A case study: Views on the practice of opting in and out of lecture capture

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Abstract

Lecture capture use has increased in recent years. Research shows that staff and students view capture differently, but their views on the practice of opting-in and out has not been investigated previously, even though this element of practice can be specified in institutional policy and governance. Focus groups revealed that staff were unclear on issues around consent and both groups i) felt staff should determine whether to capture their lectures, although students felt opting-out should require approval from senior staff and ii) recognised the need to communicate in advance about capture provision. Survey data showed the two groups differed in policy preference, with student's preferring Opt-out and staff wanting Opt-in, and in terms of whether approval should be needed to opt-out. However, there were similarities with both groups believing impact on lecture content was the most acceptable reason to opt-out and, if approval was needed, that this should be at the department level. While significant differences exist in how staff and students perceive opting in and out of capture, there is common ground which should inform the wider debate around the use of lecture capture. Furthermore, the current research identifies key issues on which staff and students should be consulted when introducing lecture capture such as consent and reasoning for use or non-use. Consultation on these topics may result in a policy more appealing to both groups.

Keywords Higher education · Audio · Video · Video capture · Live lecture · Lecture capture · Focus groups · Survey

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1 Introduction

Lectures provide a means of delivering teaching to large groups and are very much engrained in higher education (Behr 1988). Students value lectures highly, reporting that they enable involvement in the learning process, supporting independent thinking and problem solving (Covill 2011). Studies have also shown that lectures provide valuable opportunities for modelling how experts approach tasks (Feldon 2010), building links between material (Kirkpatrick 1990), and may be preferable for students transitioning to university where self-confidence may be harmed by engaging in more active forms of learning (Burgan 2006).

In recent years, the recording of live lectures, referred to as lecture capture, has become increasingly common (Deal 2007; Traphagan 2005; Woo et al. 2008). This capture can be produced in several formats including i) audio only, ii) audio and slide capture and iii) audio, slide and video capture. The rationale behind recording lectures is rarely explicitly stated but it is thought that lecture capture can offer a more inclusive experience than the traditional live lecture, therefore better supporting a diverse body of learners, for example, those for whom the instructional language is not their first language or who experience specific learning or sensory impairments (Kushnir et al. 2011; Leadbeater et al. 2013; Taplin et al. 2014). Non-academic drivers also exist, such as the an increasing requirement for many students to work and study simultaneously, making flexibility, including that offered by lecture capture, important (Phillips 2005).

Research into lecture capture has consistently found that students have a positive perception of capture (Gosper et al. 2008; O'Callaghan et al. 2017; Pons et al. 2012; Traphagan et al. 2010). Studies show higher usage of captured lectures during assessment (Brady et al. 2013) and revision periods (Gosper et al. 2010; Saunders and Hutt 2015), with students using it to review complex material, pick up on sections they missed in the live lecture (Gorissen et al. 2012; Gosper et al. 2010; Groen et al. 2016), make more detailed notes (Elliott and Neal 2016; Gosper et al. 2010; Newton et al. 2014) and take control of their learning, particularly through self-pacing (Al-Nashash and Gunn 2013; Gosper et al. 2010; Newton et al. 2014; Watt et al. 2014). Other research indicates that students believe lecture capture improves their performance because they are able to review difficult sections and revisit the material as often as needed (Al-Nashash and Gunn 2013; Groen et al. 2016). However, studies using actual grades show a mixed picture, with some indicating a positive relationship between lecture capture availability/use and actual grades (Bollmeier et al. 2010; Francom et al. 2011; Wiese and Newton 2013; Yu et al. 2015) and others reporting little or no relationship between the two (Abt and Barry 2007; Brotherton and Abowd 2004; Edwards and Clinton 2018; Hadgu et al. 2016). Despite this mixed picture on performance, availability of lecture capture increases student satisfaction (Al-Nashash and Gunn 2013; Brecht and Ogilby 2008; Bryans Bongey et al. 2006; Greenberg and Nilssen 2009; Secker et al. 2010; Toppin 2011; Traphagan et al. 2010; Veeramani and Bradley 2008; Woo et al. 2008) and affects course choice such that modules with lecture capture are more likely to be selected (Vajoczki et al. 2011; Watt et al. 2014).

