much as to vocational education. Indeed, it is obvious that many parents are purchasing home computers for this very reason — they believe that they can thus give their children a competitive edge over their schoolmates.

It is often argued that people do not need to understand how computers work in order to use them adequately — just as, it is said, car drivers do not need to know how a car works, and no one needs to acquire skill in mental arithmetic now that pocket calculators are cheap and plentiful. But there are several reasons why this view is inadequate, and why a broadly based understanding of computers is of great importance for the future. First, it can remove the fear of computers that arises from ignorance, and so permit people to begin to distinguish between what is possible and what is impossible for a computer. And this permits some genuine risks of computers to be recognised — for example, in using computer software to control medical care or nuclear power stations. Second, such education may prevent the creation of two new classes of citizen: a majority lacking understanding of computer technology, vulnerable to bureaucratic control and even oppression, and a minority of experts — latter-day witch doctors exercising control by imposing a heavy burden of fear and superstition on a hapless tribe. Computers have the potential to facilitate oppression — but a 'computer-literate' population able to develop the tools to protect themselves seems the best defence against a computer-assisted totalitarian government. Perhaps this is more important than the possibility (or even probability) that a significant proportion of such a population will engage in computer-assisted crime or accidentally plug into the NATO computer network. Third, from a more directly practical point of view, our future prosperity may depend on computer literacy as the success of the Industrial Revolution and the administration of the British Empire depended on the nation's knowledge of the 'three Rs'.

But the value of owning and learning about the computer is not wholly a matter of theory. After an initial period in which the novice grapples with the foibles and limitations of an inexpensive home computer, he or she will realise that it can be the basis of a useful and cost-effective system. Small businesses throughout the country are using cheap microcomputers to prepare their accounts, manage their stocks, and handle their records. The same businesses, together with writers and private householders, are using computers in word processing systems — that is, as 'intelligent typewriters'. Such applications require investment in accessory equipment, such as disk drives and printers, as well as professionally produced programs. That is why these items figure in The