

## Chapter 15

# Podcasting: A Flexible E-Learning Tool

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### ABSTRACT

*E-Learning has undergone an amazing metamorphosis: it has changed from the delivery of individualized, static curricular information to the consumption and sharing of social knowledge. While Web 2.0 provides the best tools to achieve this goal, podcasting – as one of the Web 2.0 technologies - is one of the most flexible teaching and learning tool used today. It has been used increasingly in higher educational institutions. This chapter will discuss the uniqueness of podcasting technology in promoting e-learning in following aspects: 1) podcasting addressing the needs of a dynamic e-learning environment, 2) research results indicating the educational efficacy of podcasting in e-learning, and 3) podcasting best practice in e-learning design and delivery.*

### INTRODUCTION

With recent advancements in modern technologies – especially Web 2.0, e-learning has adopted new meanings in both educational experiences and media-rich content delivery. Social networking has become an important component in e-learning interaction and collaboration; and the computer is no longer the dominant medium for content deliv-

ery. People's dynamic lifestyles have imposed new learning challenges – e-learners need to access educational content at any time and location available to them. Podcasting can be a very effective tool to address the needs from the flexible e-learning.

Podcasting has become a common, well-known and ubiquitous tool: it has made its way gracefully into our modern lexicon, transcends many of the inherent barriers of the traditional characteristics of mass media (Kaye, 2001), and even enjoys moderate

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## **Podcasting**

visibility from most of today's prominent media outlets. In fact, tuning to your favorite news program will inevitably find the anchorperson or disc jockey reminding us of the availability of podcasts from their respective websites.

Higher educational institutions have formed a huge e-learning delivery network under Apple Computer's iTunes U initiative. Only a few years old, the widespread popularity – in terms of creation and dissemination, as well as use and consumption – has grown exponentially in terms of both available podcasts and podcast subscriptions or downloads (Farkas, 2006). This alone suggests that podcasting as a medium satisfies a previously unfulfilled niche. Given the power of Web 2.0 technologies, podcasting is an easy to use tool that empowers all users to be dynamic information creators/generators rather than just static consumers.

This chapter has three sections: Section I will discuss podcasting, as one of the Web 2.0 technologies, is used to address the dynamic e-learning environment from the perspectives of technology change, social change and people's lifestyle change, which changes e-learning environment. E-learning is no longer a simple process of information transfer; e-learners are empowered by Web 2.0 technologies to form strong social bounding to enhance their learning experiences. Section II will discuss the educational efficacy of podcasting when used as a content delivery channel, addressing specific e-learning challenges by providing flexible learning and to enhance student learning experiences. Section III will present podcasting best practices in e-learning design and delivery based on the research data collected during five consecutive research studies on content analysis, selection of best podcasting delivery format, providing students with clear instructions and effective integration of activities in combination with podcasting delivery to improve learning quality.

## **A DYNAMIC E-LEARNING ENVIRONMENT**

### **Technology Change**

The emergence of Web 2.0 is not just a technical revolution: it is also a social revolution (Downes, 2006), and – in addition to its role as an information channel – Web 2.0 technologies help bring people closer together. And the term Web 2.0 is a misnomer, perhaps it is a cultural phenomenon (it is common in today's society to gauge newer iterations by labeling them "new and improved," or "version 2," etc.; or, a need by modern society to differentiate between newer and legacy versions).

Web 2.0 is really about giving power back to the people and Podcasting is a major component to this end. With Web 2.0 technologies, users really do play an equal role in information sharing and consumption. And podcasting is a great example of just how individuals are leveraging the power of Web 2.0 with legacy technologies in order to promote their respective causes. In the case of education, podcasting is seen as a new tool with which educators can easily share their lecture materials with their students. In reality, it is also a way for students to create and share content with peers and educators alike. Some in academe have begun offering their students the choice of a variety of tangible, electronic formats for submitting their class work. For example, a tenth grader in history class may choose to present her findings in the traditional manner (paper), a digital story, or even a video podcast.

Again, perhaps the greatest contribution of Web 2.0 is that it empowers all users of the Web to be equal participants (contributors, consumers, critical reviews, etc.) in online communities. A unique but necessary byproduct of this level playing field is that it changes the relationships we have with those we interact with online. We are able to share files, keep track of our friends, and provide original content (such as videos on YouTube) to the

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