Paper Mill Playhouse, Millburn, NJ: Sign language interpreter Jolinda Greenfield for "Dreamgirls"

Effective Communication and Program Access

Five Steps to Effective Communication

This chapter looks at auxiliary aids and services that provide effective communication and make programs inclusive, enjoyable and accessible to everyone.

In addition to physical access to programs, arts and humanities organizations must provide access to the content of their programs for audiences, instructors, artists, interns, participants, staff, docents, visitors, patrons and volunteers. Everything the organization produces or presents must be accessible, including exhibitions, lectures, films, videos, interactive computer displays, plays and concerts, as well as the materials about the programs—catalogues, labeling, scripts, libretti, brochures, maps and publicity.

Effective communication allows people with disabilities that affect their hearing, vision, speech and cognition to participate in services, goods and programs. Auxiliary aids and services include a wide range of communication techniques and devices.

Keep in mind the five steps to achieve effective communication:

First: Understand that there is no "one-size-fits-all" solution.

Second: Explore ways to accommodate the diverse needs of each population.

Third: Be prepared with well thought-out policies and procedures for accommodating the diverse needs of each population.

Fourth: Train all staff and volunteers who come in contact with the public to be knowledgeable about auxiliary aids and services.

Fifth: Inform the public about auxiliary aids and services through signage, advertising, Web sites and other means available.

For People Who Are Blind or Have Low Vision

Information regularly provided in visual formats must also be available in alternate formats. The "blind community" is not one large homogeneous group. People who are blind, legally blind or have low vision have a range of sight and loss of sight. Some people are blind from birth while others become blind later. People may have reduced or limited vision because of loss of visual acuity as they age. This diversity is reflected in the variety of possible ways to make visual information accessible.

Audio Describer in Booth

Patron Using Audio Description

Audio and Video Description

Audio description and descriptive video provide concise, objective descriptions of the settings, costumes, action, physical appearance and body language of the characters in a play, film, video or television program or the size, shape, colors, textures, composition, subject and content of visual art or other exhibited materials.

Describers undergo extensive training to attain proficiency. Not everyone has the skills or qualities to be a good describer. For example, describers are trained to slip descriptions in-between lines of dialogue. They also avoid qualitative judgments. A well-trained describer would not say, "He is angry," or "She is sad." Rather, they would say, "He's clenching his fist," or "She is crying."

- Audio description for performances and tours is usually delivered live and transmitted to listeners via infrared or FM assistive listening devices.

- Audio description for museums and exhibits is usually pre-recorded and available to visitors on audiocassette or via random access digital playback systems.

- Video description is pre-recorded and, in the case of recorded television programs, videotapes and DVDs (Digital Video Discs), is available on television with a SAP (second audio program). Broadcasts of live events, such as parades, are described live. Description for films can be recorded or delivered live.

Audio Alternatives for Print

Some people who are blind or have low vision cannot read braille or large print and find recorded information more useful. Also instances exist where some people with motor impairments or learning disabilities cannot use traditional print and prefer hearing information rather than reading it. A braille or large print version of label text might be too cumbersome to carry around a historical exhibit.

Text information can be provided via audiocassette tapes and other technologies such as random access digital playback systems or FM/infrared systems. In museums and exhibitions, locate listening stations with speakers, handsets or earphones adjacent to printed information (explanatory information, legends, labels, etc.) to provide prerecorded playback of the printed materials.

Braille

Braille is a system of touch reading that employs embossed dots evenly arranged in cells. In each cell, it is possible to place six dots, three high and two wide. Not all people who are blind or have low vision read braille, but those who do will benefit from receiving print materials in this format. Studies over the past three decades agree that 80,000 to 85,000, or eight percent, of people who are blind in the United States use braille for reading.

