

Purpose: Contribution to the UH working group on lecture capture & inclusivity policy and guidance.

Accessibility

The initial impetus for institutional lecture capture systems stemmed from the requirements of the Equality Act (2010) and earlier accessibility legislation which required universities to make provision for a wide range of educational support. A report by HEFCE (2009:117) cited examples of good practice as “having note-takers, sign language interpreters, materials available in advance, audio recordings, etc”. Much of the cost of this support was provided by the Disabled Students Allowance, received by 7.2% of students in 2014/15 (Williams et al, 2017:13).

Following the abolition of the DSA in 2015/16, universities began to see lecture capture as a means of providing some of this support, as noted by the UCISA surveys: “In 2012, 51% of UK universities reported having institutionally supported lecture capture systems, by 2014 this had risen to 63%, meanwhile in 2016 it was 71%” (UCISA, 2016:2).

Lecture capture systems include many features that support accessibility including the ability to pause, slow down and jump to specific points; search for text in slides or audio; read captions (transcript) and the layout, position and size of window components.

Inclusivity

During this period, universities started to adopt the principle of inclusive practice, following research which showed that all students potentially benefit from such enhancements, as noted in a recent government report (DSSLG 2017:2):

The principles of inclusive practice are well established, as are the benefits that they can bring to students and to state-funded and independent higher education providers.

In particular, the same report (*ibid*, page 19) listed “changes that can make a significant difference to student outcomes around inclusive practice” including to “allow or facilitate the recording of teaching.”

HEFCE has also noted that “lecture capture appeared to be a key technology for institutions to support the move to inclusive teaching and learning” (Williams et al, 2017:69) and that 96% of high tariff HEIs now have institutional systems, compared to 70.8% of low tariff HEIs (page 67). However, they also noted that “only 20% record more than half of lectures” (page 66).

The same report (*ibid*, page 3) also noted on the issue of funding support for students for disabilities that

Those who could track the use made of the HEFCE funds were using them to move to a more inclusive approach in teaching and learning in six areas: ... d. expanding assistive technologies such as supporting the roll-out of lecture capture...

In one of the case studies in the report (*ibid*, page 70) best practice in lecture capture is discussed:

[de Montford] staff who had not made use of lecture capture system were reminded of the university’s commitment to UDL and asked to make available their alternative reasonable adjustment. Although staff were able to provide their own alternative reasonable adjustment these alternatives were being reviewed, so whereas PowerPoint slides were not

deemed acceptable, a talking head video was accepted. However, staff have generally found that recording of lectures is a far more efficient use of their time.

The HEA has also noted the importance of lecture capture in its analysis of the TEF awards (HEA, 2017:63):

Half of HEIs with a Gold award included mention of lecture capture/ recording and the largest share (61%) of HEIs which were upgraded above the metrics included reference to lecture capture/ recording.

University position

The University of Hertfordshire currently supports the principles of blended learning and inclusive practices as expressed in UPR 4.1 (UH, 2016:11):

To enable students to achieve the Graduate Attributes and to reflect other local and national priorities for learning, teaching and assessment, the University is committed to promoting and supporting the following principles:

- i learner-centred and Blended Learning approaches that encourage active student engagement and provide flexibility in how, when and where students learn;
- ii complementary learning, teaching and assessment practices that are transparent, inclusive and fair and take account of the needs of a diverse student body;...

In January 2017, CEG adopted the following policy guidelines on recording lectures:

Allow all students to record taught sessions (where it is expected that students will be required to take notes eg lectures) as standard - supported by an updated protocol and new UPR... Develop and pilot ways of capturing various types of taught sessions to provide to students, with a view to eventually assigning responsibility and control of recording specific types of taught sessions to the University, and removing the need for students to record for themselves.” (INCLUSIVE LEARNING; TEACHING DEVELOPMENTS IN RESPONSE TO CHANGES TO THE DISABLED STUDENTS’ ALLOWANCE)

The lecture capture pilot was run by LTIC during 2017 and engaged some 40 staff in actively recording lectures (some 400+) and other events using the Panopto system, as reported at four pilot meetings and in two pilot reports. Student feedback has generally been positive, without significant effects on attendance, and with patterns of viewing shown in the analytics that correspond to research findings (e.g. immediately following lectures and during assessment periods).

