Open Video Annotations for Learning (OVAL)

Videos are being used in an increasing number of learning scenarios. MOOCs, flipped learning, or the use of recorded lectures all rely on videos. But how do we integrate videos in a more generic pedagogical strategy? What type of activities would make the best use of video annotation? OVAL is an open source tool that allows a group of students to produce either general comments for a video, or time-based annotations. Both contributions can be private or public and the comments can be followed by a set of questions prompting for reflection. In this workshop we will explore the possibilities of these building blocks to design engaging learning activities.

Keywords: Video annotation, student engagement, learning analytics

Metadata

Max number of participants:	25
Required technology	Internet access/ browser/ excel or equivalent
Room setup	Collaborative
Extra material	Email addresses of participants prior to the event
Duration	½ day

Introduction

The concept of flipped or blended learning practice is receiving increasing prominence and recognition for its role in future education models. Universities globally are continuing to heavily invest in the technical infrastructure and professional development resources to promote such technically rich/ supplemented learning activities. In this context blended refers to the convergence between face to face and online learning that translates into the combination of technology mediated and face-to-face activities. Blended learning essentially attempts to engage contemporary learning theory by recognising that effective pedagogy moves the learner from a passive receiver of knowledge to active participant among a network of peers (Lave & Wenger, 1991; Siemens, 2005; Vygotsky, 1978). However, a core element of blended learning is the delivery of content commonly via video as lecture capture or as short videos specially produced for the activity. There are opportunities to extend social learning through all aspects of blended/ online learning through the use of discussion and reflection on individual video resources. This workshop examines the role of video annotation software to promote student self-regulated learning

Observing Learning Strategies

Research in educational technology has recently given a fair amount of attention to explore the connection between assessments, demographics and learning outcomes. Learning analytic tools are now capable of detecting *students at risk* of disengaging from an activity, a course, or abandon an institution. But technology has matured to now explore how students shape their learning strategies without relying so much in self-reported information. Self-regulated learning (SRL) is one of these strategies. Recent research proposed the use of the interactions recorded by technology as indicators of SRL (Winne & Hadwin, 2013; Azevedo *et al,* 2010)

Active video annotation can be used as an effective activity to identify learning strategies (Pardo *et al,* 2015). There are numerous possibilities to include social video annotation as part of a learning design. The activity can be scheduled as a preparatory phase for a face-to-face session in which the video presents a concept and students provide a summary and identify specific locations in which certain terms are introduced. This scenario could be used in the context of flipped learning or inverted class (McLaughlin J.E. *et al.*, 2014). Alternatively, videos can be used in the context of a professional development course for students to visualise situations that will occur in their future jobs and reflect on practice techniques, policies, etc. From simple preparatory activities to deeper self-reflective tasks, the use of video annotations offers a rich spectrum of possible alternatives. The common thread between all of them is the possibility of using the information recorded by the platform to identify and detect different learning strategies. What kind of information can be derived from the provided comments? If students are required to identify concepts in a video, is it useful to visualise their annotations in time to detect patterns? Can these patterns be combined to derive learning strategies?

Designing Activities for Video Annotation

The objective of this workshop is to provide the platform Open Video Annotation for Learning (OVAL) to the attendees and explore the possible activities that can be designed around its functionality. Activities will include uploading a video or using an already existing one in Youtube.com, and think of possible activities around that

functionality to create an activity in a specific learning context. The workshop is proposed as a hands-on session in which users should walk away with a more precise idea of the type of information provided by these tools, the integration of video annotation in a learning context, and the type of information that can be used to gain insight into their teaching practice.

References

Azevedo, R. et al. 2010. *Measuring Cognitive and Metacognitive Regulatory Processes During Hypermedia Learning: Issues and Challenges*. Educational Psychologist. 45, 4 (Oct. 2010), 210–223.

McLaughlin, J.E. et al. 2014. *The Flipped Classroom: A Course Redesign to Foster Learning and Engagement in a Health Professions School*. Academic Medicine. 89, 2 (Feb. 2014), 236–243.

Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. Cambridge university press.

Pardo, A. et al. 2015. *Identifying Learning Strategies Associated with Active use of Video Annotation Software*. In proceedings of the International Conference in Learning Analytics and Knowledge, March 2015, Poughkeepsie, NY, USA. ACM Press.

Siemens, G. (2005). Connectivism: A learning theory for the digital age. International journal of instructional technology and distance learning, 2(1), 3-10.

Vygotsky, L.S. (1978). Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press

Winne, P.H. and Hadwin, A.F. 2013. *nStudy: Tracing and Supporting Self-Regulated Learning in the Internet*. International Handbook of Metacognition and Learning Technologies. R. Azevedo and V. Aleven, eds. Springer. Pages 293–308.