An experienced person using a braille writer, a mechanical device similar to a typewriter, can produce single copies of braille. A more efficient method is to use a computer with specialized braille software and a printer called an embosser. With training, someone who has minimal knowledge of braille can format and translate simple text documents into braille using this system. If purchasing the software and printer are beyond an organization's financial resources, contact state or local organizations for people who are blind or have low vision for recommendations on local resources to produce braille materials. Always have braille material and signs checked by an experienced braille reader.
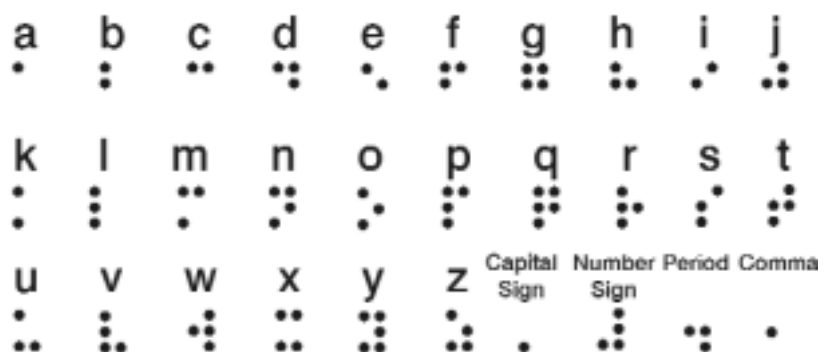
Braille Alphabet

Computers, Web Sites and E-mail

Computer technologies are essential tools of communication in our daily lives. The Internet, e-mail and Web sites are used for information, points of sales, educational tools, and are an integral part of the workplace. The arts and humanities must be committed to making sure that these tools are accessible. If an organization uses the Internet or its Web site, for example, to provide information or sell tickets, it cannot exclude people with disabilities.

There are many ways in which technology has been adapted for people who are blind or have low vision as well as people with limited mobility. Most commonly, screen reading software "reads aloud" the text information displayed on the screen—a word processing document, a Web page, an e-mail message. A touch screen on a computer-enhanced display with a lot of text might have an option for "sound off" or "sound on" so that an individual could opt to hear what others see and read on the screen. Web sites can be designed with built-in accessible features.

Large Print

Large
Print

Many people who are legally blind or have low vision can read large print. Large print documents are easy to produce using a scaleable, non-italic, sans serif font (such as Helvetica or Arial) in 14 to 18 point size with a space and a half between lines. For effective exhibit labels and displays, print should be a minimum of 24 points or larger, depending upon the distance from which people must read the print.

This is 12 point Helvetica type.
This is 14 point Helvetica type.
This is 16 point Helvetica type.
This is 18 point Helvetica type.
This is 24 point Helvetica type.

Helvetica Type Font Sizes

"It is not, in my view just straight-forward access to objects that is important but the whole experience. There is no substitute for exploring the size, shape and smell say of a steam locomotive, the layout of a castle or the shape, the size and intricacy of a carved wooden panel, the sounds of a creaking wooden floor or handling a nautilus shell."

Ken Howarth, Heritage Recording, United Kingdom

A 70 percent minimum contrast (black on white is 100 percent), between the print and the paper is critical for best results. Avoid using bright or glossy white paper because it produces glare, or the enlargement option on a photocopier, which usually yields inconsistent and distorted font sizes and blurry copies.

Readers

If braille or recorded materials are not available, designate someone to read information aloud to people who are blind or have low vision. This is usually effective for short meetings, such as a panel meeting or review session, if the material to be read is not lengthy.

Tactile Materials

Tactile materials, raised line drawings and diagrams, models and maps, such as scale models of buildings, exhibit layouts or stage settings provide orienting information to someone who is blind or has low vision. Organizations can use models to reproduce objects, artifacts and exhibit pieces that are too large, too delicate, too old or too valuable to handle.