It should be noted that some of perceived benefits of lecture capture may arise due to the capture incorporating video. Existing research from a range of academic disciplines demonstrates several general advantages to using video including supporting active

approaches to learning and deep learning (Mitra et al. 2010). There are also more discipline-specific advantages such as use to learn practical or clinical skills (Taslibeyaz et al. 2017). It is likely that to gain these positive effects a student will need to employ strategic viewing (De Boer et al. 2016). However, with availability of video resources through external platforms such as YouTube (Sherer and Shea 2011) increasing, the ability of students to make and share videos (Chugh and Ruhi 2018; Gromik 2017) becoming more common place, lecture capture which incorporates video elements may inform video use and vice versa.

The views of staff have been given far less attention, and the little research that does exist suggests that staff view lecture capture less positively than students (Danielson et al. 2014; O'Callaghan et al. 2017). The reasons for the less positive perception are not well investigated but it is thought to be underpinned by staff perceiving a lack of clear benefit of capture to students, and concern that it will impact negatively on attendance (Chang 2007; Owston et al. 2011a; Secker et al. 2010). There is some evidence to suggest that the concern about attendance is valid with several, but not all, studies finding drops in attendance (Copley 2007; Edwards and Clinton 2018; Owston et al. 2011b; Traphagan et al. 2010). Staff also report feeling pressure from students and their university and a fear of poor module evaluations if they do not use lecture capture (O'Callaghan et al. 2017). That pressure from students is evident in the actions of the National Union of Students in the UK, as one example, who made it part of their mission to support students in lobbying for lecture capture (Baker 2016). That said, the majority of staff in a multi-institution study, reported that watching their own lecture capture impacted positively on their approach in lectures improving, for example, their time-keeping, clarity of explanation and amount of detail given (Voort 2013). They did, however, also note that set up of lecture capture and managing the system can be time-consuming (Voort 2013).

These different factors are likely to impact on how staff and students believe lecture capture should be used in practice. The aim of the current study was to investigate and compare staff and student views about lecture capture, specifically with reference to opting in or out of using capture, to identify areas of similarity and difference between staff and students. This focus was chosen because at our institution we have a Lecture Capture Policy which has specific recommendations around opting in and out and yet, to date, the views of staff and students have not been considered on this topic. By better understanding the practice of opting in and out and lecture capture from the perspective of two key stakeholders we hope to provide new insights in the debate around lecture capture and potentially inform university policy on this matter.

2 Materials and methods

Our evaluation combined both qualitative (focus groups) and quantitative elements (anonymous online survey), to gain both depth and breadth of insight into participants' views. The research reported here is a sub-study of a larger investigation evaluating the teaching and learning experience of staff and students in lectures and their use of capture; here we focus on questions of lecture capture practice only. Ethical approval was obtained in advance of the research being conducted from the Institutional Ethical Review Committee (ref: MR 1617/1286).

2.1 Research context

This research took place at a large U.K. university, with nine faculties, distributed across four campuses. The university offers full-time undergraduate and full- or part-time taught postgraduate programmes, all of which include lecture-based teaching and use lecture capture. All programmes, consisting of individual courses or modules, typically between 15 and 30 credits, are campus-based learning, although a separate section of the university offers distance learning postgraduate programmes in collaboration with a commercial partner. The latter equates to a very small proportion of students and staff and was not included in this study because these programmes do not use lectures and capture. The institution rolled out lecture capture for its main educational provision in September 2015 adopting the Echo360 system. Prior to institutional roll-out there was little consultation with staff and students and no links made to the existing education strategy. At this time the university adopted an 'Opt-out' practice specified in the Lecture Capture Policy, available for all staff and students to view under the governance section of the university intranet. This Opt-out practice means that, where facilities for capture existed, all lectures are automatically captured in full, and staff must request to opt-out of capture for their modules or for specific sessions, as necessary, by gaining permission from the Faculty Senior management. There is, in principle, the ability to edit capture after the event but there is little indication from IT Services reporting that this is done. The institution has disabled the option for download of captured lectures.

