# PLAYSCHOOL

**This is the second of two articles in which we sample a variety of educational programs for very young people. Here, we consider the merits of two packages from Spinnaker, and look at a series of programs written by the educational publishers Macmillan in collaboration with Sinclair Research.**

Story Machine (Spinnaker, £9.95) is designed for children between the ages of five and nine. It is intended to teach the rules of syntax, improve spelling and stimulate expressive writing.

The program contains a dictionary of 52 words, of which five are proper nouns — the names of a boy, a girl, a cat, a dog and a creature called a 'bumpus', all of which must be specified by the user at the beginning of the program.

From this dictionary, the child builds up simple sentences that are then acted out by the characters

**Story Machine**



on the screen. For example, the sentence 'Maurice kisses flowers' will display a character showing a boy (who has been named Maurice by the user), a character depicting some flowers, and, when they get close together, flashing hearts appear to indicate the kissing.

If a word is misspelt or wrongly used, then the computer will refuse to accept it, displaying a message explaining what is wrong and asking for the word to be altered or changed. At the end of each sentence — that is, after each full stop — the program will attempt to enact it. When a whole story has been made up, there is an option to replay it in its entirety.

If you get bored writing your own stories, Story Machine has two other options: you can share the story writing with the program (taking turns to add words); or you can let the computer do all the

work, and write the story for you. This is possible because the dictionary is divided up into parts of speech — nouns, verbs, prepositions, etc. — and it has a strict grammatical algorithm to generate its own sentences.

Most of the words in the dictionary, as well as the sentence structures used by the program, are simple enough. The verbs in particular describe easily-depicted actions, such as 'hop(s)' and 'go(es)'. It is interesting that an imaginary verb 'zot' — which appears to mean hit or strike — has been included. This seems to be at variance with Spinnaker's stated rule that it is wrong to hurt other people or animals, and therefore any actions that involve physical injury to others will not be allowed by the program.

The program has two fundamental grammatical rules: a sentence must contain a subject, a verb and an object, in the correct order; and singular and plural forms must be consistent. Beyond these rules, the enforcement of syntax is less satisfactory, because of the enormous variations of usage in the English language. For example, the computer will accept the sentence 'Houses eat rocks' but will not accept the sentence 'Girls eat rocks' without the definite article before the word 'girls'.

The program even appears to break its own rules. After the sentence 'Bumpuses eat rocks', the program generated the sentence 'They walk to its fence'. Normally, when encountering the word 'its', the computer would generate the message 'Whose?' and ask for the word to be changed. The program has also ignored its rule of not mixing singular and plural forms. These may be considered minor errors, but a program that claims to be educational should at least be consistent and *must* always be correct.

Kids On Keys (£9.95) is another Spinnaker product, designed for children aged from three to nine. The aim of the program is to teach the user how to identify words, letters and numbers. There are three different games in the package, each of which has various levels of difficulty. In the first game, a letter scrolls down the screen, and the child has to press the correct key before the letter reaches the bottom. After 15 letters, a balloon floats down containing a word. This must also be typed in correctly before the balloon reaches the bottom of the display. The game is, at least, an enjoyable way for a child to become familiar with the layout of the keyboard.

In the second game, a series of pictures (expanded sprites) scrolls down the screen, and the child has to type in the name of the object before it reaches the bottom. After this, there is a