

"Hypermedia Applications: Education"

From:

Bob Cotton and Richard Oliver, *Understanding Hypermedia*. London: Phaidon Press, 1993, pp. 88-89.

The impact of hypermedia in education is likely to be the most controversial of all the application areas we examine. In the other areas the success of hypermedia will be settled on pragmatic grounds: it will depend on whether or not it solves practical problems or answers consumer desires. In education, on the other hand, there may be complications, since, as well as offering a promise of positive change that will improve the quality of education for all, hypermedia also represents a threat to the traditions, values and practices that have grown up over the years.

The first aspect of this threat is the nature of the medium itself. For centuries the written word has had a central authority in society. Indeed, it could be strongly argued that our notions of rationality and valid argument are all bound up with modes of thought that are derived from writing as a medium. The only real challenge to the primacy of the written word has come from its more esoteric cousin, the mathematical expression. Both these media are extremely abstract and their mastery takes many years of education and training. While most people in modern society can read, write and handle simple mathematics, the greatest concentration of mastery in these media is found in the elite professions, and is the source of some of their power and much of their authority.

The development of hypermedia represents a return to richer, pre-print modalities of expression, as if we are "coming to our senses" after the anaesthetic of monochrome words. The opportunity it offers to reason, to think, to speculate, to debate and to learn in more concrete, multi-sensory terms may have a deep significance in terms of what we are able to think about. Indeed, a move away from a reliance on the peculiar abstraction of written or mathematical expression may be the only way we can tackle the complexities of the modern world. But the use of hypermedia for learning traditional subjects may well be seen by many as trivializing or debasing. Those who owe their position and status to the mastery of the written word are those who may have the greatest difficulty in "writing" and "reading" in this new medium, and will resist most strongly this threat to the primacy of the written word.

This resistance is likely to be reinforced by two further aspects of hypermedia. One is the threat to jobs in education, where the major expenditure (over 80 per cent) is in salaries for teachers and lecturers. Hypermedia is the first educational technology that is likely to become a really effective means of learning. Increasingly, as this is demonstrated, there will be a strong temptation for those administering education to shift expenditure away from people, who are relatively expensive, to technology, which (if adopted on a mass scale) is relatively cheap. In many ways, however, yielding to this temptation may be an error. A more appropriate strategy would be to accept a change in the role of the teachers away from being a deliverer of content (which in many cases will be more effectively carried out by hypermedia) towards the role of "facilitator" or "manager" of learning. Nevertheless, the temptation to see hypermedia technologies as a means of saving money, rather than as a means of improving the quality of education, will be strong.

The other threat is to traditional educational institutions. If hypermedia is going to be as powerful a medium for learning as it appears, it is also going to be available in the home and in the workplace. It is highly probable that its adoption there will be considerably quicker than it is within educational institutions, and that learning will be done more effectively at home or at work. The function of schools, colleges and universities will then naturally be questioned.

These issues are important ones that we should begin to consider seriously. We still have time to think them through, since the medium is still in its infancy. Hypermedia could offer our schools, colleges and universities a powerful means of enriching the educational experience of their students when (and if) its proper place in the formal educational process can be established.