



**Idaho State University**

# ***GREAT IDEAS IN TEACHING***

## ***MINI CONFERENCE***

### **HOSTED BY**

ISU College of Education, ISU Center for Learning and Instructional Excellence,  
and the ISU Graduate School

### **Multimedia Principles for Instructional Videos**

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This session will present a number of research-based principles for improving instructional videos for online or electronic learning. These principles are based upon cognitive information processing theory, cognitive load theory, dual channel processing theory, and the cognitive theory of multimedia learning (CTML).

CTML provides a framework for developing instructional videos that are proven by over three decades of research to improve learning and performance on cognitive tests. While there are over two dozen multimedia principles, this presentation will focus on approximately 12 that can be applied when creating or editing videos for online instruction. These principles may be broken down into four categories: those that reduce extraneous load, those that manage intrinsic load, those that increase student engagement, and those that assist in the learning and recall of content. These categories of multimedia principles may be thought of as classroom management for the electronic learner, designing around limitations in learner brain capacity, and engagement strategies.

Each principle will be defined with examples. Topics for which the principles work especially effectively, as well as areas in which they must be modified (known as boundary conditions), will be identified. Special attention will be given to how principles work together in a synergistic manner, as well as how multiple principles may interact negatively. Virtual handouts will be available after the presentation.