2.2 Participants and recruitment

Individuals were eligible to participate in this research if they had experience of lecture capture at the institution and were a i) student studying an undergraduate (e.g. BA or BSc) or taught postgraduate qualification (e.g. MA or MSc rather than research-led qualifications such as a PhD) or ii) staff member regularly lecturing on such qualifications. All participants were recruited via the institutional research recruitment webpages or an advert placed on the virtual learning environment.

2.3 Procedures

This research consisted of two distinct phases. The first phase of the research was qualitative research using focus groups. Staff focus groups were held at three out of four campuses with a total of eight members of staff, from six faculties. Each staff focus group had between 2 and 4 members of staff present. Five student focus groups were held at four campuses with a total of 17 participants, from six faculties. Each student focus group had between 2 and 5 students present. All participants confirmed that they were currently giving or receiving lectures, and all had experience (current or previous) of captured lectures at the institution.

After analysis of the focus groups, a survey was developed for the second, quantitative phase of the research. The final survey sample included all participants who completed the survey ($N = 522$ students, $N = 95$ staff). Table 1 summarises the key characteristics of both groups. The student sample was comparable to the available data from the Higher Education Statistics Agency, who collect data on students from U.K.

Table 1 Sample characteristics

Sample characteristics	Students (N = 522)	Staff (N = 95)
Gender (Male: Female: Prefer not to say)	165: 349: 8	60: 27: 8
English First Language (Yes: No: Prefer not to say)	382: 140: 0	68: 27: 0
Qualification (Undergraduate: Postgraduate)	410: 111	64: 29
Faculty representation (out of 9)	9	8
Disability (Yes: No: Prefer not to say)	46: 461: 15	
Academic performance (%/mode)	60–69	
Contact hours (hr/mode)	9–16	

universities, indicating a representative sample. The staff sample was also representative with individuals from most faculties in a range of positions from relatively early career, such as lecturer to senior roles as professors.

2.3.1 Focus groups

The focus groups for staff and students were held separately and conducted by the same researcher, who is an academic member of staff has experience using lecture capture over several years and experience researching educational technologies. Each focus group lasted between 60 and 90 mins and all were held in the second half of the autumn term (October/November). The focus groups began with an outline of the current policy as explained above. The discussion then focused around three key questions i) how they felt about the current lecture capture policy ii) their experience of opt-outs of lecture capture (for staff the ease of process and for students their reaction to it) and iii) what kind of policy they would like to see in place. Each focus group was audio recorded. Staff sessions were held at three out of four campuses with a total of eight members of staff, representing six faculties. Student sessions were held at all four campuses with a total of seventeen participants, representing eight faculties. All levels of study were represented in the student sample (i.e. first to final year undergraduate and postgraduate).

2.3.2 Online survey

The items for the online survey were constructed by the researchers following an extensive literature review and analysis of the focus group data. For the purposes of the present study, only two sections of the survey are relevant, those providing basic sample characteristics and views about lecture capture policy. These sections are now described in detail.

Personal characteristics Participants indicated gender and English language status (i.e. whether English was their first or second language). Students reported if they had any disabilities and staff were additionally asked to indicate their current position at the university (teaching fellow/lecturer/senior lecturer/reader/professor/other). All participants indicated their faculty, level of qualification that

they taught or studied at (undergraduate or postgraduate), and types of learning events (LEs) they normally have or teach (lectures/seminars or tutorials/practicals or workshops). Students then indicated their weekly contact hours, and typical grades (<40%, 40–49%, 50–59%, 60–69%, 70+ per cent), where higher percentage categories corresponded to higher performance.

