



Access on a Budget

COMPUTER BUILT IN ACCESS

Windows Accessibility Features

- ◆ Start – All Programs – Accessories – Accessibility
 - Magnifier
 - On-screen Keyboard
 - Narrator

- ◆ Start – Control Panel – Accessibility Options
 - Sticky keys, Filter keys, Toggle keys
 - Sound Sentry, Show Sounds
 - High Contrast, Cursor Options
 - Mouse Keys

Windows Mouse Options

- ◆ Start – Control Panel – Mouse
 - Swap left and right mouse buttons for left-handed users
 - Decrease pointer speed for those with tremors, or increase speed for those with limited range of motion.
 - Display pointer tails for those with trouble tracking the mouse
 - Increase the size of the pointer for those with low vision

Windows Display Properties

- ◆ Right click on an empty area of the Desktop – Properties
 - Click on the Settings tab and lower the resolution to make items larger
 - Click on the Appearance tab and increase the font size if needed
 - ◆ Click Advanced to change colors of windows



Access on a Budget

VIRTUAL KEYBOARDS / MICE

1. Sue Center

<http://suecenter.org/>

Sue Center is a communication environment designed specifically for people who cannot use a keyboard or mouse. It could be described as an 'on-screen keyboard' but it is much more than that.

With an ordinary computer, a special low-cost input device, and this free software you can:

- ♦ Keep a journal.
- ♦ Read books and use bookmarks.
- ♦ Consult a dictionary and thesaurus.
- ♦ Correspond via email.
- ♦ Create and view slideshows of pictures.
- ♦ Access some select prime spots on the web.
- ♦ Play games.
- ♦ Control your environment in a variety of ways.

2. Click-N-Type

<http://www.lakefolks.org/cnt/>

Click-N-Type is an on-screen virtual keyboard designed for anyone who needs help using a physical keyboard with special consideration for the severely handicapped. Full featured virtual keyboard, Word prediction and completion, fully configurable including macros, AutoClick and Scanning Modes. Many language/keyboard packs available. Keyboard Designer and many user designed layouts included, Audible and visible feedback options, including Spoken Keys. Works with all pointing devices including head mouse and virtual mouse programs like Point-N-Click. Types into all programs including IE address boxes. Programs to administer user access available.

3. Point-N-Click

<http://www.polital.com/pnc/>

This software is a virtual mouse. It has right click, left click, double left click, click and drag, scroll, double right click, alt key, shift key, ctrl key and scroll key. It is a very good virtual mouse.

4. Dwell Click

<http://www.sensorysoftware.com/software/dwellclick/index.html>

Dwelling is resting the mouse over one area of the screen for a specified time. The dwell click software allows you to perform left-click, right-click and double clicks, and even drag things around the screen. This is ideal for those who can operate the mouse pointer, but not the buttons. For example, users



Access on a Budget

of a head mouse such as the Smart NAV can use this software to control mouse operated Windows programs.

5. **Head-Tracking Pointer**

<http://www.alphaworks.ibm.com/tech/headpointer/download>

The Head-Tracking Pointer provides an inexpensive and easily-used mouse replacement for those unable to use traditional pointing devices. Using only software and any Web-cam, this application allows users to point and click with character-level accuracy by simply aiming their face. Unlike other head-tracking solutions, the Head-Tracking Pointer does not require special-purpose hardware, head gear, or tracking aids, such as retro-reflective dots. Users train the system by tipping their head left and right. Custom-tracking algorithms provide reliable operation in a wide range of environmental conditions. Head motion is translated into pointer motion by custom filters that provide both high speed for long movements and high accuracy for fine control, without switching modes. All clicking variations are supported, including right clicking, double clicking, and click-and-drag.

6. **AAC Keys**

<http://www.aac institute.org/Resources/ProductsandServices/AACKeys/AACKeys.html>

AAC Keys is a keyboard and mouse emulation program for Microsoft Windows-based and Macintosh computers. AAC Keys receives commands through your computer's serial port and translates them into keystrokes and mouse moves, giving you full control of your computer from another device. AAC Keys implements the common GIDEI (General Input Device Emulating Interface) commands (see below). AAC Keys has been designed to work with Windows 95, Windows 98, Windows Me, Windows NT 4, and Windows 2000 operating systems.

