Multimedia Versus Print in Facilitating Audience Learning

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**ABSTRACT**

Recent studies suggest that multimedia hinders memory on several levels, while some researchers suggest that multimedia improves memory for knowledge. The controversy offers a great opportunity for this study to investigate the medium’s effect on learning by considering attitude toward instrument as a mediator.

By reviewing literature and using theories of planned behavior, medium effect, and modality effect, the author proposed a mediation model of the influence of two medium conditions (print versus multimedia) on learning through attitude toward the instrument, and conducted a field experiment using a real book and a real website designed like the book as the stimuli. Bootstrap analysis of experimental data varying medium while keeping attitude constant suggested that the participants who were in the multimedia condition perceived a more positive attitude toward the instrument. This led to greater learning measured by accuracy knowledge and self-perceived knowledge when compared with participants who were only exposed to the book. However, there was no significant difference on either attitude toward the instrument, or learning between those who were in the book condition and those who were not.

The results showed that the effect of medium was not a clear delineation. It could not be simply concluded that which medium—print or multimedia—was inferior to the other, or which was better at facilitating learning, whereas the effect of medium was mediated by attitude toward instrument under the Multimedia condition. The
author also discusses implications for incorporating multimedia elements and interactive function to enhance communication and learning.
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