UNIVERSITY OF HARTFORD

FACULTY CENTER FOR LEARNING DEVELOPMENT

12 Principles of Multimedia Learning

If you are designing a PowerPoint presentation, developing an online course or preparing to flip your classroom, you may need to reconsider how you will get students to engage with the material without the traditional face-to-face interaction. In the book *Multimedia Learning* (Cambridge Press, 2001), Richard E. Mayer discusses twelve principles that shape the design and organization of multimedia presentations:

1. **Coherence Principle** – People learn better when extraneous words, pictures and sounds are excluded rather than included.

2. **Signaling Principle** – People learn better when cues that highlight the organization of the essential material are added.

3. **Redundancy Principle** – People learn better from graphics and narration than from graphics, narration and on-screen text.

4. **Spatial Contiguity Principle** – People learn better when corresponding words and pictures are presented near rather than far from each other on the page or screen.

5. **Temporal Contiguity Principle** – People learn better when corresponding words and pictures are presented simultaneously rather than successively.

6. **Segmenting Principle** – People learn better from a multimedia lesson is presented in user-paced segments rather than as a continuous unit.

7. **Pre-training Principle –** People learn better from a multimedia lesson when they know the names and characteristics of the main concepts.

8. **Modality Principle –** People learn better from graphics and narrations than from animation and on-screen text.

9. **Multimedia Principle –** People learn better from words and pictures than from words alone.

10. **Personalization Principle –** People learn better from multimedia lessons when words are in conversational style rather than formal style.

11. **Voice Principle –** People learn better when the narration in multimedia lessons is spoken in a friendly human voice rather than a machine voice.

12. **Image Principle –** People do not necessarily learn better from a multimedia lesson when the speaker's image is added to the screen.

Getting Help with Technology at the University of Hartford

Faculty Center for Learning Development (FCLD)
FCLD provides consulting and instructional support to faculty and staff who are using technology in teaching and learning. The FCLD Faculty Lab in Mortensen 203a is available for faculty support and use and is equipped with instructional technology- related equipment including: PCs, Macs, scanners, and projectors as well as support staff. Faculty and Staff needing support with Blackboard or other instructional technologies, should contact FCLD.
Phone: (860) 768-4661 **Email:** fcld@hartford.edu
Website: http://www.hartford.edu/fcld

Student Blackboard Support
The following is student support for Blackboard only. All other support technical support issues need to be addressed to the Office of Technology Services (below).
Phone: (860) 768-4636 **Email:** bbsupport@hartford.edu
FAQ/Submit a Ticket: http://www.hartford.edu/studentbbsupport

Office of Technology Services (OTS) Help Desk
For general computer and Internet/network support questions (not directly related to the classroom but rather passwords, Internet/email problems, Banner/Self-Service, campus Facebook).
Phone: (860) 768-4357 (on campus) or (844) 292-3213 (off campus)
Email: ots@hartford.edu **Website:** http://hartford.edu/ots

Media Technology Services (MTS)
Faculty should contact MTS for assistance scheduling or implementing classroom technology (2-Way interactive video classrooms, Smart Podiums, laptops, etc.), for setting up WebEx accounts, or for scheduling and instruction for a wide variety of media equipment and resources like LCD data projectors, CD/cassette players, TVs and VCRs, digital video, and more.
Phone: (860) 768-4643 (Main) or (860) 768-4662 (Tech Line)
Website: http://www.hartford.edu/mts