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The Conversion of Traditional Course Material to the Online

Learning Format

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Abstract

This paper examines the differences that exist between the traditional face-to-face classroom and the online courseroom. Instructors should begin by identifying the epistemological foundation for the course conversion process. During the instructional design phase, courses can be developed from a team approach or by the instructor alone. Issues of communication and collaboration must be addressed as students will not meet face-to-face. Alternate or authentic forms of assessment should be planned to minimize concerns of academic honesty. Considering the differences between the two delivery methods, faculty development is integral for the course conversion process. The course conversion process can be divided into three phases: vision and planning, implementation, and evaluation.

The Conversion of Traditional Course Material to the Online Learning Format

The growth of the Internet (Liu, 2004) and the continual evolution of educational technologies (Davis, Odell, Abbitt, & Amos, 1999) have combined to create alternative opportunities for the delivery of instruction. Considering the increase of learner access to the Internet from home (VanSickle, 2003), online learning opportunities are becoming widely available (Davis et al., 1999). Learners are even beginning to adopt higher broadband Internet connections that in time will allow for new collaborative technologies to be implemented.

With this increased access and ability to pursue learning online, faculty are being forced to face new challenges that revolve around the way they teach and the way students prefer to learn (Kosak et al., 2004). Traditionally, many instructors have approached their classrooms in a didactic manner, utilizing lectures to transfer knowledge to their passive learners (Kettner-Polley, 1999; Levy, 2004; Palloff & Pratt, 1999; Yang & Cornelious, 2005). In contrast to this, online courses that are being developed today rely on a learner-centered approach (Willis & Cifuentes, 2005; Yang & Cornelious, 2005) where faculty act as facilitators of the learning process and students actively explore the course content while interacting with each other.

Nonetheless, many university administrators have taken notice that students have a desire to learn in this manner (Levy, 2003). Students enjoy the fact that courses delivered online have become easy to access and provide an extremely flexible approach to when and where they can study and learn (Kosak et al., 2004). Furthermore, non-traditional students now have an avenue for completing courses and degree programs while caring for families and pursuing employment options. Additionally, opportunities to pursue learning environments outside of their local community (Willis & Cifuentes, 2005), possibly on a global scale (Davis et al., 1999), are now

achievable, providing them with valuable experiences that transcend their own culture and belief systems.

However, online courses have been examined and the results are often mixed between those who claim success and those who cry failure (Aragon, Shaik, Palma-Rivas, & Johnson, 1999; Youngman et al., 2000). Those who report negatively have focused on issues of student attrition and tuition, as well as the time it takes to create and manage an online course.

Nonetheless, colleges and universities are investing enormous amounts of energy and resources to the development of computer-mediated learning environments (Lopez, Skarmeta, Molla, & Gisbert, 2000). These learning environments may be part of the traditional classroom setting; however, when instruction moves to the web, online learning is quite different from the traditional face-to-face class (Levy, 2003; Liu, 2004). Consequently, there is a need to identify the differences between these two instructional delivery methods; basic guidelines should be developed (Henderson & Johnson, 2001) that will assist faculty in the course conversion process “ensuring that the courses they put online are well planned and well executed” (Downey, 2001).

Therefore, this paper seeks to identify some of the key differences between a traditional face-to-face course and an online courseroom. Issues such as teaching methodology, instructional design, communication, collaboration, and assessment all need to be examined and then utilized during the faculty development process.

Finally, a series of steps will be presented that outline some considerations for the course conversion process. Phase one addresses the issues of vision and planning, team development, training, and the design process. Phase two will briefly describe the implementation process as it relates to student orientation, documentation, and team communication and support. In closing, phase three will briefly address the need for the evaluation process where faculty and learner

impressions identify any possible redesign needs before beginning the second iteration of course delivery.

Key Differences between Traditional and Online Delivery Methods

"The shift to computer-mediated distance learning poses enormous challenges to instructors and their institutions. Many faculty members believe that the online classroom is no different from the traditional one – that the approaches that work face-to-face will work when learners are separated from them and from each other by time and distance" (Palloff & Pratt, 1999, p. xiv).

Teaching Methodology

Whether teaching in the face-to-face environment or the online courseroom, instructors should give careful consideration to the epistemological principles that will provide the underlying foundation for their teaching (Gold, 2001; Youngman et al., 2000). While each of the major foundations of education, behaviorism, cognitivism, or constructivism could be utilized in both environments (Liu, 2004), instructors should give careful consideration with respect to how instruction will be delivered in the online realm.

Learning theories are constantly evolving which suggests that no one theory is acceptable for all learning situations. Liu (2004) concludes that "behaviorist strategies can be used to teach facts (what); cognitive strategies to teach the principles and processes (how); and constructivist strategies to teach the real-life and personal applications and contextual learning" (p. 1346). Newby-Fraser (2002) extends this by stating that "the strategies and techniques staff use in their FTF teaching remain very relevant.'Good teaching, is good teaching'" (p. 1986). Nonetheless, "Teaching on the web is an art that can – and should – be informed by empirical research and sound pedagogical principles" (Wolfe, 2001, p. 1).

