ICT SUPPORT

Using ICT to support recording difficulties

All learners need to be able to record their thoughts and to have the opportunity to write creatively. Many struggle to write by hand, however, and ICT can offer a range of alternatives to support them. A standard desktop computer with office software can help most learners – and be a key support for pupils with dyslexia – but for some, alternative keyboards and input devices and supportive software are needed so they can express themselves. This leaflet lists sources of information on how ICT can help, and how to use specific items of software and hardware.

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communication aids project

WHERE TO START

If you are not familiar with using ICT with pupils with special needs, and to support recording skills in particular, you will find a useful introduction on the ICT Advice site:

'How to help pupils to access the technology'
**http://schools.becta.org.uk/index.php?
section=tl&catcode=as_inc_sup_03&rid=
4627**

'How to use software to support pupils with special educational needs'
**http://schools.becta.org.uk/index.php?
section=tl&catcode=as_inc_sup_03&rid=
2349**

'Useful software to develop skills: writing'
**http://schools.becta.org.uk/index.php?
section=tl&catcode=as_inc_sup_03&rid=
4324**

'Useful software to develop skills: recording and presentation'
**http://schools.becta.org.uk/index.php?
section=tl&catcode=as_inc_sup_03&rid=
432**

ACE North has a useful sheet listing and describing a range of programs to support recording activities. See Downloads > General Resources.
http://www.ace-north.org.uk

Inclusive Technology has a series of training modules on using ICT, including Unit 1, 'Literacy and recording – using symbols, pictures and sound' and Unit 2, 'Literacy and recording – supporting literacy in the curriculum'.
**http://www.inclusive.net/resources/
units/units.shtml**

SOFTWARE

This section has information on how you can use specific types of software to support pupils' recording skills.

Word processing
A standard word processor can offer more support for recording than you might expect, by providing a scaffolding of headings and spell-checking facilities, even without the addition of speech. The links below provide information on using a standard word processor, talking word processors and specific programs such as IntelliTalk.

Blueprints for Writing
This is quite an old (1996) document but it has some useful background information on assessing pupils' skills, on the structure of writing and strategies to support literacy and/or recording difficulties.
ftp://ftp.setbc.org/pub/pdf/blueprin.pdf

Psycho-Educational Services has two articles that provide useful background information on using a word processor to help people with literacy and recording difficulties. Follow links to 'Writing Tech Notes'.
http://www.psycho-educational.com/pages/805294/index.htm

ATTO (the Assistive Technology Training Online Project) has tutorials on the many features of Word which can support pupils with recording difficulties.
http://atto.buffalo.edu/registered/Tutorials/msword/index.php

The CALL Centre has four Quick Guides to the Word features available to support users with recording difficulties.
http://callcentre.education.ed.ac.uk/About_CALL/Publications_CAA/
Quick_Guides_ CAB/Word_CAC/word_cac.html

Microsoft has Step by Step tutorials for adapting Office for learners with disabilities.
http://www.microsoft.com/enable/training/default.aspx

Talking word processors

ATTO has a useful overview of talking word processors with short reviews of some programs.
http://atto.buffalo.edu/registered/ATBasics/Curriculum/Reading/talking Word.php

SET-BC in Canada has a webcast on the use of talking word processors plus a case study.
http://www.setbc.org/setbc/access/klr01.html

Write:OutLoud tutorials: there is an extensive tutorial from the supplier, Don Johnston Special Needs.
http://donjohnston.co.uk/djlearning/index.htm
Another is from the Assistive Technology Training Online Project on using Write:OutLoud to provide auditory feedback while word processing, to provide text to speech of any text and to create talking worksheet templates.
http://atto.buffalo.edu/registered/Tutorials/WOL/index.php

IntelliTalk2 tutorials: SET-BC in Canada has an auditory tutorial.
http://www.setbc.org/setbc/access/klr02.html
ATTO has a tutorial on the basic features.
http://atto.buffalo.edu/registered/Tutorials/IT2/index.php
They also have a tutorial on the more advanced features.
http://atto.buffalo.edu/registered/Tutorials/IT2/it2part2.php
The supplier has tutorials and training materials on all IntelliTools software.
http://www.intellitools.com/index.html

Symbol-based software

This type of software enables the user to communicate either using symbols alone or with a mixture of symbols, pictures and words. Well known packages include Writing with Symbols (WWS), Inclusive Writer, The Grid and Clicker.

Writing with Symbols2000: the supplier, Widgit, has a wide range of help-sheets and activities to support WWS.
http://www.widgit.com/support/wws/index.htm
The ACE Centre has a quick-start guide to the essential features.
http://www.ace-centre.org.uk/html/resources/cribsheeets/res06.html

BoardMaker: SET-BC gives detailed instructions on how to create a range of paper-based communication materials.
ftp://ftp.setbc.org/pub/pdf02/jbbm.pdf
The ACE Centre has a quick-start guide to BoardMaker's essential features.
http://www.ace-centre.org.uk/html/resources/cribsheeets/res06.html
SET-BC also has a set of 12 downloadable BoardMaker grids for use in a variety of settings.
http://www.setbc.org/projects/winram/default.html

Wordbanks and word prediction

A wordbank presents the user with a list of the words (often topic related) that he or she is likely to want, so there is no need to type them. Typical examples include WordBar and Clicker. Word-prediction software offers the user a choice of the words it thinks are likely to come next, so again, typing is unnecessary. Penfriend and Co:Writer are two well known examples.

