Assistive Technology for People with Retinal Degenerative Diseases

The Foundation Fighting Blindness
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Owings Mills, MD 21117-2220
800-683-5555 800-638-5551 TDD
www.FightBlindness.org
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I was diagnosed with retinitis pigmentosa when I was 33 years old and my vision has slowly declined, affecting my life in many ways. My field of vision is only 10 degrees and assistive technology has become extremely important to me.

I have lost quite a bit of central vision and reading print is extremely difficult. I can read a computer screen with reverse contrast and large fonts (but even that has become difficult) but I have to struggle to read the document once it is printed on paper, even in large print.

I started using assistive technology in the form of a computer in 1993. I was at LINC (Learning Independence through Computers) taking instruction in Vocal-Eyes and speech synthesizers and started to learn enough about computers so that I was no longer "computer illiterate." When I first started using the computer I could still read print with little difficulty. I enjoyed using the computer but thought that I didn't have to have one because computers were expensive and I could still read print. However, due to the loss of much of my central vision, I have learned to appreciate the advantages of assistive technology.

The computer with screen enlargement programs, screen reversal programs (white writing on dark background), and speech capabilities makes writing letters and documents so much easier and decreases the amount of eyestrain. With a computer I put my paperwork in one place and don't worry about losing lists or little notes that I made for myself (such as a contact's name and address). I also use a Braille 'n Speak (from Blazie Engineering) which is a portable notetaker with Braille input and speech output. I used it as an organizer and notetaker while taking the notes on the resources listed in this information booklet. Since I find it extremely difficult to read my own handwriting, it is much easier to "write" into the Braille 'n Speak and hear the information spoken back to me (Blazie also makes a notetaker that doesn't require knowledge of Braille).
Selecting A Computer

There are many brands of computers on the market today (Compaq, Dell, Gateway, IBM, MacIntosh, Packard Bell, etc.). The features and model selections are vast and change daily. If the casual purchaser would walk into a computer store, he or she might be overwhelmed by all the numbers on a specifications sheet for a particular computer.

Think about what software you will be putting into your computer. The final selection of a computer can depend upon the requirements of the software, such as Windows, Vocal Eyes, Jaws (Job Access With Speech) for Windows, or MegaDots.

Consider the speed at which your computer will perform various functions. This is usually expressed as MHz. The higher number MHz indicates that the computer will perform many functions at a faster rate. Also, it is a good idea, if financially possible, to get the most current model. It might be more expensive initially but it will make it easier to add more software or upgrade your computer at a later date.

Another thing to think about is the size of the hard drive in the computer. Four gigs (4,000 MB) seems to be the standard minimum for hard-drive space and larger hard-drives (up to 19 gigs and perhaps more) are available.

Carefully consider how much random access memory (RAM) you want. RAM is the amount of memory your computer can bring up at a time. 32 megabytes (MB) of RAM usually come with the computer. However, depending on your software needs, you will want to get more than 32 MB. Your computer can be upgraded to up to 256 MB of RAM at the time of purchase. Remember that each software tool added to the computer uses more RAM. For example, Windows 95 uses 8 MB, Windows 98 uses 16 MB, JAWS uses about 32 MB, and DragonDictates can use 128 MB of RAM. Your computer will be able to run more than one application at a time (for example, JAWS with the Internet) more quickly and efficiently if it has enough RAM or memory. Speed of loading and moving from place with in your document also depends on memory.
It is important to find out if the computer manufacturer offers technical support 24 hours a day 7 days a week. If you have trouble with your computer at 1:00 AM on Sunday and you need a printout for a Monday morning presentation, you want to be sure technical support is available.

Another thing to consider when buying a computer is the availability of repair work and what the warranty covers. The warranty may specify that only an authorized dealer may work on your particular computer and that may not always be readily available.

Some other things to consider are what size monitor you will need, what speed modem you will want, and whether you are considering a CD-ROM. Monitors vary in size and a person with RP doesn't want to get a monitor that is too big (magnification isn't always the answer). A modem is necessary if you want to "surf the net", a popular and necessary activity for many computer users. The speed of the modem is measured in bauds per second (BPS) and a higher number indicates a faster modem. A CD-ROM is also a nice feature to have on your computer. There is a lot of information stored on CD-ROM (which looks like a standard compact disk) such as a dictionary or an encyclopedia that would probably take up a lot of room on the hard drive, not to mention gobbling up many MB of RAM that you could use for something else.

Other things that might be included are a video card, sound card, or speakers. These may be things that you will decide you will not need after you consider the software you will add to the basic computer (such as screen reading programs, magnifying programs, speech synthesizers, etc.). However, you might want to keep these items around in case they are needed as your vision and software needs change. It is normal to feel overwhelmed when looking at all the specifications, so take time to talk to your computer sales representative or someone whom you feel is knowledgeable about computers. You might want to talk to someone at your state rehabilitation center, or you might even have someone in your local Affiliate who is knowledgeable about computers.
Assistive technology (AT) is 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. (29 U.S.C. Sec 2202(2)) Individuals with disabilities use assistive technology to accommodate limitations due to their disabilities.

Make sure that technical support and trouble shooting (probably over the phone) are available 24 hours a day 7 days a week.

Although you can learn a great deal from product literature, your final decision should be based on actual use of the product (demos, loaners, arrangements to return if not satisfied, etc.). If possible give equipment or software a trial run (probably for at least 30 days) and then make a final decision.

