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FROM FACE-TO-FACE TO REMOTE LEARNING: WHAT CAN WE LEARN FROM STUDENT EXPERIENCES OF PRE-RECORDED LECTURES IN THE PANDEMIC?

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Abstract

This paper reports on research at a UK university exploring the experiences of students studying International Politics during 2020-2021 when all teaching took place online due to COVID-19. Learning online accentuates the importance of issues such as student digital literacies and self-regulation to cope with a large amount of information from multiple sources [1]. Therefore, we were keen to explore understand how students engaged with online resources in the context of the pandemic.

We conducted eight focus groups with students and a survey which was completed by approximately 80 students. The majority of survey respondents were undergraduates. In total 30 students - a mix of post and undergraduates - participated in focus groups. We also drew upon findings from a survey completed by over 500 students that focused on their 'digital experiences' during COVID.

We explored students' experience of asynchronous learning activities with a specific focus on pre-recorded lectures and their role in promoting deep learning in an online education context. Pre-recorded lectures were created by the lecturers to help provide a more engaging learning experience, but also created as part of an inclusive approach to online learning. Previous studies have taken a similar approach. Murray et al [2] found that student interaction with asynchronous learning resources is tied directly to their perceptions of what resources will be helpful in completing assessments. Our students commented on the flexibility and autonomy that pre-recorded lectures offered, cutting down on their commute time, being able to access and review at any time and review at their own pace. Over half of the survey respondents indicated that pre-recorded lectures were the most useful resources for their learning. Some even mentioned that they preferred them to face-to-face lectures. The most common reasons for this are:

Time to make notes; Ability to review content at their own pace. Added value for those with specific learning needs, in addition to the transcript; Useful for assessment: to prepare for essays or exams; Flexibility: can be reviewed in their own time, especially for those with other commitments such as a job.

For these reasons asynchronous content was seen as more inclusive, as long as those with hearing impairments were catered for, for example, with transcripts or captions. We also considered these findings in light of a new lecture recording policy launched in 2021 and we considered whether the pandemic might be an opportunity to change teaching for the better. For example, pre-recorded lectures free up face-to-face time for more small group teaching activities. We discuss the findings in the context of a commuter university, in which many students are travelling to classes from their family home. This paper will also explore the challenges and opportunities presented by pre-recorded lectures and lessons learnt from learning online during the pandemic.

Keywords: Online learning, recorded lectures, student experiences

1 INTRODUCTION

The paper reports on research at a UK university exploring the experiences of students studying International Politics during 2020-2021, when all teaching took place online due to COVID-19. Learning online accentuates the importance of issues such as student digital literacies and self-regulation, to cope with a large amount of information from multiple sources [1]. Therefore, we were keen to explore understand how students engaged with online resources in the context of the pandemic. We explored students' experience of asynchronous learning activities with a specific focus on pre-recorded lectures and their role in promoting deep learning in an online education context. Pre-recorded lectures were created by the lecturers to help provide a more engaging learning experience, but also created as part of an inclusive approach to online learning. Previous studies have taken a

similar approach. Murray et al [2] found that student interaction with asynchronous learning resources is tied directly to their perceptions of what resources will be helpful in completing assessments.

2 METHODOLOGY

We adopted a mixed-methods approach for this research, running an online survey and conducting subsequent online focus groups. All current taught students International Politics (UG: n=677, PG n=91) were invited to participate in the research. The survey was hosted on Qualtrics and was open between 20th April to 30th June 2021. Responses were anonymous. Upon completion of the survey, participants were invited to provide their email address to be entered into a prize draw. We received approximately 83 responses. The majority of survey respondents were undergraduates. We subsequently conducted eight focus groups with students, which were held online via Teams. In total 30 students participated in focus groups who were a mix of post and undergraduates. Focus groups were recorded and a transcription was made of the recording. The transcriptions were then coded using NVivo software.

The project's aim was to explore the factors impacting on students' active engagement with online learning resources and asynchronous learning activities. The specific research question was: what are the different student perceptions and preferences in relation to actively engaging with asynchronous individual and collaborative online learning in International Politics undergraduate and postgraduate programmes?

The research was approved by the Ethics Committee of City, University of London (City). This paper also draws upon findings from a survey completed by over 500 students that focused on their 'digital experiences' during COVID. This is the Jisc Digital Experiences survey [4] and we present some data from the UK Higher Education sector as well as the findings from our own students.

