INTRODUCTION AND BACKGROUND

Teaching and learning in the 21st century not only utilizes various technologies, but also takes place any time and any place. During the last decade, higher education institutions equipped many of their classrooms with the latest computer hardware and software applications and trained their faculty and staff to use the technology. With the technological advancements and the changing needs of institutions and students, more faculty members are teaching online.

MAIN FOCUS: CHALLENGES OF TEACHING ONLINE

Faculty choose to teach courses online for a variety of reasons. Teaching online provides faculty with an opportunity to 1) get more involved with technology; 2) use technology more innovatively to enhance teaching and learning; 3) meet the needs of students at a distance; 4) increase flexibility in working hours and locations; 5) respond to students’ requests for online educational opportunities; 6) interact with students more frequently; and 7) respond to administration’s initiative (McKenzie, Mims, Bennett, Waugh, 2000). As they prepare to teach their courses online, faculty face numerous challenges that can be classified into four areas: online course design; technology tools and course management systems; faculty development; and finally technical and administration support (Berge, Muilenburg, & Van Haneghan, 2002; Levine & Sun, 2002).

Online Course Design

Teaching online and at a distance are different from teaching face-to-face (Cyrs, 1997). Good teaching practices, however, work in either instructional setting. Hacker and Niederhauser (2000) suggest five instructional practices that current research proves to promote learning in both online and face-to-face environments: 1) asking students to construct deep explanations, justifications, and reasons for what they think and do; 2) grounding learning through effective use of examples; 3) using collaborative problem-solving strategies; 4) using appropriate and adequate feedback throughout instruction; and 5) embedding motivational components that enhance students’ self-efficacy. These practices are grounded in (also aligned with) the seven principles of good practice in undergraduate education (Chickering & Gamson, 1987). Furthermore, Cyrs (1997) argues that teaching in distance-learning environments not only requires sound pedagogical practices, but additional skills in course planning and organization, and working collaboratively with colleagues.

A systematic and thoughtful approach to online course design is essential (Beaudin, 1999; Kearsley, 2002; Palloff & Pratt, 2001). McLellan (1999) recommends that instructors design online courses that communicate the course purpose, identify learning activities and course requirements, explain the role of the instructor and the student, provide an orientation to resources and the online learning environment, and reinforce the value of forming an online learning community.

In addition, online course design should incorporate teaching strategies. For example, the use of guided didactic conversations as a strategy for instruction at a distance can simulate a dialogue between the student and the faculty member (Morrison & Guenther, 2000). The dialogue that takes place in an online discussion forum usually leads to students’ better understanding of the instructional materials.
Challenges and Issues of Teaching Online

Technology Tools and Course Management Systems

Technology plays a vital role in teaching and learning. Technology tools may enable student-centered learning activities and facilitate learner interaction in courses that are taught online. Based on their function, technology tools may fall into categories such as communication, organization and presentation, and course management systems (Zhu & Kaplan, 2002). This comprehensive array of tools includes not only existing technology, but new ones being developed rapidly that often outperform the old ones. New technology tools like blogs, podcasts, wikis, social bookmarking, and instant messaging are changing the nature of tools from single to multiple functions, and capable of supporting teaching and learning in diverse social and cultural contexts.

These new tools may redefine the way we teach and students learn, and also demand new teaching and learning practices. Blogs and wikis as technology tools not only encourage students to express their thoughts, but also generate student interest in their communities and cultures (Downes, 2004; Engstrom & Jewett, 2005). Podcasts, either audio or video, allow users to download class lectures or experts’ speeches for later listening and viewing. Social bookmarking presents new and effective ways of sharing and archiving information for later retrieval. Finally, instant messaging has uses beyond personal communication, and slowly gained ground for classroom uses in support of student learning (Farmer, 2005). As instructors prepare online courses, it is critical for them to understand different uses of technology, select appropriate tools, and have adequate access to the tools for teaching online.

Many online and distance-learning courses are delivered through course management systems (CMSs) such as WebCT, Blackboard, or ANGEL. Faculty often have to use the available CMS in their institution to teach online courses. Many CMSs have functions that allow students to access course syllabi, announcements, assignments, and schedules of activities; and to have discussions with peers using asynchronous or synchronous communication tools. Although a CMS can help instructors implement certain teaching strategies, the system itself does not necessarily embody teaching strategies for an online environment. Faculty should not plan teaching to fit into a course management system, but to take advantage of a system’s functions to support teaching activities that facilitate student learning.

Hardware and software standards, scalability, security protocols, functions, adaptability, and usability are important for CMSs. Difficulties in using a system can limit its full benefits. Students’ responses to a CMS’s features can also increase or decrease a faculty member’s use of a system in online teaching. A course management system loaded with bells and whistles seems to negatively impact faculty’s decision to use it. Some faculty members were reluctant to use such a CMS due to students’ lack of skills beyond e-mail, Internet surfing, and instant messaging (Morgan, 2003). Also, it is necessary to have an array of technology tools for teaching online to meet varied students’ technology needs and diverse learning styles.

Faculty Development

Online teaching provides an opportunity for faculty to change the way they deliver instructional materials and engage in educational processes. The online teaching environment provides ample opportunities for student-centered teaching, interactive discussion, and collaborative learning and team activities that are based on real-world problems. The online environment, capable of engaging students in actively constructing knowledge, encourages faculty to rethink or reexamine their current teaching practices. Faculty members who plan to teach online will gradually relinquish the role of “sage on the stage” and assume one as “guide on the side,” leading students through information gathering, practice, and knowledge construction.

Online teaching involves collaboration among many individuals such as an instructional designer, Web developer, graphic designer, network engineer, distance-education coordinator, faculty development specialist, and librarian. Online teaching requires additional skills. Instructors can gain the skills and develop the abilities that are necessary for successful online teaching gradually. They can first integrate technologies into face-to-face courses and become familiar with the online teaching environment before taking on the challenge of teaching totally online (Palloff & Pratt, 2001; Zhu, Payette, & DeZure, 2003). As part of the faculty development process, instructors who are interested in online teaching can learn more through workshops or individual consultation and coaching. Some researchers suggest that institutions require training for online teaching and that some part of that training be conducted.