Compendium of Materials and Resources

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Compendium

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Introduction

This *Compendium of Materials and Resources* contains descriptions of effective accommodations and assistive technology and listings of materials and resources that are useful in obtaining additional information on a variety of accommodations and disability-related topics. The intended audience for use includes adult education administrators, instructors and volunteers.

The purpose of the *Compendium* is to provide specific information on accommodations that are referenced in other project materials and to provide background information on assistive technology and other disability-related topics with which adult educators may not be completely familiar. The first part of the *Compendium* contains textual descriptions of accommodations listed by areas of functional need. The functional need categories used are the same ones found in the *Procedural Guide*. The next section provides information on assistive technology that may be useful to adult learners with disabilities. The remainder of the *Compendium* is devoted to providing additional information and resources about topics that were identified as particular concerns of adult educators as they work with learners with disabilities. These topics include legal issues, types of accommodations, specific products, alternative funding sources and specific disabilities.

The *Compendium* was developed to provide information that adult educators might need in order to more effectively implement the steps provided in the *Procedural Guide* and to provide supplementary information to topics that the project materials could not cover in great detail. In developing the *Compendium*, project staff conducted a thorough literature review and compiled listings of published materials and resources. We also incorporated suggestions from our Consumer Panel, Resource Team, consultants, and national and statewide interviews and surveys.

The *Compendium* should be used as a resource guide by adult education staff whenever questions arise in the course of using other project materials. It should be especially helpful to practitioners as they work with adult learners with a variety of backgrounds, experiences, and disabilities. References to other project materials are made throughout the *Compendium* so that needed information can be quickly located. The contents of this product will benefit both educators and learners by facilitating the process of identifying and obtaining appropriate accommodations and by answering any questions that are not addressed elsewhere.

Accommodation Descriptions
By Functional Need

Many accommodations exist that adult educators can use to help their learners. This section gives accommodations by the following functional needs:

- Reading
- Impaired vision
- No vision
- Handwriting
- Math
- Attention
- Staying on Track
- Organization
- Frustration
- Impaired Hearing
- Verbal Expression
- Accessibility
- Sitting Tolerance

READING

Enlarged print may prove to be significantly easier to read for those with reading difficulties, even when vision itself is intact. Limited enlargement can be done on a copy machine. Computer text size adjustment is generally more effective when preparing materials. Boldness of print (to heighten contrast) is equally as important as size.

A good resource for large print educational materials, (such as **textbooks**) either currently available or custom made is the American Printing House for the Blind (see Catalog List).

A **typoscope** is simply a template—a piece of cardboard with an opening cut in it that will allow the individual to read only a portion of the print on a page without being distracted or confused by the remainder of the print. These are available commercially but are also easily made and can be cut according to the needs of the individual (see figure on following page).
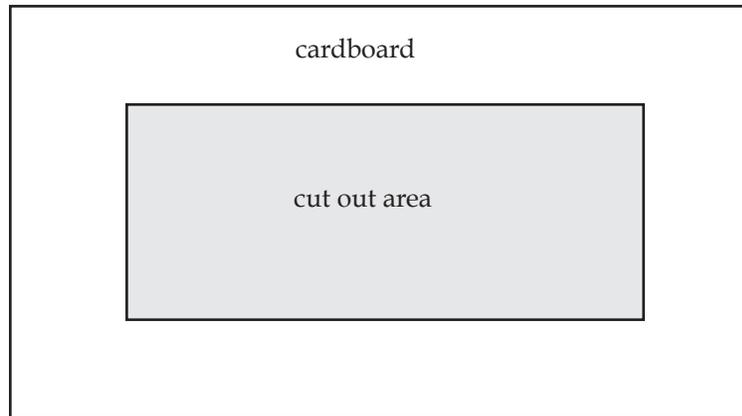
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│                      cardboard                        │
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Figure 1 - Typoscope

IMPAIRED VISION

Low vision specialists evaluate visual status and current functional concerns of the individual; they then recommend the most appropriate visual aids. Some then provide training in optimal use of those aids. Some also provide training to increase the efficiency of available vision. These specialists are generally ophthalmologists or optometrists who have specialized in low vision, or they are other professionals (such as occupational therapists) who work in partnership with a referring doctor.

Lighting is usually a critical concern for people with low vision. Overhead lights are generally inadequate. The best lamp for reading, writing or engaging in other near-vision tasks is an adjustable reading lamp that allows light to be focused directly onto the print material. It should be directed over the shoulder, on the same side as the better or preferred eye, and should be below the level of the eye itself. These lamps are available in desk or floor models.

A 50 to 75 watt halogen bulb or 75 to 100 watt incandescent bulb is considered effective for people with many eye conditions. Florescent lights are generally less effective.