No one device is a universal solution. What works for someone else may not work for you.

Consider your budget and try to get "the most bang for the buck." Decide what you want to do with your equipment and get as much information as possible about the equipment and the companies that make the specific devices you are considering.

Determine if training is needed for the device and determine how that training will be provided (tape tutorial, rehabilitation training center, etc.).

Assistive technology and computer software are always being developed and improved.
Everyone seems to be surfing the net these days and there is a lot of good information to be found. However, using an on-line service such as America Online (AOL) or the Microsoft Network (MSN) can be frustrating to a blind or visually impaired individual because many of the on-line services are graphics driven. Things that may help with the on-line services are screen reader programs for Windows, speech synthesizers, and to learn the locations of the icons that admit you to your favorite places on the Internet.

Conversa Corporation  
8522 154th Avenue, NE  
Redmond, WA  98052  
Phone:  425-895-1800  
Fax:  425-861-8664  
Web Site:  www.conversa.com

Software and hardware development company that creates, produces, and markets tools and applications using speech technology.  
ConversaWeb for Internet Explorer is a speech-enabled web browser.  
Features include voice activated web browsing and navigation.

MoneyTree Software Company  
121 Cherry Ridge Road  
Thunder Bay, Ontario  
Canada  P7G 1A7  
Web Site:  www.readplease.com

Software company that offers a free text-to-speech program that reads out loud and text on a computer. This software can be downloaded from www.readplease.com. Once installed, the user highlights and copies any text and pastes it into the reader application, which reads it out loud at an adjustable speed.

The Productivity Works, Inc.  
7 Belmont Circle
pwWebSpeak is a non-visual web browser that provides access to web pages and resources of the internet. pwWebSpeak understands the language of the web, interprets web page, and reads the web page to the user.
Reverse contrast: On the desktop, double-click on “My Computer.” Then double-click on control panel. Double click on accessibility options (accessibility...). There are some tabs at the top of the dialog box. Single click on display. Single click to check box for high contrast and single click on settings. For high contrast color scheme make sure white on black is selected. Single click highlighted OK and then single click highlighted OK.

Prevent Time out: This will prevent the accessibility settings from disappearing. Double click on My Computer and double click on control panel. Double click on accessibility option. Single click on the general tab at the top of the box. Uncheck the box that indicates turn off accessibility features after idle for awhile.

To ignore preset web colors: Double click on my computer and then double click on control panel. Double click internet (internet...) icon. At the bottom of the internet properties box, single click on accessibility box. In the formatting box at the top single click to indicate preferences. You may chose to ignore the colors specified on web pages, font styles, and font sizes. Single click highlighted OK and again single click highlighted OK.

To select colors and fonts of web pages: Double click on my computer. Double click on control panel and double click on the internet (internet...) icon. Single click on colors or fonts at the bottom of the box. For fonts you can change the type or size of the font. Single click highlighted OK. When selecting colors, there are two boxes in the upper half of the page. In the box on the left check or uncheck the box that indicates use Windows colors. This box must be unchecked (blank) to select colors of choice. Then single click on text or background. A selection of colors will appear. Single click on the colors selected and then single click on highlighted OK. The box on the right has the links for areas visited and unvisited. Single click on those boxes and choose colors as done for the box on the left. Single click highlighted OK. If printing internet text, change text and background colors to conventional black on white and then change the colors back after printing.

Useful sites and phone numbers
A listserv, called the RP List, is for individuals with degenerative retinal diseases (primarily RP) to express opinions and concerns about dealing with the various components of vision loss. To subscribe, send a message with a blank subject line to listserv@maelstrom.stjohns.edu. In the body of the message, type SUB RPLIST, you first and last name.
Al Squared
P.O. Box 669
Manchester Center, VT 05255
Phone: 802-362-3612
Fax: 802-362-1670
Email: sales@aisquared.com
Web Site: www.aisquared.com

ZoomText Xtra for Windows, ZoomText for DOS, VisAbility - ZoomText is a screen enlargement program that enlarges 2 to 16 times. VisAbility can be used as a reading and form filling program that works with a scanner and projects images onto a monitor.

ALVA Access Group, Inc.
5801 Christie, Suite 475
Emeryville, CA 94608
Phone: 510-923-6280
510-923-6286 TDD
Fax: 510-923-6270
Email: info@aagi.com
Web Site: www.aagi.com

Outspoken for Windows is a screen reading program for Windows. Alva also offers InLarge, a screen enlargement program for MacIntosh, and OutSpoken for MacIntosh. A mailing list is available upon request.

American Foundation for the Blind, Inc.
11 Penn Plaza, Suite 300
New York, NY 10001
Phone: 212-502-7661
800-232-5463
212-502-7662 TDD
Fax: 212-502-7777
Web Site: www.afb.org

Career and Technology Information Bank - provides technology database access, hardware and software evaluation, and research and development information.

American Thermoform Corp.
2311 Travers Avenue
City of Commerce, CA 90040
Phone: 323-728-8877
800-331-3676
Fax: 323-723-9021
Web Site: www.atcbreleq.com

Provides many different printers, including the Ohtsuki printer, which can produce Braille and print simultaneously. Offers translation programs, such as Duxbury and MegaDots, as well as different thermoform machines that can generate teaching aids, graphs, maps, and graphics.

