Evaluating the Benefits of Lecture Capture using a Revealed Preference Approach

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Lecture Capture in ECON100

- First year Economics module to a diverse audience
- Approximately 720 students
- 3 50 minute lectures per week, each lecture given three times: 10am; 1pm; 2pm
- Lecture Venue: GF1
- Lecture Capture Technology: 1pm lectures
- 4 Lecturers

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Existing Literature

WTP Estimates:

Taplin, Low and Brown (2011) *Australasian Journal of Educational Technology*, 27(2), 175-191.

Flores and Savage (2007) *International Review of Economics Education*, 6(2), 57-78.

Impact on Performance:

Savage (2009) *Journal of Economic Education*, 40(4), 337-353.

Faculty and Student Opinions:

Toppin (2011) *Education and Information Technologies*, 16, 383-393.

Evaluations on ECON100

- Request on Moodle: N = 22
- Specific Questionnaire requesting feedback: N = 211

- ECON100 Questionnaire feedback:
  N = 205, N = 204

- Statistics on Usage

Lecture Recordings Specific Feedback

The quality of the recording was excellent	
Mean = 4.27	St. Dev. = 0.74
The video of the lecturer was useful	
Mean = 4.55	St. Dev. = 0.70
The recording was useful for coursework or end of term assessment	
Mean = 4.29	St. Dev. = 0.80
The recording was useful for catching up on a missed lecture	
Mean = 4.70	St. Dev. = 0.57
The recording was useful for reviewing hard to understand concepts	
Mean = 4.52	St. Dev. = 0.70
The recording will be useful for future exam revision	
Mean = 4.51	St. Dev. = 0.70
What difference did lecture recordings make to your experience in the lecture itself (tick all that apply)?	
I concentrated harder on the lecturer	N = 43
I concentrated less on the lecturer	N = 16
I made more notes during the lecture	N = 31
I made less notes during the lecture	N = 33
I asked more questions	N = 8
I asked fewer questions	N = 16
I didn't attend the lecture	N = 6
I didn't know the lecture was being recorded	N = 3

Comments from Moodle

- "Very useful. Recordings are clear, visual and sound quality is good. I feel that having the ability to pause and repeat parts of lectures which were originally challenging will help improve my understanding."
- "Found them really useful for revision. Even if you attend the lectures and take notes, it can be very useful to check through the lecture again if there was a specific part you need to clarify."
- "As I am an international student, some problems of understanding happen in the lecture but I can understand it perfectly after replaying the records."
- "As I have dislocated my knee and am unable to leave my flat, the recorded lectures have proved not only useful but essential to me being able to keep up with the course. If only all departments used such a system!"

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Comments from Questionnaires

- "Incredibly helpful to students with learning disabilities"
- "Every lecture should adopt the lecture recording scheme. If I found a lecture particularly difficult, I can watch it, and pause when necessary to make notes to aid understanding."
- "The lecture recordings where useful for revision, cause I could pause them and take extra notes. I however get less distracted during real lectures and find them easier to follow. For this reason I have only skipped a couple since the beginning of the year."
- "As I can be distracted very easily, ..., by watching the lecture recordings, it makes life easier... I can be 100% focused on watching the lecture recordings in my own little space,... The only problem ... is that there is no chance of interacting with the lecturer. However, questions can still be asked during the tutorial section..."
- "I wish the recordings were taken from the centre in the lecture theatre, so that we can see what the lecturer is pointing at on the screen."

Comments from Module Questionnaires

*What were the most important parts of the module?*
- "Lecture recordings help when looking back on notes and during revision"
- "The recording facilities have been extremely helpful in assisting with my studies. Can't imagine revision without the recorded lectures."

How could the module be improved?
- "Because of the success of the video capture I think the 'pace' of the lecture could be sped up to cover more material. The lecturers will repeat points (for emphasis) but this takes up time and with the video if I miss something I know I can always watch it later."

