Chapter X
Stay Tuned for Podcast U and the Data on M-Learning

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ABSTRACT
Podcasting is a growing trend in higher education, and this chapter reviews the most common applications for podcasting in higher education and the current literature on its impact on student learning. Although many educators question whether podcasting creates an effective active learning environment, institutional research data from Georgia College & State University indicate that podcasting may have a positive impact grade on distributions and retention, but not on student opinion surveys rating teacher performance. While surveys indicate that students want podcasts of course materials, research suggests that they make limited use of them. Data indicate that student-produced podcasts may be the most efficacious academic model for podcasting, but much work remains to be done to assess the educational impact of podcasting.

INTRODUCTION
“Podcasting” was The New Oxford American Dictionary’s 2005 word of the year (BBC News, 2005), signaling an important new trend in information delivery that has impacted news distribution, entertainment, and also higher education. In Oversold and Underused: Computers in the Classroom, Larry Cuban (2001) notes that teachers on all levels of the educational spectrum tend to use computers to enhance methods they already successfully employ. Educational uses of podcasting support this assertion, since the most common application is the distribution of lectures for later review.
Podcasting has not been without controversy in educational circles. Listening to audio files can be a very passive experience, thereby losing of many of the benefits of face-to-face instruction. Some educators suggest it might even encourage students to miss classes (Read, 2005a, 2005b). However, other educators point out that it may
be very beneficial for students to be able to later review complicated materials that instructors may present too quickly for them to digest (Brittain et al., 2006). Distributing audio lectures and other materials prior to class meetings may also prompt richer discussions in class, by exploiting the well known phenomenon of lag time, and promote a more continuous engagement with course materials (Gordon-Murnane, 2005; Vess, 2006). Though research literature is beginning to appear on podcasting, there is presently little evidence beyond anecdotal data to suggest that it significantly enhances learning. Consequently, many educators have reacted against “technology-driven pedagogy,” and remind their colleagues that no matter how revolutionary technological innovations may be, there is no guarantee that they offer the same pedagogical benefits as traditional instruction (Salaberry, 2001). Podcasting has raised anew the traditional concern over “investing time and money in unproven technology” (Beatty, 2003, p. 72).

This chapter will review various educational applications of podcasting and examine the current literature on their impact on student learning. The authors will also present institutional research data from Georgia College & State University, which has acquired a national reputation as a leader in the mobile learning movement. GCSU has more than 40 courses that are enhanced through distribution of podcasts and other resources via iPods, including education, fine arts, history, mathematics, and honors courses. GCSU’s data suggest that mobile learning may have a positive impact on hours completed and on grade distributions, but little impact on student opinions of instructor effectiveness. Preliminary results of GCSU’s research suggest that active learning applications, such as student-produced audio/video podcasts, promote far more significant learning outcomes than mere dissemination of lecture and other course materials. Student podcasting projects foster the intense connection between speaking, writing, and reading skills (Vess, 2006) and often lead to greater retention of material.

Despite early reports on the potential impact of podcasting, much work remains to be done. Podcasting projects based on clearly defined learning outcomes and assessment of student needs tend to have the most success (Brittain et al., 2006), but few studies document the extent to which learning outcomes have been achieved. As mobile devices that can play audio and video files continue to proliferate, podcasting will continue to grow. The challenge for higher education today is to capitalize on a phenomenon that can enable universities to extend their reach beyond the traditional campus (Malan, 2006), but to do so in a way that will enhance the traditional face-to-face classroom experience without losing its benefits.

**HIGHER EDUCATION EMBRACES PODCASTING**

Podcasting has an “evolving definition” (Britain, 2006, paragraph 4). In 2005, a podcast was simply “a digital recording of a radio broadcast or similar program, made available on the Internet for downloading to a personal audio player” (BBC News, 2005), but today’s podcasts incorporate images, video, and even hyperlinks to Internet sites. “It is difficult to define podcasting as a technology or phenomenon” (Hargis & Wilson, p. 3), and a podcast can also include pdf files and other textual resources. Multimedia podcasting is sometimes also referred to as “learncasting.”

In the first two days after Apple introduced podcasts to iTunes in the summer of 2005, Apple reported that over one million people subscribed to them (Gilden, 2005; Mindlin, 2005) and astute observers predicted that as many as thirteen million podcasts would be available by the end of the decade (Bruno, 2005). Twenty-nine percent of adults who own portable music players have