
TREFOR BAZETT, University of Victoria
Designing Engaging Math Videos

How can we make online videos that are as engaging as our best face-to-face lectures? In this presentation we will first discuss the creation of videos, focusing on the pedagogical choices and evidence-based tips for increasing engagement. Second, we will discuss the roles video can play in the larger learning process and how to structure online modules that include videos as a component.

For video creation, we will discuss several best practices from the literature to promote engagement such as optimizing cognitive load, length and pacing, the use of storytelling techniques, and a learning objective-centric approach. We aim to leverage the opportunities of the video medium while mitigating the challenges.

Even with very engaging videos, they still need to be appropriately scaffolded in the learning process, often in online modules that contain multiple components alongside the video. We will discuss several strategies for integrating videos effectively with our other content and providing meaningful incentives and feedback to students. We will contrast the use of videos in largely asynchronous online courses, blended pedagogies such as flipped online classrooms, and even as supplements in largely synchronous online courses.