Audio elearning

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Abstract

The objectives of improved learning and grades for this bended delivery initiative required improving access to auditory and visual learning channels and providing accurate notes to enhance the opportunity for students to engage in learning. However, a student's motivation, cognitive ability, study habits, and available time all affect student performance and are outside the control of lecturers. Audio elearning is the focus for this paper.

The audio usage of three classes from the Bachelor of Information and Communications Technology programme, were monitored and compared over the learning management systems used. In comparison to non-audio classes, the student access to audio and lecture note files showed a 15- 20% increased access.

The benefits of planning the audio learning to be sufficiently and suitably chunked for non-linear usage included students using the material in conjunction with lecture notes as the first instance of learning, and the majority of students used the audio files for comprehension, their reference and study. This is an effective learning tool that takes minimal development time on the lecturer's part. It provides students a valuable resource that is consistently used on and off campus.

This has allowed the instantaneous display of the lecture as a reference check for the students' own notes and understanding.

1 Overview

Lecturers planned the audio learning to be sufficiently and suitably chunked for non-linear usage. It adds to a flexible and learner-centred model currently being developed as part of a blended delivery project for computer courses at UCOL.

Live audio recordings of lectures are posted to Blackboard and Moodle mirror sites for students to review or use as the first instance of the lecture. The audio is typically used to support the data show presentations in Microsoft PowerPoint.

1.1.1 In class audio

The lecturer uses an iPod with a lapel mike in class to record the lecture. Using an iPod is very effective for a crisp recording of the lecturer. Lecturer techniques for capturing the essence of the lecture need careful forethought and planning. The lecturer must repeat student questions and summarise answers to counteract the limited lapel mike range. This also has the benefit of everyone keeping up with lecturer/student interaction; and, importantly provides a complete audio of the entire lecture. Another lecturer technique is to state the PowerPoint slide heading or number or put sound on the PowerPoint slides which is easily picked up by the proximity of the microphone.

Capturing group activities for students using audio feedback also requires planning. Typically, the activity instructions are stated. Then the recording is stopped. Audio starts again when reporting back group findings and the lecturer summarises the information. Audio allows the student to keep up with out of class tasks such as placing glossary entries online for terminology, and posting discussion board items and journal entries.

2 Editing Time

Once the audio is captured, some editing is required by staff before it is uploaded to the respective learning management systems. Typically for a two hour lecture audio is captured for 75 minutes, file size is typically 55-65 megabytes.

Audacity is freeware audio editor and recorder used to edit silences, expletives or unintelligent babble and reduce volume of 'speaking to the back of the room' voices, and compress file size. The editing, compression and uploading of the audio file merely takes 15 minutes of the lecturer's time.

Audacity is used to convert the iPod *.wav file to a MP3 file, this typically reduces it down to 5-6 megabytes. This decision to compress was made based around student storage and transferability issues when working on dial-up or off USB devices. Platform compatibility is ensured since audio is played via standard Windows Media Player (WMP) for streaming audio.

3 Conclusion

This is an effective learning tool that takes minimal development time on the lecturer's part. It provides students a valuable resource that is consistently used on and off campus.

Students have an alternative to traditional classroom note taking with the opportunity to view the lecture material on a screen in real time, while listening to the lecturer. This has allowed the instantaneous display of the lecture as a reference check for the students' own notes and understanding.

While audio still is not mainstream for most people, it is increasingly being used for both informal and formal learning needs.