

What, Why, Where?

What is the purpose of this sheet?	To detail additional programs designed to be used with voice recognition software. See “Voice Recognition: An Introduction” for basic concepts.
Why do extra products exist?	Dyslexic users can have specific difficulty with composition; proof-reading and correction.
Where is this relevant?	For Dragon NaturallySpeaking programs running on Windows 98 and above.

What makes voice recognition good for dyslexics?

The user speaks, the software recognises what was said and types it into the computer. This means that:

- *Words are correctly spelled*
- *The user's flow is not interrupted by having to stop and worry about spelling*
- *The need to type or handwrite is removed* : this is helpful if the user is also dyspraxic.

What can make it difficult?

Dyslexia affects different people in different ways. Some people with dyslexia will be able to use voice recognition software without any problems. Others may have difficulty with enrolment, dictation or correction.

Enrolment

Before starting to use a voice recognition program you have to read out a document that is presented on the screen. This enrolment process can be an issue for people who are not fluent readers. Ideas to get around this include:

- *Choose a suitable enrolment text*: the voice recognition programs offer a choice of texts - some are easier to read than others. It is also possible to create new enrolment texts for Dragon NaturallySpeaking.
- *Print out the enrolment text in large print*: you can familiarise yourself with the document before reading it into the computer.
- *Work with a helper*: the helper reads the text on the screen in small sections and the user repeats it a section at a time.
- *Use a additional package like Keystone*: this provides alternative enrolment texts and text to speech support during enrolment (see below)

Dictating Style

To gain good recognition, speech needs to be delivered clearly and confidently without hesitation. Some dyslexic users will benefit from organising and planning their “writing” before starting to dictate. Mindmapping and planning tools may be helpful. See the AbilityNet Dyslexia Toolkit for further information.

Younger people and adults who are not confident speakers may need some coaching on how to compose by voice *before* they start using a computer. Working with a scribe, or using tape can be a helpful stepping stone for some.

Making Corrections

Words are correctly spelled, but there will be some misrecognised words which will be difficult to spot:

- *They will not be picked up by a spell checker:* - as they are correctly spelled
- *The words will often have the same “shape”:* e.g. “modern” and “modem”

Misrecognised words need to be corrected and this process involves choosing the right word from a list of suggestions. If the “right” word is not listed you need to type it in.

- Dyslexic users may struggle to identify the correct word in the list
- Some will be unable to spell out the words during the correction process

For some users, text-to-speech software can help get round some of the difficulties of identifying and making corrections.

Using Text-to-Speech with Voice recognition software

NaturallySpeaking Preferred and ViaVoice have speech output facilities that will help many users. Once text has been recognised the user can:

- *Listen to it using text-to-speech:* you select the paragraph or sentences that have been recognised and click on the text-to-speech feature. The text is read back using a synthetic voice. Then you can follow the text on the screen as it is spoken out.
- *Listen to what was said:* hear a recording of your own voice – this can be helpful if they are not sure what they said.

The text-to-speech programs provided with NaturallySpeaking and ViaVoice will not read out the correction lists and provide no support during enrolment.

Specific Text to Speech Programs to assist

	Keystone (approx £250)	SpeakOut (approx £80)	TextHelp Screen Reader (approx £30)
Overview	<p>Designed specifically for use with NaturallySpeaking:</p> <ul style="list-style-type: none"> reads back text automatically as it is recognised reads back enrolment text provides support for homophones reads correction list and menus can highlight words as they are spoken in Microsoft Word 	<p>Simple text-to-speech application:</p> <ul style="list-style-type: none"> Drag the mouse over an area to start speech Can read items in the correction box either through mouse movement or cursor keys No highlighting with speech 	<p>Simple text-to-speech application:</p> <ul style="list-style-type: none"> Mouse or cursor movement used to speak choice list Wordprocessed text needs to be selected before being spoken TextReader window which will highlight text as it is spoken
Speech Engine	Good quality L&H voice – others can be used	Excellent RealSpeak Voice	Simple text to speech engine - not especially clear
Supplier	Worlds Worldwide	Iansyst, Choice Technology	TextHelp Systems
Web link	www.keyspell.com	www.screenreader.co.uk	www.texthelp.com

For further information on text-to-speech systems see the AbilityNet sheet on this topic.

Support and Training

Many dyslexic people work successfully with voice recognition software. In the early stages of use it is important to have realistic expectations of what can be achieved and to plan suitable levels of support and training.

Useful Factsheets

This sheet gives an overview of voice recognition software. The following information sheets are available to cover more advanced topics:

- Dyslexia and Computing
- Voice Recognition – An Introduction
- Voice Recognition – More Advanced Features and Concepts

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