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Revealed Preferences

Views by Week
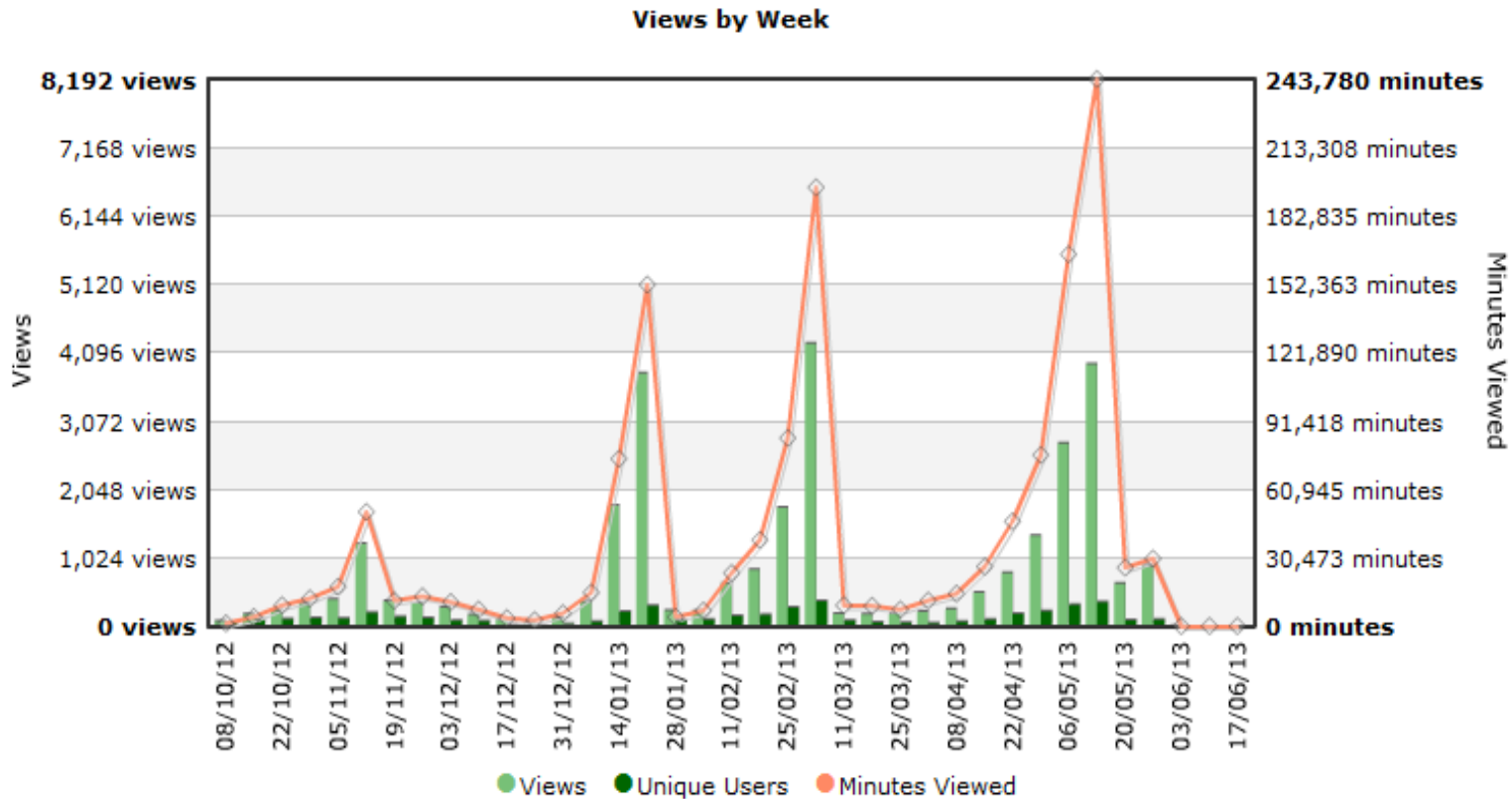
MCQ Assessment dates:
16/11/2012; 25/01/2013;
08/03/2013; 17/05/2013

Viewing Statistics

	All Viewings	Viewings ≥ 2 Minutes
Number views	29,238	17,663 (29,238 – 11,575)
Unique students	639	613
Mean view length	17.2 mins	28.0 mins
Mean views per lecture	417.7	252.3
Views per student	45.8	28.8

N.B. All statistics for student sample only

Final Thoughts

- Students watch lecture recordings
- Students only view parts of lectures
- No obvious effect on lecture attendance
- No obvious effect on participation
- Less use of lecturer office hours
- Increasing usage around successive tests

- Recordings supplement rather than replace lectures
- Recordings encourage independent learning

- Benefit recording 2nd lecture Lancaster University MANAGEMENT SCHOOL