

■ TEACHING IN LIBRARY AND INFORMATION STUDIES: CREATING VIDEOS TO PROVIDE EDUCATIONAL CONTENT

by *Juan-José Boté-Vericad*

Abstract: *COVID-19 has forced several changes in the teaching of Library and Information Studies. In this article we explain our experience in creating and publishing videos as educational content at the University of Barcelona. Students having to learn by distance teaching have different needs in regard to the provision of educational materials. Similarly, professors need to give the best possible experience to distance students when face-to-face courses are not possible. This leads to the question of the roles that information literacy and digital literacy play, especially for professors.*

Keywords: *Information Literacy; Digital Literacy; educational videos; distance teaching; interactive video; online video*

UNTERRICHTEN IN DEN BIBLIOTHEKS- UND INFORMATIONSWISSENSCHAFTEN: VIDEOHERSTELLUNG ZUR BEREITSTELLUNG VON BILDUNGSINHALTEN

Zusammenfassung: *Der Beitrag berichtet über die Erfahrungen mit der Veröffentlichung von Videos als Bildungsinhalte an der Universität von Barcelona. Die COVID-19-Pandemie hat mehrere Änderungen in der Lehre der Bibliotheks- und Informationswissenschaften erzwungen. Fernunterricht hat gezeigt, dass die Studierenden unterschiedliche Bedürfnisse in Bezug auf die Bereitstellung von Unterrichtsmaterialien haben. Ebenso müssen Professor*innen den Studierenden die bestmögliche Erfahrung im Fernunterricht bieten, wenn Unterrichtskurse an der Universität nicht möglich sind. Dies führt zu der Frage, ob Informationskompetenz und digitale Kompetenz eine wichtige Rolle spielen, insbesondere für Professor*innen bei der Betreuung von Studierenden.*

Schlagwörter: *Informationskompetenz; Digitale Kompetenz; Lehrvideos; Fernunterricht; interaktives Video; Online-Video; HSP*

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1. Creating videos as educational content

The COVID-19 pandemic has caused many changes in teaching methodologies in higher education. In Spain, two major changes were noted since the onset of the pandemic. The first is that all teaching in higher education shifted online. Beginning in the academic year 2020–21, and depending on the university, teaching was done through hybrid or completely online models (Silió, 2020). This meant that most professors needed to find ways to continue teaching and delivering educational content. The field of Library and Information Studies (hereafter LIS) has not been an exception.

At the University of Barcelona (hereafter UB) we use a set of Microsoft cloud applications to deliver educational material both asynchronously as well as synchronously. Generally, all applications are used asynchronously. There are two exceptions: ‘Skype Business’ and ‘Microsoft Teams’, which can be used synchronously. One of the asynchronous applications is Microsoft Stream, a video publishing platform where instructors can upload videos for students. Stream is organised in groups and channels. Channels or each course can be created for each group.

Technically speaking, Stream is an ideal platform that is not dependent on social networking sites such as YouTube or Vimeo. There are also other advantages: educational material can be reused, and students have exclusive access to high-quality educational content. Moreover, it is possible to embed Microsoft Stream videos into the Moodle platform that we use in our virtual campus.

At the beginning of the lockdown we decided to create educational videos and publish them on Microsoft Stream. In our opinion, it was a better option than only doing live online teaching sessions as students could have technical issues such as connectivity or audio quality problems while accessing the live session. We also created educational content for UB professors. We had experience creating videos for students as we delivered videos in previous terms, but not with this degree of intensity. Almost the entire content of the courses we teach needed to be available via video.

During the lockdown, the author of this paper published a set of videos for LIS students as well as other UB staff. There were a few reasons for this.

First, students need some visual support as part of their learning experience before or after the live session. We found that PowerPoint slides or other documents on the Moodle virtual campus were cumbersome because they did not always provide students with enough context.

Second, educational videos can be necessary for teaching with the flipped learning method where students watch materials in advance. In addition, for some assignments, students needed some instruction best given by video, for instance, to follow the steps to create an XML file.