Apple Computer, Inc.
One Infinite Loop, M/S 301-3ED
Cupertino, CA 95014
Phone: 800-600-7808
800-755-0601 TDD
Email: education@apple.com
Web Site: www.apple.com

The newest version of MAC-O'S includes the software for Speech Recognition and Text-to-Speech. This is Apple’s speech recognition technology which will carry out voiced commands and let the user know what is going on.

Arkenstone, Inc.
Nasa Ames Moffett Complex, Bldg.23
Optical character recognition (OCR) reading system - scans a printed page and uses OCR software to convert that information to a computerized format. Once material is converted to computer form, it can be read with any computer access device (for example, screen reader and speech synthesizer or refreshable Braille).

Artic Technologies
55 Park Street
Troy, MI  48083
Phone:  248-588-7370
Fax: 248-588-2650
Email:  info@artictech.com
Web Site:  www.artictech.com

Win-Vision is a screen reader program for Windows. It works with MS-Word, WordPerfect, Excel, and Lotus 1-2-3 and can be used with refreshable Braille. Artic Business Visions is a DOS screen access program. Magnum is large print, screen magnification software for DOS and Windows. Also offered are Artic Transport (a portable speech synthesizer) and TransType (a talking notetaker which has mini “QWERTY,” or standard, typewriter keyboard. Various speech synthesizers such as Artic Internal speech card and DecTalk are also available.

Beyond Sight
26 E. Arapahoe Road
Littleton, CO  80122
Phone:  303-795-6455
Fax:     303-795-6425
Email:   bsistore@beyondsight.com
Web Site: www.beyondsight.com

Offers a variety of CCTV’s, reading systems such as the Arkenstone Open Book Unbound system (for scanning and reading documents), Braille printers, screen enlargement programs, and screen reading programs.

Blazie Engineering
105 E. Jarrettsville Road
Forest Hill, MD  21050
Phone:  410-893-9333
Fax:     410-836-5040
Email:   info@blazie.com
Web Site: www.blazie.com

Braille 'n Speak, a personal data organizer with Braille input and speech output, is a powerful tool that has word processing, time, date, calendar, etc. Braille Lite is comparable to Braille 'n Speak but with refreshable Braille display. Type 'n Speak is comparable to Braille 'n Speak, but with traditional typewriter keyboard setup. Blazie also offers Braille embossers, screen access programs for PC’s and Windows, other screen access programs (JAWS, Vocal Eyes, ASAP), speech synthesizers (Double Talk and DecTalk), and SmartTalk which is a portable speech synthesizer. Blazie also offers PowerBraille, a refreshable Braille display available in 3 models of 40, 65, or 80 (number indicates number of cells displayed at a time).
MAGic Deluxe; a screen enlargement program for DOS and Windows that works with PC’s, laptops, or notebooks. ZoomText: a screen enlargement program that can enlarge up to 16 times. VisAbility: a software package used with a computer and scanner that lets you scan an entire printed page or document and have it displayed on the monitor. Various kinds of CCTV’s are also available.

MegaDots, a Braille translation program, is software which combines features of a user-friendly word processor with automatic Braille formatting. When a document is typed in MegaDots, it will be formatted correctly so it can be produced (in print or Braille). MegaDots knows the Braille rules and will automatically reformat when you make corrections. It can be used with any speech synthesizer or refreshable Braille display. Technical support is provided for those who have MegaDots.
Computer Challenges  
3201 Coquelin Terrace  
Chevy Chase, MD  20815  
Phone:  301-986-9369  
Fax:  301-986-9357  
Email:  computerchallenges@worldnet.att.net  

Computer technology for the visually or motor impaired. Technology offered includes Personal Manager, DragonDictates, ZoomText, and Ad-hoc Reading systems. Also offers consulting for people with low vision or visual impairments. Also offers Installation, training, and system setup at various sites.

Cross Educational Software  
P.O. Box 1536  
Ruston, LA  71270  
Phone:  318-255-8921  
800-768-1969  
Email:  markcross@aol.com  

Talking software for the Apple computer such as Talking Writer, a speech output and large print word processor.

Dragon Systems, Inc.  
320 Nevada Street  
Newton, MA  02160  
Phone:  617-965-5200  
800-825-5897  
Email:  info@dragonsys.com  
Web Site:  www.naturalspeech.com  
Web Site:  www.dragonsys.com  

Works with Windows or Windows '95 and is capable of speaking back what has been entered. Although you can add words DragonDictates has an extensive vocabulary so you don’t have to teach the vocabulary from scratch. DragonDictates analyzes your voice, recognizes it, and generates a computer response. NaturallySpeaking is a dictation program that converts naturally spoken speech to text. Also offers DragonNaturallySpeaking Medical Suite and Dragon NaturallySpeaking Legal Suite.
Braille translation system can be used to create accurate Braille documents from print. There are Duxbury Braille translator systems for DOS, Windows, and MacIntosh. The system works with many kinds of word processors and is compatible with speech output and refreshable Braille systems. It works with the major Braille printers, and provides unlimited technical support.

Electronic Visual Aids Specialists (EVAS)
P.O. Box 371
Westerly, RI 02891
Phone: 401-596-3155
800-872-3827
Fax: 401-596-3979
Web Site: www.evas.com

EVAS offers adaptive hardware systems, speech synthesizers, screen readers, refreshable Braille display systems, printers, screen enlargement programs, CCTV systems, reading systems, Braille translators such as Duxbury and MegaDots, voice recognition such as DragonDictates, and TDD products. Catalog offers descriptions and features of the items available.
Enabling Technologies Company  
1601 NE Braille Place  
Jensen Beach, FL 34957  
Phone: 561-225-3687  
800-777-3687  
Fax: 561-225-3299  
Email: enabling@brailler.com  
Web Site: www.brailler.com

Braille printers and embossers such as Romeo Braille printer,  
 Thomas Braille printer, and Juliet Braille printer. Translator programs  
 from Duxbury and Braille Planet.