7. **Cursor Enlarger**

<http://rbx.de/big-cursors/>

This software allows you to enlarge your cursor. Each of the enlarged cursors are the maximum of 32 by 32 pixels. It is windows based software.

8. **SUITEKeys v.1.0**

<http://www.cs.cofc.edu/~manaris/SUITEKeys/>

SUITEKeys provides access to a virtual keyboard and mouse through continuous speech input on MS Windows platforms.



Access on a Budget

SCREEN MAGNIFICATION

1. **EzMagnifier v. 1.2**

<http://www.ancientsoft.com/ezmagnifier.htm>

EzMagnifier is a small utility to magnify a portion of the screen where you can choose the zooming factor and you can resize the magnified portion itself to suite your needs. You can capture the image of the magnified area and the program saves it in the same folder of the program and you can save multiple captures as the program save them sequentially.

2. **Another Lens**

<http://www.b-zone.de/software/lens.htm>

Another Lens displays a magnified view of the area of the mouse cursor. Quite handy, for example, for drawing software. The window contents can be locked, and saved to a file or copied to the clipboard for taking screenshots. Several additional options, like crosshairs, resizing the window and hiding the caption bar and/or main menu. Stays on top of other windows optionally. Note for fellow programmers: Full source code included (Delphi 4).

3. **Dragnifier**

<http://www.halley.cc/stuff/dragnifier.html>

Dragnifier offers 3 magnification settings—2x, 4x or 8x. For the shape of your magnifier, you get 6 options—hand loupe, small rectangular lens, medium rectangular lens, large rectangular lens, round lens, or “handy reader”.

4. **Screen Magnifier**

http://www.code-it.com/software_info.htm

Just a nice little screen magnifier for those that need a little help enlarging an area of the screen.

5. **Super Magnify v1.2**

<http://www.softlookup.com/display.asp?id=9955>

Super Magnify allows you to magnify portions of your screen up to 15 times. The program includes a special interpolation routine to maintain details when magnifying, as well as the ability to magnify the mouse cursor. In addition, Super Magnify displays your (x, y) pixel coordinates on the screen, and the RGB values corresponding to the cursor's position.

6. **iZoom Screen Magnifier**

http://www.ohsht.org/izoom_index.htm

Redefine your computing experience with iZoom, a Professional Grade Screen Magnifier and Reader built into a single application. Magnify your



Access on a Budget

screen anywhere from 1.5 to 16 times while having it read out to you, all ready with color/cursor enhancements and image smoothing.

TEXT TO SPEECH

1. **Verbose Text to Speech Converter**

<http://www.nch.com.au/verbose/index.html>

Verbose is a text to speech program which will read aloud any text or save it as mp3. Verbose can also save your text documents or emails to mp3 or wav for you to store them on your Pocket PC or MP3 player, such as an iPod, so you can listen to them on your way home.

2. **ReadPlease 2003**

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

This program will read any document you open. You can customize the font and background color, adjust the voice speed, and set a generic low vision color option. It is a great text-to-speech program for free. ReadPlease 2003 Plus is not free. The Plus version has great low vision font enlarging and color options. You can fast-forward and reverse though the text. It highlights text while reading. Finally, it has the Natural Voices.

3. **NaturalReader**

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

NaturalReader is software that converts any text into incredibly clear, high-quality, natural sounding voices. Integrated with the latest One-Click technology, NaturalReader reads text directly from other applications, without copying or pasting. Unique powerful output function can easily convert very large text files into MP3 or WAV files for use on portable devices like iPod, CD players and PocketPCs.

4. **Reader's Pal 3.1**

<http://www.magnifiers.org/cgi-bin/links/jump.cgi?ID=307>

Intended to ease reading on a computer monitor by displaying text in large fonts in foreground and background colors of the user's choosing. Works with Microsoft's Text-to-Speech, reads web pages from the Internet and let you browse text-only.