Consider the following when creating tactile maps, models and reproductions:

- Size
- Shape
- Scale
- Original textures
- Detail
- Orientation

Another matter to consider when producing touchable materials is to select items that convey the complex theme of the exhibit or environment. For instance, if the exhibit is about quilts, but a doll happens to be in the exhibit, providing touchable quilts, rather than replicating the doll, might be more appropriate. The key is to avoid random object availability. Involve the curator in selecting tactile items that are significant.

"If touching weren't such a good thing, they wouldn't have to put up all the signs that say 'Don't touch.'"

Ray Bloomer, Director of Education & Technical Assistance, National Center on Accessibility

Try to incorporate tactile experiences as a part of the general environment or exhibition. Signage and placement of items indicate what may or may not be touched. Many visitors will benefit from tactile experiences—those who are blind or have low vision, have different learning styles and learn from touching and handling things.

Touch Tours

Touch tours may be developed to enhance the experience of visitors and patrons who are blind or have low vision. Plan the tour so that the visitor has the opportunity to experience things that represent the central themes of the exhibit or environment. Train docents and tour guides to give clear and concise descriptions along with providing tactile and other sensory experiences.

For People with Hearing or Speech Disabilities

People who are deaf or hard-of-hearing have a range of hearing loss. Some people are congenitally deaf while others lose their hearing later in life. The diversity of this community is reflected in the variety of ways available to make audible information accessible.

Many communication access improvements are inexpensive and easy to implement. Useful communication tools may be as simple as providing paper and pencil for writing brief messages. Include a specific person for whom the organization will be providing communication aids, such as an employee or a conference attendee, in determining the type of auxiliary aid that will provide the most effective communication.
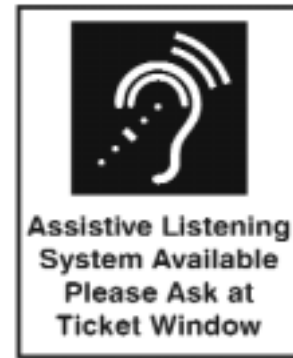
Assistive Listening Systems

Assistive listening systems (ALS), in most cases, must be provided for assembly areas where audible communication is integral to the use of the space (concert and lecture halls, live theaters, movie theaters,

"Advances in technology have … contributed to the arts by making communications, documentation and production tasks easier to perform. Computer software including computer-aided design, three-dimensional modeling, graphic design, authoring software (in all disciplines), programmed learning, distance learning, the Internet, voice-recognition and voice synthesis systems, as well as other forms of computer and telecommunications technology have provided incredible new opportunities for people with all types of disabilities to be creative and to communicate more effectively."

Ron Mace, architect, FAIA

meeting rooms). Accessibility standards require permanently installed systems if (1) an assembly area accommodates at least 50 persons or has an audio-amplification system, and (2) has fixed seating. Other assembly areas may permanently install an ALS or provide a portable system. The minimum number of receivers available must be equal to four percent of the total number of seats, but not less than two receivers. Signage must tell patrons that a listening system is available. (ADAAG 4.1.3)

Sign for ALS

An assistive listening system (ALS) minimizes background noise, reduces the effect of distance and overrides poor acoustics. There are three basic types of ALS technologies: audio loop, FM systems and infrared systems.

Assistive Listening Systems

- Audio loop systems work by transmitting an electromagnetic field to a receiver or directly to an individual's hearing aid. These are often used in small classrooms, lecture halls or conference rooms. The audio loop is usually a permanently installed system.

- FM systems work by transmitting radio waves to receivers. They are commonly used in classrooms, movie and live theaters, large arenas and convention halls. FM systems can be portable or permanently installed.