Ferguson Enterprises  
104 Anderson Avenue  
Manchester, SD 57353-5702  
Phone: 605-546-2366  
Fax: 605-546-2212  
Email: fergent@fergusonenterprises.com  
Web Site: www.fergusonenterprises.com

Distributor of assistive technology such as scanners, speech  
synthesizers, Braille translators, various tutorials on tape, printers, and  
screen readers for DOS and Windows.

GW Micro, Inc.  
725 Airport North Office Park  
Fort Wayne, IN 46825  
Phone: 219-489-3671  
Email: support@gwmicro.com  
Web Site: www.gwmicro.com

Vocal-Eyes is a screen reader for DOS; Window-Eyes is a screen  
reader for Windows. Other products offered include DecTalk,  
ZoomText, NaturallySpeaking and DragonDictate, Braille printers,  
Braille translators such as Duxbury and MegaDots, and tape tutorials  
on Windows and MicrosoftWord. Also has Toshiba laptop computers  
to which can be added such adaptive technology as a synthesizer,  
screen reader, screen magnification, or voice recognition.
Information about adaptive equipment for the deaf-blind. Braille access (reading) to computer screens and refreshable Braille displays allow the user to read the screen in Braille. Text is converted to Braille and read through refreshable Braille display but only one line (about 80 characters) at a time so reading is slower. It cannot do graphics. Telebraille, from Blazie, is a modified TDD connected to refreshable Braille display. It allows the user to communicate over the phone with other TDD users and can also be used as a computer access device or as a face to face translator between print and Braille (print user types in TDD portion and Braille user uses refreshable Braille display). Lite Touch, also from Blazie, is a TDD device to be used along with the Braille Lite (Blazie). Lite Touch consists of a TDD machine and a vibrating array that gives deaf telephone users the information that might come from flashing lights. The Braille display on the Braille Lite can receive information from another TDD on the other end of the phone.

JAWS for Windows is a screen reader for Windows. The newest version reads the internet using Microsoft Internet Explorer 4.01. Cassette tape tutorials for JFW are available. There is a timed evaluation of JFW which lasts for 60 days from the day of installation. There is a charge for this evaluation and then arrangements for permanent (licensed) software can be made through a phone call. MAGic (Magnification in Color) is screen magnification software.
Hooleon Corporation
411 South 6th Street, Bldg. B
Cottonwood, AZ  86326
Phone:  520-634-7515
        800-937-1337
Fax:   520-634-4620
Email:  sales@hoolean.com
Web Site:  www.hoolean.com

Kits for labeling computer keys (or other things).  Offers Braille labels and/or large print labels.  Color combinations are black/ivory, white/black, black/white, or black/yellow.

HumanWare, Inc.
6245 King Road
Loomis, CA  95650
Phone:  916-652-7253
        800-722-3393
Email:  info@humanware.com
Web Site:  www.humanware.com

Companion is a portable Braille notetaker with speech output.  Other products include ClearView CCTV’s, Braille printers, screen access programs such as outSpoken for Windows, and Braille translators such as Duxbury.

ILA, Inc.
27 East Mall
Plainview, NY  11803
Phone:  800-537-2118
Email:  can-do@independentliving.com
Web Site:  www.independentliving.com

Product catalog that offers assistive technology and software products for blind and visually impaired people.
Magni-Cam is a portable hand-held magnifier that projects onto any television. Offers zoom-focusing and reverse contrast (white letters on dark background). Magnification is changed by moving the camera but image stays in focus. Special spacer locks are installed so that writing can take place with Magni-Cam.

IntelliTalk, a talking word processor, reads what you type. It can read by letter, word, or sentence and turns a MacIntosh into a talking word processor. IntelliTalk for Windows is also available.

Cassette magazine/catalog that has information about products, services, and announcements from manufacturing researchers. Also offers a selection of talking players and recorders and CCTV’s
Lernout & Hauspie Speech Products USA, Inc.
52 Third Avenue
Burlington, MA 01803
Phone: 781-203-5000
Fax: 781-238-0986
Web Site: www.lhsl.com/education

Reading products for people who are blind or visually impaired (Kurzweil 1000) or have learning disabilities and reading difficulties (Kurzweil 3000). These products work by scanning almost any printed document into the PC and then converting text into speech.

Lighthouse International
111 E. 59th Street
New York, NY 10022
Phone: 212-821-9200
800-829-0500
212-821-9713 TTY
Email: info@lighthouse.org
Web Site: www.lighthouse.org

Sharing Solutions is a newsletter published twice a year by Lighthouse for the Blind (in large print or cassette) and has a variety of ideas from many sources about coping with blindness and profiles of adaptive equipment. Also available is Introduction to Adaptive Computer Technology, a resource guide with overviews of different adaptive devises and the companies that provide them.

LS&S Group
P.O. Box 673
Northbrook, IL 60065
Phone: 847-498-1482
800-468-4789
800-317-8533 TTY
Email: lssgrp@aol.com
Web Site: www.lssgroup.com
Catalog of products for the blind and visually impaired. Offers assistive technology products such as screen readers, speech synthesizers, magnification programs (MAGic, ZoomText), etc.

