Dynamic Lightboard Videos

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Recommended Citation

Schmid, Kristina; McCandless, Peter; and Gomez, Eddie, "Dynamic Lightboard Videos" (2019). UNLV Best Teaching Practices Expo. 77.  
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Dynamic Lightboard Videos

**The practice and the need it addresses**

**Rationale**
STEM content in online courses can be difficult to convey. Instructional videos are often limited to voiced-over, handwritten examples which can limit the quality of dynamic presentation. The need is for a technological medium that facilitates a personal connection.

**Solution**
The Office of Online Education’s new lightboard technology enhances video presentation. This solution supports online learning and student engagement to promote student success.

**UNLV Lightboard Demo Video**

**Benefits**
Lightboard technology allows instructors to convey content in a visual way. This particularly benefits STEM content containing visual diagrams, graphs and handwritten equations. Filming content in this way emulates F2F lectures and sets the stage for appealing presentations.

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### Evidence this practice benefits UNLV Students

**Personalizing Instruction**
Dr. Peter McCandless (Assistant Professor-in-Residence, Math Learning Center) has created 100+ videos using this lightboard technology. According to class surveys, more than 70% of his online students prefer his lightboard videos over any publisher or supplemental resources.

- 72.7% Prefer Instructor’s Lightboard Videos
- 27.3% Prefer Other Videos

**Dual Channeling**
Pictures that are explained by words in audio format “optimizes the capacity limits of working memory”. (Reiser & Dempsey, 2012, p. 317)

**Modality Effect**
“Learning is more effective when visuals are explained by audio narration.” (Reiser & Dempsey, 2012, p. 317)

**Multimedia Principle**
“People learn better from words and pictures than from words alone.” (Mayer, 2014, p. 786)
“Video is an ideal form for illustrating classroom activities and interactions.” (Mayer, 2014, p. 797)

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### Resources and where to find them

**Leaders in the Field**

- [Interview with the Innovators](#)
- Northwestern University
- Oregon State University
- San Diego State University

**References**


**Visit Us!**
Office of Online Education, MAB building
www.unlv.edu/teach-online

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### How other UNLV teachers might adopt this practice

**Tips From the Experts**
- Use color to display concepts.
- Do not try to write everything down in real time. Fill out the board before recording, then during recording you can circle, underline and point to important concepts.
- Plan your talk before the recording session begins.
- Look into the camera often as if students are present and watching.
- Five minutes! One topic, one board, stop.
- Pause before starting.
- Look at the camera.
- Wear dark clothing. No text or logo on your shirt.
- During filming, look at what you are writing while you are writing it.
- Don’t strive for perfection. Good enough is good enough.