Natural light coming in through a window may be adequate for some, but is difficult to control (e.g., changes according to time of day or level of cloudiness). If used, light is generally considered best if coming from over the shoulder or from the side, and not shining directly into the eyes of the individual.

Magnifiers are available in a wide range of strengths and designs, and often must be "custom fitted" for the individual. Drug and variety stores may sell magnifiers, but their ranges are extremely limited—usually only very weak ones that work for a very limited portion of the low vision population.

Remember that the stronger the magnifier, the smaller its diameter, and the closer it must be held to the paper.

Enlarged print is necessary for many individuals with low vision, either with or without use of a magnifier. Limited enlargement may be done on a copy machine. Computer text size adjustment is generally more effective when preparing materials. Boldness of print (to heighten contrast) is equally as important as size.

A good resource for large print educational materials (such as textbooks), either currently available or custom made, is the American Printing House for the Blind. (see Catalog List on page 240).

Yellow acetate overlays and yellow filters (sunglasses) often provide enhanced contrast and decreased glare for individuals with low vision. A roll of yellow acetate paper can be purchased at an art supply store. Yellow filters (as well as other colors of filters) are available from low vision specialists; however, they can often be found at drug stores or other stores that cater to older adults. One company that manufactures good quality filters is NoIR (see Catalog List).

A **typoscope** is simply a template—a piece of cardboard with an opening cut in it that will allow the individual to read only a portion of the print on a page without being distracted or confused by the remainder of the print. These are available commercially but are also easily made and can be cutaccording to the needs of the individual (see figure 1).

Keyboard/Calculator enhancement can be done with colored tape; simply tape a bright color over the "f" and the "j", or the "+" sign, for example. The learner may prefer other keys to be marked instead of, or in addition to, those mentioned. Color preference is very individual but primary colors or black are usually the best.

Stick-on, large print high-contrast letters and numbers are also available from Maxi Aids, Inc., as are large button calculators. (see Catalog List on page 240).

No Functional Vision

Braille is a method of written communication that needs to be taught by an experienced instructor.

Grade I consists of the alphabet, numbers and some punctuation marks. It is functional for personal reading and writing of rather small amounts (like notes, telephone numbers, addresses, etc.).

Grade II Braille consists of over two hundred contractions and short forms that allow reading and writing to be done much more quickly (and for text to be less cumbersome). Braille books are published in grade II; therefore, a learner in the adult education setting who is blind will need to be proficient in grade II Braille to utilize Braille textbooks or computers.

Braille textbooks may be available from the American Printing House for the Blind. (see Catalog List).

Braille writing devices (nontechnological) include the brailler or slate and stylus. The former is somewhat like a typewriter, and is faster and appropriate for lengthier writing and notetaking. The latter is more like writing long hand; it is appropriate for writing shorter notes, taking down a message or phone number, etc.

Taped textbooks are available to those who pay an annual individual or institutional membership fee from: Recording for the Blind & Dyslexic (RFB&D) (609) 452-0606, website: http://www.rfbd.org/. This organization has a large collection of taped educational materials available for loan; upon special request, RFB&D also produces recordings of books not already in its library. The tapes must be played on special 4-track tape players, which are available from RFB&D, and various catalogs, including Maxi-Aids (see Catalog Liston page 240). Contact the organization for eligibility requirements or other information, or access their website.
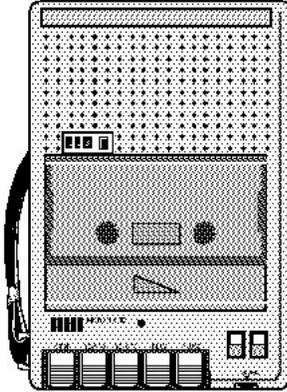
Tape players used by individuals with visual impairment are usually standard tape players (except as noted above), perhaps with tactual (or very bright markings) on the buttons to allow for easier access. Some machines already have raised symbols on their buttons; otherwise, these can be added quite easily. Puff paint or several layers of Elmer's glue can be used. A commercially available product, Hi-Marks, allows the user to make raised, bright orange-red marks on plastic or other surfaces. It is available from a number of sources, including Maxi-Aids.

HANDWRITING

A variety of **adaptive handwriting devices** are available from a number of sources. They include:

1. Triangular grips and foam grips (both slip-ons)—for those with some weakness in grip.

2. Sta-Pen, attached to a stabilizing base/writing frame— holds the pencil in place, at correct angle,and allows an individual to grasp base rather than writing utensil itself. For those with limited strengthand/or control in hands.

3. Foam tubing, which can be custom cut with scissors, to build up writing instrument. For those with limited grip or grip strength.

4.   Weighted pens/pen holders—for those who have difficulty with hand control (such as tremor).

5.   Slip-on pencil holders/universal cuffs—band attaches securely around the hand and holds the pencil in place and at the correct angle. For those with little or no grasp. These are available from Sammons-Preston or Smith & Nephew, Inc.