MicroTalk Systems
3039 Aubert Ave.
Louisville, KY  40206
Phone:  502-897-5789
Fax:  502-721-6083
Email: support@microtalk.com
Web Site:  www.microtalk.com

ASAP (Automatic Screen Access Program) is a screen reader for DOS. They also offer ASAW which is a screen reader for Windows.

Myna Corporation
239 Western Avenue, Bldg. A-21
Essex, MA  01929
Phone:  978-768-9000
Email: mynacorp@aol.com
Web Site: Under construction

Myna is an organizer that is integrated with speech so that a screen reader is not necessary. It is menu driven with no special commands to memorize. It has keyboard tutorial and requires no prior knowledge of computers. It is compatible with IBM PCs and is easy to connect to other computers (would need screen reader for working with programs on these computers). Myna allows user to type with full keyboard or in Braille (which can then be translated and printed with Braille printer). It works as organizer, notetaker, telephone and address book, planner, and file manager.
Solutions - Access Technologies for People Who Are Blind by Olga Espinola and Diane Croft-can be purchased through National Braille Press. Talks about computers for the visually impaired, explains parts of the computers such as operating systems, memory, components of word processing such as writing basics, cut and paste, bells and whistles; record and file management (spreadsheets); telecommunications (modem), electronic reading methods (CD-ROM), electronic reading services for the blind, and computerized books. It also describes the various assistive technologies and software, lists vendors, the products they offer, price range, system requirements. Other aspects discussed in this book include new technologies, places to seek funding and related information, and on-line services.

Windows 95 Explained describes concepts of Windows 95 from a non-visual perspective. This book provides a list of Windows keyboard commands and glossary of terms. This book is available in Braille, disk, cassette, and large print and costs $18.
Free comparison data via telephone, email, and written correspondence. Free hands on access by appointment. Work shops available, fee charged.

Op telec US, Inc.
6 Lyberty Way
Westford, MA  01886
Phone: 978-392-0707
        800-828-1056
Fax: 978-692-6073
Email: optelec@optelec.com
Web Site: www.optelec.com

Manufacturer, distributor, and retailer of CCTV’s for people with low vision.

RC Systems
1609 England Avenue
Everett, WA  98203
Phone: 425-355-3800
Fax: 425-355-1098
Email: info@rcsys.com
Web Site: www.rcsys.com

DoubleTalk is a speech synthesizer for PC’s. Speech synthesizers for Apple computers are also available.

Sunflower Software Inc.
211 E. 43rd Street
Suite 2202
New York, NY  10017-4707
Phone: 212-818-1144
Email: sales@sunflowersoft.com
Web Site: Under construction

PRD Plus, works by letting the user type abbreviations for whole words. When the abbreviation is typed, followed by a space or punctuation mark, the program expands it to the whole word.
Tactic
Clovernook Center
7000 Hamilton Avenue
Cincinnati, OH  45231-5297
Phone:  888-234-7156
Fax:    513-728-3946
Email:   clovernook@clovernook.org
Web Site: www.clovernook.org

Offers a quarterly magazine on access technology with reviews about hardware, software, and technical developments. Magazine is available in Braille, large print, and IBM compatible computer disk. A one year subscription is available for $25.

Telesensory
520 Almanor Avenue
Sunnyvale, CA  94086
Phone:  800-804-8004
Fax:    408-616-8720
Email:   info@telesensory.com
Web Site: www.telesensory.com

Offers CCTV’s, reading systems, and computer magnification systems. Vista PCI and Super Vista are hardware magnification programs for Windows or DOS. Reading AdvantEdge is a reading system that works with Windows. Expert Reader and The Reading Edge are “stand alone” reading systems.

Vision World Wide, Inc.
5707 Brockton Drive, 302
Indianapolis, IN  46220-5481
Phone:  800-431-1739
Email:   visionww@netdirect.net
Web Site: www.visionww.org
Offers information and referrals in different media for people concerned with vision loss. Publishes a quarterly journal with information on assistive devices, medical research, self-help techniques, and resources for the vision impaired.

### Training and Assistance

Your state rehabilitation agency is a good starting place. The trick with the state rehabilitation agencies is to be persistent. These agencies serve many people and can’t remember everyone so persistence is invaluable in getting their attention. The state rehabilitation agencies can offer some great training in assistive technology for the visually impaired. Another good place to try is the Alliance for Technology Access (ATA). The ATA consists of centers, located throughout the country, that train visually impaired individuals in the use of assistive technology. Nobody is too old to learn about assistive technology. Check with the ATA centers, state rehabilitation agencies, or the senior centers in your area to find out where you can receive training. There are computer tutorial programs and manuals on cassette tapes. The Hadley School for the Blind, a correspondence program, also offers an introductory course in computer use.

ABLEDATA
8401 Colesville Road, Suite 200
Silver Spring, MD 20910
Phone: 800-227-0216
301-608-8998
301-608-8912  TTY
Fax: 301-608-8958
Web Site: www.abledate.com

Primary mission is to provide information on assistive technology and rehabilitation equipment available from domestic and international sources to consumers, organizations, professionals, and caregivers within the United States. ABLEDATA does not produce, distribute, or sell any of the products listed on their database. They will provide information on how to contact manufacturers or distributors of the products.
Louis Database of Accessible Materials (formerly Carl et al) is an online service that lists over 135,000 titles which include textbooks and other educational material, Braille teaching material, and computer instruction. The service is free through the APH website and doesn’t require a password. For those who don’t have speech access to a browser or don’t have internet access, APH will provide telecommunication software and access will be through a toll-free line. For more information, contact the Resource Services Department.

