# CAN PODCASTING AND VODCASTING ENHANCE YOUR CLASSROOM INSTRUCTION?

Debora J. Gilliard, Metropolitan State College of Denver, Campus Box 78, PO Box 173362, Denver, CO 80217-3362, 303.556.4682, gilliard@mscd.edu

## **ABSTRACT**

This paper explores the new technology of podcasting and vodcasting and their potential role in enhancing learning opportunities for students and providing an alternative delivery of course information. The terms are defined, potential benefits and issues are discussed, and a summary of how faculty are incorporating this technology into their courses is included to generate ideas.

### WHAT IS A PODCAST AND VODCAST?

Podcasting is a new and innovative technique that is able to provide audio content to a large number of students and makes mobile learning possible. It allows professors to provide up-to-date information and allows listeners to listen to the content anytime and any where they want to. The term "podcasting" evolved from the Apple Computer "iPod" and the term "broadcasting". Podcasting is the delivery of audio content which is posted to a web server and it uses the RSS protocol. It is typically created in MP3 format that is compatible with audio/video players such iPods, cell phones, and PDAs. To listen to podcasts on a computer, users will need some form of media player such as Windows Media Player, Real Player, etc. (Cebeci & Tekdal, 2007; Laing, et. al., 2006, Podcasting News, 2007).

Vodcasting combines digital video and audio formats. The term is derived from "video-on-demand (VOD)" and "broadcasting" (Herkenhoff, 2006). Vodcasts allows students to both hear and see content that has been downloaded.

# WHAT ARE THE POTENTIAL BENEFITS OF PODCASTS/VODCASTS?

Although podcasts/vodcasts should not be viewed as a replacement for lectures or other learning and teaching activities, they can certainly be used to enhance course materials.

Podcasts are particularly useful to the auditory learners and vodcasts enhance the learning of visual learners. Morales & Moses (2006) report that auditory learners who have shown musical and verbal intelligence can retain up to 90% of the information received. By incorporating podcasts and vodcasts into higher education courses, faculty are more likely to enhance learning when using multiple teaching methods that match students' learning styles.

A major benefit to students in using podcasting/vodcasting technology is that it allows them to learn at anytime and anywhere. If students must miss a lecture, then students can gain some or all of that day's class information via a podcast/vodcast.

Podcasts/vodcasts can enhance distance learning as it appears to increase student engagement, productivity and motivation (Morales & Moses, 2006). The technology can also be integrated in web-based or on-line courses. Recordings of classroom lectures can be made available to students enrolled in on-line courses and offers these students another technique to learn course material (Cebeci & Tekdal, 2006).

Today, the millennial generation is used to be stimulated in multiple ways and they are very adept at multi-tasking. Podcasting/vodcasting technology is especially adaptable to society's need to multi-task. In a learning environment students can actually be 'doing' while listening to instructions or information.

To date, student feedback about the use of podcasts/vodcasts to enhance course material has been positive. Edirisingha, et. al. (2007) conducted a pilot study in which weekly podcasts were prepared to supplement a professor's online course. Students reported that podcasts provided a good introduction to the online learning material, helped organize weekly learning activities, helped them stay focused on the course, and provided a sense of informality in that it was less serious and students didn't have a sense of urgency to record all information provided by the professor. Students found that if they had trouble understanding course material, the podcast was a helpful review. For the online students, podcasts gave students a positive picture of their professor. Finally, some students reported that they needed to be paying attention and concentrating on the academic material which is a different requirement than when students listened to music for entertainment.

## ISSUES RELATED TO PODCASTS/VODCASTS

Although podcasting/vodcasting is an exciting new technology there are a number of issues that must be considered when using this technology. Faculty are beginning to incorporate this technology in their classrooms and publishers are preparing podcasts as a textbook supplement, but are students embracing this new method of obtaining course material?