SOLVING MATH PROBLEMS

Math manipulatives are simply any three dimensional aids that provide a hands-on approach to solving math problems. Coins are an example of a manipulative, although many are commercially available from companies that cater to educators. One source, focusing exclusively on those who learn differently, is Learning disAbilities Resources (see Catalog List on page 240).

Talking calculators, calculators with large buttons, or those with tape output are available from such retail outlets as Radio Shack. One catalog source is Maxi Aids, Inc. (see Catalog List on page 240).

Graph paper can be very helpful in organizing math problems on the paper. A variety of different kinds of paper is available from Learning disAbilities Resources (see Catalog List on page 240).
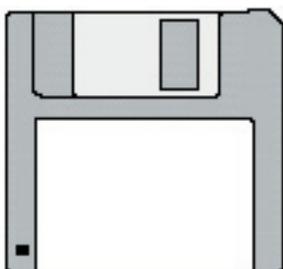
Computer software aimed at reinforcing math concepts is available from educational suppliers andthrough many computer software companies. Staff at ABLEDATA (for information on ABLEDATA see page 244-245) can also provide information about specific programs.

ATTENTION TO TASK

A **typoscope** is simply a template—a piece of cardboard with an opening cut in it that will allow the individual to read only a portion of the print on a page without being distracted or confused bythe remainder of the print. These are available commercially but are also easily made and can be cut according to the needs of the individual (see figure 1 on page 227).

STAYING ON TRACK

A **typoscope** is simply a template—a piece of cardboard with an opening cut in it that will allow the individual to read only a portion of the print on a page without being distracted or confused by the remainder of the print. These are available commercially but are also easily made and can be cut according to the needs of the individual (see figure 1 on page 227).

ORGANIZATION

Mnemonics can be used to organize one's approach to remembering facts. As most educators know, this technique simply involves using first letters of words to form a new word or sentence to jog the memory. ROY G BIV helped many of us to learn the colors within the spectrum of white light—red, orange, yellow,etc. This can continue to be a helpful strategy for adults as well as younger learners.

FRUSTRATION

Relaxation and stress management are skills that are taught and monitored by various professionals such as psychologists. The learner's personal physician is one individual who might be able to make an appropriate referral.

A number of self-help books available at local bookstores or libraries suggest ways to learn these skills without professional intervention.

IMPAIRED HEARING

Amplification can be provided by a system such as the "Pockettalker Pro" which is available for less than $150.00 from MaxiAids, and includes an amplifier, a microphone, and a mini earphone. The microphone is placed near the origin of the sound to be heard (such as the educator).

Visual cues can be given through any of a number of alarm clocks that will alert the learner via a flashing strobe or halogen light. Available from MaxiAids.

Sign language and lip reading instruction must be provided by professionals in the field. Audiologists are hearing care professionals who specialize in prevention, identification, and assessment of hearing disorders and provide treatment and rehabilitative services. They may provide training in speech reading (formerly called lip reading), recommend other professionals who train in sign language, or may refer you to the appropriate agency or individual in the community who might provide these services. Your local VR agency may also be able to provide a listing of professional interpreters in your area.

VERBAL EXPRESSION

A **speech and language pathologist** is an allied health professional, usually with a master's degree, who can evaluate speech and language difficulties and assist in determining whether intervention might result in improvement of the identified barrier(s). This professional is also knowledgeable about communication devices that might be appropriate.

Speech and language pathologists can be found in most medical centers and schools. The learner's physician is a good source for a referral to an appropriate individual in this field.

ACCESSING FACILITIES WITH LITTLE OR NO VISION

Teaching the learner the layout of the facilities may be necessary for an individual with little or no vision. This service is best provided by a professional known as an "orientation and mobility specialist," if available in your community. Contact your local government social service agency for information on the state agency mandated to provide services to individuals with vision loss. Many of these agencies employ orientation and mobility specialists.

Some aspects of safe access to the environment can be addressed directly by educators. For example, one can critically examine the classroom environment, looking for obstacles such as cords, loose carpet, sharp protruding edges, etc. Move what can be moved. Then think about enhancing the **contrast** of those things that cannot be moved by marking them with a sharply contrasting color (other than red); most individuals with vision loss can see such contrast. Vinyl tape of various colors and widths can be purchased at most hardware stores.

Color/contrast enhancement can also be extremely important for easier location of materials and equipment in the classroom. For example, place a light colored computer mouse on a dark mousepad.Wrap pens and pencils with strips of bright yellow vinyl tape so that they won't disappear on a tabletop.