- Infrared systems work by transmitting sound via light waves to receivers worn by users. They are commonly used in courtrooms, movie and live theaters, convention halls and lecture halls. Infrared systems can be portable but tend to be permanently installed.
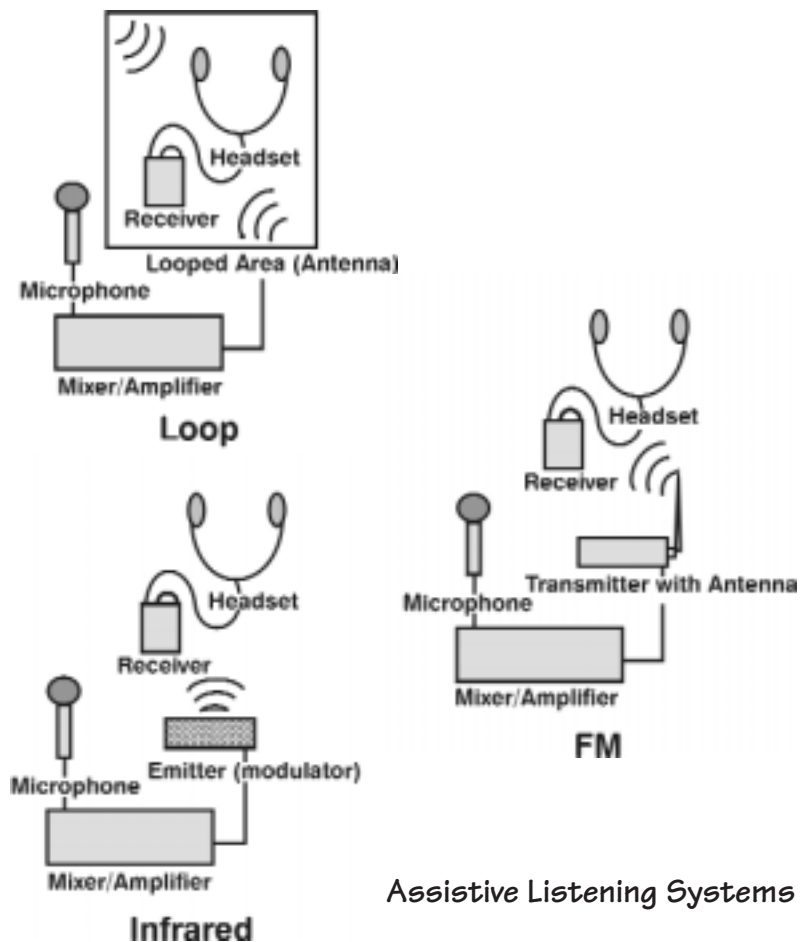
The receivers worn by the user must have an output jack to accommodate attachments such as monaural or binaural earpieces, induction neck loops and cochlear implant adapters. The type of attachment required by individuals depends on the severity of their hearing loss and whether they want to use

the receiver with or without their hearing aid. Provide an assortment of attachments so that patrons may choose the options that best suit them.

The same equipment used for an assistive listening system may be used to provide audio description for people who are blind or have low vision. Multi-channel versions of these systems can also be used to deliver simultaneous translations from one language into multiple languages, or one channel could be used for an ALS and another channel used for audio description.

Captioning

Captioning is the visual display of spoken material. Captioning should also identify who is speaking and indicate non-verbal cues such as sound effects, laughter and music. Individuals who are deaf or hard-of-hearing, who do not know sign language and cannot use assistive listening systems will benefit from captioning.

Open Captioning is always visible, preferred by most people and much more user-friendly. With open captioning there are no buttons to push and it is less likely to be subject to technical difficulties and mechanical breakdown. Open captioning also benefits children learning to read, people learning English as a second language, as well as the general public in a noisy environment.

Closed Captioning allows the display of captions to be either on or off. Closed captioning is frequently used for television broadcasts, videotapes and DVDs. Cultural organizations often use closed captioning for video presentations with a sign next to the video display stating, "Press the button to view this video with captioning."

