



Chapter 1: The Promise of Multimedia Learning

I. literature

A. technology-centered approaches...

p. 11

"A review of educational technologies of the twentieth century shows that the technology-centered approach generally fails to lead to lasting improvements in education (Cuban, 1986, 2001)."

1. inherent problem...

p. 12

"The focus was on giving people access to the latest technology rather than on helping people to learn through the aid of technology."

a. Table 1.2

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B. learner-centered approaches...

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"The focus is on using multimedia technology as an aid to

human cognition."

1. basic premise...

p. 13

"...multimedia designs that are consistent with the way the human mind works are more effective in fostering learning than those that are not."

II. Theoretical Models

A. info acquisition view...

p. 16

"The information acquisition view is sometimes called the empty vessel view because the learner's mind is seen as an empty container that needs to be filled by the teacher pouring in some information."

B. knowledge construction view...

p. 17

"...the knowledge construction view is that multimedia learning is a sense-making activity in which there learner seeks to build on coherent mental representation form the presented material."

"...the learner is an active sense-maker who experiences a multimedia presentation and tries to organize and integrate the presented material into a coherent mental representation...the teacher's job is to assist the learner in this sense-making process...the goal of multimedia presentations is not only to

present information, but also to provide guidance for how to process the presented information....multimedia is a sense-making guide, that is, an aide to knowledge construction."

III. Goals of learning

A. Remembering...

p. 19

"Remembering is the ability to reproduce or recognize the presented material, and is accessed by retention tests."

"..the major issue...involves quantity of learning - that is, how much was remembered."

B. Understanding...

p. 19

"Understanding is the ability to construct a coherent mental representation from the presented material; it is reflected in the ability to use the presented material in novel situations and is assessed by transfer tests."

"The major issue in transfer tests involves the quality of learning - that is, how well someone can use what they have learned."

IV. definitions

A. Multimedia learning...

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"Multimedia learning refers to learning from words and pictures."

B. Multimedia instruction...

p. 3

"Multimedia instruction refers to the presentation of material using both words and pictures, with the intention of promoting learning."