Demonstrations of low vision devices, electronic and computer technology. CAPS (Career Access for the Partially Sighted) Program; assesses, evaluates, prescribes, and recommends low vision aids and appropriate technology for those individuals with educational and/or vocational goals. Sponsors Project VIEW (Visually Impaired Engaged in Work); a program to help companies provide reasonable accommodations in the workplace for partially sighted employees.
The Guild for the Blind
180 North Michigan Avenue, Suite 1700
Chicago, IL  60601-7463
Phone:  312-236-8569
Fax:  312-236-8128
Web Site:  www.guildfortheblind.org

Offers introductory and advanced level training on the internet for JAWS for Windows, Window Eyes, and ZoomText.

Hadley School for the Blind
700 Elm Street
Winnetka, IL  60093-0299
Phone:  800-323-4238
Email:  info@hadley-school.org
Web Site:  www.hadley-school.org

Offers many distance education courses, one of which is a four lesson course titled, “Introduction to Personal Computers”. Also gives instruction on how to use computers if you can't see the screen, and gives tips on how to select the appropriate computer and software. Text book for the course is offered in Braille, cassette, or large print and is accompanied by the computer access resource list. Hadley also offers a course on word processing.

Maryland Technology Assistance Program (MD-TAP)
2301 Argonne Drive
Baltimore, MD  21218
Phone:  800-832-4827
Web Site:  www.mdtap.org

Focuses on work place accommodations for the blind and visually impaired with some assistive technology for the deaf-blind. TAP has a sensory aids specialist who does training for home or work situations. TAP also fields information and referral calls.
The following titles are provided through the “Talking Books” program and can be ordered through your state library.

- **DOS for Dummies** - RC37977
- **DOS for Dummies Command Reference** - RC39117
- **The WordPerfect Bible** - RC 35117
- **Being Digital** - BR10195, RC 39965

One-on-One Computer Training
2055 Army Trail Road
Addison, IL  60101
Phone:     800-424-8668
Email:     oneonone@pincom.com
Web Site: www.oootraining.com

Offers self-paced, tutorial cassette computer courses. You can listen to tapes and practice at home on your computer (practice files are provided on disk). Courses offered include “**How to Use the Internet as a Research Tool**”, “**How to Use Microsoft Windows ’95**”, “**How to Use MS-DOS**”, and “**How to Use Micsrosoft Word**”. Each course comes with course tapes, a practice disk, and a quick reference guide. Check with One-on-One about the cost of the courses.
Recording for the Blind and Dyslexic
20 Roszel Road
Princeton, NJ  08540
Phone:  609-452-0606
         800-803-7201
Web Site:  www.rfbd.org

Non-profit organization for people who can't read standard print
because of visual, perceptual, or other physical disability. Registered
members can borrow cassettes from the large library of textbooks and
educational books or purchase e-text (books on computer disk).

Available on Cassette from RFBD:

   Add-Ons-The Ultimate Guide to Peripherals - Shelf #CC118
   Windows from the Keyboard - Shelf # FD419
   DOS for Dummi - Shelf # DT301
   Internet for Dummies - Shelf # EB027 (only on computer disk)
   Word for Windows 95 for Dummies - Shelf # FM960

Rehabilitation Engineering and Assistive Technology Society of North
America (RESNA)
Technical Assistance Project
1700 North Moore Street, Suite 1540
Arlington, VA 22209
Phone:  703-524-6686
         703-524-6639 TTY
Fax:    703-524-6630
Web Site:  www.resna.org

Provides information and consultation to the assistive technology
(Tech Act) programs in all 50 states, the District of Columbia, Puerto
Rico, Virgin Islands, Guam, American Samoa, and the
Commonwealth of the Northern Mariana Islands. The Tech Act
projects are funded under the Technology Related Assistance for
Individuals with Disabilities Act of 1988, as amended (P.L. 103-218).
The 56 Tech Act projects work to reduce barriers to the availability, acquisition, and use of assistive technology devices and services for individuals with disabilities within their states.

Sensory Access Foundation
1142 W Evelyn Avenue
Sunnyvale, CA  94086
Phone:  408-245-7330
Fax:  408-245-3762
Web Site:  www.sensoryaccess.com

Offers functional vision and stamina testing and evaluations at the facility as well as on the job site accommodations evaluation. The Sensory Access Foundation also runs an information referral line and training classes are available.

The Carroll Center for the Blind
770 Centre Street
Newton, MA  02458
Phone:  617-969-6200
800-852-3131
Fax:  617-969-6204
Web Site:  www.carroll.org

Provides evaluation, training, information, and technical assistance on adaptive technology. Training is available at the center or on the job site. Training is offered in an individual or group setting on computer operating systems, application programs, and adaptive devices.
The Alliance for Technology Access (ATA) is a movement of people across the country who are working to redefine human potential through the application of computer technology. It consists of a network of assistive technology resource centers whose members share a common vision and a commitment to improving the quality of life for children and adults with disabilities.