Third, we created videos for UB professors because most of them had no need to learn digital literacy before the lockdown. In most cases, professors did not have the necessary skills to create educational videos, and some disciplines never had the need for videos or podcasts. Consequently, learning to create videos was never a priority for them and in the end, many found this content to be helpful.

Initial training is needed when creating educational videos, to help with the requirements like developing a script, recording the content, managing the equipment such as a microphone, editing, and managing audio quality (Aldrian, 2019; Boté, 2019). There are other technical elements that are part of the equipment, such as a microphone or some effects for video editing (Boté-Vericad, 2020; Harder, n. d.). The end goal is to create high-quality educational content. Videos are supposed to deliver added value and students expect high quality materials (Müller et al., 2019).

However, some parameters are needed when creating educational videos from scratch, such as length, style, speaking speed and other items such as adding subtitles when necessary. All published videos were mainly short in length, from five (5) to seven (7) minutes on average, based on different studies that reported similar averages (Expósito et al., 2020; Guo, Kim and Rubin, 2014; Van der Meij, 2017). Moreover, these video lengths permit students to maintain their focus on the educational content until the end of the video.

Video styles vary from field to field (Guo, Kim and Rubin, 2014). However, facilities were limited to video creators as they were at home, locked down. Most published videos were recorded as PowerPoint slides with the speaker's head appearing in one corner or with voice over when necessary. However, video production can combine different styles. Some videos were screencast to demonstrate learning, for instance, such as how to retrieve advanced information from an internet archive.

The speaking speed in videos does not have to vary for different topics. For instance, the average is 120 word per minutes in Spanish (Expósito et al., 2020) and 156 in English (Guo, Kim and Rubin, 2014). Depending on the course, it may be necessary to include subtitles. In the field of English, a study of multicultural videos was conducted at the German University in Jordania. It was found that subtitles enabled students to learn new vocabulary and improve their education (AITaHer, 2020).

It is also important to bear in mind where the content is to be reproduced. For instance, during the lockdown in Spain, one third of students did not have adequate technological resources at home (Rodicio-García, et al. 2020). Their mobile device was their main means to connect to their courses, but connectivity was difficult, especially for those not in urban areas. Thus, when creating educational videos, it is important to focus on mobile devices, ensuring that content is visible on a small screen.

Creating videos is not just part of digital literacy but also part of information literacy. Digital literacy is necessary not only in the use of technology, but also to summarise, produce and present information (Yildiz, 2020). Information literacy is necessary to process information especially in regard to content from other sources and understanding the ethical use of information.

2. Adding interactivity to educational videos with H5P

At UB we have the option of using H5P¹ in Moodle. Therefore, different educational elements, such as still images, presentations, or videos, may have different levels of interactivity. Interaction enables students to use the content in different ways, such as to review the material and prepare for assessments.

H5P on the Moodle platform allows instructors to design a complete course or just pieces of micro-learning content. Adding H5P interactivity gives the ability to add several elements to an educational goal, such as quizzes, multiple-choice questions, fill in the blanks or true-false questions, among others. At the same time, students can be assessed with a number of different tools. Quizzes accompanying videos help students in a more effective way than just reading their own notes (Fujita, 2020). In Germany, a study of 260 students of 9th grade and above, in the fields of physics, chemistry and biology, found that students watch videos passively, but they prefer to have tasks at the end of the videos (Richtberg and Girwitz, 2020). The integration of H5P tasks into the videos allow students to be active in their learning. It facilitates instructor feedback from students about their success.

3. Conclusions

The experience of creating educational videos for LIS students brings new possibilities not only in how students may review concepts but also in how

information and later knowledge can be transmitted. Creating videos requires a different set of skills than those in digital literacy and information literacy. In distance teaching it is necessary to acquire these skills. Inclusivity always needs to be considered when creating educational videos. Not everyone enrolled in distance learning has access to the same devices or resources. Finally, adding interactivity to videos gives additional value to the content allowing students to re-visit it as they wish.

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* All websites and links were last accessed on 29 December 2020.

1 <https://h5p.org/>