Using Course Maps for Easy Classroom to Computer Transition

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INTRODUCTION

Online learning is the fastest growing segment in the educational marketplace (Conhaim, 2003). As the number of online courses increases and distance learning programs grow in popularity, questions of quality and comparability of online courses with traditional methods naturally arise (Schulman & Sims, 1999). While online learning is the fastest growing educational segment, partly in thanks to on-campus students who choose to take courses online, there are still debates about not only the quality of the course content, but the quality of the technology used as well. According to Bowman (2003), in "the history of higher education, online classes are relatively new, and it is yet to be determined how to take full advantage of the technology" (p. 73).

Traditional face-to-face courses, which may have been proven successful in terms of evaluations and outcomes assessments, are increasingly being converted to online courses. A study by Smith, Ferguson, and Caris (2000) concluded: "Contrary to intuition, current Web-based online college courses are not an alienating, mass-produced product. They are a laborintensive, highly text-based, intellectually challenging forum which elicits deeper thinking on the part of the students" (p. 67). Converting a traditional classroom course that is intellectually challenging and that elicits deeper thinking into an online course that can do the same can be a harrowing task. The process of converting a face-to-face course into an online course without compromising the course's integrity and quality is a difficult burden to overcome. The burden of the conversion process can be eased, however, through the use of course maps.

The purpose of course mapping is to organize all of the components of a course, including course material, technology, and procedure, into one coherent structure. Course maps generally come in one of two forms: a written map in the form of an outline of the course, or preferably, a graphical image that provides a pictorial representation of the course syllabus. Course mapping is a critical process in the development of online courses, as it provides a way to organize course content and provide direction and focus to students who are often new to the concept of self-directed learning.

The conversion process from face-to-face to online delivery begins with a review of current course content. While this may be the first time the course will be offered online, most instructors will already be equipped with some of the necessary components from the face-to-face course such as the course overview, course objectives, course schedule, list of assignments, required readings, lecture notes, PowerPoint presentations, bibliography, and Web links. Many of these may be reusable learning objects (RLOs). According to Mills (2004), reusable learning objects are resources that can be used for facilitating intended learning outcomes, and be extracted and reused in other learning environments. Many objects in the face-to-face course can easily be used in the online course. Clyde (2004) further explains reusable learning objects by saying the "concept of learning objects is based in both instructional technology and computer science, and while they may be 'chunks' of content, they may also be simulations, communication tools, assessments activities and learning management tools" (p. 55).

COURSE MAPPING PROCESS

The process of course mapping begins with a review of the goals and objectives established for the course, as well as a review of how these learning objectives and goals are accomplished in a face-to-face setting. Using a well-designed face-to-face course, it will be easy to see which course requirements (e.g., lecture notes, assignments, projects, exams) are connected to each of the objectives or goals. At this early stage in the process, it is more important to thoroughly review the course objectives, requirements, expectations, and assessment techniques, than to think about the role of technology. As explained by Helmuth (2000), it is vital to have good teachers involved in the development of online instruction so that technology does not play a more dominant role than pedagogy. While course objectives will likely stay the same, course requirements may see significant change.

Based on the face-to-face course, a map can be drafted. The map will be a model of how the present course is taught; for example, it may be taught in units, lessons, or chapters. According to Zhang (2004, p. 34): "From the learning point of view, the course is better divided into a number of modules (associated models can be grouped in chapter), where each model refers to one separate study unit." If a course is instructed in units, with the first unit having three chapters, the map may begin with a figure similar to Figure 1. A study conducted by Zhang (2004) concluded that "this module-based structure, with the organization of study units, reduces the possible disorientation and cognitive overload in learning practice" (p. 40).

Throughout the design of each chapter, it is important to consider the main content and to keep the general information aligned consistently. If in a particular chapter the instructor will cover chapter objectives, summary of chapter, glossary of terms, chapter notes, Web-based articles, and Web links, each of these may be included as a description on the map as depicted in Figure 2.

This will allow for the creation of an "easy-to-navigate" or "user-friendly" environment for the learner. Technology should be neither a focus nor an obstacle for the students.





Figure 2. Map with content items



After determining which course requirements from the face-to-face course most successfully satisfy the course objectives, it is then necessary to evaluate these tasks in terms of online delivery. For example, a program shown on videocassette, while effective in the classroom, cannot be easily incorporated into an online course. An analysis of current course components is then necessary to determine which components of the face-to-face course can stay the same, which components need to be dropped, if any, and which can be effectively delivered with the help of technology. This stage requires some prior knowledge and understanding of the course management system (CMS) in place at the institution.

Once the initial foundation of information is planned, participatory exercises, such as interactive tutorials, simulations, discussion forums, pre- and post-practice quizzes, real-time chat, or e-mail, can be considered. The use of these exercises should align with the current face-to-face course and, where applicable, enhance current teaching style and delivery. It is appropriate to consider course content in terms of technology and communication methods as demonstrated in Table 1.

This will likely be the most challenging component of the course development.

Some of the conversion process in this area may require cooperative work with the school's instructional technology staff or design team in order to find an appropriate program for online use.

With distance learning research still in its infancy, there are few rules or guidelines regarding how classroom delivery is most effectively converted to online delivery. Determining the most effective and appropriate 3 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/using-course-maps-easy-classroom/12056

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