National Office:
Alliance for Technology Access
2175 East Francisco Blvd., Suite L
San Rafael, CA 94901
Phone: 415-455-4575
        415-455-0491 TTY
Fax: 415-455-0654
Email: ATAinfo@ATAccess.org
Web Site: www.ATAccess.org

Resource Centers

ALABAMA

Birmingham Alliance for Technology Access Center
Birmingham Independent Living Center
206 13th Street, South
Birmingham, AL 35233-1317
Phone: 205-251-2223 Voice/TTY
Fax: 205-251-0605
Email: dkesslel@ix.netcom.com

Technology Assistance for Special Consumers
P.O. Box 443
Huntsville, AL 35804
Phone: 205-532-5996
Email: tasc@travellers.com
ALASKA
Alaska Services for Enabling Technology
P.O. Box 6485
207 Moller Drive
Sitka, AK  99835-7615
Phone:  907-747-3019
Email: asetseak@aol.com

ARIZONA
Technology Access Center of Tucson
P.O. Box 13178
4710 East 29th Street
Tucson, AZ  85732-3178
Phone:  520-745-5588, ext. 412
Fax:  520-790-7637
Email: tactaz@aol.com

ARKANSAS
Technology Resource Center
Arkansas Easter Seal Society
3920 Woodland Heights Road
Little Rock, AR  72212-2495
Phone:  501-227-3602
Fax:  501-227-3601
Email: atrce@aol.com

CALIFORNIA
Alliance for Technology Access
2175 East Francisco Blvd., Suite L
San Rafael, CA  94901
Phone:  415-455-4575
        415-455-0491 TTY
Fax:  415-455-0654
Email: ATAinfo@ATAccess.org
Web Site: www.ATAccess.org
CALIFORNIA – con’t

Center for Accessible Technology
2547 8th Street, 12-A
Berkeley, CA  94710-2572
Phone:      510-841-3224
Fax:         510-841-7956
Email:       cfarat@aol.com

Computer Access Center
5901 Green Valley Circle, Suite 320
Culver City, CA  90230
Phone:       310-338-1597
Fax:          310-338-9318
Email:        cac@cac.org

iTech (Parents Helping Parents)
3041 Olcott Street
Santa Clara, CA  95054-3222
Phone:       408-727-5775
Email:        iTECH@php.com

Sacramento Center for Assistive Technology
701 Howe Avenue, Suite E-5
Sacramento, CA  95825
Phone:       916-927-7228
Email:        scat@quicknet.com

Special Awareness Computer Center (SACC)
P.O. Box 1325
2975 North Sycamore Drive
Simi Valley, CA  93065
Phone:       805-582-1881
Fax:          805-582-2855
Email:        dssacccca@aol.com
CALIFORNIA – con’t

Team of Advocates for Special Kids
100 West Cerritos Avenue
Anaheim, CA  92805-6546
Phone:  714-533-8275
Fax:  714-533-2533
Email:  taskca@aol.com

FLORIDA

Center for Independence, Technology, & Education (CITE)
215 East New Hampshire Street
Orlando, FL  32804
Phone:  407-898-2483
Fax:  407-895-5255
Email:  comcite@aol.com

GEORGIA

Tech-Able
1112 A. Brett Drive
Conyers, GA  30207
Phone:  770-922-6768
Fax:  770-922-6769
Email:  techable@onramp.net

HAWAII

Aloha Special Technology Access Center
710 Green Street
Honolulu, HI  96813-2119
Phone:  808-523-5547
Fax:  808-523-5548
Email:  stachi@aol.com
IDAHO

United Cerebral Palsy of Idaho, Inc.
5530 West Emerald
Boise, ID  83706
Phone:  208-377-8070
Fax:  208-322-7133
Email:  ucpidaho@aol.com

ILLINOIS

Northern Illinois Center for Adaptive Technology
3615 Louisiana Road
Rockford, IL  61108-6195
Phone:  815-229-2163
Fax:  815-229-2135
Email:  nicat@bossnt.com

Technical Aids & Assistance for the Disabled Center
1950 West Roosevelt Road
Chicago, IL  60608
Phone:  312-421-3373
Fax:  312-421-3464
Email:  taad@interaccess.com

INDIANA

Assistive Technology Training and Information Center (ATTIC)
P.O. Box 2441
3354 Pine Hill Drive
Vincennes, IN  47591
Phone:  800-96ATTIC
  812-886-0575
Fax:  812-886-1128
Email:  inatticl@aol.com
KANSAS

Technology Resource Solutions for People
P. O. Box 1160
1710 West Schilling Road
Salina, KS  67402-1160
Phone: 913-827-9383
Fax: 913-823-2015
Email: trspks@midusa.net

KENTUCKY

AbleTech
36 West 5th Street
Covington, KY  41011
Phone: 606-491-8700
Fax: 606-491-5708
Email: abletech@unidial.com

Bluegrass Technology Center
169 North Limestone Street
Lexington, KY  40507
Phone: 606-255-9951
Fax: 606-255-0059
Email: bluegrass@uky.campus.mci.net

EnTech:  Enabling Technologies of Kentuckiana
Louisville Free Public Library
301 York Street
Louisville, KY  40203-2257
Phone: 800-327-KATS (in state)
       502-574-1637
Fax: 502-582-2448
Email: entech@iglou.com
KENTUCKY – con’t

Western Kentucky Assistive Technology Consortium
P.O. Box 266
Murray, KY  42071
Phone:  502-759-4233
Fax:  502-759-4208
Email:  wkatc@mursuky.campus.mci.net

