

This resource has been written for Teachit English by Malcolm Litten, a tutor, trainer and consultant in assistive technology. He has over 40 years' experience of teaching English, in both state schools and in a specialist secondary school for dyslexics. Malcolm has extensive research experience in assistive technology, and here outlines how schools and students can benefit from tools to aid students' writing.

Handwriting

We all have a limited amount of attention we can devote to a task. If too much of that attention is required to cope with one part of the writing process, there will be little left for other parts. So, for example, the vast majority of us can form letters automatically when handwriting, requiring none of our conscious attention. However, if that automaticity is lacking, determining which direction the pen should go in when distinguishing between forming a 'b' or a 'd' can be a high demand on your attention.



Handwriting can pose problems for other reasons too. Coordination problems can lead to poor quality presentation of which the writer feels ashamed; they are then reluctant to expose this to anyone's scrutiny. Demands for a cursive style may again impose a drain on the writer's attention.

How to help

A keyboard: Providing a keyboard may remove any or all of these problems. Despite being a 'simple' solution, it does lead to the question of keyboarding skills. There are numerous typing programs available and varied opinions about their merits. It is sensible to choose one that is age appropriate. Becoming a touch typist is unnecessary and likely to render the whole idea a barrier rather than a solution, particularly for anyone affected by dyspraxic-natured difficulties.

Some suggested typing programs: *BBC Dance Mat* (free online), *Doorway touch typing* (free online), *Type with Tizzy*, *Type To Learn*, *English Type Junior*, *KAZ*, *Adventures in Typing*, *Nessy Fingers*, *2Type*, *Touch-type Read and Spell* and *Ten Thumbs*.

Spelling

Ensuring words are spelt correctly is a challenge that will always require some of a writer's attention. For some, this can become an almost all-absorbing challenge. In extreme cases, the completion of a sentence free of spelling errors can feel beyond the reach of a writer. A commonly adopted partial solution is to exclude challenging words, reducing the quality of the content severely.



How to help

A predictive typing tool: This tool is now a common feature on many smart phones and if you have experienced it, it is likely you are aware of its disadvantages as well as its advantages! Its function is to try and anticipate the word the writer wants, thus reducing typing strokes and providing a correctly spelled word. On phones it often alters less familiar words or mis-spelled words which can infuriate the user!

It is essential to define what the tool is being used for. A very slow typist can benefit from this tool if they can recognise words in the displayed list. In more sophisticated versions of this tool, specialist vocabulary (that may be challenging to spell) can be offered. In other sophisticated versions, a very poor speller can be helped to find the word despite being unable to generate the word accurately with letters in the correct sequence.

The function of the predictive typing tool should then be customised for users, and proper training provided to ensure they know how to use it. By doing so, irritating qualities can be minimised and support maximised. This tool has in my experience enabled some users to create understandable, meaningful sentences for the first time in their lives. However, it will not suit all potential users.

Some suggested predictive typing programs:

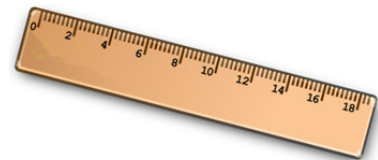
ClaroRead, Co-Writer, Penfriend XP, Read&Write Gold.

A talking spell checker: Like a keyboard, a spell checker is a basic tool that many people rely upon. For a poor speller it can be a life-saver. Whilst there are specialist spell checking tools, for many users the vital additional feature is to be able to hear the options offered.

The spell checker in *Microsoft Word* can be turned into a speaking spell checker by the addition of an excellent free piece of software, *WordTalk*. This software only functions in conjunction with *Word*, as the name implies. There are different versions for *Word 2007, 2010* or *2013*. The software includes a number of other helpful features, for example, it provides text-to-speech in any *Word* document, highlighting the text, it provides a speaking dictionary, and it can convert any *Word* document into an mp3 or wav sound file.

Structure

Determining the content of a piece of writing and the best way to structure it poses a further challenge that many younger writers fail to tackle.



How to help

Mind-mapping tool: Many younger writers struggle with the demands of structuring a piece of writing. One of the advantages of using a mind-mapping tool is that it does not require the user to think in a linear fashion. The relationship between different elements can be worked on in a way that involves visual and tactile formulation, making the process much less abstract.

While the process can be undertaken by hand on a piece of paper, there are a number of computer-based versions that appeal as an alternative. Some users may find management of the software challenging, some may be distracted from the task by all the choices of colour, shape and illustrations, while for others, the misty maze of writing longer pieces clears.

Some suggested mind-mapping programs:

MindView, MindJet, MindGenius, iMindMap, SparkSpace range, Inspiration, Claroldeas or *Read&Write Gold.*

For younger writers: *Kidspiration, KidSpark, ThinkSheet, DraftBuilder* or *Rationale.*

Further writing support tools

Word banks: Anyone familiar with *Clicker* software will be aware of the wide range of support that can be provided to a writer through specifically targeted word banks. Specialised vocabulary, particular types of words, phrases or selected quotations can serve a variety of purposes to stimulate and extend the writer.

This tool is much more widely used with younger writers, but arguably has just as much value with older ones as well, especially those struggling to produce more extended or interesting pieces.

While there are a few other programs as well as *Clicker* that provide specialist support or sources of ready-made word banks, it is simple enough to create a table in a *Word* document containing the vocabulary. With *WordTalk*, the words can all be read to the user.



Speech recognition software

The most radical solution to writing problems is to convert it into a talking process, removing all need to form and spell words.

The software can still suffer from a poor reputation, gained in the earlier years of its development. Now it is a truly impressive tool, able to produce a 95-99% accurate transcript of anyone's talk.

An online version exists on phones and notepads, but for the best results it is worth trying the Dragon products on a computer (*Dragon NaturallySpeaking* for Windows PCs and *Dragon Dictate* for Macs). The recognition performance is improved by customising it to the individual user and training is essential. The major challenge for any user is to develop the skill of dictation. Thinking and speaking your sentences is not the same as talking to someone.

I have used this with pupils from the age of 7 up, but for most users it is most likely to feel a relevant tool from age 12-13.

Teachers need to become experienced users themselves. If it suits you, you are likely to become an enthusiastic advocate! I have seen it transform a child's entire experience of education - nothing else I can recommend to you comes near offering that!