Lecture capture policy As with the focus groups, the survey began with a definition of the current policy, followed by several questions to establish experiences of opting-out, and ii) views on policy. Staff who stated they had opted-out were asked why they did so and to rate the ease of this process. For information on policy, participants were first asked whether they supported staff having the option to opt-out of using lecture capture (Yes/No/Maybe). Secondly, they were asked if they believe the decision to opt-out should require approval from a senior member of staff (Yes/No/Maybe). Those answering 'yes' or 'maybe' then selected who they felt should provide this authority selecting from i) Programme Leader ii) Head of Department or equivalent iii) Vice-Dean of Education for the faculty or iv) Other. Thirdly, both staff and students were asked about whether staff should have to provide a specific reason to opt-out of lecture capture (Yes/No). This was followed by asking them to rate the appropriate of several reasons drawn from the focus group data. The next question asked them to rate the importance of lecture capture availability in determining module choice. Finally, both groups were asked to select the type of policy they would most like to see implemented from i) Opt-out without reason ii) Opt-out with reason and approval iii) Opt-in. These choices were based on what it was reasonably felt could be implemented at the institution based on the existing policy and, more recently, produced education strategy. Additional questions were then asked of individual groups. Students indicated the importance of having the decision to opt-out communicated in advance of the lecture. Related to this, staff indicated their comfort at communicating their opting-out to students.

3 Results

3.1 Qualitative results

The audio recordings of the focus groups were transcribed and then analysed using Thematic Analysis procedures (Braun and Clarke 2006). The six-stage analysis process involved data familiarisation, coding, thematic extraction, and review and naming of themes, before finally completing a narrative analysis (Clarke and Braun 2013). Analysis was undertaken by the same researcher who conducted the focus groups and reviewed independently by a researcher with extensive qualitative research experience within psychology. Quotes identified by group (e.g. Staff or Student) and number (e.g. Staff P1) are provided as evidence (Mays and Pope 1995) of findings. Three themes emerged from the data: i) consent, ii) control and iii) communication. The first theme was only apparent in staff responses.

3.1.1 Consent

Staff were generally unaware of whether they had consented to have their lectures captured ('*Presumably somewhere in my induction document pile I signed my consent, I don't know*'; Staff P1) but the greatest concern was that lecture capture would be used for purposes other than that to which they believed they had consented ('*There's always a sort of undercurrent of "what's it going to be used for?" Is it going to be used to monitor teachers because ... your manager could access it if they wanted.*'; Staff P2). Access by those outside of the institution or for performance management was particularly concerning to staff ('*I would absolutely hate people outside the university being party to my teaching...I know another big concern is whether lecture recordings will be used in disciplinary or promotion procedures.*'; Staff P3).

3.1.2 Control

Both staff and students felt that it was important for individual staff members to have autonomy over the decision to capture:

> We [want] to be autonomous and making our own decision and being trusted and as educators…we are all trained to make those decisions about our teaching, it should be our opt-in decision and we are qualified to make that decision, we don't need someone higher up to sign it off. (Staff, P4)

Some students were also supportive of staff having the option to opt-out ('*As long as [there is] the option to opt out if they want to then it's fine […] If it's more beneficial for the students, for them to not have lecture capture then it should be fine*'; Student P1). However, some viewed opting-out as a deliberate decision to compromise the quality of students' learning experience, rather than as a reasonable exercising of a personal preference:

> I would find it very annoying if a lecturer did opt out … because that feels like they're taking away a potentially very useful resource from their students […] and I would actually consider that diminishing the value of my tuition fees by taking away that resource. (Student, P2).

Furthermore, students worried that staff would only seek to opt out if they were '*camera shy*' (Student P3) or '*[didn't] like the sound of their voice on a recording*' (Student P4), seeking to improve attendance rates, or concerned about the lecture being viewed by an audience other than those for who it was intended ('*it's not like [it's] accessible to everyone on the internet, only the same students [who would attend]*'; Student P5). Perhaps because of these concerns, whilst students were happy to see the option of an opt-out, they felt it necessary for the decision to opt-out to be approved by a more senior member of staff:

> 'I think it shouldn't be a very lax threshold, so I definitely think it should be a senior member of staff in the department and it should also be supplemented with a valid justification. I don't think it should be massively easy. (Student, P6)

They felt that approval could serve as a way to check validity of reason ('*You should have approval because you need to check the reasons are valid.'; Student, P7*).

