Chapter 11

Teaching literacy using technology

11.1 *Look, Cover, Write, Check*

11.2 *Prompt Spelling*

11.3 Talking Computer Methods

11 TEACHING LITERACY USING TECHNOLOGY

This book concentrates upon the use of technology to compensate for writing difficulties. Usually, we hope that the technology, by removing barriers to learning, will improve basic literacy skills. In addition, word processors and software can also be used as part of a structured teaching program.

At primary school in particular, it is important to get the balance right between the development of literacy skills and the use of supportive writing methods; between the computer as an aid to learning and as a method of circumventing problems. This chapter summarises three techniques for developing literacy skills:

- *Look, Cover, Write, Check.*
- The *Prompt Spelling* method
- The *Talking Computer Project*

11.1 *Look, Cover, Write, Check*

The *Look, Cover, Write, Check* approach is well established as a way to assist pupils to become fluent spellers. The pupil follows a simple procedure for learning to spell words: he or she looks at the word, then covers it, attempts to write it, and then checks the spelling usually by reading the word and the attempt out. If the attempt is correct, the next word on the list is tackled. If not, the pupil tries again. There are also computer programs which can present this sort of task tirelessly and without allowing cheating. Pupils get a sense of achievement as they work through the scheme or get better scores on an exercise they have tackled before. *Speaking Starspell* (Acorn / Windows, £42 from Inclusive Technology) is a good example of this type of program.

11.2 Prompt Spelling

Prompt Spelling is a method in which a pupil works in a one to one situation with a teaching assistant. The target words are mistakes identified with the pupil, from his or her own writing. The pupil learns to spell these correctly with the aid of a Franklin Spellmaster. The pupil can also use the Spellmaster to find words which are related – containing similar phonic patterns. This method succeeds where pupils are highly motivated to improve their spelling, as it concentrates on words they want to use and have identified as problem words.

Figure 11.1: Case study – Prompt Spelling

Gordon, now in Secondary School, said this about Prompt Spelling:

"One thing that really helped me at primary school was Prompt Spelling. I learnt to spell the words I really needed to use"

Prompt Spelling was developed by Watkins and Hunter-Carsch (Watkins and Hunter-Carsch, 1995). They described it as a form of paired spelling that they trialled with pupils aged 12 – 13 in three English Secondary schools. Prompt Spelling is described in detail in *A Teacher's Guide to Prompt Spelling* (Watkins, 1996). The materials needed for a Prompt Spelling session are:

- a sample of the pupil's writing
- a hand held spellchecker e.g. Franklin Spellmaster

- a paper Wordsheet with four vertical columns
- paper for rough attempts.

Step 1 – Together, the helper and pupil identify 5 misspellings and the pupil copies these into column 1 on the Wordsheet.

Step 2 – Each word is discussed, with the helper saying the word clearly and the pupil repeating the word.

Step 3 – The pupil underlines the part of the word he or she suspects is wrong. The pupil writes a few more attempts at the word in rough.

Step 4 – The pupil uses the spellchecker to check the rough attempt which he/she thinks is closest to the proper spelling. The correct spelling, taken from the Franklin, is written in column 2. The helper and pupil discuss the original error and how it has been corrected.

Step 5 – The helper and pupil discuss similar words which contain the word pattern that has been corrected. The words can be found by using the 'wild card' facility of the Franklin spellchecker. The similar words are written into column 3.

Recapitulation

Once all 5 words have been tackled the helper discusses the error, the correction, and the generalisation of the correction.

Then columns 2 and 3 are covered and the pupil attempts to write the correct spelling in column 4.

After all 5 words have been written, the spellings are checked against column 2.

After every 4th session the pupil is tested on the twenty words dealt with.

A by-product of the method is that the pupil learns to use the spellchecker effectively, especially the wild card facility.

11.3 Talking Computer Methods

The *Talking Computer Project* was first implemented in 1992 by Martin Miles & Vivienne Clifford for children with literacy difficulties (Miles and Clifford, 1994). The children involved in the pilot study demonstrated significant gains in reading, spelling and listening skills.

Over the next two years the technique was further developed and tested and in 1994 a manual with teaching materials – *Acceleread, Accelewrite* (Clifford & Miles, 1994) – was published. The method is now used extensively around the UK.

