Podcasting as a Learning Tool in Higher Education

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Introduction

As new technologies are being introduced into our society, their applications are being realized for potential use in higher education. Podcasts have become very popular not only as a form of entertainment, but as a means to send and receive different types of information. As online education becomes more popular and as technology use continues to be used in education, podcasting could emerge as an effective tool to promote learning. This would be valuable to higher educational institutions for use in both distance and face to face classes. This paper will examine the recent literature to determine how podcasting can be used as a learning tool in higher education. This paper will examine how podcasting is being used in education, how it can be used for learning, and how instructors and students are utilizing podcasting.

Podcasting Basics

Podcasting is the process of publishing or broadcasting either an audio or video file on the Internet. A technology known as Really Simple Syndication (RSS) is used to deliver the multimedia file by means of a subscription. A person subscribes to the RSS feed of a podcast using an aggregator or podcatcher, such as Apple's iTunes. The podcatcher downloads the file and allows for playback. An audio podcast is delivered as an mp3 file. A video podcast is usually delivered as an mp4 file, but other formats may be supported. The term podcast, a word created by combining Apple's iPod and broadcast, can mean both the content and the method of delivery. Although the term podcast has its origin in Apple's iPod, you do not need an iPod or other MP3 player to listen to or watch a podcast. When Apple launched iTunes in 2004, it became a popular podcatcher. Today there are many desktop and Web-based podcatchers, in addition to

applications for other portable devices. Both audio and video podcasts are relatively easy to create. Free and inexpensive audio recording and video capture software is available, and file hosting can be obtained at low to no cost

Educational Uses of Podcasting

Podcasts can be delivered to most any computer device and can be accessed at any time of day, bringing flexibility and mobility to the learning environment. Students in a distance education class commented that because they could listen at any time and in any location, podcasting allowed them to make better use of their time (Fernandez, Simo & Sallan,2009). Podcasts can be used to create and distribute lectures, provide supplemental materials, and for student created assignments (Deal, 2007). A podcast can be used to deliver instruction for a student who needs to miss class. It also can be used by an instructor who is unable to attend class as a means of broadcasting information to the students (Tavales & Skevoulis, 2006). Podcasting can be used to deliver lecture material, supplemental material, announcements, homework assignments, feedback, and for guest speaking presentations (Gribbins, & Bapat, 2007). It can be used to enrich distance learning or to a supplement to a face to face class.

Podcasting as a Learning Tool

An important pedagogic characteristic of audio podcasting is learning through listening. Listening may be less tedious than reading and may motivate students who do not like reading. An auditory podcast would appeal to auditory learning styles, and may be useful for the visually challenged (Cebeci & Tekdal, 2006). Fernandez et al. (2009) reported that the teacher's voice provided feelings of proximity, not found in text materials, and also provided a feeling of a connection with the teacher. In a study using video podcasts to supplement a face to face class, students perceived that the podcasts benefited their understanding and retention of knowledge of

course material (Vajoczki et al., 2007). In this same study, podcasting was found to be a helpful tool to accommodate the learning needs of some disabled students. Because podcasting gave an overview of the chapters, students found that it reduced the time required to study and assimilate the material. It also offered the students a new tool with which to review the concepts and study before an exam (Fernandez et al., 2009).

Student Uses of Podcasts

In a study using video podcasts to supplement a face to face class, students reported that the podcasts were used frequently and were easy to use. They reported using the podcasts following classes to review specific concepts, but the heaviest use of podcasts was in the week prior to tests for clarifying material (Vajoczki, Watt & Marquis, 2007). This is consistent with a similar study (Lonn & Teasley, 2009) which indicates that students use podcast material largely for reviewing concepts presented in class. In this same study, students reported listening to podcasts on their computers and laptops more than with portable devices. A similar study (Gribbins & Bapat, 2007) also found that very few students used mobile devices to listen to podcasts.

Instructor Uses of Podcasts

Podcasting can pose some challenges for instructors. There are technical requirements that need to be supported, processes to be learned, and the instructor must be accepting of this technology of a learning tool. Because podcasts are relatively easy to produce and publish, they can be used to address student needs and for new content as it becomes available (Gribbins & Bapat, 2007). In the studies presented in this paper, it appears as though the instructors were able to produce and distribute the podcasts easily. In one study which used video podcasts to supplement a face to face class, instructors stated that podcasting has reduced the number of

email, phone, and office hour requests, and those that did need assistance seemed to have a deeper understanding of course material (Vajoczki et al., 2007). Although it appears that podcasting is benefiting students, it may not be producing a change in teaching. One study found that only one instructor reported that their instruction had improved as a result of podcasting (Lonn & Teasley, 2009).

Conclusion

The use of podcasting in higher education is growing. Podcasts are being used to enrich online classes and to supplement face to face classes. Podcasting delivers instructional content in the form of audio or video to the student's computer by means of a subscription to an RSS feed. The podcast can be accessed from any location and listened to or viewed at any time. These characteristics enable better utilization of study time. Podcasts also support different learning styles and accommodate disabled students.

The literature suggests that podcasting has benefit in increasing the understanding and retention of course materials. Students used podcasts to review specific concepts and study for exams. In spite of the popularity of mobile devices, most students access the podcasts from a computer or laptop. Although studies found that podcasting improves learning for students, it has not been found to improve teaching. It appears as though most instructors are using podcasting as a supplement, similar to PowerPoint, rather than as a new method of instruction. Podcasting appears to have potential for changing and improving teaching style but more research need to be conducted.

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