3.1.3 Communication

Students felt that it was very important that the reasons for not capturing lectures are communicated ('*My lecturer when she said why they'd opted out she gave some very good reasons, even though I still think it should be recorded. She gave some fair reasons.'; Student, P6*). The value of explaining the reasoning to students was also recognised by staff ('*I think if you explained to a student why you're doing what you're doing they're usually very receptive to it.'; Staff P3*). One of the reasons for this communication was that students felt the availability of lecture capture would impact on module selection ('*If I knew in advance that [there was no capture] I would probably be more inclined to pick something else.'; Student P8*).

3.2 Quantitative results

Staff-student comparisons for categorical data were analysed using Chi-square tests. For the most comprehensive contingency tables that we examined (sized 3×2), we could detect a critical value of $\chi^2(2) = 5.99$ with a power of, $(1 - \beta) = 0.90$ and Type-I error rate of, $\alpha = 0.05$. Continuous variables were analysed using between subject t-tests. Our sample size allowed us to detect effects of, $d = 0.36$, with a power of, $(1 - \beta) = 0.90$, when comparing the (unequally sized) staff versus student groups with a Type-I error of, $\alpha = 0.05$ (two-tailed). A Bonferroni-corrected Type-I error of, $\alpha = 0.01$ (two-tailed), that we adopted for some of these tests allowed us to detect effects sized, $d = 0.43$, instead. We also ran 5×2 Mixed-ANOVAs. Our sample size granted us a power of, $(1 - \beta) = 0.90$, to detect effects sized, $f = 0.10$, with a Type-I error of, $\alpha = 0.05$, (two-tailed). Finally, we conducted a series of Bonferroni-corrected post-hoc paired-sample t-tests. Our sample size allowed us to detect effects of, $d = 0.17$, with a power of, $(1 - \beta) = 0.90$, with a Type-I error of, $\alpha = 0.05$ (two-tailed).

3.2.1 Experience of opt-out

Around half of the 522 surveyed students had experienced opt-out of capture (46.9%). Of the 95 members of staff completing the survey 85.3% were capturing their lectures. For the 14.7% not doing so, all except one gave reasons for not capturing. From those giving reasons ($N = 13$), the most commonly selected reason was that lecture capture can detract from the learning (76.9%, $N = 10$) followed by equal mention of teaching style not being conducive to lecture capture or the content of the lecture raises consent or legal issues preventing capture (61.5%, $N = 8$). In ten cases staff provided additional free text comments of their reasoning. These included i) lack of trust in the university or students to use the lectures appropriately ii) belief that capture fails to convey the enthusiasm and passion for the subject on lecture capture iii) belief that lectures are individual lecturer's intellectual property does not wish to see lecture content shared online. Although most staff were currently capturing their lectures, 38.9% had previously opted out of lecture capture at some point and the majority (51.4%) found the opting out

process difficult to some extent, which may explain the higher proportion currently capturing.

Where a member of staff chose to opt out of lecture capture, students felt it was extremely (68.4%) or very (18.4%) important they were given advanced warning of this. Staff were generally comfortable in communicating opt-out decisions to students with 57% saying they would be extremely comfortable doing so and a further 17.2% saying they would be somewhat comfortable. Only 6.5% said they would be extremely or somewhat uncomfortable.

3.2.2 Opt-out availability and approval

Staff and student agreement with lecturers having the option to opt-out of lecture capture was analysed with a chi-square test, which showed that there was a significant difference between staff and students in terms of whether opt-out should be available, $\chi^2(2) = 71.19$, $p < 0.001$, with staff more likely to believe that it should be and students more likely to believe that it should not (Fig. 1).