Podcasts/vodcasts should not be viewed as a replacement for currently used learning and teaching activities. Podcasts/vodcasts should be used as another means for students to review course material (Laing, et. al, 2006) or to provide pre and post course material (Morales & Moses, 2006). Professors have found that when they record lectures, students tend not to attend class and participate in class discussion because they can hear the lecture via the podcast/vodcast.

Learners are unable to control the pace at which information is presented and must accept the speaker's tempo (Guertin, et.al., 2007) and if the speaker uses a monotone the podcast/vodcast is less effective ((Herkenhoff, 2006).

Podcasts discriminate against those students who are deaf or who have impaired hearing as it does not allow these students to access the information in the format presented (Laing, et.al. 2006).

Copyright issues and intellectual property issues may be a problem (Donnelly & Berge, 2006; Herkenhoff, 2006; Morales & Moses, 2006). If podcasts/vodcasts are closely aligned with text information then it may be unclear if the professor or publisher owns them. Professors may choose to limit access to the podcasts/vodcasts until this issue is settled. Apple has recently introduced iTunesU that allows participating universities to post education material (Laing, et.al. 2006).

There is some concern about student access to equipment necessary to download podcasts/vodcasts. About 11% of American adults (22 million people) own an iPod or other MP3 player and more than 6 million American adults listen to podcasts (Donnelly & Berge, 2006; Guertin et.al., 2007) and most students either own or have access to computers

#### HOW ARE PODCASTS/VODCASTS BEING APPLIED?

One of the most interesting aspects of a new technology is to learn how faculty are using it in their courses. This helps us gain ideas on how we can incorporate the use of new teaching and learning techniques. This section will discuss research on how faculty are applying the podcast/vodcast technology and will include primary information on how faculty are using podcasts/vodcasts at the author's college.

Research papers indicate the following uses of podcasts/vodcasts:

In a war and politics course faculty have students listen to Civil War ballads on an iPod (Guertin, 2007). At Indiana University-Purdue University, MP3 files are used for self-guided field trips (Guertin, 2007), and at other schools MP3 files are used as fieldwork guides for geomorphological features and natural habitats, laboratory work guides, and support for workshops in Chemistry (Edirisingha, et.al.2007) Many faculty record lectures and make them available to students (Guertin, 2007; Herkenhoff, 2006; Liang, et.al. 2006), while other faculty provide additional course material to enhance lectures and inclass learning.

The author became interested in podcasts during April 2007, when one day during class students were queried about how many had read the chapter prior to coming to class. When 5 out of 28 students indicated they had read the chapter, the author asked students if they would be interested in having podcasts available that would provide a brief summary of the chapter material. When students answered with an enthusiastic "Yes", the author developed 10-15 minute podcasts that summarize information in each chapter and uploaded the podcasts to the class website. During a 5-week summer course, about 10 out of 22 students accessed the podcasts. Their reports indicate that they liked the podcasts and one student reported the podcast was a great exam review tool. Three weeks into fall semester 2007, only 3-5 students in classes of about 30 students are regularly accessing the podcasts. The author will continue to monitor student usage and comments.

In August 2007, the author's college hosted a faculty fall conference and the author participated in a workshop discussing podcasts, vodcasts, and blogs. During a panel discussion three other faculty (plus the author) discussed how they are incorporating podcasts/vodcasts into their classes. One faculty member used to develop vodcasts (audio in conjunction with power point slides) for his entire lecture. When class attendance dramatically decreased, the faculty member changed his vodcasts to cover additional material than what was covered in class or to review difficult material. Another faculty member uses vodcasts to explain laboratory procedures for his science class. Finally, one faculty developed a podcast project for his students. Students identified historic buildings that runners would run by while participating in a marathon. Students then researched the buildings to find out interesting facts and their historical significance and developed a podcast that the runners could listen to while they ran past the historic buildings.

How have you or your fellow faculty incorporated podcasts and/or vodcasts into your classroom repertoire?

References Available Upon Request