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Is old technology out? Challenges in developing open educational videos

Issue at-hand

The use of video materials in distance education dates back to a long time when instruction in the correspondence education generation was dispensed through black and white television programs. Developments in Information and Communication Technology (ICT) and the Internet have re-energized the use of video as instructional materials. There is little doubt that video materials stimulate interest in learners: they have the potential to catch student attention as well as enhance retention. In distance education, the use of the educational video depends on the type of program and the type of audience. With regard to courses that require observation as a part of learning, like in a medical course or a course in the arts or geology, for instance, video supplements are highly recommended. On the other hand, for some audiences, especially those that are less literate, educational videos are of special value because they illustrate the cognitive material in visually interesting ways that enhance learner engagement.

While the educational video is a powerful medium for capturing and holding attention and for conveying impressions (Moore & Kearsley, 2003, p.77), many erroneous perceptions have robbed it of the place it should have held in distance education. With the advent of the Open Educational Resource (OER) movement, releasing educational videos under specific open licenses make them accessible to more individuals and institutions. However, despite their nearly ubiquitous presence and attraction as potentially effective learning materials, there are several challenges that must be addressed before they can be accessed confidently.

Early challenges in developing Educational Videos

In the early generations of distance education, the production of educational videos was a task

undertaken in studios or in outdoor sites depending on the subject matter. Such assignments were viewed as cumbersome ones requiring the participation of the recording expert, the lighting and sound expert as well as a presenter. Post recording work was entrusted to another series of experts who could adjust the light and sound for optimal effect. Not only was this time consuming but it was also a costly enterprise.

Policy recommendations. (i) Carry out advocacy to encourage distance learning institutions to engage in the development of quality open educational videos (ii) Ensure that educational videos are adequately quality assured before they are used, and (iii) Develop an Open Educational Resources Policy that will cater for the publishing of educational videos under that license.

Uses of educational videos

Educational video clips usually last 3-10 minute providing information or help on a range of educational problems that a learner might experience (Kay, 2009). Educational videos carry instructional messages whose patterns of signs and symbols are deliberately chosen to modify behavior or attitudes in any one of the following three domains: cognitive, affective or metacognitive. Psychologists have very complex explanations on the role of educational videos on modifying learner behavior.

In online distance education, the internet is the medium that mediates learning. In this setting, educational videos are either copyrighted or open. Educational videos can be uploaded on platforms like YouTube or Vimeo or stored in MP4 files that can be accessed through hyperlinks present on the online learning platform or simply be embedded in it. Usually, educational video clips are easily downloadable [provided there is adequate bandwidth] and their controls enable users to engage effectively with them since they can pause, rewind, and fast- forward a clip. This degree of control ensures that the learners can take their time to absorb the learning material.

Pedagogically, and since correspondence education times, educational videos were used as an integral part of the course of study. Earlier, there was a particular broadcast sheet that was made available to the learner who would switch on the television at appropriate times. The same pedagogical approach is maintained in online distance education, whereby the tutor may ask the learner to watch the video at a specific time and to do some activities related to the educational video.

The move to open educational videos

Current developments in Information and Communication Technology, especially audio-visual

technology as well as the Internet have brought many changes to this exercise. What remains important is the *quality of the video* and *how it is used*. The move to publishing educational videos under open licenses that allow their open access has brought along interesting advantages.

Access. Open educational videos are special. First they bring specialized knowledge to those audiences that earlier could not have had access to such knowledge. Then because they are 'open,' this means that their uses are multifold. They can be used, re-used and re-purposed for the different audiences to which they are destined. The open license allows their domestication depending on cultural and contextual variables. Such videos are an effective method of delivering learning content to students who cannot physically be in educational settings. When shown in webinar style forums, they can actually be connected to multiple students in diverse settings. New broadcast and recording possibilities enable students that are geographically remote from their tutors and peers to witness in real-time lessons like surgery or other types of intervention. In fact, tutor advice to students on a range of topics can also be provided with the effective use of broadcast and a camera.

Production and use. Educational video clips are easily produced. With modern technology, anybody can produce and upload videos. The task of the instructional designer has become easier: if the need arises to provide students with visual support, using a combination of smartphone or digital camera and a computer, can be sufficient to record, compress and upload a lesson. Any individual with a personal computer and adequate bandwidth can become a producer and a consumer of educational videos.

Cost. Recent innovations in telecommunications technologies, such as compressed video systems, have significantly decreased equipment and transmission costs, making video clips easily accessible through internet search engines. Video compression also reduces the transmission cost (Woodruff & Mosby, 1996.) When produced using the in-built devices in a computer or a smartphone, this cost can be almost nil. Modern computers and smart phones allow instructional designers to develop educational videos almost as and when they require.

Contemporary challenges

While the earlier described challenges are truly a thing of the past, when we talk about *open educational videos*, there are new challenges that must be overcome. These are especially issues concerning **copyrights** of the educational videos as well as whether the videos are really fit for the purpose of teaching. Hence **quality assurance** is the second concern that arises with educational videos.

Copyright and copyleft. Video clips are available on the Internet. Their use, even for educational

purposes may be protected by copyrights or they may be published under open licenses - copyleft. It is important to ascertain under which license they have been published before they are used in a distance learning program.

Quality assurance. Since anybody can upload video clips on any subject on the Internet, they may be amateurish as well as professional in quality. It is important to verify who has produced a given video clip, and whether the producer has the appropriate credentials, before deciding to use it in a learning program.

Despite all the above, educational videos are more than ever an important part of the online distance education scenario. With specific licensing, they can be published as OERs, ready for uploads and downloads. Not only does this make the material get closer to the zero-cost OER that is now an objective in distance education, but also make the content more accessible to a wider range of people, ready for use, re-use and re-purposing. Open licensing of educational videos will reinstate them to their legitimate place as a rich learning resource (Moore & Kearsley, 2003)

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