CART Set-Up

Computer-Aided Realtime Reporting (CART)

Captioning for live performances, lectures, presentations and meetings is sometimes called CART or Computer-Aided Realtime Reporting. Technology changes rapidly, but current CART uses technology developed for the courtroom. Realtime reporters type in a shorthand that specialized computer software instantly translates into full English words and sentences. Then a video monitor, projection screen or LED sign displays the text almost simultaneously. In a small meeting where the system is used by only one individual all that is needed is a laptop computer or two laptops linked together so that what is being typed on one shows up on the screen of the other.

Sign Language

People who are deaf or hard-of-hearing use a variety of communication methods. Many people who are deaf or who lose their hearing use American Sign Language (ASL) and are very proud of the deaf culture that accompanies the use of ASL. American Sign Language is a complete language, with its own grammatical structure and syntax.
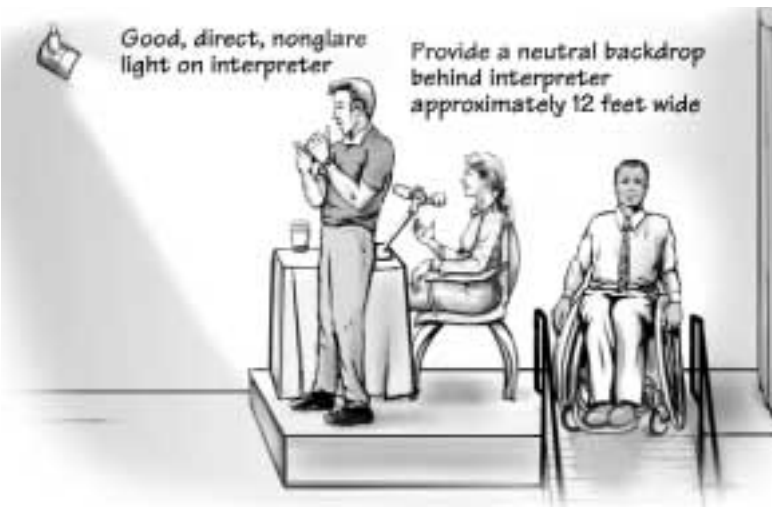
Other communication methods include Cued Speech, Manually Coded English, Pidgin Sign English (PSE) and Signed Exact English (SEE). Someone who knows and understands ASL may not understand SEE or Cued Speech and vice versa. Other deaf or hard-of-hearing individuals may use speechreading (commonly known as lipreading). To ensure effective communication, consult the person who is deaf or hard-of-hearing on their preferred method.

Interpreters

People who are deaf or hard-of-hearing may request interpreting services to ensure full participation in events, meetings and conversations. Interpreters will interpret between spoken English and American Sign Language (ASL), Manually Coded English, or Cued Speech.

Several interpreters may be needed for long programs. The average time a person can comfortably interpret is about 45 minutes. Most interpreters in lecture, workshop and meeting situations work in teams of two and trade places every 20 minutes. In a theatrical or performance setting, two or more interpreters typically work at the same time to convey a sense of dialogue between characters.

Good, direct, nonglare light on interpreter

Provide a neutral backdrop behind interpreter approximately 12 feet wide

Good, direct, nonglare light on interpreter

Provide a neutral backdrop behind interpreter approximately 12 feet wide

Interpreter Positions

A common location for an interpreter in a classroom, meeting or lecture is at the end of the speakers' table or beside the speaker. In a theatrical setting the best placement of interpreters will vary depending on the performance and the size and shape of the theater. Illuminate the interpreter with light focused on the interpreter's face and upper body and angled to reduce the amount of shadowing on the interpreter's face.

To assure the availability of a qualified interpreter, request the service as soon as the meeting or event is scheduled. Interpreter fees vary from region to region. Interpreters usually charge by the hour with a two-hour minimum; sometimes they will negotiate a flat fee, especially for theatrical or performance interpreting.

A word of caution: someone who knows sign language, but is not a certified or qualified interpreter may not adequately translate the message or provide effective communication.

