



Dyslexia Assessment and Consultancy

Email: info@workingwithdyslexia.com Telephone: 020 7582 6117

ASSISTIVE TECHNOLOGY SUPPORT FOR DYSLEXIC EMPLOYEES

Susan Close

1. INTRODUCTION

In this information sheet you will find general information on IT and technological support for people with dyslexic and dyspraxic difficulties. For advice on specific items of hardware or software packages that would suit your particular requirements, consult a specialist in the field. Try to get a hands-on demonstration or a free trial of software before purchasing anything.

2. THE COMPUTER

Many organisations deliver software through servers. There can be problems with running assistive software in these environments. If the PC terminal has adequate memory, sound card etc., then it may be possible to install the assistive technology on it. If this is not possible, then a laptop with docking station may be a solution. Additionally, many computers are located in busy environments which are not suitable for working with voice recognition. A laptop that can be moved to a 'quiet room' would be worth consideration.

3. DIGITAL VOICE RECORDER

Digital voice recorders are small, lightweight pocket-sized devices that are useful for taking memos and for entering reminders of dates, appointments and tasks to be carried out. Voice files thus created can be transferred to a computer and stored for future reference.

Depending on the specification of the recorder and voice recognition software, these files can sometimes be automatically transcribed into a word processing package.

Caution: Voice recognition software is trained to recognise particular voices, and will not transcribe meetings where there are many participants.

Caution: When recording meetings, use an external directional microphone.

4. MIND-MAPPING

Mind-mapping (concept mapping, brain-storming) creates a spider diagram (like a family tree) which can be used to represent a set of concepts and/or thoughts, beginning with the most general or most important and then working down to more specific detail. It can be used to plan and structure letters and reports. With one mouse click the spider map can be converted to text, and these files exported to word processing and presentation software.

5. VOICE RECOGNITION

Voice recognition allows you to dictate into a microphone and have your speech appear on the screen in, for example, Microsoft Word.

Caution: You will need training and practice to do this efficiently.

Caution: Voice recognition can make mistakes. All work created with voice recognition will require conscientious proofing. To illustrate:

Dictated: Mary had a little lamb, its fleece as white as snow.

Transcribed: Mary had a little lamb, its fleas as white as snow.

The words "fleece" and "fleas" are correctly spelled words and will not be highlighted as errors by a spell-checker.

6. SCREEN READERS (TEXT TO SPEECH)

Some text-to-speech software has been developed to help employees with their reading and writing skills. This software works with most Windows based applications (word processor, spreadsheet, database, and email) and many bespoke packages. Being able to listen to emails and files can improve comprehension and retention; and being able to have text you have written read back to you can assist with proofing your work.

7. SPELL-CHECKERS

Make sure you are making best use of the spell-checkers that come as standard within, for example, Microsoft Office. There are also sophisticated add-ons to word processing packages that offer phonetic and homophone spell checks, and word prediction. Hand-held spell-checkers are also available.

8. SCANNING

OCR software (optical character recognition) can convert hard copy into electronic and editable text on the screen (in Microsoft Word, for example).

Caution: OCR is best reserved for shorter documents or articles: scanning in whole textbooks can be unrealistic because of the time it takes to do so. (One page can take several minutes and may contain recognition errors.)

9. PERSONAL DIGITAL ASSISTANT (PDA) / SMART PHONES

PDA's are hand-held portable devices (like mini-computers) to help with everyday tasks such as time management and organisation. They can be used to set audible reminders for appointments and "to do" tasks – functions which are particularly useful for people with dyslexia who have memory problems. There is a notes pad (no more mislaid post-it notes), as well as word processor and spreadsheet functions.

The PDA can be set up to synchronise with a PC or laptop to keep information up-to-date (i.e. calendar, reminders, contacts list) and files (including emails) can be transferred between both pieces of equipment. Smart phones are used in the same way.

10. TOUCH TYPING

Trained touch-typists can become so proficient that they can enter text at two to three times their average handwriting speed. And research shows that people with keyboarding skills (compared to those who have developed their own 'hunt-and-peck' systems) are able to compose written work faster, produce documents with a neater appearance, improve language skills, have better motivation and take greater pride in their work.

11. SCREEN RULER

Screen ruler software provides support to readers who find it difficult to track text across a computer screen, as it can highlight part(s) of the screen in a horizontal band.

12. SAFE WORKING PRACTICES

Make sure that a DSE risk assessment is carried out on your workstation, and that it takes into account your dyslexic/dyspraxic difficulties. If you spend hours at your computer without taking appropriate breaks, you may be putting your health at risk. Consider also your posture, and whether it would be improved by using wrist and foot rests, a stand to raise your monitor to eye level, an ergonomic keyboard and mouse, and a paper/book holder that keeps documents vertical and parallel to the screen.

13. VISUAL SENSITIVITY

Microsoft Windows operating systems allow customisation of your computer with tools designed to help users with disabilities. For example, changing screen and font colours can reduce eye strain and prevent text from swimming on the page.

When reading books or papers, you could use coloured overlays or eye-level coloured reading rulers.

14. TECHNICAL NOTES

Each package of software that is being run on a computer uses up memory. As a simplistic guide to how much memory your computer will need, check with the manufacturer/supplier the requirements for each individual piece of equipment, add them together, and then double that figure.

There may be compatibility issues between the assistive technology described above and some operating systems. Check with the manufacturer/supplier of any software/hardware before purchasing.

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More information sheets are available at: www.workingwithdyslexia.com

See also:

Assistive Technology: Overview of the software and associated equipment

IT Training for dyslexic employees for details of our illustrated step-by-step assistive software guides.