



**p. 267 - Table 14.1**

**Principles for Reducing Extraneous Processing...**

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"...extraneous cognitive processing, which is cognitive processing that does not serve the instructional goal and is caused by poor instructional design."

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...caused by confusing instructional design."

**I. Coherence Principle**

- A. "People learn better when extraneous words, pictures, and sounds are excluded rather than included."

**II. Signaling Principle**

- A. "People learn better when cues that highlight the organization of essential material are added."

**III. Redundancy Principle**

- A. "People learn better from graphics and narration than from graphics, narration and on-screen text."

**IV. Spatial Contiguity Principle**

**A. "People learn better when corresponding words and pictures are presented near rather than far from each other..."**

**V. Temporal Contiguity Principle**

**A. "People learn better when corresponding words and pictures are presented simultaneously rather than successively."**

**VI. = 1. reduce confusion re. what to attend to and what to ignore**