ACCESSING FACILITIES IN A WHEELCHAIR

Please refer to the **Accessibility Checklist** in the Adult Educator Handbook of Rights and Responsibilities, which gives extensive information about ways to make a facility user-friendly to an individual using a wheelchair.

Raised desks or tables at an appropriate and comfortable height for a learner using a wheelchair must allow for armrests to slide underneath the desk or table surface. Choose one that does not have a front "apron." Adjustable tables can be purchased from rehabilitation supply catalogs, but they are quite expensive ($500.00 and up). Sammons-Preston and provides such tables (see Catalog List on page 240).

Tables can be modified to the appropriate height simply by adding bricks or blocks under each leg of a table or desk. However, be certain that such an adaptation is stable and secure.

SITTING TOLERANCE: AGITATION AND DECREASED ATTENTION

Relaxation and Stress Management are skills that are taught and monitored by various professionals, such as psychologists. The learner's personal physician is one individual who might by able to make an appropriate referral.

A number of self-help books available at local bookstores or libraries suggest ways to learn these skills without professional intervention.

Chewing can be a powerful stress reliever/agitation decreaser for some individuals. If done within acceptable limits, it may be very helpful for the learner to bring food, gum, or rubber tubing to chew on while doing school work. One must be sensitive, however, to other learners who may be distracted by loud chewing or "smacking."

Comfortable clothing—loose fitting, appropriate to indoor temperature and of a soft fabric—may help to decrease agitation when sitting for any length of time. Some individuals are sensitive to the tactile stimulation provided by certain clothing.

Providing a variety of seating options within the classroom can help the learner to move about and change positions when needed. Rocking and beanbag chairs should be considered; even carpeted areas with pillows can be provided for working prone or lying on the floor.

Inflatable cylinders, rolls or balls (commonly used in therapy settings) can provide additional seating options. These are available through a supplier such as *Sammons-Preston*. (see Catalog List on page 240).

SITTING TOLERANCE: PAIN, DISCOMFORT, FATIGUE

Increased sitting tolerance may be an appropriate goal for a learner. Seek advice or assistance from a physical or occupational therapist who specializes in working with individuals with pain, or with orthopedic or work tolerance issues.

A **lumbar support** is simply a soft, firm (usually foam) roll that can be attached to a chair back at the point where the mid to lower back curves inward. It is designed to help relieve or prevent lower back pain by promoting correct posture while sitting. Some are actually designed to tie around the waist so that learners who move from chair to chair can take the support with them.

Assistive Technology

This section on assistive technology is separate from the accommodations sections because the previous accommodations are higher incident examples. In other words, the previous accommodations will be useful for most of the adult learners most of the time. The assistive technology that will be discussed in this section will be used primarily by learners with more severe functional limitations.

"Assistive Technology" is defined by the Technology-Related Act of 1988 (Tech Act), Public Law 100-407, and the Individuals with Disabilities Education Act of 2004, (IDEA), Public Law 101-476, as "any item, piece of equipment, or product system, whether acquired commercially off-the-shelf, modified or customized, that is used to increase, maintain or improve the functional capabilities of individuals with disabilities." Many of the accommodations we have discussed in the prior section would meet the definition of assistive technology.

When you encounter an adult learner who has a severe physical or sensory disability (hearing or vision) you will probably need help from an outside resource like the Assistive Technology Center, an occupational therapist, or a rehab technology specialist. While many of these learners will come to you with some type of technology already in place, there may be times when this equipment will be inadequate or will need modification. This is when you need to rely on the experts. However, before referring a learner you may need to learn from an expert how to operate the device or how the device will be used by the learner.

The following is a general discussion of assistive technology and how it might help the learner to meet his/her educational goals. A table summarizing this information can be found at the end of the section.

Oral Communication

You may encounter a learner whom you cannot understand when he/she speaks to you. This person may use or need an augmentative communication device.

Generally, a speech-language pathologist is the person most trained to help a person with a disability to decide what kind of communication device would work best for him/her. Low tech systems like alphabet boards or cards with words or symbols work well for some people. Devices are also available that can be preprogrammed with sentences or words that people carry with them and access by pushing buttons. Many of these high tech devices use symbols to represent words or phrases and when buttons are pushed in a certain sequence the device speaks the words the person wants to express.

Written Communication

If the learner in question cannot produce writing, both hardware and software can be used with computers to assist in the writing process. Individuals who are not able to use standard keyboards because of limited range of motion, poor ability to press keys, limited coordination skills, tremors or excessive movements may benefit from a **large** or a **small keyboard**, a **head controlled input device**, or a **keyboard emulator**. These are all hardware devices that work with a standard computer. Most come with the software that allows them to interact with the software the individual needs, like a word processor.