5. **Word Talk**

<http://www.wordtalk.org.uk/>

For people with reading and writing difficulties, having text reinforced by hearing it read aloud can be very useful. Specialised programs have existed to do this for a long time, and in many cases are extremely helpful and highly



Access on a Budget

appropriate and should be seriously considered, perhaps in consultation with professional advice where necessary. WordTalk is a free plug-in developed for use with all versions of Microsoft Word (from Word 97 upwards), which can help people with reading difficulties use Microsoft Word more effectively. It will speak the text of the document and will highlight it as it goes. It contains a talking dictionary to help decide which word spelling is most appropriate. It sits neatly in your toolbar and is highly configurable, allowing you to adjust the highlight colours, the voice and the speed of the speech.

6. **Sayz Me**

<http://sourceforge.net/projects/sayzme/>

Sayz Me is a text-to-speech application for Windows. Text can be typed in or read from clipboard. Words are highlighted when spoken. Select voice, adjust reading speed, voice pitch, font and color. Simple and easy to use.

7. **My Freedom To Communicate (MyFTC)**

<http://www.oatsoft.org/Software/myftc>

My Freedom To Communicate (MyFTC) is Assistive Technology (AT) software that uses text-to-speech technology to enable nonverbal individuals to communicate easily in real life situations.

8. **Talking Faces**

<http://www.inclusive.co.uk/downloads/downloads.shtml#talkingfaces>

Another free, switch accessible program from Inclusive Technology. Record your voice and hear it played back while a face animates!

9. **Premier AT**

<http://www.readingmadeez.com/Home.php>

Premier AT has developed a complete suite of products that address "reading, writing and information transfer" needs for individuals with visual, cognitive and mobility challenges.

INTERNET RESOURCES

1. **Free & Inexpensive Adaptive Technology Database**

http://adaptech.dawsoncollege.qc.ca/fandi_e.php

Adaptech has compiled a list of free and/or inexpensive hardware and software alternatives.



Access on a Budget

2. **One Stop for Free Assistive Technology**
<http://www.onlineconferencingsystems.com/at.htm>
A list of about 200 free assistive technology solutions.

3. **Special Education Technology – British Columbia**
<http://www.setbc.org/lcindexer/>
The SET-BC Learning Centre provides a wealth of classroom resources and training modules on assistive technology. Visit the Main Library to view our complete collection, or look for resources that are organized by technology topics: alternate access; augmentative communication; vision; and general implementation.

4. **Assistive Technology Training Online Project (ATTO)**
<http://atto.buffalo.edu/>
The Assistive Technology Training Online Project (ATTO) provides information on AT applications that help students with disabilities learn in elementary classrooms.

5. **Simplified Technology by Linda Burkhart**
<http://www.lburkhart.com/links.htm>
Selected Links to Assistive Technology and Augmentative Communication Resources for Children with Disabilities.

6. **Georgia Project for Assistive Technology**
<http://www.gpat.org/Resources%20Main.htm>
GPAT has developed numerous resources to assist educators and families in providing assistive technology services to students with disabilities. These resources are organized by various process topics. They include narrative documents, PowerPoint presentations, forms, on-line videos, and web links. Use the navigation bar at the left to view and access resources within each topic area.

7. **Skype**
<http://www.skype.com>
Skype is a little piece of software that lets you talk over the internet to anyone in the world for free.

8. **Freeware By Age**
http://www.kidsdomain.com/down/pc/_agefreeware-index.html
Freeware is sorted by age on this website.



Access on a Budget

SCREEN READERS

1. **Thunder**

<http://www.screenreader.net/index.php?section=Thunder%20and%20Manuals>

Downloadable Free Screen Reader for People with Visual Disabilities.

TALKING WEB BROWSERS

1. **WebbIE**

<http://www.webbie.org.uk/>

WebbIE is a web browser for blind and visually-impaired people, especially those using screen readers. It comes with the Accessible programs, letting you access news and audio on the Internet in a simple and accessible way, allowing you to use podcasts, listen to the radio and read RSS and news with your screen reader or other access solution. Together they provide a way to access websites and other great things online - and they are all free!

