Chapter 7.8
Issues in Using Web-Based Course Resources

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INTRODUCTION

Education over the Internet is going to be so big it is going to make e-mail usage look like a rounding error.

John Chambers, Cisco Systems, New York Times, November 17, 1990

Web-based courses (Mesher, 1999) are defined as those where the entire course is taken on the Internet. In some courses, there may be an initial meeting for orientation. Proctored exams may also be given, either from the source of the Web-based course or off-site at a testing facility. The Internet-based course becomes a virtual classroom with a syllabus, course materials, chat space, discussion list, and e-mail services (Resmer, 1999). Navarro (2000) provides a further definition: a fully interactive, multimedia approach. Current figures indicate that 12% of Internet users in the United States use the Internet to take an online course for credit toward a degree of some kind (Horrigan, 2006). That number is indicative of the rapid proliferation of online courses over the past several years.

The Web-enhanced course is a blend with the components of the traditional class while making some course materials available on a Web site, such as course syllabi, assignments, data files, and test reviews. Additional elements of a Web-enhanced course can include online testing, a course listserver, instructor-student e-mail, collaborative activities using RSS feeds and related technologies, and other activities on the Internet.

One of the biggest concerns about Web-based courses is that users will become socially isolated. The Pew Internet and America Life Project found that online communities provide a vibrant social community (Horrigan, Rainie, & Fox, 2001). Clearly, students are not concerned or feel that other benefits outweigh the potential drawbacks. According to government research (Waits and Lewis, 2003), during the 2000-2001 academic year alone, an estimated 118,100 different credit courses were offered via distance education (with the bulk

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of that using Internet-based methods) by 2- and 4-year institutions in the United States. Over 3 million students were registered in these courses.

Navarro (2000) suggests that faculty members are far more likely to start by incorporating Internet components into a traditional course rather than directly offering Web-based courses. These Web-enhanced courses might be considered the transition phase to the new paradigm of Internet-based courses. Rich learning environments are being created, with a shift from single tools to the use of multiple online tools, both to enhance traditional courses and to better facilitate online courses (Teles, 2002).

BACKGROUND

A 1999 research study showed that 27.3% of the faculty members thought they used the Internet for the delivery of course materials, but only 15.6% actually did so. Of this group, the major use was simply the substitution of a Web page for the printed page. Most faculty members (73.8%) updated their sites so infrequently that the sites only served to replicate printed handouts. In a follow-up study at the same university, the number of faculty who used Web pages to enhance their courses showed a decrease from the previous year (Garrett, Lundgren, & Nantz, 2000). In the same study, 22% of the faculty were never planning to use a Web site for delivery of any portion of their courses. Less than 5% were truly incorporating Web technology into their courses in a meaningful way. Lee Raines, Director of the Pew Internet and American Life Project notes that the role of experts, such as teachers, has changed. The Internet has empowered amateurs. New teaching models and methods have developed as educators try to adjust to changing student attitudes (Rainie, 2006). The new educational model becomes "the net-savvy, well-connected, teacher-independent end-user" (Castells, p. 20).

Overall, Internet penetration for U.S. adults is up to 73% as of April 2006, up 9% in just one year. In addition, "… the 40% in home broadband adoption from March 2005 to March 2006 is double the 20% rate of increase that occurred from March 2004 to March 2005" (Horrigan, 2006). For college age degreed adults, 91% go online regularly (Rainie, 2006). Researchers at Ball State University found that 30% of a waking day is spent with media as the sole activity with an additional 39% spent with media combined with some other activity ("Average…", 2005). Fully one third of all Internet users in the U.S. say that the Internet has greatly improved the way they pursue hobbies and interests (Madden, 2006) and each day 44% of all Americans are online at some point, up from 36% in 2002 (Horrigan & Rainie, 2006).

Part of the expectation of the current college population is that two-way technologies are the norm (instant messaging, Weblogs, and online journaling, for example) and that online communities provide a rich environment for information sharing. According to Pew data, almost half of Internet users access listservs, RSS feeds, and bulletin boards to stay engaged. This shift to more collaborative tools provides new opportunities but creates numerous challenges. Learning management systems (LMS) are adding collaborative tools to reflect the changing habits of Internet users. All of the popular LMS tools, such as WebCT, Blackboard, and Moodle provide for online discussions, information posting, group assignments, synchronous chats, interactive quizzes, and a closed e-mail system. Students perceive collaborative activities, both synchronous and asynchronous, as cutting edge. Castell and Wellman refer to this synchronous and asynchronous environment as "networked individualism" (Castells, p. 20). In Table 1, Garrett (2006) presents a breakdown of the myriad tools available in various combinations of synchronous/asynchronous and interactive/non-interactive.