Software is also available to make the typing process less laborious. One type is **abbreviation expansion software**. When the letters "ku", for example, are typed, the words "University of Kansas" appear on the screen if that is what is programmed. Many current word processors like WordPerfect have this capability built in. With **word prediction software**, the letter t is typed and on the screen many common words beginning with "t" are spelled out. The person doing the typing picks the word he or she wants by pressing the number next to the word, thus eliminating the keystrokes usually necessary to type the words.)

An individual who cannot use a keyboard can also use different input methods. These may be as simple as a mouse or a trackball or some kind of a switch. Individuals who cannot use a keyboard may input information through an on-screen keyboard with a **scanning array**, or a **touch screen**. Also **voice input devices** are available that allow a person to talk into the computer.

Visual Deficits

For people with visual deficits, programs are available that will magnify images on the computer screen (this software is included on Macintosh computers and with Windows although other packages are also available to do this). **Closed circuit TV's (CCTV's)** can magnify text from books, newspapers, magazines, etc., so that a person with low vision is able to read. An **optical character recognition system** scans and converts written text into computer documents that can be read by a speech synthesis/screen review system. A person with visual deficits might also benefit from voice input systems as mentioned above. Many of the above suggestions for people with visual deficits might also be practical solutions for people with reading disabilities.

New devices arrive on the market daily and it is not important that you are aware of the latest devices. However, the **Assistive Technology Center** is an invaluable resource to you and your students. It was not our intent in these few pages to give you more than a very quick survey of the kinds of technology available and some resources to get you and the adult learner started on the road toward the learner's goal.

Table 1   Area of disability

Assistive technologies by area of disability	Reading	Impaired or no vision	Handwriting	Math	Staying on track	Memory	Staying organized	Impaired hearing	Verbal Expression	Written Expression
Augmentative communication devices									X	
Word processing software			X							X
Spell check			X							X
Modified input devices, e.g. mice, joysticks, keyboards			X							
Speech recognition software			X							X
Abbreviation expansion			X							
Word prediction software			X							
Indirect input methods			X							
Closed circuit TV's (CCTV)	X	X								
Optical character recognition systems	X	X								
Screen enlarging software		X								
Listening aids								X		
Talking calculators		X		X						
Variable speed control tape recorders		X			X	X	X			
Personal data assistants					X	X	X			

Catalog List

American Printing House for the Blind
1-800-223-1839   www.aph.org
Braille and large print materials

Learning disAbilities Resources
1-800-869-8336   www.learningdifferences.com
a variety of items for enhanced learning

Maxi Aids, Inc.
Aids for Independent Living
1-800-522-6294 (V)   1-800-281-3555 (TTY)
www.maxiaids.com
products for individuals with physical or sensory disabilities

NoIR Medical Technologies
www.noir-medical.com/index.htm
colored light filters for people who are sensitiveto glare

Sammons Preston Rolyan - USA.
1-800-323-5547   www.sammonspreston.com
helpful items for people with physical disabilities

WCI.
1-800-233-9130 (V/TTY)   www.weitbrecht.com
products to enhance everyday sounds and events, assisting
people with hearing loss

North Cost Medical.
1-800-235-7054   www.beabletodo.com
products that increase independence by making everyday
activities easier and safer)

EnableMart
1-888-640-1999   www.enablemart.com
assistive technology products to meet the needs of individuals
across a range of disabilities

Infogrip.
1-800-397-0921
assistive devices to provide people with a healthier and more
productive way to interact with computers

ASSIS-TECH, Inc.
1-866-372-5114   assis-tech.com

Other Subject Areas

The following are subject areas about which adult education programs might have questions as they work with adults with disabilities. A summary is provided of each subject area, and representative materials and resources are listed and described. The resources and materials listed are examples only and are by no means comprehensive. A summary listing of resources, phone numbers and website addresses is provided at the end of this section.

Information on Legal Issues and Program Accessibility

As adult education programs strive to make their programs accessible and provide accommodations to adult learners with disabilities, they may have questions about requirements within the ADA, IDEA, Section 504, or other relevant legislation. These questions may range from the specific (e.g., how wide should doorways be?) to general (e.g., what is an auxiliary aid or service?). The materials and resources listed below can answer many of these questions. Also, legal issues are addressed in detail in the *Adult Educator Handbook.*

Materials

Americans With Disabilities Act Handbook, Equal Employment Opportunity Commission and U.S. Department of Justice, 1991. This volume contains annotated regulations for all Titles of the ADA, resources for obtaining additional assistance, and an appendix that contains supplementary information. www.eeoc.gov/ada/adahandbook.html

ADA Title II Action Guide for State and Local Governments. This is a practical manual and workbook designed to guide state and local government entities through Title II of the ADA and the compliance process. Written and produced by Adaptive Environments Center, Inc., it can be obtained through regional ADA & IT Technical Assistance Centers (see Resources on following pages).