The programme involves 20 sessions lasting 20 minutes each, spread over 4 weeks (i.e. one session per day). Pupils work individually with a teaching assistant, school auxiliary or parent helper, and a computer with a talking word processor. Each session uses cards with four sentences which the pupil has to read and type on the computer.

Many schools have developed their own variants of the approach. Figure 11.2 gives a sentence set from an authority that developed its own materials.

Figure 11.2: Sample sentences for a Talking Computer Project-style exercise

I found a pound on the ground.
We can shout very loud. What a sound!
The hound ran around.
Can you count any amount?

The helper and pupil follow this procedure:

1. The pupil attempts to read the first sentence, with help if necessary, until he or she can remember it when the card is taken away.
2. The pupil types it into the talking computer. The computer reads back each word as it is typed, and then the whole sentence when the full stop is entered.
3. The pupil checks the words and makes corrections.
4. The pupil uses the computer to read the sentence.
5. The pupil reads the sentence him / herself.
6. The remaining three sentences are tackled in the same way.
7. After all four sentences have been completed the pupil reads the sentences and is asked to identify any letter patterns, with help if necessary.
8. The screen is cleared and the pupil is asked to type as many of the words as they can into the computer.
9. The pupil goes on to the next card of four sentences until the 20 minutes are up.

The method has been shown to improve pupils':

- reading age;
- listening memory;
- spelling age;
- self-esteem;
- motivation and enthusiasm to read and write;
- computer skills (a useful side-effect for pupils who may rely on computers for writing).

(Miles & Clifford (1994), Nisbet, L. (19995))

The original materials were designed for use across a fairly broad range of ages and levels of ability, and Clifford & Miles suggested that schools and users create their own materials to suit individual needs.

Bordertalk

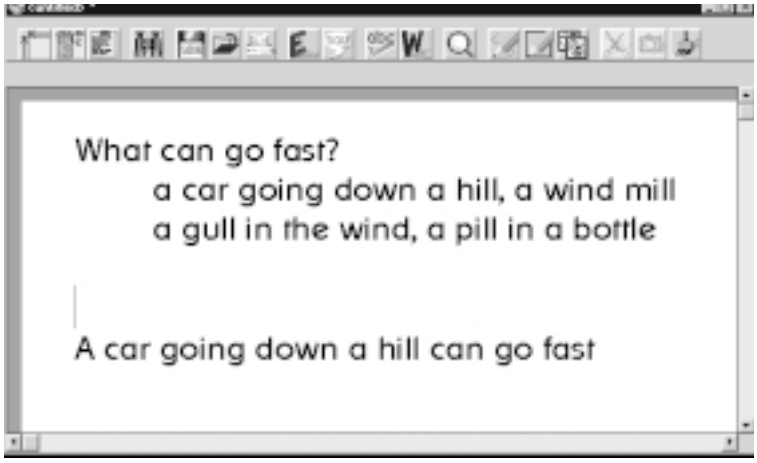
In Scottish Borders, a method was developed that had much in common with the Talking Computer Project. However the materials differ in these ways:

- they were developed for *TextReader*, the first word processor with the 'Click on a word to hear it' facility (now available in *Pages* and *TextEase*).

- they come as files on disc that are installed onto the hard disc of the computer ready to be loaded into the word processor.
- they are graded into levels according to the spelling levels of the Scottish 5 – 14 curriculum.
- they include questions to answer rather than sentences to copy, which can add interest to the activity.

Figure 11.3 gives an example question from level A / B.

Figure 11.3: BorderTalk example using *Pages*



The pupil reads the question and the possible answers, getting help where necessary from the talking word processor. The pupil then says their answer, using the words available on the screen in most cases. The pupil makes the computer say the sentence by clicking on the words on the screen (the teaching assistant can add any words that are not on the screen already).

Then the pupil types in the sentence, for example

A car going down a hill can go fast

The pupil moves to the next of the three on-screen questions and works in the same way.

Finally the pupil prints out the work, reads the sentences he or she has typed in, and highlights words with the target pattern in them.

The session might end with the pupil typing to dictation in an otherwise blank page of the word processor to check that he or she has learnt the words.

As well as boosting pupils word attack and phonic skills, another result of using this method has been that pupils have become more aware of sentence structure and this carries on to their own creative writing.