

# SECTION 1

## SUPPORTIVE WRITING TECHNOLOGY IN THE CLASSROOM

Section 1 describes the various types of supportive writing technology available and gives some examples of how they can help pupils experiencing difficulties with writing.

The aim of the section is to give you a reasonably thorough understanding of the technology and why particular supportive tools can be helpful for writers with different difficulties.



# Chapter 1

## Basic principles

- 1.1 Using Information and Communication Technology (ICT) within the curriculum**
  
- 1.2 'Low tech' and human support**

# 1 BASIC PRINCIPLES

## 1.1 Using ICT within the curriculum

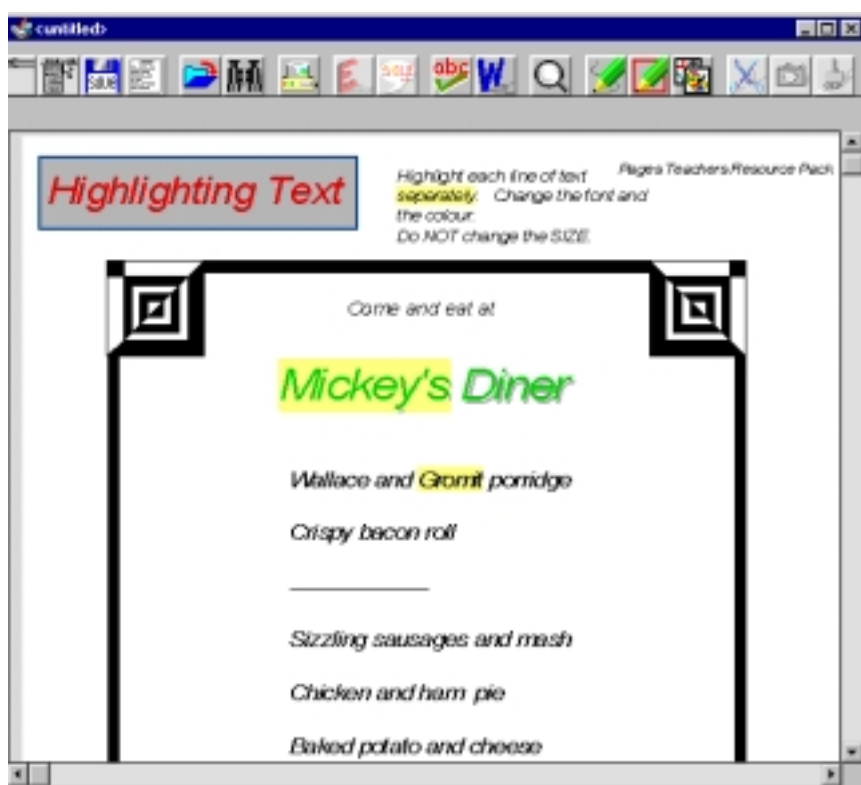
Supportive writing programs and systems are tools and, like any tool, they require instruction and practice if they are to be effective. In addition, the teaching of information technology and word processing is now part of the Scottish 5 – 14 Curriculum and the National Curriculum for England and Wales.

Therefore, a teaching programme should be planned and delivered to develop the pupil's skills with the supportive writing technology. Many users of supportive writing tools will be reluctant writers and so it is even more important to plan the curriculum carefully to avoid failure and damaged motivation. There is also some evidence to suggest that technology is only really effective when the learner can use it independently without support from the teacher or classroom assistant (Boswell, France & Refern, 1994, p. 20).

The teaching program should reflect all these issues, and be designed to develop the skills with the technology in line with linguistic and literacy development. One programme for introducing word processing is described in *Information Technology Skills* (Scottish Borders Council, 1997).

Classroom experience shows that pupils acquire word processing skills most effectively through a series of discrete exercises where the amount of text entry is quite short, and the task very clear. This is best done through exercises where all the information is available on screen, as illustrated in Figure 1.1 (taken from the *Pages/TextEase Resource Pack* (Marroni, 1998)). The Resource Pack is aimed at pupils who can recognise all the letters and who can read the materials presented on screen.

**Figure 1.1: A sample page from a set of on-screen exercises in the *Pages/TextEase Resource Pack*, designed to lead young pupils through the basic operation of the word processor.**



Other teachers and specialists have developed similar materials and resources: for example, Alan Stewart, Development Officer for IT/SEN in the Highlands has created a set of *ClarisWorks* templates with matching *Clicker* grids, while ITSU in Edinburgh have distributed activities built using *ClarisWorks* and *Speaking Dynamically*, an on-screen word bank program. It is worth contacting your local centre or service (see the *Resources* at the back of this book) to ask if they have similar materials available.

One of the most important techniques for developing writing skills – whether using pencil, simple word processor, or word processor with support – is to give a context for the writing. In other words, early or struggling writers should never be presented with a blank piece of paper or a blank screen and expected to produce great things.

Standard techniques used with traditional writing tools, involving worksheets, themes and other materials to encourage interest and stimulate the pupil's creativity, can be used equally effectively with supportive writing systems. Copying texts, cloze procedures, and activities using pictures and photographs to stimulate ideas are all helpful for teaching the use of writing whether the tool is a pencil or a speech recognition system. Pupils may have to complete a partially-written word; copy a word into a particular place in a sentence; or complete a sentence – all techniques routinely used by teachers with paper worksheets.

For all these activities, speech output can help pupils identify words and make sense of sentences and reinforce learning. The activities themselves may be completed using the keyboard, with word banks, word prediction or speech recognition.

Examples of teaching materials and methods are given in the following chapters and in the references.

## 1.2 'Low-tech' and human support

Although this book concentrates on computer-based systems for writing, the use of this technology should be considered along with other support techniques.

### Handwriting methods and tools

If a pupil has poor handwriting skills, first consider whether the writing implement or position can be improved. There is also evidence that some writers benefit from structured physical exercise programmes (Portwood, 1999) and from learning cursive handwriting, which is physically less demanding and can produce more legible results. Refer to Ott (1997) for a description of tools and approaches.

### Spelling methods and tools

Writers with poor spelling abilities can often benefit from a structured approach to teaching spelling, such as *Alpha to Omega* or *Read Write and Spell*, and from use of aids to spelling such as the ACE Spelling Dictionary (Collins, 1986).

### Readers, scribes and tape recorders

Many pupils with specific learning difficulties, visual difficulties and hearing difficulties use readers and scribes to support them in the classroom. This linguistic support includes the use of readers to read text, scribes to write down answers dictated by the pupil and the transcription of hard-to-read scripts. Where reading and writing difficulties present serious problems and where these skills severely restrict a pupil's performance, readers and scribes can be used for exams.

Readers and scribes can provide vital support to pupils who would otherwise be unable to access the curriculum for a variety of reasons. The main disadvantage, compared with technological tools, is that the writer is not as independent and can become overly reliant on having someone there all the time. However, for those pupils who have severe difficulties, using a reader and scribe may be the only realistic way of providing support. Readers and scribes can be particularly important in examinations and tests, where there is limited time for the writer to complete the work, and where any writing difficulty will put the pupil at a disadvantage compared to his or her peers. In these situations, it may be more appropriate to opt for a reader and scribe, than to use technology. The special arrangements which can be used by pupils with special educational needs in Scottish Qualifications Authority examinations and assessments are described in *Arrangements for Candidates with Special Educational Needs* (Scottish Qualifications Authority, 1996) and in *Testing with Special Technology* (Nisbet & Kerr, 1995).