

Main, Diane: Multimedia Research Assignment #2

The very definition of multimedia has changed over time with advances in technology. While it used to mean using multiple forms of media delivered by a variety of devices, it has now evolved to encompass the many ways information can be delivered to our senses by computers and the devices connected to them. Interactivity is also a key factor in modern multimedia, whereas older multimedia experiences were much more passive for learners. Today, we seem to assume that using multimedia is good and expected in education. But what does the research tell us?

Well, for starters, the research of the past several decades appears to be confusing at best. In trying to determine whether multimedia technology improves instruction, we uncover the issue that we don't really know enough about how the thinking and learning brain actually works. So how can we know if multimedia is designed to complement the brain at work? In addition, the mere presence of multimedia as a component of instruction does not guarantee its success. How is the multimedia designed and implemented? Is the overall instruction itself sound in its design? Finally, is multimedia used to present in a linear progression, or can the learner interact with materials more effectively due to the inclusion of multimedia?

In evaluating the efficacy of multimedia in education, we still lack one settled definition for what "multimedia" actually means. How do we assess a thing we can't define with absolute certainty? Evaluation of multimedia in one setting may assess different things than in another setting, simply because the tools or components that constitute the multimedia used are completely different from one situation to another.

In short, I believe the key to effective use of multimedia for education is choice. What options do the materials and their delivery give the learner for choosing how and when to consume information? Can the learner change his or her mind mid-stream? For example, when I completed a mandatory online training for my summer job, I listened to the audio for a while, but then I turned the volume down and read the text myself for a while when I grew tired of the narrator's voice, and because I could read much faster than she was narrating. Even greater choice for learners might include having several optional examples to view: a dramatic or live-action scenario, an animation and/or diagrams, a narrated skit with no visuals (or perhaps just stills), or a text-only description. In fact, it might be interesting to collect data on which modes learners choose, and whether these choices change over time, throughout a particular learning experience.

Of paramount importance is taking the focus off the technology and placing it on the learner and his or her needs and preferences. Just having lots of bells and whistles does not help the learner if these are not designed with the audience in mind.

Moore, D.M., Burton, J.K., and Myers, R.J. (2004). Multiple-channel communication: the theoretical and research foundations of multimedia. In D. Jonassen, (Ed.), *Handbook of*

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