

# Multi-media information programs which can be used with young children

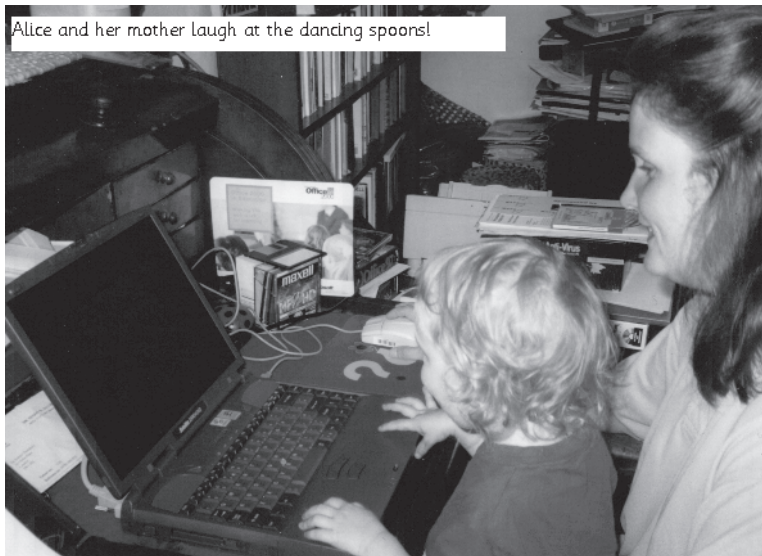
**Mary Lou Thornbury**  
*ICT Advisor*

It is not necessary for parents to have a great number of CD-ROMs; they are expensive and having a great number can be 'distracting'. It is better to get one or two and explore them with young children so that they will take up the exploration themselves. Besides 'talking books' there is a range of software which motivates children and assists in the acquisition of pre-reading skills. It is multisensory with sound and music, graphics and animation, photos and video.

The pattern of use of these programs is interesting. For the first few times young children want to be sitting on an adult's knee or close beside them, or maybe they will stand in the background watching other children. They observe the program and quite often command the adult to make the moves, pointing to the screen or asking for directions. They become familiar with the program and explore its possibilities: will the pig in the corner or the little girl, Fat Controller or Noddy figure help with the

task or explain where to go next? Can the child make any number of choices, can she click anywhere, or is the exploration limited? To avoid frustration children need to know what these limits are. When all this is known they will explore a section of the program on their own, often coming back and back until the supporting skills, like the different uses of the mouse for a particular operation, are established.

One little girl, sitting on my lap, was quite impatient with a shape matching program. She wanted to explore the more 'interesting' or demanding sections of the CD-ROM. However when she asked to use the computer by herself she went to the shape matching and repeatedly played it until, having relearned for herself the sequence of operations, she could also click precisely. Only then did she move on to the game involving clicking and dragging which, when played with an adult, she declared to be 'the best'.



An observer might suggest that the child is making no progress but the challenge to the adult is to observe the necessary reinforcement and how the program supports it. When they revisit the program the children are also in the company of the programmer, a more shadowy presence than an actual adult but one who provides transitional help towards independent play. The children need to be supported to move on to different levels. In the company of an adult they will discover what else the CD-ROM has to offer.

An exciting example of such software is *My First Incredible Amazing Dictionary*<sup>1</sup>. The thoughtful selection of images for this CD-ROM combines photographs and drawings, stills and animations. The images of children are inclusive, the use of a range of voices includes higher pitched children's voices, which, combined with the avoidance of gender stereotypes, suits it to most 3–5-year-olds – and older. It is also refreshing in this CD-ROM to have images of real children and adults.

The most popular feature with one 3-year-old was the sound game, *What's That Noise?* The child clicks on a door; behind the door is a sound. The child listens carefully and clicks on the object that makes the sound: dolphin or tambourine, cricket or lorry. This is a very important age for the development of listening skills because only if they are fully developed will the child come readily to listening to the sounds of words and letters. Phonic awareness develops later than, and is dependent upon, the maintenance of pitch recognition. This game has many frames and can hold the attention of most young children; in fact if they are really keen they will learn mouse skills of location and clicking (not dragging) with this game alone. Little children find it difficult to screen out surround sound so for this activity the computer is best set up away from other activities which generate noise.

Another feature shows associated groups of words. One 3-year-old's mother had had a new baby in hospital. She asked for 'ambulance' and then for

'hospital'. At the bottom of the page is a square which leads to all the words to do with 'At the Hospital'. We clicked on all the pictures, looked at them and listened to the definitions over and over till all the words were thoroughly absorbed and then we went off to another part of the dictionary to find some 'reptiles'.

The idea of grouping words and objects is associated with the beginning of understanding of generalisations. Vygotsky calls these groups 'heaps' because they may be generic groups like 'reptiles' or groups by association like 'at the hospital'. The ability of children to see and make categories is important in their marshalling of the multiplicity of information about the world around them.

One other feature of this program is the 'footprints'. If you click on them you can go back over the subjects you have looked at and return to an earlier train of thought. We used this to go back to the hospitals again.

This program with 3-year-olds is less a dictionary than an exploring of the world, but one delimited and imagined by a skilful programmer.

### The importance of sound

With more recent computers the sound quality has become clearer. One magic CD-ROM allows you to listen to and memorise bird-song. *Garden Wildlife*<sup>2</sup> shows pictures of the animals, insects and other beasts in gardens, parks and buildings. It caters for young children's interest in the world around them and their early ability to learn the 'big' and correct word like 'millipede'. A wonderful feature is the recording of bird song which enables identification of most garden and park birds. Again, it is great for listening to and remembering even quite long sequences of sound.

But *Garden Wildlife* does not have a speaking facility. If it is used it with pre-schoolers the adult needs to read and endlessly re-read the descriptions, and explain them. The language is precise and correct: we learnt that the young dragon-fly is called a 'nymph'. But the ideas are accessible and if we read them often enough they will be remembered. And the little biologist will then return to the video knowing what it represents (a dragon-fly nymph eating a fresh water shrimp!).

These are the simplest form of information sources for young children and they return to them again and again. The CDs are well organised and attractively presented and their appeal outlasts the matching games and jigsaws which proliferate for the pre-schooler and her parents.

<sup>1</sup>(1994) Dorling Kindersley

<sup>2</sup>Anglia Multimedia