

Visual Instruction and Visual Aptitude

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"Both adults and children show a marked preference for visual information and are more likely to attend to visual than to verbal modes of instruction. This overwhelming preference for the visual has misled many researchers into asking whether students will automatically learn more from the visual than the verbal mode. In fact, a number of studies so designed have provided equivocal or ambiguous results. With the benefit of hindsight it is relatively easy now to see that preference for visual instruction is neither a necessary nor a sufficient condition for learning." (visual modes may promote attention, but attention is not sufficient in and of itself to produce learning either; see Salomon's shallowness or investment of mental energy argument)

"...it is fruitless to ask whether medium A is better than medium B. If all factors other than the medium of presentation are controlled in an experiment there would be no reason to expect differences between visual media. We would simply be comparing two devices for delivering the same piece of information."

"As Schramm (1978) has said: 'Learning seems to be more affected by what is delivered than by the delivery system.'"

"We have also learned not to ask whether instructional technique X is more effective on medium A than medium B, such as presenting a programmed instruction text via print or television. We would not expect that presenting a written text via a visual medium would significantly change its impact."

"Research which contrasted different visual media that contained the same instructional technique....In this line of research an attempt was made to control the content of the presentation. However when content was controlled there only minor differences in learning which generally turned out to lack instructional importance. For example, finding that the ability to review material when using a book is an advantage over the arbitrary rate with which a television presentation of the same textual material is offered to a student may have more to do with the idiosyncratic needs of individual readers than with some essential instructional feature of the medium of presentation. Generally, it seemed that when the content of instructional presentations is held constant there are few educationally significant advantages between various media."

"Again, when the content of the medium was held constant there were no significant findings of differences between media, even when visual and verbal mediums were contrasted for the same subject matter content."

"Preferential treatments.... a treatment which is shaped in the learner's preferred style or strongest aptitude mode of information processing."