Analysis of video use in edX courses

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MOOCshop - July, 9th
Motivation for video analytics

Content Development

Many on the MITx team.

Tool Development

Cody Coleman: video annotation tool.

Analytics

Albert Rodenius: click-level analysis.

Middle of the road video use...

RELATE Group: bimodal video use by certificate earners
Video use in 6.002x Spring 2012

- Shown to be bimodal in inaugural MITx course; does this persist?

Who Does What in a Massive Open Online Course?
Seaton, Bergner, Mitros, Chuang, Pritchard (In Press - Communications of the ACM)
Methods

• In early stages of analyzing video usage in MITx courses.
• Analysis of pause/play events (clicks) in tracking logs
• Play event occurs at each loading of a video
• Unique accesses and video-player time of click

Research questions

• Video use has been shown to be bimodal; does this persist?
• Do meaningful signals exist in pause/play activity?
• How can such knowledge be integrated into future tools and courses?
Does bimodality persist?

**6.002x Fall 2012**

**3.091x Fall 2012**
3.091x: Video engagement and peak detection

Albert Rodenius is actively working on peak detection.
What might the peaks tell us?
6.002x: What might the peaks tell us?
Video Annotation Tool

• **How will new tools affect results?**

• Video annotation tool
  - Opportunity to measure how usage changes
Video Annotation Tool + Digital Notebook

Digital Notebook =

Cody Coleman is actively working on this project.

Other possible uses?

The Collaborative Lecture Annotation System (CLAS): ...

Conclusions

• Results (*very much in progress*)
  - Bimodal use of videos persists (all Fall courses)
  - Meaningful signals exist in pause/play activity (but to what extent?)
  - Current engagement analyses server as a baseline for future tool development.

Acknowledgements

• Thanks to Yoav Bergner, Piotr Mitros and J.M. Van Thong for support.
Supplementary slides
Fiona’s comment: *impact on residential ed?*

**MSU On-Campus (3 types)**
Large-Lecture Intro Physics

**Online:**
MOOCs, MSU Distance, SOOCs

... Exploring the relationship between course structure and eText usage ...
Seaton, Bergner, Mitros, Chuang, Pritchard ( *In Press* - Communications of the ACM )