

Webinar title: Video for Calculus

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Webinar overview:

Teaching students to conceptual rather than procedural levels is a goal of many educators, and particularly for Calculus instructors. Students who attain conceptual levels of understanding are often those who are able to effectively teach the material on to other students. Strategies for teaching students to these levels include collaborative projects, flipped classrooms, and class presentations. In this session, I will describe a teaching technique that incorporates all three strategies: student-created video assignments. Students are tasked with using technology to create videos that show them deriving and explaining solutions to challenging Calculus exercises. The instructor properly evaluates the videos before uploading them to a secure class website so that the other students can learn from their classmates' videos. My team of educators and I have observed significantly higher levels of self-regulated learning in students completing the video assignments than in students who only complete more traditional written or online homework. In this session, I will also discuss how these video assignments align well with what recent studies have identified as effective homework practices.