Making Learning Visible with Student-Generated Video Content. Preliminary report.

Professors want to assess their students’ thought processes and problem solving skills in addition to the correctness of calculations. However, students may have difficulty expressing their reasoning in written work, and class time is often too limited for stage fright-inducing student presentations. Furthermore, traditional assessment techniques can be difficult to use in online courses.

We describe the use of student-generated video content to assess students’ engagement with and understanding of problem solving tasks. Using simple and widely available technological tools, students create videos of themselves working through and describing solutions to exercises. The videos are then posted to an unlisted YouTube channel that is only accessible to the students and faculty in the class. We discuss the creation of the assignment, the challenges of logistics and assessment, and the role of student videos in the course. We present results and recommendations based on the use of video assessments in an online asynchronous section of Calculus 1, and in face-to-face sections of Calculus 2. (Received September 18, 2016)