Compliance with the Americans with Disabilities Act: A Self-Evaluation Guide for Public Elementary and Secondary Schools, U.S. Department of Education, Office for Civil Rights. Presents a comprehensive process for schools to use in ensuring ADA compliance, conducting self-evaluations and transition plans, and making modifications. Can also be obtained through regional ADA & IT Technical Assistance Centers (see below).

Resources

Adaptive Environments, Inc., 374 Congress St., Suite 301, Boston, MA, 02210, (617) 695-1225 (V/TTY); www.adaptenv.org. Adaptive Environments is a non-profit organization that develops and conducts educational programs and produces publications on accessibility.

American Association on Higher Education and Disability (AHEAD), P.O. Box 540666, Waltham, MA, (781) 788-0003. AHEAD is funded by the Department of Justice to provide information and technical assistance on the education-related sections of Title II. They have several publications available, including information on testing accommodations and learning disabilities.

Department of Justice ADA Information Line. The Department of Justice operates a toll-free ADA Information Line to provide information and publications to the public about the requirements of the ADA. The automated service, which has recorded information and through which people can order publications, is available 24-hours a day, seven days a week. ADA specialists are available Monday, Tuesday, Wednesday and Friday from 10:00 a.m. until 6:00 p.m. and on Thursday from 1:00 p.m. until 6:00 p.m. (Eastern time.) Spanish language service is also available. To obtain general ADA information, get answers to technical questions or order free ADA materials, call: 1-800-514-0301 (voice) or 1-800-514-0383 (TDD). The ADA Home Page is http://www.usdoj.gov/crt/ada/adahom1.htm. The ADA Homepage has ADA regulations and technical assistance materials and links to the Department's press releases, as well as other important information.

Disability Rights Education and Defense Fund (DREDF) , (516) 644-2555 (V/TTY); www.dredf.org. A legal resource center providing technical assistance and informed analysis on disability laws.

Centers for Independent Living (CIL's) There are more than 200 CIL's nationwide. CIL's are community-based service and advocacy programs run by people with disabilities, and are a good source of local information and assistance on issues related to the ADA. To find the nearest CIL, check your phone book, or call *Independent Living Research Utilization (ILRU)* at (713) 520-0232. You can also try http://www.ilru.org/Jump1.htm which gives a listings by state.

National Rehabilitation Information Center (NARIC) (800) 346-2742 (V) and (301)495-5626 (TTY). NARIC is a federally-funded library and information center on disability and rehabilitation that collects and disseminates the results of federally-funded research projects. NARIC produces an ADA Resource Guide, which is continuously updated and is also available on the internet at www.naric.com

ADA & IT Technical Assistance Centers. Ten of these centers across the country to provide information, training, and technical assistance on the ADA and accessible information technology. By calling 1-800-949-4232 (V/TTY), you will reach the center for your region. adaportal.org

The Alliance for Technology Access (ATA), 1304 Southpoint Blvd., Suite 240, Petaluma, CA 94954, is a network of community-based Resource Centers, Developers, Vendors and Associates dedicated to providing information and support services to children and adults with disabilities, and increasing their use of standard, assistive, and information technologies. They may be reached at (707) 778-3011 (V) or (707) 3015 (TTY); www.ataccess.org.

Information on Types of Accommodations

Once an adult educator has determined that a particular adult learner with a disability would benefit from an accommodation, he or she may be at a loss to know what kind of accommodation is appropriate. Fortunately, several organizations can provide expertise and assistance in this area, listed below. Also, the process of identifying an appropriate accommodation is addressed in detail in the *Procedural Guide*.

ABLEDATA is a division of NARIC that maintains a database of more than 20,000 assistive devices ranging from eating utensils to wheelchairs. Searches of the database can be cross-referenced by many categories, including functional area, disability type, and cost. ABLEDATA can also be accessed on the internet at www.abledata.com.

Apple Computer, Worldwide Disability Solutions Group, (800) My APPLE, provides information from an extensive database on accommodations for people with disabilities produced by Apple and other companies and publishes and distributes booklets and videotapes. The website for this group is www.apple.com/accessibility.

IBM National Support Center for Persons with Disabilities, P.O. Box 2150, Atlanta, GA, 30301, (800) 426-4832. This is a clearinghouse with an extensive database on adaptive computer technology produced by IBM and other companies (screen magnifiers, screen readers, voice input devices, etc.); publishes resource guides on specific disabilities (e.g. vision, mobility, hearing, speech).

Job Accommodation Network, (JAN), West Virginia University, 918 Chestnut Ridge Rd., Ste. 1, P.O. Box 6080, Morgantown, WV, 26506-9901, (800) 526-7234. JAN is a free service that provides information on how to accommodate specific functional limitations, with a database of more than 16,000 specific accommodations. JAN can also be accessed on the internet at http://www.jan.wvu.edu/.

