

## **Making Online Streaming Video and Multimedia Content Available 24/7**

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In response to student demand, and in conjunction with recent developments in digital technology, there has been a considerable increase in the use of online streaming video content being made available for learners in the Language Centre at the University of Worcester. New hardware and software tools have made it much easier than was previously possible to digitally convert, create, edit and publish online a variety of off-air and staff and student generated video materials for teaching purposes.

Over the past two years most of the Language Centre's pre-existing analogue video materials have been converted into digital format for a variety of reasons. Initially, they were made available on DVDs because many students did not have access to VCRs in their own accommodation, and consequently were not able to play video tapes outside of the Language Centre. Secondly, these students were able to play DVDs on their computers or on DVD players, which were becoming increasingly cheaper and more widely available. Thirdly, compared to trying to navigate around an analogue video tape, it is much easier for tutors and students to find the required track on a DVD. Another advantage with DVDs is that they also take up less storage space, and this is becoming increasingly important due to the considerable limitations we have with physical room in the university. However, as the number of students enrolling on the Language Centre modules increased considerably, it became ever more difficult to have enough DVDs available to take out on loan due to time and financial constraints.

As well as pre-existing video content, staff and students have started to create and edit their own video materials for learning purposes. Until only very recently it would have been necessary to make use of specialists in the e-learning team with their own equipment to do this. However, it has now become possible to generate our own video content because the Language Centre has purchased relatively low cost video technology: an iMac with a built-in camera, microphone and iMovie software to edit any video content; also a digital video camera which stores video in MPEG4 format on memory cards that can be easily loaded onto the iMac for storage and editing. Of course the final product is not of a professional standard, but this is less important when the video is for an internal audience. Actually, the quality of the finished video content is often surprisingly good because it is so easy to use iMovie to edit the content.

With iMovie it is possible to copy, cut, drag and drop parts of the video footage and place it in the required order, add text, audio and other images. For instance, the German lecturer interviewed a native speaker and interspersed each key element of the dialogue with a pause with questions, in the form of static text, which the students had to answer. Key items of German vocabulary were added as subtitles. These questions were duplicated in a worksheet, which was placed on Blackboard along with the video materials (Lewin-Jones, 2008). A similar method was employed to explore the way in which a business lecturer

subconsciously modified his language with a closed group of non-native speakers compared to when he delivered a lecture on exactly the same topic to a group of native English speakers. Using iMovie, video clips were placed side by side of him giving the same lecture to both groups and subtitles were added to aid in the comparison of the language and communicative strategies he used with both classes (Snookes, 2008).

It is not always necessary to edit video footage using iMovie. Several videos have been shot in one continuous sitting and put online without any alterations or additions. For example, a French lecturer has used the iMac to give a brief weekly summary of her lectures. She simply sat down in front of an iMac during a short break in her teaching session, used PhotoBooth (the software supplied with the iMac), and spoke for a few minutes. This raw footage was then made available to the students on Blackboard without any editing at all. Likewise, the German and Japanese lecturers took the iMac into their classes and filmed the students doing formative language learning tasks. Also, last semester all of the assessed student presentations in the Language Centre were videoed using the digital video camera and displayed on Blackboard, as recorded, without any alterations, allowing students to reflect on their own and their peers' performance.

Both the staff and student generated video material and the off-air content mentioned above are now being made available as streaming online video on Blackboard. This is firstly in response to formal student feedback, in which they made it very clear that it was difficult and inconvenient to have to come into our self-access centre to watch DVDs connected with their studies. This was compounded by it not being possible to have the facilities open at times which were convenient for students. Secondly, although it has been technically possible to stream both kinds of video content online for some time, the University did not have the appropriate copyright licence for off-air video content to be made available in this way. In response to demand from staff from a variety of institutes, the University has recently purchased the ERA Plus Licence. This grants our institution the right for most recorded broadcast television content to be accessed online via a closed environment, such as Blackboard or Moodle, by University of Worcester students and staff from anywhere in the UK.

It had been quite a lengthy and complicated procedure to convert the completed digital video materials into an appropriate format - Flash - so that it could be streamed online. This required the services of a skilled technician, who had had to spend quite a lot of time converting the video content and posting it online in a streaming format. Thus lecturing staff were precluded from putting their own generated material onto Blackboard. However, that has all changed now that the e-learning team have initiated an extremely easy to use media streaming service which is used to display digital video content on Blackboard. This software, named Release, is similar in concept and usage to YouTube. Video content is uploaded to Release and then a link is copied and pasted into Blackboard. Academic staff can now add much more easily their own video content without having to rely on anyone else.

One of our next projects will involve the recording of off-air material directly from satellite or a digital box straight onto a computer in digital format. This will make it much easier for academic staff to select suitable television programmes, store them, edit them and publish them on Blackboard as required. We are investigating two technological options presently:

Elgato which would provide hardware and software solutions; and BoxofBroadcasts.com, which is a subscription-based web service which allows the recording and storage of off-air broadcast television material without any need for our own hardware and software.

We have also begun to explore the creation of interactive online multimedia content using software such as Articulate and the Adobe e-Learning Suite. These allow content specialists to create their own interactive digital material without having to rely on information learning technology specialists. With these tools academics are able to create highly interactive, rich multimedia content with quizzes and nonlinear routes through the materials. Also, this type of software is usually SCORM compliant which means that the students' grades can be recorded in Blackboard, for instance. We anticipate, however, that this option might only be taken up by a few enthusiasts or when funding is available because it requires a high level of skill and time to produce quality content using these types of tools.

In addition, we are in the early stages of investigating the use of iTunes U and mobile learning as ways of extending opportunities for our students to engage in learning through video anytime and anywhere. Our learners are using increasingly powerful mobile devices to communicate and access multimedia content, and we need to respond to this.

The advantages of having our video and multimedia content streaming online are numerous. Firstly, there are far fewer physical limitations regarding where the content is viewed. Secondly, there are no time constraints, with students and academic staff able to access materials 24/7. Thirdly, using Flash as the format is helpful, as almost all computers have this software on their computers. Also, physical copies of video material often go missing. This is much less likely when stored digitally. Finally, we are able to utilise much more fully a medium that the 'YouTube generation' are increasingly using as a rich source of information. It could be argued that we should not be pandering to an ever more alliterate cohort of students. Conversely, we can accept that there has been an irrevocable change in the way that information can be created, stored and made available, and therefore we need to help our learners to become discerning and insightful creators and users of this powerful medium now that these new opportunities exist.

## References

Lewin-Jones, J. (2008) *Interview with Susanne*. [online] Available from: <http://tinyurl.com/SusannePrankel>

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