START RIGHT

This is the first of two articles in which we look at a range of educational software written for young people. We begin with a brief discussion of the specific objectives a programmer must bear in mind when producing software for pre-school and primary school children.

The educational aims of the packages we looked at ranged from simple shape and colour recognition, through basic numerical and reading skills, to quite sophisticated attempts to expand a child's artistic abilities.

All of the packages were fairly straightforward in explaining to the user what had to be done. This must be a priority for any educational program: the child must fully understand what is required, and there must be clearly-defined rewards given when he has mastered a skill.

Secondly, the program must be easy to use. It is pointless for a program that purports to teach a child reading skills to begin with a list of operating instructions. The best programs keep these instructions to a minimum.

An educational program must hold a child's interest. No matter how important or worthy its ultimate aims are, it will fail to achieve anything if it is pitched above the child's abilities, or becomes repetitive and boring.

Finally, the acid test of an educational program is that it teaches what it is supposed to. This may seem an obvious point, but software houses often forget the educative aims of a program in favour of its entertainment value.

The packages we discuss here are produced by the American companies, Spinnaker and Fisher-Price. Although these programs are available in the US as cartridges, in the UK they are marketed

Dance Fantasy

in cassette format. Whereas a young child could easily be shown how to insert a cartridge into a computer and switch it on — thus being able to load his or her own program — the cassette format invariably requires an older person to be at hand to help load the program.

Perhaps the most fascinating of all the programs we looked at, Dance Fantasy (Fisher-Price, £9.95) is aimed at four- to eight-year-olds. The screen display shows a stage on which two figures are standing, and the user is asked to choreograph a dance for them. Before beginning work you are asked to specify the sex of the dancers: a boy and a girl, or two boys or two girls.

At the bottom of the screen, the program displays a range of figures in various poses: each of these represents a particular dance routine — a leap, a jig, and so on. By moving one of the dancers over one of these figures, using the joystick, the child effectively chooses that particular routine, and then positions it on the stage and has it performed by pressing the fire button. A dance is thus choreographed by selecting a series of

Aegean Voyage

movements and performing these at different points on the stage, with connecting movements supplied by the program. Once a dance is complete, the child can SAVE it and then view the overall effect.

As you may have recognised from this description of Dance Fantasy, the program's great strength is that it is an imaginative analogy for a computer program: the child is able to create its own dance (program) using a series of basic routines (a set of procedures). This is then SAVEd to, and LOADed from, cassette — thus painlessly introducing the child to these two terms.

Aegean Voyage (Spinnaker, £9.95), aimed at a slightly older age group, uses characters and locations from Greek mythology as the elements