

Word recognition for pupils with literacy problems

Paul Nisbet

Windows 7 has quite good built-in speech recognition software. This allows you to control your computer – ‘Start Menu; open Microsoft Outlook...’ – and lets you format and control everything with your voice. However, it’s not designed for young people with literacy difficulties.

We’ve had notable success with WordQSpeakQ in a particularly challenging situation. Gareth has quite severe literacy difficulties. He’s on the autism spectrum and has a constellation of other issues with visual perception, attention and reading. While he is physically agile and his school has done a fantastic job of supporting him, he had no independent means of expressing himself. Yet he has a lot of ideas and was quite effective at using a scribe.

WordQ is text-to-voice software that reads any text you can highlight to improve comprehension and proofreading skills, and provides word prediction to help improve spelling accuracy. SpeakQ is a forgiving add-on to WordQ, giving the user speech-to-text capability. Both programs were designed specifically for people with literacy difficulties. Note that they are designed to help with writing, so if you have a physical difficulty and want to control the computer as well, Dragon or Windows Speech Recognition give you hands-free control.

One of the great advantages of WordQSpeakQ is the Speak&Select function, which gives Gareth a chance to review what he has said. If a phrase is not clear, it might give him options.

For example, Gareth can point to each

possible phrase and the software will read it back to him (see box right). He then clicks the one he wants or types in the relevant number to lay it down.

Dragon, on the other hand, is really designed more for professionals using continuous speech, and works best when users dictate whole sentences or phrases at a time, because it uses the context to improve voice recognition accuracy.

That means you have to know what you are going to say before you start to talk, which is trickier than you think. I tried it myself recently when I damaged my wrist. Even though I was used to dictating reports into a Dictaphone, there is something about talking to the computer, and seeing the words come up, that is very distracting. (I found it easier to stare out the window and dictate rather than look at the screen.)

“ It allows Gareth to dictate one word at a time, and check and correct it, if he chooses ”

Schools have to teach young people how to compose language internally and then say it for speech recognition software to work well. It takes time for this to become an automatic process and having part of your attention focused on the mechanical process of laying down words can be confusing. In the same way, if you have dyslexia and you have to think about how you spell every word, you can lose the thread of what you wanted to say in the first place.

This is where WordQSpeakQ comes into its own because it allows Gareth to dictate one word at a time, and check and

- 1 and make sense
- 2 and makes sense
- 3 and makes ends
- 4 there and make sense
- 5 to and make sense

Dictating with Speak&Select

correct it, if he chooses. While there are learners who use Dragon successfully, WordQSpeakQ is more suitable for children with literacy difficulties.

Learning the program is straightforward, and training the software to recognise your voice takes about ten minutes. One of the nice things about the training process is that it pops up the phrase on the screen, reads it out to you and then waits for you to echo it, which means that pupils like Gareth can work their way through it semi-independently.

The software has allowed Gareth to write independently for the first time – a huge success as far as he, his parents and staff were concerned. I think part of it is because he feels he has control over an aspect of his life.

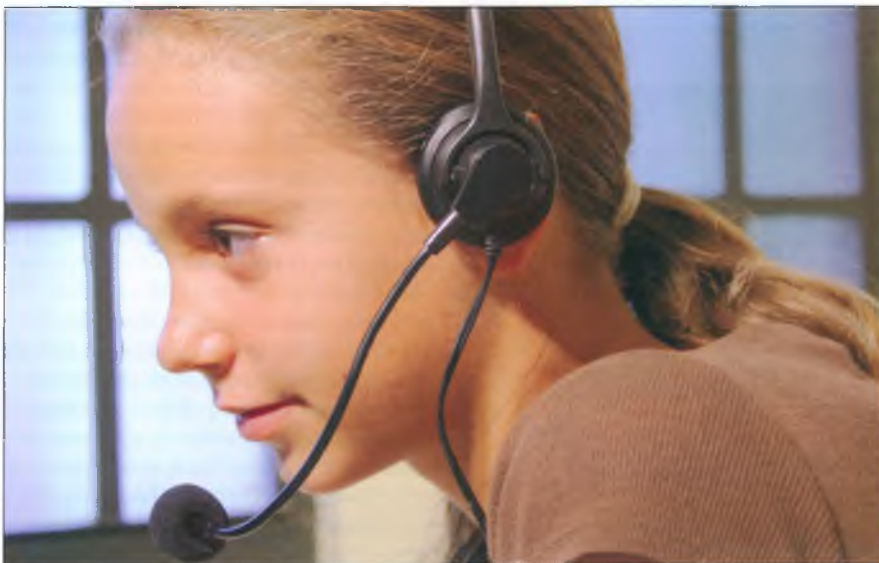
One reason voice recognition software is not used more frequently in schools is because it’s tricky to integrate into the classroom. You need a quiet room with no distractions, and a decent computer with a lot of memory or it runs very slowly. You also need a quality microphone – the built-in microphone on your laptop won’t do.

None of the speech recognition programs are good for young children – early secondary school is when they really start to benefit from them. The user must also speak clear, standard English – the programs can’t cope with strong regional accents yet.



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For a detailed comparison of the three products by Mr Nisbet, visit bit.ly/SC212-21



You need a quality microphone

Site licences for WordQ (£1495 + VAT) and WordQSpeakQ (£1995.00 + VAT) include home activation for the students and teachers enrolled in the school. Demo videos and a free 30-day trial: www.goqsoftware.com/uk