There currently exists a university protocol ‘Videotaping of lectures’ (agreed in 1998) which sets out the principles of ‘reasonable requirement’, copyright and sole use for teaching and training purposes. See the following web sites for further information:

<http://staffnet.herts.ac.uk/human-resources/videotaping-of-lectures.htm>,

<http://www.studynet1.herts.ac.uk/ptl/common/LIS.nsf/lis/copyright#howme>,

<http://www.studynet1.herts.ac.uk/ptl/common/LIS.nsf/lis/Videoandimage>.

Student experience

There is growing evidence of student demand for lecture capture, for example in a student experience survey by JISC (Newman et al, 2016:19) which stated that “students think... HEIs should start [to] offer lecture capture [and] stop doing ‘death by powerpoint’”.

A survey of 47 research papers published during the period 2005-11 (Pursel and Fang, 2012:3) found that:

General trends in lecture capture research over the designated timeframe generally show positive results. Most studies indicate students find the ability to watch recorded lectures a positive influence on their educational experience (Copley, 2007; Corliss, Heikes, & Heidenreich, 2009; Euzent, Martin, Moskal, & Moskal, 2011; Gosper, et al., 2008). Common reasons for leveraging lecture capture by students include convenience (Akiyama, Teramoto, & Kozono, 2008; Mark, Vogel, & Wong, 2010), reviewing for exams (Brotherton & Abowd, 2004; Craig, Wozniak, Hyde, & Burn, 2009; Engstrand & Hall, 2011; Preston, et al., 2010; Settle, et al., 2011), enhancing their understanding of concepts from class (Brecht & Ogilby, 2008; Gosper, et al., 2010), note taking (Collie, Shah, & Sheridan, 2009) and reviewing materials if they missed class (Settle, et al., 2011).

There is some evidence that staff fear students will miss class if they know the lecture is recorded, but most research has found a more nuanced approach by students, for example a study for the LSE (Karnad, 2013:3) found that:

In conclusion, students find lecture recordings to be a useful tool, and mainly use recorded lectures to make up for missed lectures and to prepare for assessments (Soong et al. 2006; Traphagan et al. 2009; Gosper et al. 2008), which also explains student access patterns to recorded lectures. Having access to recorded lectures has generally not been found to have any significant effect on students' results. While some students recognise the motivation to miss lectures due to the availability of recorded lectures (Traphagan et al. 2009), there seems to be little evidence that students actually believe that having access to recorded lectures is the main cause or incentive to miss lectures. In fact, the majority of students (55%) surveyed by Traphagan et al. (2009) strongly agreed that they preferred receiving lecture content in class, even when it is available through other means.

Pedagogical approaches

There has been some research into more innovative uses of lecture capture, including the 'flipped classroom' and using the interactive features such as embedded multi-choice quizzes. The report into the Rec:all project at UCL (Young and Moes, 2013:6-10) found that:

Excellent resources are now available to help designers think about how to integrate video generally such as dial-e-designs (JISC 2007) which suggest 'integrated' video can be used to: Prepare or motivate; Collaborate on and further explain; Recall and integrate; Lead-in to an assignment; Learning guidance and strategies; Content to encourage analysis.

The UH Pilot included examples of staff experimenting with different approaches to lecture capture, but there already existing many such examples within the university. In 2009 the School of Law at UH decided to implement a flipped classroom approach to its teaching using pre-recorded 'lectures' and this is the summary of its results in terms of the effect on student retention (Berger and Wild, 2016:12):

The flipped classroom model was adopted in the School of Law, following the revalidation of the School's law programme in 2009-10, and saw a 10% improvement, from 68% to 78%, in terms of student progression, engagement and assessment results, from the previous standard live lecture/seminar university teaching delivery plan. Starting in the 2014-15 academic year, the refined three-element flipped classroom model (the focus of this paper)

was adopted in a pilot module – Constitutional and Administrative Law – chosen as it is a compulsory module in the current qualifying law degree, and therefore contains the largest student cohort. It is also a first year module, allowing the authors to chart the impact that the refined model had on students with no prior university experience or opportunity to accrue the QAA-specified critical reasoning skills elsewhere. The results in this module in 2014-15 were improved from the previous year, from 78% to 83%, despite there being no alteration year-on-year to the content of the course, assessment strategy or teaching personnel. The university benchmark fail rate for an individual Year 1 module, including Constitutional & Administrative Law, is set at 20% - this indicates that implementation of the refined flipped classroom model has allowed the university to meet this benchmark for the first time.

In summary, it could be argued that an institutional approach to adopting a university wide lecture capture system, combined with a school or programme based approach to best practice pedagogy, will achieve the most positive results for students, both academically and for the student experience overall.

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