2. **Awesome Talkster**

http://www.awesomelibrary.org/Awesome_Talking_Library.html

Awesome Talkster combines a browser, directory, search engine, and text-to-voice technology. This allows you to select online text and have it read to you. Children can have the Web pages read to them slowly, but adults can have pages read at normal speed. Awesome Talkster can also make the Web more accessible to persons with impaired vision or persons with impaired ability to navigate a page with a mouse. It can be navigated with keystrokes.

3. **Sign Talkster**

http://www.code-it.com/software_info.htm

A great tool to learn "finger spelling" / sign language. Just type in what you want finger spelled/ signed then click the play button. Shows the letter and a graphic of the sign that relates.

4. **Web Talkster**

http://www.code-it.com/software_info.htm

Web Talkster is our latest and greatest 'talking web browser' that is released as free with an option to register. No adware, spyware, under coverware, supportware, or any of that other stuff we all are starting to resent in recent software releases; just an honest to goodness solid web browser that features several options that are very unique. This browser takes advantage



Access on a Budget

of Microsoft Agent© technology at it's finest.

5. **Simply Web 2000**

<http://www.econointl.com/sw/>

Simply Web 2000 is an speech friendly, speech enabled accessible web browser with advance features that allow easy navigation of complex pages by blind users.

EBOOKS

1. **Sense Factory**

<http://www.deafblindonline.org.uk/software.html#sf>

Switch-activated software that lets you make slideshows and sequences of pictures, videos and sounds for use with one or two switches.

2. **Special Education Technology – British Columbia (SET-BC)**

<http://www.setbc.org/setbc/accessiblebooks/freebooksforyou.html>

A collection of teacher and student-made accessible books and extension activities.

3. **Region 3 Assistive Technology Website**

<http://www.lati3.com/E-books.htm>

Free original books created for students with access issues.

4. **Talking Book Library**

<http://www.talkingbooklibrary.net/Matrix.htm>

Talking Books come in many different forms and can be used in many ways. The matrix contains the start of a talking book collection that they hope will continue to grow. A few creative ideas that make the most of the multimedia capabilities of PowerPoint as an instructional tool.

5. **Starfall.com**

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

Starfall is an inexpensive way to make the classroom more fun and inspire a love of reading and writing. Primarily designed for first grade, Starfall is also useful for pre-kindergarten, kindergarten and second grade.

6. **Children's Storybooks Online**

<http://www.magickeys.com/books/>

Illustrated children's stories for kids of all ages.



Access on a Budget

7. **PocketMod**

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

The PocketMod is a small book with guides on each page. These guides or templates, combined with a unique folding style, enable a normal piece of paper to become the ultimate note card, mini book, study guide, etc.. It is hard to describe just how incredibly useful the PocketMod is. They now have a PDF to PocketMod converter that will convert any 8 page PDF document into a pocketMod with just a few clicks.

8. **Mini Printable Books**

<http://www.dltk-teach.com/minibooks/index.htm>

Make these mini-books with or for your children to help encourage them to read. The books come with activity sheets to reinforce the stories.

9. **Online Switch Accessible Books**

http://www.bbc.co.uk/cbeebies/grownups/special_needs/physical_dev/switch/

A range of switch accessible games and stories for those students who can not operate the standard keyboard and mouse. Can use with one to two switches.

SWITCH ACCESS

1. **Inclusive CD Player**

<http://www.inclusive.co.uk/downloads/downloads.shtml#cdplayer>

A free, switch accessible CD player for Windows 95 onwards.

2. **Priory Woods School**

<http://www.priorywoods.middlesbrough.sch.uk/resources/videos.htm>

Switch videos are animations or slideshows set to music, which can be controlled by a range of common assistive access devices. They are designed to help children understand and generalize cause and effect (the action / reaction bond), one of the foundation stones for early learning. All of the videos can be played online or downloaded for use on a PC or Macintosh computer.

ETEXT

1. **Page by Page Books**

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

They have *hundreds* of classic books you can read right now, all absolutely free! It is an ideal way to expand your horizons, catch up on your reading list,



Access on a Budget

or read books that it seems like everyone else has already read. Fix yourself a drink, get comfortable and *Start Reading!*

2. **20 Plus Places for Public Domain E-Books**

<http://mashable.com/2007/11/12/public-domain-ebook-sources>

Nothing beats holding an actual book in your hand, but sometimes it's nice to be able to download it and take it with you. Especially if it's completely legal. That's why we've put together this list of 20+ sources for e-books for your use.

