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Using Adobe Connect to deliver innovative learner support

Oliver Allchin, Liam Bullingham and Emily Stock, The University of Sheffield

Introduction

The University of Sheffield has recently moved to improve its digital offer for students within learning and teaching. Lecture capture was introduced in 2016/17, and this was recently followed by the University of Sheffield Digital Media Hub to host and disseminate video content. Although helpful to all students, the move is particularly beneficial to those not predominantly based in Sheffield: distance and off-campus learners, international partners and part-time students. In this environment of change, the University Library's Faculty Engagement Team (FET) decided to develop our digital offer and increase the number of students able to access library support. This article outlines the 'Digital Delivery Project', established by FET to explore, test and implement strategies for expanding the Library's learner support online.

The Digital Delivery Project

The overarching goal of the project was to enhance FET's learning, teaching and research support offer through online channels. The first step in this process was to identify digital solutions that could help us reach the following goals:

More efficient use of staff time. FET's face-to-face information and digital literacy (IDL) teaching is concentrated at key points in the academic year. We sought platforms to allowing us more flexibility and the opportunity to develop materials which can be created in advance and then shared, embedded and disseminated at the point of need.

More flexible, richer learning experiences for students. Our teaching is often delivered through large-group lectures, which position librarians as 'content directors' (Kelly et al., 2005) and limit scope for interactivity or learner-centred pedagogy (Rabe-Hemp, Woollen, & Humiston, 2009). Due to timetabling pressures, IDL sessions are often scheduled too early/late in a programme, potentially limiting their impact or perceived relevance (Kavanagh, 2011). We were keen to explore ways in which digital delivery could empower learners to take control of their own development, and foster higher quality learning experiences through a more active approach.

Expand and extend our support. We wished to reach a greater number of learners, particularly those marginalised by in-person sessions such as distance, international and part-time learners, as well as researchers and academic staff who may be unable to attend workshops in person due to professional commitments; teaching online provides an opportunity to reach such library users (Crawford-Ferre & Wiest, 2012). We sought solutions to remove

barriers created by room capacity, timing and audience location. In doing so, we also hoped to meet the expectations of our full-time on-campus students who increasingly request simple, seamless, 24-hour access to IDL support throughout their studies.

Assessing the technology

Following adoption by several academic departments, Adobe Connect was identified as a suitable platform for delivering Library teaching online; the platform addresses pedagogical needs and its use provides a consistent experience for learners, from the academic department to the Library.

Adobe Connect is designed as web conferencing software and supports virtual classrooms (Adobe Systems Incorporated, 2017) it can be used to host live webinars, hold virtual meetings, or pre-record presentations for embedding in a VLE. Its flexibility means users may record audio, webcam footage, and run live demonstrations. Adobe Connect also features several built-in tools to enable audience engagement or gather real-time feedback, including polls, questionnaires and live chat.

The platform provides a balance of reasonably advanced functionality whilst being intuitive enough for users to learn quickly with minimal need for technical support. Certain aspects of the interface were felt to be somewhat unwieldy by Library staff, with some features such as the interactive whiteboard failing to reach their potential, meaning session leaders felt less confident using them in a live setting.

Staff training

The Digital Delivery Project Group provided a training programme for Library colleagues with responsibility for skills support. Each session focussed on a different theme or technology, and provided hands-on experience of using the platform whilst also allowing attendees to consider its suitability and potential applications within their role.

For the Adobe Connect session, we created a 'sandbox' area for attendees to experience the whole process of setting up, delivering, recording and editing webinars. Working in pairs, attendees alternately delivered short live webinars whilst their partner acted as a participant, trying interactive elements such as polls and live chat. This was a valuable exercise which enabled us to build staff confidence and identify aspects of the platform which would be most useful, as well as how to troubleshoot technical issues.

Use cases

The below table illustrates how Adobe Connect was utilised to provide online delivery of two different sessions:

	'Introduction to Endnote'	'Key Tools for Engineering'
Programme	Doctoral Development Programme, Information and Digital Literacy Workshops	PhD student induction (Faculty of Engineering)
Face-to-face session format	120 minute workshop in computer lab	90 minute workshop in classroom
Online session format	60 minute webinar	
Approach used	Flipped learning, live session	Flipped learning, live session/pre-recorded session
Pre-task completed by students	Register for EndNote, watch training videos	Practise literature searching in a range of databases
Webinar benefits	Increased reach: distance learners able to attend, students from International Faculty included for the first time	Offer a mixture of face-to-face/online delivery options, students can view at the point of need
Webinar drawbacks	Lower attendance figures	
		some learners drop out, little observable interaction with recording
Adobe Connect tools used	Slides, chat box, polls	
Recording dissemination	Shared with learners, uploaded to webpages	Shared with learners
Webcam/audio	Instructor webcam/audio only	

We provided webinars across multidisciplinary training programmes and also faculty-specific teaching. In both cases, shorter contact time in the webinar was offset by asking learners to complete a pre-task. Creating pre-recorded sessions allows learners to view at their convenience, however scope for learner interaction is lost. Attendance has been lower for webinars, but this may change as they become more established. Instructors shared their webcam and audio to establish a feeling of connection and build on the relationship with learners which had been established during the pre-task email exchanges (Falloon, 2011).

Reflection, impact and challenges

Session design: We find Adobe Connect sessions work best with two staff members: one to present, while the other manages chat dialogue, polls, etc. Engagement can be enhanced by swapping presenters frequently. Incorporating interactivity helps engage learners, but we recommend making participation voluntary to allow attendees to 'lurk' depending on their learning style/preference. Flipped learning allows learners to build upon and evaluate new knowledge acquired during the pre-tasks (Bergmann & Sams, 2014) but we must gather evidence that learners are undertaking these tasks and the possible negative impact if they do not undertake the preparation.

Practical considerations: Attending the webinar 15-20 minutes early can give learners time to accustom themselves to Adobe Connect in advance, and try a 'dry run' poll. Since audio/visual problems can cause significant disruptions, we recommend asking a colleague to join the webinar to ensure they can see and hear you. Computers with in-built webcams and microphones can be easiest to use as a headset is not required.

Ensure attendees are aware in advance when the session is being recorded, a slide may help here; Connect can hide attendees' names when sharing recordings. Evidence from academic colleagues suggests audiences are more likely to engage if they can see the presenter (even with a pre-recording) but conversely prefer to not share their own image (Holdridge, Pinfield Stordy, 2016).

Attendance: Webinars may suffer from a high dropout rate, with a relatively small percentage of learners attending on the day. The web environment also provides more opportunities for learners to become distracted and disengaged. As such, sessions need to be short but substantial enough to be worth attending. Unlike face-to-face activities, webinar recordings can be shared with students after the event, reaching those unable to attend on the day and allowing learners to revisit the content at their convenience.

Future developments

The Digital Delivery project has led to positive change, both in terms of our confidence in using new delivery methods, and in improving our offer to learners on and off-campus. Positive feedback has been consistently gathered, but we feel that more work is needed to assess the long-term impact of digital delivery. It would be beneficial to develop our understanding of how learners build knowledge in this environment and whether there are significant differences in the style and nature of remote learning experiences. Adobe Connect is likely to play a key role as part of a wider suite of digital delivery methods, but as this is a fast-moving arena we must keep up-to-date with emerging technologies and pedagogical approaches.

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