Comparing wordbanks and word-prediction software: the ACE Centre has a PowerPoint presentation which compares the features of wordbanks and word-prediction software.
http://www.ace-centre.org.uk/download/wordbanks.ppt

Co:Writer 4000: the supplier has an extensive tutorial, as does ATTO.
http://donjohnston.co.uk/djlearning/index.htm
http://atto.buffalo.edu/registered/Tutorials/cowriter/index.php
SET-BC has a webcast covering in detail all Co:Writer's major features.
http://www.setbc.org/setbc/topics/topics_cow_kr.html
The ACE Centre site also has a quick-start guide to the essential features.
http://www.ace-centre.org.uk/html/resources/cribsheeets/res06.html

Onscreen grids and keyboards

With this type of software, there is a grid or keyboard on screen, from which the user can select letters or whole words, by using the mouse or switch access. Well known programs include Clicker, Writing with Symbols, Penfriend, The Grid, and Speaking Dynamically Pro.

Clicker4: The ACE Centre has a quick-start guide to the essential features of Clicker.
http://www.ace-centre.org.uk/html/resources/cribsheeets/res06.html
You can find help-sheets covering both basic and more advanced features of Clicker4 from Trafford ICT Centre.
http://extranet.traffordlearning.org/oldictcentre//Downloads/dloadsIT.html
The suppliers of Clicker, Crick Software, provide downloadable training resources covering a basic introduction, switch access and more advanced features.
http://www.cricksoft.com/uk/training/4introduction.htm
The CALL Centre has a series of Quick Guides.
http://callcentre.education.ed.ac.uk/About_CALL/Publications_CAA/Quick_Guides_CAB/Clicker_CAC/clicker_cac.html

Mind mapping

This type of software, also known as concept mapping or visual thinking software, is used for storing, processing, organising and presenting information graphically. Ideas are presented visually and linked together to show relationships, forming diagrams that resemble a web, a branching tree or a flow chart. Examples include Inspiration, Kidspiration and Thinking with Pictures.

Inspiration and Kidspiration: a range of training materials and presentations to support the use of both programs is available from the supplier.
http://www.inspiration.com/prodev/index.cfm

You can find a tutorial on using Inspiration from Le Roy Central School in New York.
http://www.leroy.k12.ny.us/Technology/OnlineTutor.htm

HARDWARE

Keyboard

If a pupil is struggling with a standard keyboard, it is worth investigating alternative keyboards or concept keyboards – or dispensing with a keyboard altogether and using an onscreen grid or keyboard (see under Software).

The CALL Centre has a 'Keyboard Quick Assessment Guide' to help assess the problems users may have with a standard keyboard, and suggests solutions. http://callcentre.education.ed.ac.uk – go to Resources > Quick Guides > Assessment.
It also has three information sheets, 'Keyboard Adaptations and Alternatives', 'Overlay (Concept) Keyboards' and 'On-Screen 'Point and Click' Keyboards' – go to Publications > Information Sheets.

The ICT Advice site has an introduction to the whole area of keyboard and mouse alternatives.
http://schools.becta.org.uk/index.php?section=tl&catcode=as_inc_sup_03&rid=2345

ATTO has a useful overview of different types of keyboards and alternatives.
http://atto.buffalo.edu/registered/ATBasics/AdaptingComputers/KeyboardOptions/index.php
Their site has a tutorial on connecting the Intellikeys keyboard and using the set-up overlay.
http://atto.buffalo.edu/registered/Tutorials/intellikeys/index.php
There is another tutorial on using Overlay Maker.
http://atto.buffalo.edu/registered/Tutorials/OverlayMaker/index.php

AbilityNet has several factsheets covering aspects of keyboard use, including single-handed use.
http://www.abilitynet.co.uk

The ACE Centre has information if you want to use the keyboard to operate Windows.
http://www.ace-centre.org.uk/html/resources/usingkeys/usingkeys.html

Mouse

The CALL Centre has a Mouse Quick Assessment Guide identifying common problems and solutions.
http://callcentre.education.ed.ac.uk – go to Resources > Quick Guides > Assessment.

The ACE Centre has information if you want to use the keyboard to operate Windows.
http://www.ace-centre.org.uk/html/resources/usingkeys/usingkeys.html
There is also a comprehensive review and comparison of the various head-pointing and eye-gaze systems currently available.
http://ace-centre.hostinguk.com/index.cfm?pageid=96087278-3048-7290-FEE3B3EC247ADA3A

ATTO has a useful overview of the possible alternatives to using a standard mouse.
http://atto.buffalo.edu/registered/ATBasics/AdaptingComputers/MouseOptions/index.php

AbilityNet has a range of Factsheets and Skillsheets on accessibility options with a mouse, such as enlarging the cursor, slowing it down, leaving a trail on screen, or making it left handed.
http://www.abilitynet.co.uk

Portable writing aids

Another alternative to using a desktop PC, and one that pupils can take with them from lesson to lesson, and home too, is a portable writing aid such as a laptop, handheld device or specialised writing support tool such as an AlphaSmart.

The ICT Advice site has an introduction to the whole area of portable writing aids including laptops, low-cost writing aids and PDAs.
http://schools.becta.org.uk/index.php?section=tl&catcode=as_inc_sup_03&rid=527

The Georgia Project for Assistive Technology has a video presentation about portable writing aids and particularly the AlphaSmart.
http://www.gpat.org/GPAT%20Resources%20video%20files%20and%20video%20pages/instructional%20areas%20and%20devices/writing/portable%20wp%20windows%20media.htm