Speechreading and Oral Interpreters

Speechreading (often called lipreading) is the ability to perceive speech by watching the movements of a speaker's mouth; observing all other visible clues including facial expressions and gestures; and using the context of the message and the situation. According to the National Association of the Deaf, on the average, even the best speechreaders only understand 25 percent of what is said. Do not assume that someone can speechread.

To effectively speechread, however, individuals must have an unobstructed, well lit view of the speaker's face. Speechreading is most effective one-on-one. It is not effective in group situations, at large meetings or where the speechreader is seated or standing far away from the person speaking. People who speechread may ask to be seated close to the speaker or the stage to improve their ability to understand what is being presented. Some speechreaders use oral interpreters who use clear articulation, facial

expressions and natural gestures to silently mouth the speaker's words, conveying both the message and the emotion.

TTYs

TTYs are text-based telephones used by people with hearing or speech disabilities to communicate with other TTY users. The first text telephones were teletypewriters, hence the nickname "TTY." Today's TTYs are small, lightweight electronic devices with a keyboard, a visual display and/or a printer connected to a telephone line.

Equip ticket offices with a TTY so that patrons who are deaf or hard-of-hearing may call to order tickets or get information. Advertise the TTY number along with other ticket office numbers.

If there are public phones available, these should not only be wheelchair accessible, but there should also be provisions made for the public to have access to a TTY. There are

TTY and TTY Hooked Up

specific requirements in the Americans with Disabilities Act Accessibility Guidelines (ADAAG) for the number of public TTYs required and phones requiring amplifiers or individualized volume controls when there are public pay phones available (ADAAG 4.1.3).

Telecommunication Relay Services

Telecommunication Relay Services allow a person using a TTY to communicate with someone who uses a voice telephone by calling through a relay operator. A trained operator speaks the words typed by a TTY user and types the words spoken by a voice telephone user.

Because of the low cost of a TTY and the efficiency and desirability of one-to-one communication, cultural organizations that conduct a high volume of business by phone or who have staff or volunteers who are deaf, should consider making themselves directly accessible through TTYs rather than relying on relay services. After October 1, 2001, dialing 711 anywhere in the United States will connect the caller to a relay operator who will place a voice or TTY call for the caller.

Telephone Amplifiers

Many telephones come equipped with a volume control switch or amplifier. When requested, local telephone companies can install amplification devices on pay phones. Portable amplifiers for individual use are also available.

For People with Cognitive Disabilities

The most important service is to provide clear information. People with cognitive disabilities especially appreciate the use of graphic symbols, color and other supplements to clarify the meaning of verbal information. For example, illustrations next to written instructions are easier to comprehend by someone who does not read well and also can be useful to foreign language speakers. Train all staff and volunteers to provide information clearly and to have patience with people who might not understand the first way it is presented.

Environment

Some people who have developmental or cognitive disabilities may be extremely sensitive to the environment around them. Environments that are too noisy or have too much activity may cause the individual to lose focus or become distracted. Creating areas or zones that are quieter and have fewer visual distractions may enhance some visitors' ability to appreciate an exhibit, presentation or activity.

Flexibility and Language

Adapting to the needs of the individual visitor or patron is important. If someone has difficulty understanding or appears distracted, try a different way of presenting the information. These tips may help:

- Focus on one topic.
- Keep remarks short.
- Show or demonstrate instead of giving detailed verbal or written descriptions, directions and information.
- Rephrase, simplify or break down concepts into smaller components if necessary.
- Make associations with already familiar ideas and objects.
- Provide objects that people can touch and that appeal to as many senses as possible.
- Use pictures and other visual aids.
- Inform people before transitions to a new location or program.
- Respond to interest or lack of it.

Pictures

Pictures can often supplement or substitute for written material. Many ideas can be explained more clearly if accompanied by illustrations. Signs for restrooms, telephones and first aid should use standardized pictographs or symbols.

