

The Next Generation of Research on Instructional Media

Richard Clark, USC

speaking of Berylyne's work - "He notices, for example, that the biological theory of homeostasis which says that all organisms seek some kind of steady state is inaccurate. People in fact seek out uncertainty and ambiguity and they seek it out both intellectually and perceptually."

speaking of instructional supports - "Those concerned with this area are asking; 'What effect does the organization or sequencing of instructional material have on learning? How do we help students understand exactly what is expected of them in a specific bit of instruction? Under what conditions should instruction be visually rich or sparse? How much of the instructional strategies that are needed to solve instructional problems should be given to students? How do we help students recall what they have learned? Why is it that students who are bright often fail to learn."

Five Promising Directions for Media Research

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speaking of social or observational learning - "The notion here is that people can learn to perform a task, solve a problem, and so on, by watching other people demonstrate or 'model' correct procedures for them. Most important here is the finding that this modeling effect need not be limited to human behavior. In other words, it is possible to model the 'behavior' of inanimate processes such as graphs, charts, computer displays of learning strategies, compressed speech from a tape recorder, and so on."

speaking of learning socially desirable behaviors and instructional strategies -

"Among the latter group will be strategies for cognitive problem solving particularly among younger children and older adults. Emphasis in the research on younger children is liable to be in the area of acquiring developmental stages strategies (a la Piaget). It is also possible that part of this research will focus on how older adults learn from media, since current studies seem to indicate that various types of broadcast media are their preferred mode of receiving instruction."

"...Instructional supports such as variations in the difficulty level of instructional materials, different kinds of organizational patterns, the verbal requirements of materials and 'indicating cues' (eg arrows, directions to pay attention or notice certain parts of an instructional sequence, the use of color codes).

"What common features do these instructional supports contain? Tobias for example, believes that such supports provide both organizational and orienting assistance to students with little

prior knowledge and that they may interfere with strategies developed by students who have a great deal of prior knowledge."

"...it seems that certain types of people not only do not like novelty encountered, but they actively retreat from it. If these persons are to learn from instructional sequences, they require a great deal of regularity and organization. It also appears that some degree of uncertainty and novelty is necessary to stimulate thinking and that the preferred level of uncertainty varies among individuals."

generalization and transfer of skills refers to "... how we insure that what is learned from media transfers to 'real life.'"

"... it appears that asking students to engage in role playing following media presentations, or using mediated models of similarly aged and motivated students transferring the training received to their everyday life, increases the chance that instruction gained from media presentations will become part of everyday activity."

"it is possible that different media have different engaging features. What are the elements in mediated instructional presentations that enhance or increase the chances of student interest, liking, arousal, attention, persistence, and/or engagement with that presentation?"