3 BACKGROUND AND INSTITUTIONAL CONTEXT

City, University of London is a UK Higher Education institution based in central London, teaching both undergraduate and postgraduate students in subjects as diverse as Music, Business Studies, Engineering, Journalism and Health Sciences. The Department of International Politics is part of the School of Arts and Social Sciences (SASS) and has approximately 675 undergraduate and 100 postgraduate students. City students are more likely to be the first in their family to attend university and more likely to be commuting students. The university is committed to diversity and inclusion and implemented a range of measures following the Covid-19 pandemic to provide a high quality online learning experience for their students.

A common theme that was raised in free text comments in the 2019 National Student Survey (NSS) before the Covid-19 pandemic was that students in SASS did not have access to lecture recordings and that many lectures were not recorded.

4 RESULTS

This paper explores one of the key themes emerging from our research: students' experiences of pre-recorded lectures. Participants identified a range of benefits that they experienced from utilising pre-recorded lectures, which can be broadly summarised as:

1. Flexibility and autonomy
2. Deep learning
3. Accessibility
4. Revision

Over half of the survey respondents indicated that pre-recorded lectures were the most useful resources for their learning. Some even mentioned that they preferred them to face-to-face lectures. Similarly, many focus group participants found pre-recorded lectures particularly beneficial to their learning and were keen to keep pre-recorded lectures when returning to face-to-face study.

4.1 Pre-recorded Lectures

4.1.1 Flexibility and Autonomy

Flexibility was a common theme in the survey and focus groups and was often cited as a benefit of online learning. As one student responded in the survey:

- Q. What benefits did you experience with online learning?
"Flexibility. Pre-recorded lectures were very beneficial for me as it meant uni was working around my timetable and I could focus on it better as I was doing it when I knew I was focused and when I didn't have other stuff going on. It meant I could also take better notes as I could pause the recordings in comparison to face-to-face teaching where sometimes I felt lecturers were too fast paced and I would lose focus and stop attending them."

Having control of the asynchronous recordings allowed students to manage their time more effectively, as another student reported:

- "Learning online was an efficient way to learn. It meant that I could listen to my lectures at twice the speed. I ended up having much more time in my day, to divert to either more learning or more leisure."

A particular benefit participants reported was being able to re-play pre-recorded lectures:

- Student 1: I really love the pre-recorded lectures. I think it's just because I quite like you can kind of control the speed on them and then I just think they're really useful.

This sentiment was echoed by a number of participants:

- Student 24: I did find that, for having recorded lectures it made it really easy actually to do more in-depth notes, because you could kind of go back and you know speed things up and slow things down, which I personally found really, really helpful.

The value of being able to control the speed and press pause was considered to be particularly beneficial for note-taking:

- Student 10: I was saying that recorded lectures turned out to be pretty successful for me, especially because I believe that the fact that students have recorded lectures it's much better to follow to take notes. For example, if you were to miss a class last year we wouldn't have the notes for that lecture. You have more time to [take notes], for example, I've re-watched several recorded lectures to be sure not missing any notes and important points. So that I believe it's a fundamental feature that should be kept in the future, even if lecture will be in class hopefully. Because it's a very useful tool to make students more let's say prompt to remember things and to watch those lectures, in case they missed a class lecture.

4.1.2 Deep Learning

Participants also reflected that pre-recorded lectures enabled them to absorb information more effectively:

- Student 12: ... so with the pre-recorded lectures I find them helpful because in first year when we had in-person lectures didn't realise how a lot of information just kind of go over your head because it's in-person, it's face-to-face I say you don't have a lot of time to process it, whereas when you have pre-recorded lectures a) you can do them in your own time and b) you can pull them to understand what they're saying go back if they're not if it doesn't make sense, last year, some sessions were recorded by the lecturers but not all of them, so the ability to have all your lectures online was useful for me

Participants reported that having pre-recorded lectures enabled them to prepare more thoroughly for sessions:

- Student 8: I think actually this year that part has been amazing because, like my first year, I really wanted to prepare beforehand the lectures, but the teachers and never ever uploaded the PowerPoints or anything, so I just came to class on prepared. So this year that's a really positive thing. I think lecture slides and pre recorded lectures are very helpful for like my learning.

These views were also supported by free text comments in the survey.