3. **Project Gutenberg**

<http://www.gutenberg.org/catalog/>

There are over 20,000 free books in the Project Gutenberg Online Book Catalog. A grand total of over 100,000 titles is available at Project Gutenberg Partners, Affiliates and Resources.

4. **Bookshare.org**

www.bookshare.org

Bookshare.org dramatically increases the accessibility of books for people with visual or other print disabilities. Help Bookshare.org build the collection of digital books.

5. **ManyBooks.net**

<http://manybooks.net>

Thousands of free e-books available in multiple formats for PDAs.

6. **LibriVox**

<http://librivox.org/>

LibriVox volunteers record chapters of books in the public domain and release the audio files back onto the net. Our goal is to make all public domain books available as free audio books.

7. **Lit2Go**

<http://etc.usf.edu/lit2go/>

Lit2Go is a free online collection of stories and poems in Mp3 (audiobook) format.

8. **Baen Free Library**

<http://www.baen.com/library/>

A small library of downloadable science fiction novels, mostly the first in an ongoing series to get you hungry for more.



Access on a Budget

9. **Book Rags**

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

Small selection of free choices, and thousands more for premium members. Can be downloaded as PDF or Word documents.

10. **Mslit**

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

Over 1,500 texts provided by Microsoft for their MSReader.

11. **PlanetPDF e-Books**

http://www.planetpdf.com/free_pdf_ebooks.asp

A decent sized collection of classic novels all in PDF format.

12. **Internet Public Library**

<http://www.ipl.org/div/subject/browse/hum60.60.00/>

A large directory of online texts hosted at other sites.

13. **ReadEasily**

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

An e-books site specifically with the elderly and somewhat visually impaired in mind that allows you to change colors, fonts, and size to make it more legible.

14. **The Online Books Page**

<http://onlinebooks.library.upenn.edu/>

A gigantic directory of e-books from all over the web.

ACADEMIC

1. **Literative**

<http://www.literative.com/Home/index.asp>

Literative provides a systematic and balanced program to support learning of basic reading skills. Targeted at pre-school, kindergarten, and grade 1.

2. **OpenOffice.org**

<http://www.openoffice.org/index.html>

OpenOffice.org the product is a multi-platform office productivity suite. It includes the key desktop applications, such as a word processor, spreadsheet, presentation manager, and drawing program, with a user interface and feature set similar to other office suites. Sophisticated and flexible, OpenOffice.org also works transparently with a variety of file formats, including those of Microsoft Office, and the vendor-neutral



Access on a Budget

OpenDocument standard from OASIS.

3. **Drawing for Children**

<http://people.cs.uu.nl/markov/kids/draw.html>

This program is a drawing program that is especially suited for small children. Children don't need to be able to read to use the program. Also, rather than asking the user to set all sorts of options it simply gives a large number of different ways of drawing. There are normal drawing commands, for drawing lines, circles, etc. but also many weird ones to draw railroads, pipes, bubbles, grass, etc. Just try experimenting to make the weirdest pictures. There are many different pens, stamps, cliparts, backgrounds, and special effects.

4. **Google Earth**

<http://earth.google.com/>

Google Earth combines the power of Google Search with satellite imagery, maps, terrain and 3D buildings to put the world's geographic information at your fingertips.

5. **Photo Story 3**

<http://www.microsoft.com/windowsxp/using/digitalphotography/photostory/default.mspx>

Create slideshows using your digital photos. With a single click, you can touch-up, crop, or rotate pictures. Add stunning special effects, soundtracks, and your own voice narration to your photo stories. Then, personalize them with titles and captions. Small file sizes make it easy to send your photo stories in an e-mail. Watch them on your TV, a computer, or a Windows Mobile-based portable device.

6. **Free-Reading.net**

<http://www.free-reading.net>

Free-Reading is an "open source" instructional program that helps teachers teach early reading. Because it's open source, it represents the collective wisdom of a wide community of teachers and researchers. It's designed to contain a scope and sequence of activities that can support and supplement a typical "core" or "basal" program.

