Review of Interaction of Media, Cognition, and Learning, by Gavriel Salomon

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"Learning results not from media but from a combination of media 'attributes,' learning tasks, and learning abilities."

"He defines symbol systems as ways of abstracting or representing experience (symbols) that are tied together with rules or syntax (systems). Examples of symbol systems are cartography, verbal language, mathematics, painting, and music."

"What Salomon asks, would be left of the medium of books if verbal language were removed?... or of maps if cartography were eliminated."

"He also argues that all learning is 'based on internal symbolic representations."

"Salomon argues that the important feature of symbols for intstruction is the extent to which they correspond with our internal representations."

"He presumes that there are large individual differences in internal symbolic representational schemes. This in turn suggests that there must be corresponding differences in the way instructional events are presented to different students. Salomon believes the concept of 'lifelikeness of presentation' must be determined on an individual basis. Therefore no one medium is best for representing any particular event."

"He claims that symbol systems can be described as more or less notational. Notationality is determined by the number and extent of rules and syntax in the system. Language for example, is more notational than painting because we have clear agreements for decoding language and few agreements about painting. This fact leads Salomon to claim that 'other things being equal, nonotational systems, when perceived as depicting lifelike messages, allow shallower processing than notational systems.'"

"The implication is that (for example) highly verbal systems such as those generic to textbooks are perceived correctly as requiring many skills to decode correctly. Experiences that are more nonnotational (e.g., televised entertainment) however, tend to be wrongly perceived as 'lifelike' and thus permitting the investment of fewer intellectual skills for decoding."

"The fact that a message is shaped in a less notational system does not mean that less effort is required to derive meaning from it. Nor does it necessarily imply that the benefits of using fewer notational coding elements are smaller. What seems to be important here is to teach students to invest the effort required to extract meaningful skills and knowledge from less notational messages."

"The contemporary audience's assumption that the types of messages typically presented via television are easier to decode (i.e., require fewer mental transformations) has led, Salomon suggests, to a failure to derive the maximum instructional benefits from more nonnotational messages."

(my note on above - you cannot assume that the oppty for interactivity will yield action on the child's part, the child, or adult for that matter, must still be motivated to interact)

Comments by Kieth Mielke of CTW on Salomon's book

"Some of its coding elements surely modeled mental skills (speaking of Sesame Street), while others activated or short-circuited them.

quoting Ed Palmer (1978) -
"With repeated exposure, the viewing child develops an understanding of the 'game' of sorting which transcends a mere understanding of the response that is sought in any particular situation inwhich the sorting format appears. The child gradually learns how to learn from this format, and finally may become quite proficient in grasping and coping with its nuances. When this happens, we may say that the child has developed facility (wiseness) in the given format."