Information on Specific Products

Once the adult educator and learner, working together, have selected the general type of accommodation that is appropriate, they must next select the specific product to utilize. There will undoubtedly be many factors to consider in making this selection, including the availability and cost of specific products. Again, the *Procedural Guide* addresses this subject area in great detail. Other possible resources are listed below.

Probably the most extensive resource in this area is the ABLEDATA database listed on page 244. ABLEDATA has the capacity to conduct product searches based on a variety of key words or phrases such as architectural elements, communication, educational management, sensory disabilities, etc. Searches can also be constrained by such factors as price and manufacturer.

Additionally, many catalogs from various companies and manufacturers are available on different types of devices and equipment. Most companies will provide a catalog free of charge. Also, retail medical equipment outlets will often provide information on suppliers or send catalogs from their various suppliers upon request.

A final resource is the Tech Act project in each state. The federal Technology-Related Assistance for Individuals with Disabilities Act of 1988 (the "Tech Act") created programs in each state to develop statewide, consumer-responsive programs of technology-related services for individuals with disabilities of all ages. Services that state Tech Act agencies are mandated to provide (at no cost) include:

- Events and locations where individuals can try out devices and equipment

- Statewide toll-free numbers for information and referral to Assistive Technology (AT) services and suppliers

- Funding Guides listing AT resources and funding options

- Equipment exchange and recycling services

- Training of people with disabilities, families, service providers, and others in AT.

Most Tech Act projects have devices available for people with disabilities to try out to see if they are compatible. They also have staff members who can provide information on various products, and make recommendations based on the specific situation or need.

To obtain the name and phone number of the Tech Act project in a particular state, call the *RESNA Technical Assistance Project* at (703) 524-6686 (V) or (703) 524-6630 (TTY). RESNA also maintains a website at http://www.resna.org/resna/ that lists all the state projects as well as funding and other information.

Information on Alternative Funding

Based on our findings, funding is often seen by adult educators to be one of the largest barriers to providing accommodations. In reality, according to the Job Accommodations Network, most (69%) job-related accommodations cost less than $500, and many (19%) cost nothing at all ("Cost and Benefits of Accommodations," a fact sheet published by the President's Committee on Employment of People with Disabilities, July, 1996). Research for the *Procedural Guide* indicates that most classroom-related accommodations cost very little or nothing at all. Nevertheless, because they perceive a problem with costs, adult educators might be interested to know of possible outside funding sources for assistive devices and related items.

Materials

Again, the state Tech Act projects (see above) are an important resource to contact. All of these projects are mandated to prepare *Funding Guides* for public and private sources of money for assistive technology available in their state. These *Guides* provide information about regulations specific to their state agencies, local charitable trusts and other private funding sources, how to develop a funding request, and many other practical pieces of advice. Very often, local chapters of disability-specific organizations, such as the Multiple Sclerosis Society or United Cerebral Palsy, will have limited funds available for AT, and the Funding Guide for that state will document this availability.

ABLEDATA (see above) also has a factsheet called *Funding Assistive Technology*. It can be obtained through ABLEDATA's website or by calling to request a copy. The factsheet lists potential funding sources and their eligibility requirements as well as many other resources available on obtaining funds.

Resources

The Assistive Technology Funding and Systems Change Project
Funded under the Tech Act, this project helps individuals and groups to identify funding sources for assistive technology and provides information on how to access them. The project also works to identify barriers to funding and to promote systems change.

Other funding sources that can be pursued, depending on the individual and the type of device desired, include:

- *Medicaid* - Eligibility restricted to people who receive TANF or Supplemental Security Income. What is covered varies from state to state, but medical necessity is usually a critical factor for payment. Augmentative communication devices are covered by many states, as well as prosthetics and orthotics.

- *Medicare, Part B* - Available only to people 65 and older, or people whose disabilities are severe enough to qualify them for SSDI. Pays for durable medical equipment such as wheelchairs and braces.

- *Private Insurance*, including health insurance, disability insurance, and liability insurance—Coverage varies depending on the policy; extensive documentation by professionals is often required.
- *Vocational Rehabilitation (VR)* - VR is available to working age people with disabilities. Equipment is purchased when it can be demonstrated that it can expedite the goal of vocational placement. In some states, VR retains ownership of any equipment purchased.
- *Special Education/IDEA*—Available to persons with disabilities age 21 and younger. Funds the purchase of equipment that is justifiable as expediting educational goals. Not all states allow use of these funds for individuals in adult education programs. Also, many states retain ownership of equipment.
- *Veterans Administration*—Several levels of eligibility based on service and financial need. Equipment is paid for when deemed part of overall medical or rehabilitation need. Funds equipment such as sensory aids, prosthetics, and mobility equipment.
- *Workers Compensation* - Varies from state to state, but equipment is often purchased as part of the rehabilitative process.