7. **Big Calculator**

<http://www.sensorysoftware.com/bigcalculator.html>

Big Calculator is a large calculator for Windows. You can either click on the buttons with the mouse or use the numeric keypad to perform calculations. The size of the calculator buttons is determined by the WIDTH of the



Access on a Budget

calculator window.

8. **Graphing Calculator**

http://www.compilerabuse.com/projects/gc/gc_help.htm

GC (graphing calculator) allows the user to display two-dimensional graphs of functions.

9. **US Features Map Puzzle**

<http://www.yourchildlearns.com/usa-features-map-puzzle.htm>

Learn United States geography with a free interactive map that teaches the physical features of the United States—rivers, mountains, lakes, deserts and swamps.

10. **Music Games**

<http://www.inclusive.co.uk/downloads/downloads.shtml#musicgames>

A collection of early learning musical activities. You can set targets at different levels, to gradually improve an individual's listening skills in a fun way. Use a mouse, keyboard, touch monitor, or IntelliKeys.

11. **WordWeb**

<http://wordweb.info/free/>

WordWeb is a one-click English thesaurus and dictionary for Windows that can look up words from in almost any program. It works off-line, but can also look up words in web references such as the Wikipedia encyclopedia.

GAMES

1. **Papunet Games**

<http://papunet.net/games/>

Papunet Games is a website with an engaging set of activities designed specifically to work well for individuals who use switches to access a computer, including those who use two switches for step-scanning. The range of activities is extensive, and there are varying levels of challenge within many of the activities.

2. **Jetstream Trader**

http://www.brillsoft.com/Index_files/Page552.htm

Jetstream trader is a very complex single switch game for people with gross motor skills only.

3. **Fab Four**

http://www.brillsoft.com/Index_files/Page396.htm



Access on a Budget

Cause and effect switch games for users with special needs.

4. **Rockets**

http://www.brillsoft.com/Index_files/Page396.htm

Switch game for users with special needs.

5. **Accessible Computer Games**

<http://www.arcess.com/demo2.cfm>

Get 3 free accessible games: Alien Invasion, Ruby Ridge, and Brick Out.

LOW TECH TOOLS

1. **Baggy Books**

Make your own books that are indestructible. Place ziplock bags together, staple along closed end, duct tape along staples, print pages of the story, glue onto cardboard, cut to fit in the ziplocks, insert and seal

2. **Page Fluffers/Turners**

Various items that are attached to the pages of a book to assist students in turning pages. For examples go to: <http://www.lati3.com/QuickTips.htm>

3. **Filters**

They come in a variety of sizes and colors that can assist students in keeping their place as they read or copy. Can help students with reading and writing due to visual-perceptual problems caused by sensitivity to light. To make your own go to: <http://www.lati3.com/Templates.htm>

4. **Highlighter Tape**

Removable, reusable tape that comes in a variety of colors and sizes. You can write on the tape and store used pieces on a laminated sheet of paper to re-use. Can use to place in margins to remind student where to begin and finish writing, place over text that has to be read, assist with tracking, way to budget how much is highlighted and can make own colored reading strips with cardstock and colored transparency file.

5. **Hefty Tabs**

Page markers or dividers that are stiff semi-circles and are available in a variety of colors and are removable. Can use to mark important places in books, assist with turning pages in a book and can be an excellent organization tool.



Access on a Budget

6. **Math Tube**

Great math manipulative made from a potato chip can. Available in addition, subtraction, multiplication and division. Visit

<http://www.lati3.com/Templates.htm> to download the templates.

7. **Crayola Cutter**

Safe & easy to use! Cuts smoothly through paper and won't harm skin. Make curvy and straight lines, even from the center of the page. Crayola makes a whole line of Total Tools that can assist our students with math, writing, coloring, gluing and stapling.

<http://www.crayola.com/products/list.cfm?categories=TOOLS,TOTAL%20TOOLS>

8. **Mead Notebooks**

Does your student have a problem spacing between letter and words? The Mead Redispacer transitional notebook paper can teach your proper spacing and adhering to the margins. From <http://www.onionmountaintech.com> for \$3.