Assignment submission via video in a large first year calculus class

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A face to face explanation of the solution to a mathematics problem demonstrates understanding far more than a written report. This assertion was the core motivation behind us asking our first-year calculus students to submit one of their weekly assignments by video.

Students in our course work in groups of five throughout the year and submit weekly assignments, usually as a group. These assignments form part of the ongoing assessment for the course. There are a number of difficulties in evaluating group submissions. Obvious concerns include judging who contributed to the solution, how much was copied and which group members understood. More subtly, such written submissions cannot always expose where misunderstanding occurs nor reflect the degree of group engagement.

In this talk we will report on the success of requiring groups to submit a mobile phone recorded video of them explaining the weekly assignment. This was exploratory on our part and proved to be more successful than we anticipated! Student engagement was very high and we were certainly able to examine the assignment with deeper insight. The intention is to include such assignments in our course more regularly next year.