Most students felt that staff should need approval to opt-out (61.5%), whilst 18.2% were unsure and 20.3% felt no approvals were needed. This directly contrasts with staff, of whom the majority (64.2%) felt that it should not be required, with only 17.9% unsure and 17.9% believing it should. As with the overall opt-out availability there was a significant difference between staff and student views here, $\chi^2(2) = 85.13$, $p < 0.001$. Despite this difference in whether approval should be required, both groups agreed that the most appropriate individual to provide this approval was the Head of Department or equivalent (Staff 44.1%, Students 46.2%), closely followed by Programme Leader (Staff 32.4%, Students 32.6%). There was less support for the approval being by the Vice Dean Education for the faculty (Staff 14.7%, Students 19.2%), as is currently the case. Only 8.8% of staff and 2.0% of students selected other, although the majority did not specify who this should be. Chi-square analysis confirmed that for the three named choices, which were chosen by most of both groups, there was no significant difference in staff and student views, $\chi^2(2) = 0.23$, $p = 0.891$.
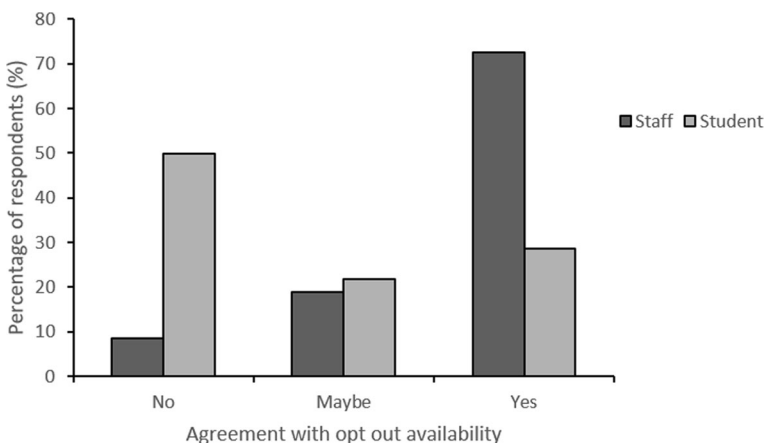

Fig. 1 Staff ($N = 95$) and student ($N = 522$) agreement with the availability of opting-out of lecture capture

Most students went on to indicate that they felt that the availability of lecture capture was either very or extremely important in module choice (46.1%), in contrast to just 25.2% who felt it was not at all important. Just over half of the staff did not feel that lecture capture was important in module choice (50.6%) and where they did think it was important most only saw it as moderately important (21.8%). Only 4.6% saw it as very important. Comparing importance ratings between staff and students using an independent sample t-test showed that students felt it was significantly more important in module choice than staff, $t(610) = 1.37$, $p = 0.006$.

3.2.3 Appropriate reasons for opt-out

Students and staff rated the appropriateness of the following reasons for opting-out of lecture capture: i) Presenting material which has copyright, consent or other legal implications ii) Using a teaching style not well suited to lecture capture but one which is effective in delivering the teaching iii) Lecturer does not wish to have their presentation captured iv) Lecturer does not wish to have a recording of themselves available for scrutiny e.g. of their appearance or performance v) To encourage attendance by removing the capture. Figure 2 shows the appropriateness ratings of both groups.

A mixed-ANOVA with reason as the within-measures factor and group as the between-measures factor was conducted. There was a significant main effect of group, $F(1, 612) = 105.189$, $p < 0.001$, and reason $F(3.349, 2049.332) = 92.978$, $p < 0.001$. There was also a significant interaction effect, $F(3.349, 2049.322) = 8.424$, $p < 0.001$. Independent-sample t-tests with alpha corrected for multiple comparisons ($\alpha = 0.01$) showed that for all measures staff ratings of the appropriateness of reasons for opting-out were significantly higher than student ratings ($p < 0.001$). Paired sample t-tests, also with alpha corrected for multiple
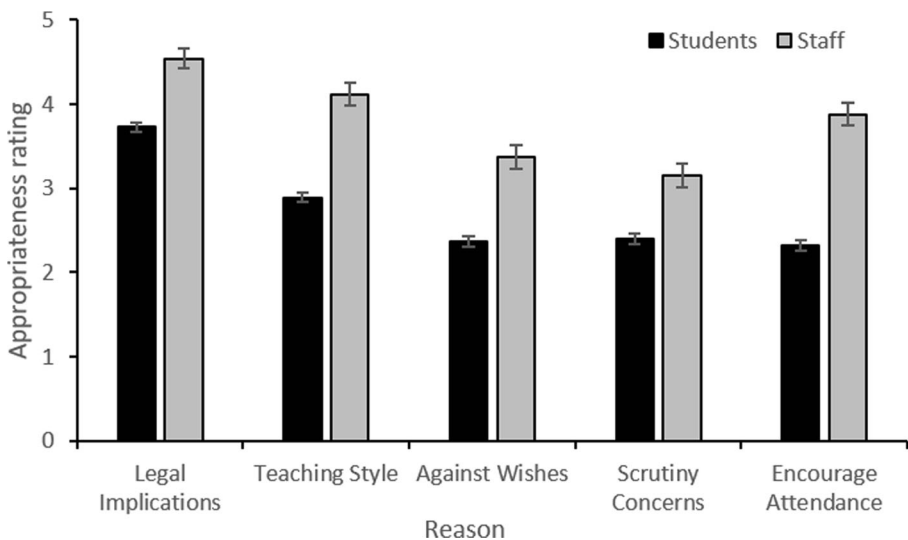