- “being able to come back and view lectures whenever needed, to consolidate my knowledge. before online lectures this wasn’t possible, could only view lectures once, was very rushed and if you were sick you would miss a lecture and never be able to attend it so you lose out on knowledge”
- “Recorded lectures - helped me revisit the topic as many times, meaning that my understanding for a particular topic was more developed than it would have been in a live lecture”
- “Having lecture materials (PowerPoints) available is key to successful learning. Before online teaching, professors didn’t provide this material, so now that they do— my learning quality has increased”

This is supported by Noetel’s 2021 systematic review of videos in Higher Education [3] where he found that “student results are unlikely to decline when using video for teaching. We identified more than 100 randomized trials that had used video in Higher Education, and on average, videos led to better learning outcomes compared with other methods.”

4.1.3 Accessibility

Students also mentioned how recorded lectures helped them with issues related to learning difficulties and accessibility. These quotes came from the survey:

- “I think I was able to learn very effectively online. Having lecture videos online meant that I could use subtitles and not mishear which is a problem for me in live lectures, it also meant I was able to take notes at my own pace.”
- “It allowed me to learn at my own pace especially as I have underlying learning difficulties the accessibility to transcripts and fast forward settings was so crucial to me”

4.1.4 Revision

Respondents also found pre-recorded particularly useful when revising or preparing for an assessment:

- Student 6: And pre-recorded lectures was really useful. I could always look back on it during- when it came to write and assessment. Also, if I didn't understand something just going over a couple of times we make me understand the topic. Or it was just so much more easier to ask a question by looking at these or things as well yeah.

The sense of pre-recorded lectures being particularly useful when preparing for an assessment was picked up on by other participants:

- Student 7: being able to re-watch a few times is definitely something that is useful. I know, theoretically, some lecturers used to use like Lecture Capture when we have live lectures anyway, but no one ever really did that. So it's nice to have it properly online [so it] can be viewed three or four times, especially because like Student 6 all my courses have been assessment based rather than exams and mostly with writing essays on like topic there was only really covered in one week so it's nice to be able to go over watch that lecture three or four times, while I'm writing the essay. And you get ideas, rather than having to remember what was that one lecture we had four weeks ago; here are my notes that made sense at the time but don't really any more. So if recorded lectures stay, even with like with in-person tutorials I think that might actually be an improvement to learning processes.
- Student 21: I found most of the recordings to be way less engaging when if you were in a lecture in person. But when it came to assessment times, I actually found that having those pre-recorded lectures there to like look back over and listen to what they were saying, as if it was a fresh lecture all over again was really useful versus, just like the year before we only had like PowerPoint slides because everything else was in person.

Some formats of online lectures were considered to be more useful than others. A number of respondents reflected that it was helpful when lecturers divided their lecture into multiple parts:

- Student 9: I found that it's good if the lecturer divides their lecture clips into three parts. So, some have literally done this, since they've done three separate videos to 15 minutes each or they've just said we're having part one, and then you go do an activity, part two, and then come back

Another aspect of best practice identified by participants discussing pre-recorded lectures, was the importance of having the spoken text and slides available simultaneously:

- Student 3: the pre-recorded lectures were great especially they had like a video of like the natural talking and then the slides together. I will say, ... there were some modules that missed weeks or they just uploaded a PowerPoint. Which of course I don't mind, but sometimes we'll know a completely like fresh, new topic a PowerPoint just isn't enough for you to like really understand all the details.

It is worth noting that not all participants preferred the pre-recorded format:

- Student 20: So for me, the only main difference was do with the lectures and personally lecture recordings of the lecturer sort of speaking at the screen at you, is nowhere near as engaging as in person. Because normally you know you can sort of chat back and forth; they can see your engagement levels and try and pique your interest. Whereas when you're watching a pre-recorded lecture it's just not the same, and most of them as well, you have the slides separately, so you can't even see them going through the slides. You kind of have to put that together yourself. And it just makes it a lot more complicated and confusing and I think, whilst they're trying to share the same information and technically saying the same things. The level of learning isn't the same because when you're directly speaking someone you're going to listen to what they're saying. A lot better and more easily and also on their side obviously they're not speaking to a natural person they're talking to a camera and it's also harder for them to also therefore to be engaging.

