

Computers and Stroke

Disability can limit an individual's range of communication and degree of independence in day-to-day life. An ordinary personal computer can make a major contribution to assist and help these individuals. Personal computers have become progressively more common in the area of communication over the last decade, an alternative to a pen and paper, the computer provides a way to read, write and speak. Many colleges have a variety of facilities for people who have difficulties using computers, who wish to further their education. Contact your local college for further information.

What equipment may be useful?

There is a large range of equipment to help disabled people; the following is just a selection:

Software

Word Processing packages. Some features of standard word-processing packages may be useful for aphasic users and no other software maybe necessary. These include spell check and large type. Screen magnification and contrast options are available with Windows.

Games such as solitaire scrabble, snap etc. may be available on standard software packages and can be useful in increasing concentration, matching and sequencing skills as well as helping people become familiar with using the computer.

Software produced for people with special needs, or for people learning English may sometimes be useful for people with aphasia. Programmes include sentence completion, punctuation lessons, anagrams, reading comprehension, matching, vocabulary building and spelling.

Software is produced for people with dysphasia and the programmes cover a range of tasks and abilities and include naming pictures (with clues provided); multiple choice activities; word association and reading comprehension. A feature which aphasic people may find helpful is prediction. Once you start typing, the computer will try to predict the word you want to use and language that you use and puts up a list of suggestions. It helps people who can recall the word they want when they see it. (This is therefore only appropriate for some aphasic people who are able to do this.) Not all packages that are designed for people with aphasia will be appropriate for all types of aphasia.

The aphasia may be accompanied by different cognitive (thinking) difficulties so it is very important to get an expert opinion before buying new software.

There is a range of text-based software (literate communication) for use on standard PC computers i.e. Lorien Communicator (includes an on screen keyboard), Lorien Systems, Lorien Talking Trees, EZ Keys by Word Plus, Windbag by Sensory Software, Semerc, Talking Technologies, etc. (*summary on www.abilitynet.co.uk/content/alt_tech/cac/Communication.htm*).

Software with communication systems built-in.

This includes 'Winspeak' which is a symbol-based programme for Microsoft Windows,

which speaks a message aloud when the symbol is clicked i.e. Hands-off (an onscreen keyboard with some communication properties), Semerc, Talking Technologies, EZ-Keys.

The Aphasia Computer Team (see useful addresses)

The team is based at Frenchay Hospital, Bristol and has produced a number of programmes, which can be altered to suit individual needs. These include Phraseflash, Gapfiller and Intact, (Intact is only available to Speech and Language Therapists).

Voice Input Devices

You speak into a microphone and the computer types for you. It takes some time for the computer to learn to recognise your voice, and you will need to correct it quite a lot to start with. This type of device would be useful for someone whose main difficulty is with reading and writing. Your speech needs to be consistent for the machine to recognise it, i.e. 'Dragon Dictate' and 'Voice Type'.

Speech Output Devices

Speech output devices read aloud what you have typed and can also prompt you to correct errors. These can be used in combination with a voice input device if necessary i.e. 'Windbag'.

Some devices can scan and read aloud text. They would be particularly useful for people with visual problems or people who have good comprehension but difficulty in reading.

Much of the above software will need extra memory on your PC to run the programmes. They will also need a sound card and speakers.

Hardware

Keyboards

Ranges of one-handed and smaller keyboards are available. Similarly, there are larger keyboards and large print stickers to make keys easier to see and key guards to help guide your fingers to the correct key. Simplified 'concept' keyboards with just a few keys on can also be helpful but you may need specialised software to go with it. Keyboards can be provided in ABC rather than QWERTY layout or use concepts instead of letters. There is also equipment to raise or angle keyboards and armrests to facilitate movement.

If using the keyboard is difficult, it may be possible to access the computer using a simple switch or pointing system. Voice active programmes may also be a useful alternative to using the keyboard, although they will need some training. Both of these options require special software.

