

The Educational Possibilities of Intelligent Videodiscs

Alfred Bork, UC Irvine 1977

speaking of advantage of computers in instruction-
"The first advantage...is the level of interaction
which is possible. The distinction is between an
active medium, with the student constantly interacting
while learning, and a passive medium, with the
student reading or being told something but making no
active contribution of his or her own.

But the computer allows individualization impossible
with printed media or with lecture or videotape
presentations, reacting to the individual background,
previously acquired knowledge, and desires of
individual students.

A third advantage is that the computer can be the creator
or experiences....Simulations on the computer can create
a rich range of experiences, and so give students the same
ability to learn on the basis of experiences that they had
in elementary school."

"Some of the discs will also contain standard books,
perhaps all the texts and auxiliary physics books
currently available, and newer ones following newer
pedagogical strategies."

"A third type of videodisc for the physics course
might have slides and video sequences of the phenomena
of physics, giving the student a rich background at
the beginning of the study of a particular area in the
phenomena appropriate to the theory about to be
considered. The fact that physical theories, or all
scientific theories, arise out of experience is something
that needs to be constantly stressed with students."

Graphics, Videodiscs, and the Personal Computer

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"Many people learn better, through iconic representations,
pictorial information that may be, although informationally
equivalent, entirely different in the manner it conveys
that information to humans."