Dyslexia and voice recognition software

**Important** - This information should be read in conjunction with our other factsheet “Voice recognition software - an introduction” which gives an overview of voice recognition software.

**What makes voice recognition good for people with Dyslexia?**
The user speaks, the software recognises what was said and then 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 hand write is removed: this is particularly 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**
Everybody sounds slightly different, so the first step in using a voice recognition system involves reading an article displayed on the screen. This process, called enrolment, takes less than 10 minutes and results in a set of voice files being created which tell the software how you speak. The newer versions of voice recognition programs say this is not required however we would always say it's worth doing to get the best results. The enrolment only has to be done once, after which the software can be started as needed.

However 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 software.

• 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 to the user and then they repeat it a section at a time.

• Use an additional software package that provides alternative enrolment texts and text to speech support during enrolment. (Refer to page 4)

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. Planning tools may be helpful. See the AbilityNet ‘Dyslexia and Computing’ factsheet 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 a dictaphone 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, listening to the text they have dictated can help to identify mistakes so they can make corrections.
Dragon NaturallySpeaking does have a speech output facility that will help many users. Once text has been recognised the user can:

- Read back text that they have spoken using the text-to-speech output facility. They select the paragraph or sentences that have been recognised and click on the text-to-speech facility. The text is then read back using a synthetic voice. Then they can follow the text on the screen as it is spoken out to recognise any mistakes they have made.

- Listen to what was said: hear a recording of their own voice – this can be helpful if they are not sure what they said.

However the text-to-speech facility provided within Dragon NaturallySpeaking will not read out the correction lists and this could stop the user from being able to correct their mistakes. Having an additional specific text-to-speech program that works with Dragon Naturally Speaking that will read out the correction list and menus will enable the user to identify and correct their own mistakes.

The next section provides an overview of some of the text-to-speech programs that will work with voice recognition software, highlighting their main features.
Specific text to speech programs that work with voice recognition software

<table>
<thead>
<tr>
<th>Product</th>
<th>Overview</th>
<th>Price (ex VAT)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Keystone Screen Speaker 10</strong></td>
<td>• Reads back text automatically as it is recognised</td>
<td>£145</td>
</tr>
<tr>
<td><strong>Supplier:</strong> Words Worldwide</td>
<td>• Reads back enrolment text</td>
<td></td>
</tr>
<tr>
<td><strong>Web link:</strong> <a href="http://www.wordsworldwide.co.uk">www.wordsworldwide.co.uk</a></td>
<td>• Reads correction list and menus</td>
<td></td>
</tr>
<tr>
<td><strong>Speech engine:</strong> Good quality L&amp;H voice – others can be used</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TextHelp Screen Reader 4</strong></td>
<td>Simple text-to-speech application:</td>
<td>FREE</td>
</tr>
<tr>
<td><strong>Free download</strong></td>
<td>• Mouse or cursor movement used to speak choice list</td>
<td></td>
</tr>
<tr>
<td><strong>Web link:</strong> <a href="http://www.free-soft-ware.org">www.free-soft-ware.org</a></td>
<td>• Paragraph or sentence needs to be selected to enable the software to be read out</td>
<td></td>
</tr>
<tr>
<td><strong>Speech engine:</strong> Simple text-to-speech engine - not especially clear</td>
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<td></td>
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<tr>
<td><strong>ClaroRead Plus V5</strong></td>
<td>Sophisticated dyslexia support program with talking spellchecker, and prediction.</td>
<td>£159</td>
</tr>
<tr>
<td><strong>Supplier:</strong> ClaroSoftware</td>
<td>• Echoes text as it is recognised</td>
<td></td>
</tr>
<tr>
<td><strong>Weblink:</strong> <a href="http://www.clarosoftware.com">www.clarosoftware.com</a></td>
<td>• Reads back suggestions in the spell dialogue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reads and highlights text in word processors and on web pages</td>
<td></td>
</tr>
<tr>
<td><strong>Speech engine:</strong> Excellent RealSpeak voice</td>
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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 factsheets are available to cover more advanced topics:

- Dyslexia and computing
- Voice recognition software – an introduction
- Voice recognition software – advanced features and concepts

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