Mouse

Right and left-handed mice and smaller or larger versions are all alternatives to the standard mouse. Some people may find a tracker ball easier to use. If using a mouse is difficult, most word-processing packages allow you to use the keyboard for the same functions. A Graphics Tablet can be used as an alternative to a mouse. This uses a pen

to point like a mouse and you can write with it instead of using a keyboard.

Screen

Extra large monitors are available for people with visual difficulties (17", 19" 21" and upwards). Touch screens may provide a useful alternative to keyboards and allow more direct interaction between user and computer. Most computers will allow a change of icon size, and desktop contrast colours to allow the user the easiest access.

How much does it cost?

Software packages vary considerably in price. A standard package nowadays would include a monitor, processor (one gigahertz), keyboard, mouse, soundcard (32 megabytes), speakers, and CD ROM drive and should be available for £300 - £400. Printers, scanners and CD writers are usually extra. You need to check that your computer has sufficient memory to run the programmes you require. It is best to 'try before you buy'. Your registered speech and language therapist can advise you, or contact your nearest communication aids centre. The charity AbilityNet may also be able to assist. Some companies will provide software on a sale or return basis.

Computers – Useful Addresses

AbilityNet

PO Box 94
Warwick
CV34 5WS

Helpline: (0800) 269 545 Telephone: (01926) 312 847

Fax: (01926) 407 425

E-mail: enquiries@abilitynet.org.uk

Website: www.abilitynet.org.uk

Also in Scotland:

AbilityNet Scotland

PO Box 28423
South Queensferry
EH30 9ZN

Telephone: freephone 0800 269 545

Office phone: (0131) 331 6381 (covered from 9 – 1 pm)

Fax: (0131) 331 7418

E-mail: scotland@abilitynet.org.uk

Website: www.abilitynet.org.uk

AbilityNet is a Charity offering an information service to people with disabilities, and others seeking advice on computer technology. The centre can also advise people who have repetitive strain injury who find keyboard and mouse work difficult. Activities include consultancy and assessment services to assist in choice and use of computer equipment at work and at home; courses for care professionals, employers, teachers

and central and local government. Full information is on the website.

Adapt-IT

Church Hill House
Stirling Way
Boreham Wood
Herts WD6 2HP

Telephone: 0845 644 1712

Fax: 0845 644 1742

E-mail: sales@adapt-IT.net

Website: www.adapt-it.org.uk/

Adapt-IT has been established to help disabled people to make full use of computers. A range of IT products are for sale on line. Catalogue available on request.

Aidis Trust

3 Gunthorpe Street
London E1 7RQ

Telephone: 02074 262 130

Fax: 0207 377 5738

E-mail: info@aidis.org

Website: <http://www.aidis.org/>

Provide specialised computer equipment to people with disabilities to aid their communication.

Communication Aid Centre

The Speech and Language Therapy Dept
Frenchay Hospital
Frenchay Park Road
Bristol
BS16 1LE

Telephone: 0117 975 3946

E-mail: cacfrenchay@north-bristol.swest.nhs.uk

Website: <http://www.cacfrenchay.nhs.uk/>

Produce 'Aphasia-friendly' software and can advise on suitability of other software. Hold open days for speech and language therapists and people with aphasia to try out equipment and programmes.

British Computer Association of the Blind (BCAB)

C/O RNIB
58-72 John Bright Street
Birmingham
B1 1BN

Telephone: 0845 430 8628

E-mail: info@bcab.org.uk

Website: www.bcab.org.uk

BCAB promotes the use of IT by the visually impaired in education, employment and at home.

Possum Controls

8 Farmbrough Close,
Stocklake Park Industrial Estate
Aylesbury, Bucks HP20 1DQ

Telephone: 01296 461 002

Fax: 01296 461 107

E-mail: unit8@possum.co.uk

Website: www.possum.co.uk

Information on communication aids.

Keytools for the Computer-Enabled

PO Box 700
Southampton
SO17 1LQ

Telephone: 0238 058 4314

Fax: 0238 055 6902

E-mail: info@keytools.com

Website: www.keytools.com

Keytools (formerly known as KCS) has been supplying 'Tools for the Computer-Enabled' for over ten years. Their aim is to source special needs devices, which are of genuine assistance, to those wishing to use today's computer technology for work, play or therapy. They are able to provide telephone and e-mail support during all stages of your purchase. This means that you can call them for technical advice before you buy, as well as after you have made a purchase.