RESOURCES

Braille and Large Print

National Library Service for the Blind and Physically Handicapped (NLS)
Library of Congress
1291 Taylor Street, NW
Washington, DC 20542
(202) 707-5100 voice
(202) 707-0744 TTY
(800) 424-8567 voice
www.lcweb.loc.gov/nls/

"Making Text Legible: Designing for People with Partial Sight"
"Effective Color Contrast: Designing for People with Partial Sight and Color Deficiencies"
Lighthouse International
Arlene R. Gordon Research Institute
111 East 59th Street
New York, NY 10022-1202
(212) 821-9200 voice
(212) 821-9713 TTY
(212) 821-9707 fax
(800) 829-0500 voice
www.lighthouse.org

Preparing Tactile Materials

Tactile Access to Education for Visually Impaired Students (TAEVIS)
1149 South Campus Courts, Building E
Purdue University
West Lafayette, IN 47907-1149
(765) 496-2856 voice
(765) 496-3423 fax
taevis@purdue.edu
www.taevisonline.purdue.edu

National Centre for Tactile Diagrams
University of Hertfordshire
Hatfield, Herts, AL10 9AB, UK
44 1707 286 348 voice
44 1707 285 059 fax
www.nctd.org.uk

Web Accessibility

The World Wide Web Consortium (W3C) Web Accessibility Initiative

W3C has established guidelines for accessible Web sites.
World Wide Web Consortium
Massachusetts Institute of Technology
Laboratory for Computer Science
200 Technology Square
Cambridge, MA 02139
(617) 253-2613 voice
(617) 258-5999 fax
www.w3.org

Assistive Listening Devices

Self Help for Hard of Hearing People, Inc. (SHHH)

National Office
7910 Woodmont Avenue, Suite 1200
Bethesda, MD 20814
(301) 657-2248 voice
(301) 657-2249 TTY
(301) 913-9413 fax
national@shhh.org
www.shhh.org

Technical Assistance Bulletins

The Access Board has three technical bulletins on assistive listening systems—one for consumers, one for installers and one for providers.
Access Board
1331 F Street, NW, Suite 1000
Washington, DC 20004-1111
(202) 272-5434 voice
(202) 272-5449 TTY
(202) 272-5447 fax
(800) 872-2253 voice
(800) 993-2822 TTY
info@access-board.gov
www.access-board.gov/publications/9-als/index.htm

**"Assistive Listening Devices for People With Hearing Loss:
A Guide for Performing Arts Settings"**
The John F. Kennedy Center for the Performing Arts
2700 F Street, NW
Washington, D.C. 20566-0001
(202) 416-8727 voice
(202) 416-8728 TTY
access@kennedy-center.org
www.kennedy-center.org/accessibility

Computer-Aided Realtime Reporting (CART)

National Court Reporters Association
Contact local court reporting agencies, interpreting agencies or other
organizations serving people who are deaf or hard-of-hearing.
National Court Reporters Association
8224 Old Courthouse Road
Vienna, VA 22182-3808
(703) 556-6272 voice
(703) 556-6289 TTY
(703) 556-6291 fax
(800) 272-6272 voice
msic@ncrahq.org
www.ncraonline.org

Association of Late-Deafened Adults (ALDA)
1145 Westgate Street, Suite 206
Oak Park, IL 60301
(877) 348-7537 voice/fax
(708) 358-0135 TTY
www.alda.org

Sign Language Interpreters

Registry of Interpreters for the Deaf
Certification means that an interpreter was evaluated according to
the National Evaluation System for Interpreters. This certification
guarantees an interpreter's signing skills. The Registry of Interpreters
for the Deaf issues an annual "Regional Directory of Services for
Deaf Persons" that lists all services available to people who are
deaf including a roster of certified interpreters.
Registry of Interpreters for the Deaf
8630 Fenton Street, Suite 324
Silver Spring, MD 20910
(301) 608-0050 voice/TTY
(301) 608-0508 fax
www.rid.org