Information on Specific Disabilities

Many adult educators contacted through the various activities of our project expressed a desire to learn more about specific disabilities. We hope the following resources will cover most types of disabilities encountered by adult educators, including physical, health, sensory, emotional, substance abuse and learning disabilities. Many of these groups have local chapters listed in the phone book. The National Health Information Center (phone number listed below) has a comprehensive listing of toll free numbers and other information on a huge variety of disabling conditions and also on organizations that provide information to the public about them, including many not listed below. The Center can be accessed on the internet at www.health.gov/nhic.

These organizations provide information to the public. Some offer recorded information only. They can generally be reached within the U.S. Monday through Friday during normal business hours (unless otherwise stated).

Resources on Disabilities

Alcohol and Drug Information	800 788-2800	www.health.org
Alzheimer's & Related Disorders Center	800 621-0379	www.alzhi.org
American Association on Mental Retardation	800 424-3688	www.aamr.org
American Autoimmune Related Diseases Association	800 598-4668	www.aarda.org
American Cancer Society	800 ACS-2345	www.cancer.org
American Council of the Blind	800 424-8666	www.acb.org
American Diabetes Association	800 232-3472	www.diabetes.org
American Foundation for the Blind	800 232-5463	www.afb.org
American Parkinson's Disease Association	800 223-2732	www.apdaparkinson.com
Amysotrophic Lateral Sclerosis (ALS) Association	800 782-4747	www.alsa.org
Arthritis Foundation	800 283-7800	www.arthritis.org
Autism Society of America	800 3-AUTISM	www.autism-society.org
Children and Adults with Attention Deficit Disorder	800 233-4050	www.chadd.org
Epilepsy Foundation of America	800 332-1000	www.epilepsyfoundation.org
Huntington's Disease Society Hotline	800 345-4372	www.hdsa.org
International Dyslexia Association	800 222-3123	www.interdys.org
Learning Disabilities Association of America	888 300-6710	www.ldanatl.org
Lupus Foundation	800 558-0121	www.lupus.org
Macular Degeneration Foundation	888-633-3937	www.eyesight.org
Multiple Sclerosis Foundation	800 441-7055	www.msfacts.org
Muscular Dystrophy Association	800 572-1717	www.mdausa.org
National AIDS Clearinghouse	800 342-2437	www.cdc.gov
National Alliance for the Mentally Ill	800 950-NAMI	www.nami.org
National Association for Hearing & Speech Action	800 638-TALK	www.asha.org
National Attention Deficit Disorder Association	800 487-2282	www.add.org
National Center for Stuttering	800 221-2483	www.stuttering.com
National Down Syndrome Society	800 221-4602	www.ndss.org
National Foundation for Ileitis and Colitis	800 343-3637	www.ccfa.org
National Head Injury Foundation	800 444-NHIF	www.biausa.org
National Information Center on Deafness	202 651-5051	www.clerccenter.gallaudet.edu
National Organization on Rare Disorders	800 999-6673	www.rarediseases.org
National Spinal Cord Injury Association	800 962-9629	www.spinalcord.org
Tourette's Syndrome Association	800 237-0717	www.tsa-usa.org
United Cerebral Palsy	800 872-5827	www.ucp.org

Summary of Contact Information

Organization:	Phone number/ website:
ABLEDATA	(800) 227-0216 www.abledata.com/
Adaptive Environments, Inc.	(617) 695-1225 (V?TTY) www.adaptenv.org/
AHEAD	(781) 788-0003 (V/TTY) www.ahead.org/
Apple Computer, Worldwide Disability Solutions Group	(800) MY APPLE www.apple.com/accessibility
Disability Rights Education and Defense Fund	(510) 644-2555 (V/TTY) www.dredf.org
IBM Accessibility Center	www.-306.ibm.com/able/
Independent Living Resource Utilization (ILRU)	(713) 520-0232 (V/TTY) www.ilru.org
Job Accommodation Network	(800) 526-7234 (V/TTY) www.jan.wvu.edu
National Health Information Center	(800) 336-4797 www.health.gov/nhic
National Rehabilitation Information Center (NARIC)	(800) 346-2742 (V) (301) 459-5984 (TTY) www.naric.com
Recording for the Blind & Dyslexic (RFB&D)	(866) RFBD585 or (866) 732-3585 www.rfbd.org
ADA & IT Technical Assistance Centers	(800) 949-4232 (V/TTY) adaportal.org
RESNA Technical Assistance Project	(703) 524-6686 (V) (703) 524-6639 (TTY) www.resna.org/taproject
The Alliance for Technology Access	(707) 778-3011 (V) (707) 778-3015 (TTY) www.ataccess.org