Fig. 2 Staff ($N = 95$) and student ($N = 522$) responses to the appropriateness of different reasons for opting-out of lecture capture where 1 = extremely inappropriate and 5 = extremely appropriate

comparisons ($\alpha = 0.005$) indicated that there were significant differences between the legal implications and all other reasons with the former being rated as the most appropriate ($p < 0.001$). Similarly, there were significant differences between teaching style and all other reasons ($p < 0.001$). However, there were no significant differences between 'Against wishes', 'Scrutiny concerns' and 'Encourage attendance'.

3.2.4 Preferred policy choice

Most students selected 'Opt-out with reason and approval' (79.0%), with a further 16.2% selected 'Opt-out without reason' and only 4.8% selected 'Opt-in'. By contrast, staff preferred the latter (42.6%), followed by 'Opt-out with reason and approval' (31.9%). The remaining 25.5% preferred 'Opt-out without reason'. Perhaps unsurprisingly, this is significantly different between staff and students, $\chi^2(2) = 135.73, p < 0.001$.

4 Discussion

The aim of this study was to investigate and compare staff and student views about the practice of opting in and out of lecture capture and how this could be included within university policy i.e. whether the default position should be opt-in or opt-out in order to identify any additional requirements. The first area for consideration, that was prominent in both qualitative and quantitative data, is the capacity of lecturers to exert some autonomy over whether they capture lectures. The staff comments at the focus groups are in line with previous research with staff commenting that there was pressure on them to use lecture capture, having a sense it is forced upon them (Baker 2016; O'Callaghan et al. 2017). Students expressed some irritation that staff might opt-out, but some still recognised that it is important for them to have this option. This is reflected to some extent in the survey data where around 50% of students felt there should be no opt-out. The contrast between staff and students was also present in the survey data, where over 70% of staff felt that opt-out availability was important. The strength of majority was greater in the staff data, indicating that this option should be included in lecture capture policies and practice to avoid further discontent around lecture capture.

In line with the stark difference between staff and students regarding whether lecturers should have the option to opt-out of lecture capture, there were also differences in terms of whether they felt opt-outs required approval with students generally feeling that they should whilst staff did not, with near identical majorities in the two groups. Data from the focus group suggested that this was felt necessary by students because they wanted to ensure that the staff had a valid reason, whilst staff felt they should be trusted to make this decision independently. Despite the differences in terms of whether opt-out should be available and whether approval should be needed, there was a consensus across both groups that the approval should be at the Head of Department level, rather than at our current faculty level. Students did not elaborate on this in the focus group, but staff data indicated that this was because they felt the Head of

Department had more involvement in teaching and education than the more senior staff.

