



Australian Government

Department of Education, Employment and Workplace Relations



National Disability Coordination Officer (NDCO) Program Western NSW

This resource forms one chapter of a 5 part series to assist people with a disability successfully access further education and employment.

Chapter 4

Assistive Technology

Outlines the variety of assistive technologies available to help people with a disability study and work (including software that is free!)

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Assistive Technologies

Definition

Assistive Technology is technology that allows a person with a disability to independently perform tasks which otherwise may be difficult or impossible.

Without access to Assistive Technologies, many people with a disability could not move forward, or would not be successful enough in their studies to move to the next step.

Assistive Technologies improve participation for students with a disability in Higher Education and subsequent employment. Assistive Technologies allows this participation and for many, it is the only way to access these pathways.

Overview of the types of Assistive Technologies available

•For people with blindness and low vision

- Screen readers
- Screen magnification software and hardware
- Notetakers

• For people with learning disabilities

- Text to speech/Text to Audio – Software to assist students with a learning disability with the reading/writing process. It includes features such as screen reading, word prediction, spelling and phoneme checking. By converting text to speech, students can follow the highlighted written word on the screen as it is spoken out loud.
- Planning and Organisational software
- Optical Character Recognition software allows text material to be scanned and the computer text extracted. The text can be exported to other programs such as TextAloud
- TextAloud is cheap software downloaded from the Internet which allows text material to be converted to digital audio Mp3 files. Students can put these files onto a CD/MP3 player and listen to them.

• For people with physical disabilities

- Software to convert voice to text
- Alternative keyboards, mice, head pointers
- Word Prediction Software

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•Voice Recognition Software - software that allows a person to produce text by speaking to a computer.

• **For people with a hearing impairment**

•Sound field systems, audio induction loops

Main Suppliers of Assistive Technologies

- Ability Technology
- Battery Powered Computers
- HumanWare
- Innovative Communication Programming
- Northcott CATS
- Optek Systems
- Printacall Communications Technology
- Quantum Technology
- Spectronics Inclusive Learning Technologies

(Not an exhaustive list but a prompt if you wanted to Google them)

Most of these suppliers send out updates as new technology comes to hand. More details can be provided if people contact the NDCO on 1800 051 769.

It's also worth mentioning the Workplace Modifications Scheme again. The Scheme can pay for the costs involved in modifying the workplace or purchasing special or adaptive equipment (such as the assistive software mentioned above). Free to employers –up to \$25,000. More information can be found at <http://www.jobaccess.gov.au>.

Assistive Technology Websites and Resources

Here is a list of websites that may help you to get a clearer understanding of assistive technology that can help you. This is by no means an exhaustive list but it's a good start.

•**The Australian Adapted Technology User Group (AATUG)**

<http://www.aatug.answd.org>

The Australian Adapted Technology User Group (AATUG) is a network for students with disabilities, disability practitioners as well as all users of adapted technology. AATUG aims to facilitate the use of adapted technology in the education and employment environments. It's a discussion list for disseminating and promoting information about the use of adapted technology by people with a disability.

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•**Assistive Technology in Universities Project website**

<http://www.anu.edu.au/disabilities/atproject>

•**Vision Australia Adaptive Technology Guide**

<http://www.visionaustralia.org.au/info.aspx?page=1230>

•**Broaden Your Horizons**

<http://www.imvc.com.au/broadenhorizons> (and then select adaptive technologies from the menu on the left).

Broaden Your Horizons is a centralised website that houses resources relating to young people with disabilities. This resource is dedicated to provide quality career and transition information and support services to young people with disabilities.

•**Closing the Gap**

<http://www.closingthegap.com>

Founded over 25 years ago by Budd and Dolores Hagen, parents of a child with a disability, Closing The Gap strives to provide parents and educators alike, the information and training necessary to locate, compare, and implement assistive technology.

AccessApps - A new, portable and free way to support students!

The freely downloadable of *AccessApps* is an initiative developed by the Scottish JISC Regional Support Centres. It consists of over 50 open source and freeware assistive technology applications that can be *entirely* used from a USB stick on an MS Windows computer.

This means AccessApps will run ***without needing to install any software or utility application*** on a host computer. A wide range of e-learning solutions that support writing, reading and planning as well as visual and mobility difficulties are provided – and you can add additional portable applications to AccessApps, if and when required.

The advantages of having AccessApps:

- * No need for technical support at a school or workplace
- * No permissions required for installing assistive technologies onto a local computer or server
- * Independent use, independent tools - anywhere, anytime
- * Independent set up, configuration and preferences in each App for each user
- * Ability to add more portable apps to cater to individual interests or needs

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- * Low cost solution (approximately \$20-\$25 for a 4GB USB2 memory drive/stick)
- * Provides increased independence
- * USB drive technology is accepted and used universally already
- * Ability to add and save MP3, Podcasts, graphics, photos and other documents on the drive
- * Ideal for older PCs and Eee PC style and ultra portable computers that have minimal or restricted hard disk space

How do I get it?

Individual learning support needs dictate the type of software solution required by a user. The download section allows you to choose the portable applications which best suit your individual needs and download them in a single application suite. There are a few versions – the full AccessApps and a lite version (for 1GB or 512MB drives) or a “pick and mix” option where you choose the apps that you need.

<http://www.rsc-ne-scotland.ac.uk/accessapps/preselection.php?ID=NTMx>

Further information about using AccessApps can be found on the website site at the following address -

<http://www.rsc-ne-scotland.ac.uk/accessapps/help.php>

You can access Help files and directions about all of this material as well. There are video guides and tutorials to help you from A-B. It is extremely comprehensive and a great way to invite students to learn how to install AccessApps themselves.

For further information on anything contained in this resource, please contact:

**Julia Strang, NDCO for Western NSW
Central West Community College, Bathurst.**

Freecall 1800 051 769 or ndco@cwcc.nsw.edu.au

You can also download other resources from the Central West Community College website including:

- * Overview of the NDCO role/ Map of Western Region
- * Supports to employment
- * Supports to further education
- * Assistive Technologies

Visit www.cwcc.nsw.edu.au and follow the links to NDCO.