Communication Aid Centres

Specialist centres around the country offer advice and trials of communication aids.

You may require referral from a speech and language therapist or doctor see:

http://www.abilitynet.co.uk/content/alt_tech/cac/Communication.htm or ask for our

Alternative Communication Aids factsheet.

Consultancy for Visually Impaired Persons Limited (CVIP)

30 St Thomas Drive
Pinner
Middlesex HA5 4SS

Telephone: 0208 4 201 338

E-mail: iki@cvip.co.uk

Abbreviation: CVIP aims to provide computer software and hardware to people with visual impairment, and advice on how to use them. Equipment provided includes: Electronic voice diary pocket organiser; voice input; voice output; Braille; large print; screen reader; screen magnification; scanners; digital cameras; Braille embossers.

ITCH Network

BCS Block D
North Star House
North Star Avenue
Swindon SN2 1FA

Telephone: 07985 779071

E-mail: info@itcanhelp.org.uk

Website: www.itcanhelp.org.uk

Area organiser for Scotland is Dr Alison Crerar

Freephone number for disabled clients requesting help 0800 269 545.

ITCH Organiser for Scotland

C/o School of Computing
Napier University
10 Colinton Road
Edinburgh EH10 5DT
ITCH voicemail: 07931 355 495
E-mail: scotland@itcanhelp.org.uk
Website: www.itcanhelp.org.uk/index.htm

ITCH is an initiative of the British Computer Society Disability Group and involves establishing networks of volunteers who are experienced in using computers to visit disabled people at home to provide assistance "free of charge". All volunteers carrying out home visits are fully vetted before they are taken on the scheme. The scheme covers the Edinburgh area, some parts of the North East and West of Scotland.

Propeller Multimedia Ltd.

P.O. Box 13791
Peebles
EH45 9YR
Scotland

Telephone: 01896 833 528

Fax: 01896 833 528

E-mail: enquiries@propeller.net

Website: www.propeller.net

Propeller Multimedia is a leading developer of stroke rehabilitation software on CD-ROM.

The programmes are designed to be used by stroke or brain injury patients, normally under the guidance of a speech and language therapist. They provide extra therapy practice to assist recovery of speech, reading, writing and cognitive skills.

RNIB Technology in Learning and Employment (Tile)

58-72 John Bright Street
Birmingham
B1 1BN

Telephone: 0870 013 9555

Website: www.rnib.org.uk/technology

Aims to improve information on the use of technology for the visually impaired people, primarily in the areas of education and employment. Provides an information helpline service via phone, email, fax or letter - for both sighted and visually impaired people. Factsheets can be sent out, information given over the phone, or people can be referred to other RNIB departments or external services. The service is unable to help people needing support with their computer, but will be able to suggest other sources of help.

Scottish Centre of Technology for the Communication Impaired (SCTCI)

Southern General Hospital
Govan Road
Glasgow G51 4TF

Telephone: 0141 201 2619

Speakability

1 Royal Street
London
SE1 7LL

Helpline: 0808 808 9572 Mon.– Fri. 10am – 4pm

Telephone: 0207 261 9572

Fax: 0207 928 9542

Website: www.speakability.org.uk

Formerly Action for Dysphasic Adults provides advice and information to people with aphasia, their families and healthcare professionals.

Computer Classes with ECAS

ECAS is an Edinburgh based charity established in 1902 to help those who have a physical disability. It provides grants, run activities and classes, and conducts research

and campaigning. It is only for residents in Edinburgh and Lothians.
For information on classes available contact Janice Todd on 0131 475 2344 or visit the
website below

www.ecas-edinburgh.org/index.html

If you require any more information please contact the Advice Line nurses on

0845 077 6000

***Monday to Friday
9.30 – 12.30 and 1.30-4.00
Local call rate***

December 2006