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Analysis of video use in edX courses

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Abstract. In Massive Open Online Courses (MOOCs), online videos serve as the equivalent of lectures found in their traditional on-campus courses. Across a number of courses offered by edX in the Fall of 2012, the number of unique videos watched shows bimodal student engagement similar to ``attendance'' of large-lecture on-campus courses; only half the participants are watching the majority of course videos. The overall scale of MOOC populations still allows for meaningful measurements of video activity, while also providing a tremendous opportunity to experiment with methods of improving engagement of those participants showing low video use. We present preliminary analyses of the nature of video engagement through both the fraction of videos viewed over the course and the detection of convergent activity (``hot spots'') in the collective pause and play interactions within each video. We discuss our results in the context of improving video content, as well as a new video annotation tool being integrated into assessment items.

Keywords: MOOC, Video, Online, Analytics