



## Chapter 4: Coherence Principle

### I. p. 89

"People learn better when extraneous material is excluded rather than included." ...

p. 97

"...adding interesting but irrelevant pictures and words had a strong negative effect on people's understanding of the explanation presented in the lesson."

p. 99

"One tempting technique for making a multimedia lesson more interesting is to add some 'bells and whistles' in the form of background or environmental sounds."

p. 100

"When processing capacity is used to process the music and

sounds, there is less capacity available for paying attention to the narration, organizing it into coherent cause-and-effect chain, and linking it with the incoming visual information."

p. 102

"...students are a better able to make sense out of a multimedia lesson when interesting but irrelevant material is not included."

p. 105

"...our research shows not only that students remember more of the important material when it is presented as a summary, but that they also better understand the material."

p. 106

"...in the case of multimedia lessons, students tend to learn more when less is presented."

p. 106

"Keep the presentation short and to the point. A concise presentation allows the learner to build a coherent mental representation - that is to focus on the key elements and to mentally organize them in a way that makes sense."

A. p. 106

## **Implications for Multimedia Instruction"**

**"Do not add extraneous words and pictures to multimedia presentations. Do not add unneeded sounds and music to multimedia presentations."**

### **traditional model of instruction**

#### **I. knowledge transmission...**

p. 93

"...knowledge transmission - the idea that learning involves taking information for the teacher and putting it into the learner."

#### **A. vs.**

##### **1. knowledge construction...**

p. 95

"...knowledge construction - the idea that learners actively build mental representations based on what is presented and what they already know."

### **cognitive processing model of instruction**