# AbilityNet

## **Dyslexia and Computing**

#### Introduction

This factsheet covers a range of ideas that may help people overcome difficulties with writing and spelling. These ideas do not deal with skills training or attempt to solve the difficulties but are more a way of working round them. No two people are alike and the best solution is likely to be a selection from the ideas described below.

## **Creating Text**

### **Planning**

It may help if you decide what you want to write before starting. You could talk through what you want to write first or make written notes. In Microsoft Word there is an outline facility which may help you create a basic structure which you can then develop.

There are also some programs especially designed to help with making notes and organising thoughts ready for writing.

Product	Supplier
Inspiration	lansyst

## **Keyboard Use**

Some people may find using a keyboard easier than writing by hand. The following are some ideas to make using the keyboard even easier.

### **Keytop Stickers**

Stickers which make the keyboard letters more visible can make recognising and locating the right letter easier. These are available in upper and lower case letters and different colours - yellow on black and white on black.

Product	Supplier
Keytop stickers	Techno-Vision Systems, Keytools,
	Inclusive Technology, Granada
	Learning/SEMERC

#### Making the letters easier to read on the screen

- You can choose the colours you find most helpful for the background and for the letters themselves.
- Larger letters can also prove helpful and the letter size can be varied by either changing the 'font' size or by using the 'zoom' facility.
- Changing the letter styles may make a difference. You could try some
  alternatives such as 'Times New Roman' compared with 'Arial'. Also some
  fonts like 'Courier' have equally spaced letters so that the length of a
  word reflects the number of letters in it. (We/ill compared with we/ill).
- For some people double (or 1.5) spacing can also help a lot. Remember you can always put the whole document back to single spacing before you print it.
- The help facility within Word, or similar programs, has instructions on how to make these changes.

#### **Word Prediction**

There are software programs that will predict, or "guess", what you are about to type and complete the word or phrase for you. Words and phrases that you regularly use can be added to the program. Some will predict words that follow the word just typed. For example, you type a 'c' and the system might offer:

- 1 can
- 2 college
- 3 computer

#### You choose 3, the computer types "computer" and then offers:

- 1 programmer
- 2 error
- 3 system

Product	Supplier
Prophet	Ace Centre
Penfriend	Crick Software Limited
Co Writer	Don Johnston
Wordbar	Crick Software Limited
TextHelp Read and Write	lansyst

## **Voice Recognition**

Voice recognition allows you to talk to the computer and your words appear on the screen. This is an alternative to the keyboard. There are a number of voice recognition programs that can be used with Windows including a basic one that is supplied with Microsoft Office XP and 2003.

No recognition system gives 100% accuracy and you must either be able to recognise errors and be able to spell the word properly or must achieve the same result with help. Getting started is much harder for poor readers and learning to use the system effectively requires a real commitment. Please see our factsheet Voice Recognition And Dyslexia for more details.

#### **Auto Text**

This is built into Microsoft Word and allows abbreviations to be expanded. This can reduce the amount of typing and spell checking needed and therefore speed up writing. Abbreviation expansion is also included in some prediction programs. See Word Prediction.

## **Checking Text**

## Spell checking

#### **Built In**

- All computers have built-in spell-checkers. These are basic and not specifically designed for people with dyslexia.
- Most computers will spot mistakes and automatically correct them as you write. In Microsoft Word this is called AutoCorrect. You can easily add

your own mis-spellings to AutoCorrect and these will then automatically be changed to the correct spelling.

#### Words that sound similar but are spelled differently

Additional software can help check words that sound similar but are spelled differently – e.g. weather/whether, their/there/they're, access/excess. These types of words are called homophones. The program will highlight any potential homophones and offer possible alternatives, with explanations. Additional homophones can be added to the program. For example, if you type "bought" the system puts on the screen:

bought with money
 brought did bring

Product	Supplier
Sounds Write	Ace Centre
TextHelp Read and Write	lansyst

#### Voice recognition with integrated speech output

Many voice recognition systems can read back the dictated text to you in synthetic speech. Some have additional facilities like 'echoing' each word as it is spoken and the ability to read out the options presented when recognition errors are being corrected.

See our factsheet Voice Recognition – Advanced Features for more details.

Product	Supplier
Keystone Screen Speaker	Words Worldwide

## **Reading Text**

## Speech output (or text to speech)

Using additional software it is possible to get your text read back to you. This may reveal an error that would otherwise be missed - even by a spell-checker.

For example: you write: "They was lots men there" when you want: "There were lots of men there". The spell-checker won't help with this, but you might notice the error when you listen to it.

Product	Supplier
Screen Reader	lansyst

#### Scanning with optical character recognition (OCR)

With a scanner and OCR software you can transfer typed or printed documents onto your computer. This means you can use a document without re-typing it. This can be used in conjunction with text to speech software to have your text read out to you.

## **Useful Organisations**

The British Educational Communications and Technology Agency
 (BECTa) have a Special Needs section that have a specific interest in
 dyslexia/SLD. They are a resource for teachers and other education
 professionals but will help if they can with information. They publish a
 free dyslexia information sheet.

Tel: 02476 416 994

Web: www.becta.org.uk.

#### British Dyslexia Association (BDA)

98 London Road, Reading, RG1 5AU.

Tel: 0118 966 8271

Web: www.bda-dyslexia.org.uk

#### Helen Arkell Dyslexia Centre

Frensham, Farnham, Surrey GU10 3BW

Tel: 01252 792400

Web: www.arkellcentre.org.uk

## **Useful Factsheets**

Voice Recognition – An Introduction Voice Recognition And Dyslexia Keyboard And Mouse Alternatives