

Exploring dissonance in the use of (lecture) capture technologies: Institutional approaches and the realities of student engagement

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Capture Technologies: The literature

- Commonly referred to as "Lecture Capture" (Panopto, Echo360, Mediasite)
 - 75% institutions have centrally-supported systems (UCISA TEL SURVEY 2018)
- Focus in the literature on recorded lectures
 - Student satisfaction
 - Student attendance
 - Student attainment
- Findings of the literature:
 - Conflicting sometimes controversial
 - Many variables that might also have an impact





A study exploring the impact of lecture capture availability and lecture capture usage on student attendance and attainment." (Edwards & Clinton, 2019)

"the net effect of lecture capture introduction on the cohort is generally negative ..."

... because student attendance decreased after the introduction of lecture capture and lack of attendance often leads to lower attainment)

... guidance on effective use or the impact of non-attendance?





Is the effectiveness of lecture capture related to teaching approach or content type? (Danielson, Preast, Bender & Hassall, 2014)

"Higher views of captured lectures were associated with higher test scores ..."

... only in some discipline areas

... only when combined with traditional lecture style teaching approaches





Use of Lecture Recordings in Medical Education. (Franklin, Gibson, Samuel, Teeter, Clarkeson, 2011)

"lecture recordings did not have an impact, either in a positive or negative direction on exam performance ..."

... except in second year pharmacology

... students responded overwhelmingly in favour of the recordings





Capture technologies: the landscape

- General trend towards increasing lecture capture availability at HEIs
- "Lecture capture provision" identified as one of five core TEL services
- 75% UK HEIs have a centrally supported system
- 59% have lecture capture policy or guidance

(UCISA TEL Survey 2018)

 A review of policies in UK HEIs revealed a slow and steady move towards opt-out (capture-all) approaches

(Nordmann and Mcgeorge, 2018)





Capture technologies: WLV Research

Motivations: persistence of pursuing lecture recording at scale when there is no definitive evidence that it is "good" in all circumstances

Method: Naturalistic case study methodology

- 152 courses in VLE using Panopto during 2017/18
- Quantitative analysis of usage data from Panopto system
- Investigative enquiry to identify factors which may contribute to higher engagement with content





What was being recorded?

Only 50% of courses using Panopto contained any recorded lectures

Identified 13 other content types in addition to recorded lectures

Flipped Classroom Information Communication Events

Online Distance Mini Lectures Demonstrations & Simulations

Supplementary Recordings Introductory Materials Feedback

Assessed Presentations or PerformancesStudent Submissions





- System analytics provide number of views or hours delivered
- Recording: Viewing (R:V) ratio as a measure engagement with content

For every **1 hour** of content recorded during 2017/18, **7 hours** were viewed University of Wolverhampton Institutional Average R:V = 1:7

- Use the institutional average R:V of 1:7 as a benchmark for the research
- 26% courses had an R:V above 1:7 for investigative enquiry (39 courses)





Students are less likely to engage with traditional lecture capture than some other content types

- Only 50% of courses using Panopto had used it for recording lectures
- 79% of these fell below the institutional average R:V ratio





Students are less likely to engage with traditional lecture capture than some other content types

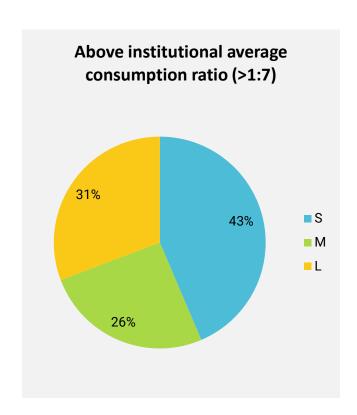
- Students most likely to engage with assessment related and demonstration/simulation content
 - Assessment related content: 82% above average
 - **Demonstrations and simulations**: 82% above average
- Assessment, Demonstration and Simulation content increased R:V for courses producing a mixture of content types





Students are more likely to engage with shorter recordings

- 69% with a R:V ratio above the institutional average have a short or medium average session length
- choosing shorter, purposeful pieces of content across a broad range of disciplines
- aligning their study practices with content that reduces their cognitive load







So, what happens next?

- Consider observations in the environment HEIs are placed
- Challenging funding environment and financial investment required for lecture capture at scale is significant
- Investment in lecture capture to minimise impact of reduction in DSA
- EU Digital Accessibility Directive costs of accurate transcribing services has been prohibitive
- Low overall student engagement with lecture recordings
- Balance with importance of NSS and student satisfaction metrics





Change our approach policy

- Avoid one-size-fits-all policies that lead with the technology
- Appreciate the differences in teaching style and approach across disciplines and in different institutions
- Acknowledge the benefits of academic autonomy
- Explore the development of local policy for capture technology at the subject level





Start asking different questions

- Engage students and manage expectations
- Stop repeatedly giving students binary choices on lecture capture
- Present them with the options and ask what is going to help them achieve
- Understand that different groups of students might give different answers





Build in accessibility

- Making an accessible recording of an inaccessible teaching approach does not equal inclusive curriculum design.
- Think about the way we teach and the way technology can be used to support and enhance inclusivity





Thank you!

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