Around half of the students surveyed had experience of a lecturer opting out of lecture capture previously and approximately 40% of staff reported doing so at some point. However, when asked to rate the appropriateness of a variety of reasons for opting out, there was considerable variation with staff always rating reasons as more appropriate that students. Notably, the largest difference between staff and student ratings was for encouraging attendance, that is where the lecturer opts-out to prevent the potential drop in attendance that can result from implementing lecture capture. There is some evidence for decreases in attendance when lecture capture is available (Edwards and Clinton 2018; Traphagan et al. 2010). However, there is also evidence of students not changing their attendance pattern and some even attend more lectures (Owston et al. 2011b). One possibility for the large group difference here is that the approach of forcing attendance in this way is at odds with some of the main benefits students see to lecture capture, for example in self-pacing and developing independence (Al-Nashash and Gunn 2013; Gosper et al. 2010; Newton et al. 2014; Watt et al. 2014). Whilst there were always significantly higher ratings from staff in comparison to students, the two groups agreed on the most appropriate reason with presenting material which has copyright, consent or other legal implications most appropriate. This indicates that this reason is most likely to be acceptable to staff and students when considering opting-out of lecture capture. Irrespective of the exact reason for opting-out, students felt this information should be communicated in advance, something staff were generally comfortable doing. In line with previous research, students felt that opt-out may affect their module choice (Vajoczki et al. 2011; Watt et al. 2014) and so communication timing and approach should consider this. Based on this discussion, it is perhaps not surprising that staff and students differed in their overall policy choices. Students showed a large majority, almost 80%, preferred the current policy of 'Opt-out with reason and approval'. In contrast, a much smaller majority, just over 40%, of staff selected 'Opt-in' and this was closely followed by around 30% making the same choice as students. Given the strength of the majority in the student reporting, and the fact that the students' first choice was a close second choice for staff, this policy option is likely to be the most acceptable to the two groups at this institution.

The current study, which is the first of its kind to explicitly investigate views on lecture capture opt-out and opt-in with reference to policy, has identified some clear differences in opinions of staff and students on this matter. However, it has also demonstrated some similarities between the two groups, notably that where approval is put in place this should be at a department level and that the most acceptable reason to opt-out of lecture capture will relate to the content of the lecture itself rather than any impact it has on the lecturer or student behaviour. The areas of greatest disparity were whether opt-out should be available and whether staff need approval to opt out. The former had a greater majority in the student data, adding some strength to their views. The differences in these measures appeared to feed into differences in the overall policy preferences with students seeking a default where lectures are recorded, and staff must actively opt-out.

5 Conclusion

This research has identified similarities and differences in staff and student views of lecture capture practice in terms of opting in and out of use. Whilst this topic represents only a narrow element of the lecture capture experience, the fact that it is often specified in university policies makes it important to investigate. Notably, the research has identified some areas of common ground between staff and students such as the need for lecturers to have some control over whether their lectures are captured, and that communication is a key issue. There are, however, several limitations which should be acknowledged. Firstly, the study was conducted with a voluntary sample at a single institution which had an existing policy in place. It is therefore possible that these findings would not generalise to other institutions. They may also not generalise to other samples within this institution, although the quantitative sample for students at least, was representative of the wider student body at the institution. Secondly, the sample size for the staff group was considerably smaller than the student group. Whilst this reflects the proportion of staff and students in the university, it does potentially impact on the generalisation of the results from staff. A limitation of the survey approach is that measures are self-reported. However, previous research suggests that self-report can be reliable provided that the information is known to respondents and that the questions are i) unambiguous ii) relate to recent activity iii) requiring a serious and thoughtful response, and iv) will not lead to embarrassing or threatening disclosures (Kuh 2001; Owston et al. 2011b). Our study was designed to meet these criteria. Fourthly, it should be noted that whilst staff involved in lecturing and students are clearly key stakeholders in the use of educational technologies such as lecture capture, they are not the only stakeholders. Future research may also consider including other key groups such as IT services, disability services and those working more widely in student support.

Despite these limitations, the findings presented here provide some additional insight into a key educational technology and add to the debate around its use. They helpfully identify key issues that it may be appropriate to consult staff and students on prior to the introduction of lecture capture. For example, it appears that staff are often unaware of issues around consent to record in this institution and this may therefore be something to consider. Additionally, both staff and students may be consulted when considering issues around who should determine opting in or out and the suitability of different reasons to opt-out. By ensuring these issues are consulted on it is more likely that a policy will be derived that both groups can subscribe to.

Compliance with ethical standards

Conflict of interest   The authors declare that they have no conflict of interest.

Research involving human participants and/or animals   All research was conducted in line with the Declaration of Helsinki and was approved in advance by the Institutional Ethics Committee.

Informed consent   Informed consent was provided by all participants.

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