4.1.5 Benchmarking with the wider student cohort and HE sector

This paper also draws upon findings from a survey completed by over 500 students that focused on their 'digital experiences' during COVID. City participated in the Jisc Digital Experiences survey [4] and there were some findings of note in relation to recorded lectures. Clearly during the pandemic, recorded lectures have been used extensively across the sector. The percentages of students who reported they had attended live lecture/teaching session and accessed lecture or teaching recordings in the last two weeks prior to taking part in the survey were: 84% and 82% respectively. Fewer students had engaged with more active learning tasks online, such as working on a group project online or carrying out research tasks online [4 p.12]. Meanwhile at City, 19% of students said recorded lectures were the most useful online resources provided by their lecturers.

Digital poverty was however more of an issue at City. For example our students were almost twice as likely to face issues around not having a suitable device to use for learning and they were 10% more likely to not have a safe, private place to work. City students were over twice as likely to have problems with accessing specialist software and 20% more likely to have issues with mobile data costs compared to the UK student cohort as a whole [5].

5 CONCLUSIONS

There are a number of challenges and opportunities presented by the increased use of pre-recorded lectures during the pandemic. Our research also made recommendations based on lessons learnt during this time.

Despite perceiving benefits from pre-recorded lectures, many participants in the survey and focus groups missed the social interaction of in person classes. Focus and motivation were issues for many students while working from home. As Nordmann, Hutchison, and MacKay [6] note "The student response to the pivot to online learning has reinforced that lecture recordings without interaction with the person on the recording does not provide a satisfactory learning experience alone." Mackay's [7] pre-pandemic work on lecture recording identified that staff were concerned "that recordings 'canonised' the material and made students too reliant on lectures" and there is the worry

that “the flexibility of pre-recorded material may encourage students to spend hours with each video, pausing and obsessing over the minutiae and this is important to consider in cases where live lectures are to be replaced by asynchronous recordings or flipped classrooms”. Although this may be a temptation for students, the pre-recorded lectures were provided to students along with live online teaching sessions so there were also opportunities for students to discuss content and ask questions and work in groups and students were often required to work on activities and tasks asynchronously to test their understanding and knowledge.

Just as the pivot to online learning has exposed students to the benefits of lecture recordings, academic staff have also become more aware of their advantages. Results from an internal staff survey carried out in June 2021 on their experiences of teaching online for the academic year 2020/21 indicated that staff felt that giving students access to pre-recorded lectures and other asynchronous materials was a positive aspect of online learning. Free text comments indicated that although creating pre-recorded lectures added to their workload, staff believed that they made courses more accessible, flexible and inclusive. Comments included:

The students like the recordings as they can replay them (and subsequently ask me questions about them)

It allows students to take breaks to suit themselves, returning or revisiting sections as they need.

Pre-recorded lectures - not being bound to a fixed time and space to deliver teaching and provide support to students - students also appreciated the freedom to learn at a time convenient to them.

These findings were reinforced by the Jisc Survey which received responses from 4,000 teaching staff from 24 UK universities, representing 9% of all Higher Education providers in the UK. The responses were gathered between October 2020 and July 2021 and similarly found that staff believed improved student access to learning was a positive aspect of online learning.

In 2020 City introduced an interim policy on recorded lectures and online teaching materials to support the work undertaken during the pandemic. In 2021 this new policy was approved by the university Senate. Staff in SASS had been vocal in their resistance to lecture recording prior to the pandemic. However, the creation and use of pre-recorded lectures during the pandemic, and seeing their use and benefits to students seems to have led to lecture recordings (of any kind) now being more accepted by academic staff. The policy has also clarified issues related to the ownership of recorded lectures and teaching materials. It has made lecture recording essential ‘opt-out’ rather than ‘opt-in’ but also ensured that staff are aware of their own rights and responsibilities. Lecture recording has many benefits for students in terms of supporting students to study in a flexible way that best suits their constraints. It also is inclusive in terms of supporting students with accessibility requirements.

Finally, the project made several recommendations regarding the creation and use of lecture recordings, as well as some broader recommendations for staff who are designing and adapting their teaching for online and blended learning. With regards to pre-recorded lecture were recommend:

- Staff try and break up lecture recordings into shorter sections (15 minutes) and include external resources (YouTube videos/readings) in further reading.
- Staff should refer to asynchronous activities in live teaching sessions (online or face-to-face) and provide students with feedback to encourage participation.

In conclusion the findings of this study indicate that student access to lecture recordings has benefits for note-taking, flexibility, accessibility and deep learning. However, further research to understand the attitudes of staff and the evolving needs of students post-pandemic is recommended.

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