MARYLAND

Learning Independence Through Computers, Inc. (LINC)
1001 Eastern Avenue, 3rd Floor
Baltimore, MD  21202
Phone:  410-659-5462
Fax:  410-659-5472
Email:  lincmd@aol.com

MICHIGAN

Living and Learning Resource Centre
Physically Impaired Association of Michigan
1023 South US 27, Suite B31
St. Johns, MI  48879
Phone:  800-833-1996 (in state)
        517-224-0333
Fax:  517-224-0957
Email:  llrcmil@aol.com

MINNESOTA

PACER Center , Inc.
4826 Chicago Avenue, South
Minneapolis, MN  55417-1098
Phone:  612-827-2966 (Voice/TTY)
Fax:  612-827-3065
Email:  pacercrc@aol.com
MISSOURI
Technology Access Center
12110 Clayton Road
St. Louis, MO  63131-2599
Phone:    314-989-8404
Fax:      314-993-5937
Email:    mostltac@aol.com

MONTANA
Parents, Let's Unite for Kids (PLUK)
MSU-B/SPED 267
1500 North 30th Street
Billings, MT  59101-0298
Phone: 800-222-7585 (in state)
        406-255-0540
Fax:    406-657-2061
Email:  plukmt@aol.com

NEW JERSEY
Computer Center for People with disAbilities
Family Resource Associates, Inc.
35 Haddon Avenue
Shrewsbury, NJ  07702-4007
Phone: 908-747-5310
Fax:    908-747-5936
Email:  ccdanj@aol.com

The Center for Enabling Technology
622 Route 10 West, Suite 22B
Whippany, NJ  07981-0272
Phone: 201-428-1455
Email:  ctnj@aol.com
NEW YORK
Techspress
Resource Center for Independent Living
P.O. Box 210
401-409 Columbia Street
Utica, NY 13503-0210
Phone: 315-797-4642
Fax: 315-797-4747
Email: lana.gossin@rcil.com

NORTH CAROLINA
Metro School
700 East Second Street
Charlotte, NC 28202-2826
Phone: 704-342-3004
Fax: 704-342-1513
Email: ccacnc@aol.com

OHIO
Technology Resource Center
301 Valley Street
Dayton, OH 45404-1840
Phone: 937-222-5222
Fax: 937-222-2101
Email: trcdoh@aol.com

RHODE ISLAND
TechACCESS Center of Rhode Island
110 Jefferson Blvd.
Warwick, RI 02888
Phone: 401-463-0202
Email: accessri@aol.com
TENNESSEE

East Tennessee Special Technology Access Center, Inc.
3525 Emory Road, N. W.
Powell, TN  37849
Phone:  423-947-2191
        423-947-2192
Fax:    423-947-2194
Email:  etstactn@aol.com

Technology Access Center of Middle Tennessee
2222 Metrocenter Blvd., Suite 126
Nashville, TN  37228
Phone:  800-368-4651
        615-248-6733
Fax:    615-259-2536
Email:  tactn@aol.com

West Tennessee Special Technology Access, Resource Center (STAR)
60 Lynoak Cove
Jackson, TN  38305
Phone:  901-668-3888
Fax:    901-424-9090
Email:  startn@usit.net

UTAH

Computer Center for Citizens with Disabilities
Utah Center for Assistive Technology
2056 South 1100 East
Salt Lake City, UT  84106
Phone:  801-485-9152
Fax:    801-485-8675
Email:  cboogaar@usoe.k12.ut.us
VIRGIN ISLANDS
Virgin Islands Resource Center for the Disabled, Inc.
P.O. Box 308427
St. Thomas, VI  00803-8427
Phone:  809-777-2253
Fax:  809-774-9330
Email:  wayneram@aol.com

VIRGINIA
Tidewater Center for Technology Access
Special Education Annex
960 Windsor Oaks Blvd. Blvd.
Virginia Beach, VA  23462
Phone:  757-474-8650
Fax:  757-474-8648
E-mail:  tcta@aol.com

WEST VIRGINIA
Eastern Panhandle Technology Access Center, Inc.
P. O. Box 987
110 Mordington Avenue
Charles Town, WV  25414
Phone:  304-725-6473
Fax:  304-728-4814
E-mail:  eptac@earthlink.net
Unfortunately assistive technology can be expensive and this can make these wonderful tools seem unobtainable. There are agencies that offer loans and grants to people who would benefit by having a computer at work or at home but who cannot afford one. State agencies can sometimes provide assistive technology to help visually impaired individuals at work or at school. Again, persistence is the key. The state rehabilitation agency makes an evaluation to determine the appropriateness of providing assistive technology. Applications are usually required for loans, grants, or scholarships.

Reference Service Press
5000 Windplay Drive, Suite 4
El Dorado Hills, CA  95762
(916) 939-9620
e-mail:  findaid@aol.com
www.rspfunding.com

Funding for Persons with Visual Impairments is a good reference book about scholarships, loans, grants, and awards from organizations throughout the country and lists the eligibility requirements for each. Reference Service Press also has publications about funding for many categories (people with disabilities and their families, college students, etc.). Reference Service Press Funding Focus is available on AOL by typing in the keyword RSP.
Technology for Education, Inc.
7328 Braden Trail
Inver Grove Heights, MN  55076
Phone:  800-370-0047
Fax:  651-457-3534
Email:  tfe@pop3.spacestar.com