washington, D.C. 20024

For information regarding TeleCaption decoders (Line 21, closed-caption decoders), contact The National Association of the Deaf, 814 Thayer Avenue, Silver Spring, Md. 20910, your local Sears Roebuck & Co. catalog department or the National Captioning Institute (address above).

For information regarding teletext and teletext decoders, contact:

- Caption Center/Los Angeles
  6255 Sunset Boulevard, Suite 2206
  Los Angeles, CA 90028

For information regarding Captioned Films for the Deaf, contact:

- Modern Talking Pictures Service, Inc
  5000 Park Street, North
  St. Petersburg, FL 33709