Instructional Design Process

The instructional design process refers to the process that instructors should utilize in the planning and preparation of instructional activities that will be conducted during course delivery (Reigeluth, 1999). Utilizing learning and instructional theory, the process examines the goals and outcomes of the course as well as the how the planned instruction will be delivered. This process often begins with an analysis phase followed by design, development, implementation, and evaluation (Miller, 2000).

Even though many of the steps of the instructional design process may remain the same in the creation of a traditional or online course (Levy, 2003), "planning for instruction at a distance is a multi-faceted process" (Simonson, 2000, ¶3). Unlike traditional design where lectures and content may be developed the night before class, or even the day of class, instruction online should be "comprehensively designed in advance" (Boettcher & Conrad, 1999, p. 47).

Furthermore, depending upon the organizational structure of a college or university, the instructional design of a course can be approached from the standpoint of a single entity (Boettcher & Conrad, 1999) or comprised of a development team that is widely skilled and responsible for components of the design process (Boettcher & Conrad, 1999; Carroll-Barefield, Smith, Prince, & Campbell, 2000; Youngman, Gotcher, Vafa, Dinsmore, & Goucher, 2000).

Single Entity Development. The first approach, in which instructors work as a single entity, is very similar to the traditional course design process. Boettcher & Conrad (1999) support this by stating:

"In the case of a single course being moved to the web, or a sequence of two or three courses, the general expectation is that the faculty members will develop the online course in the same manner they design and develop a face-to-face course" (p. 52).

However, Boettcher and Conrad (1999) and Verneil and Berge (2001) recommend a team approach over single entity creation; if single entity production is utilized, instructors may soon find the process to be a daunting task. Filling the shoes of an instructional designer, subject matter expert, graphic designer, programmer, web developer, or reference specialist will require a great deal of time and commitment (Youngman, et al., 2000).

Even though instructors may devote a considerable amount of time preparing for a traditional course, the conversion of course content for online delivery by a single individual may require steps to be taken by the institution to ensure that the course is developed in a quality fashion maintaining instructional integrity (Davis et al., 1999). "Without support from a project team, the instructional quality of the first version of the online course may suffer...this is too much work for one individual who is also maintaining a full teaching load" (Boettcher & Conrad, 1999).

In order to assist in achieving quality design and development, instructors should request release time or a course reduction. Providing additional time will help them to complete the many tasks that would be accomplished by multiple individuals. Palloff and Pratt (1999) also suggest incentives such as "in-house grants for course development, significant blocks of time off to engage in course development or training activities, reduced teaching loads..., and adequate support" (p. 40). It would also be beneficial for instructors to spend time developing a project plan to keep track of progress and provide focus during the process.

Team Development. Considering some of the issues that were presented in the previous section, such as time, effort, and expertise, it is preferable to approach the conversion of a traditional course to the online format from a team perspective (Levy, 2003; Youngman et al., 2000). According to Carroll-Barefield et al. (2005) "Transitioning from a traditional to online

program is not cut-and-dry. It requires the cooperation of a team of educators, administrators, and designers" (¶3).

Even though the team process can be approached in various manners, Levy (2003) describes this process as an unbundling of responsibilities with experts taking responsibility for specific parts of the course design (¶35). This development approach divides the work load into smaller pieces and allows for optimal development because each component is developed by a person with expertise in that area.

Instructors remain the primary content leaders (Boettcher & Conrad, 1999) of design teams and should work closely with the instructional designer to fashion activities that promote a student-centered environment. The instructional designer also acts as the project manager, but focuses on "matching the learning goals and objectives with the characteristics and lifestyles of students and with the constraints of the delivery environment" (Boettcher & Conrad, 1999, p. 50).

The graphic designer and web developer work together to construct an aesthetic and user-friendly environment that is conducive to the desired activities that will take place in the courseroom. To an extent, this role may be minimized if the university employs the use of a content management system that already has a structure designed for delivering instructional content. Nonetheless, even content management systems can be customized and the structure should be analyzed to minimize the existence of technology barriers.

Other team members could consist of a reference specialist and technical support personnel. These positions are essential in the online development process, but also play a particularly important role in the development of traditional courses also.

Communication

Communication, whether face-to-face or online, is critical to the success of the teaching learning process (VanSickle, 2003). However, there are some considerable differences in how communication is achieved in these two different environments. Personal contact, emotionality, and immediacy all differ to some extent.

In the traditional environment, communication is conducted face-to-face; whereas in the online environment, communication is conducted virtually, whether it is synchronous or asynchronous. While students receive immediate feedback in the face-to-face classroom, students often have some form of time delay in receiving feedback online. From a synchronous approach, the feedback is somewhat quick; however, the person speaking must still take the time to type his or her response causing minor delays in the communication process.

When using the asynchronous form, student postings may take several hours or even days to receive feedback. While one of the benefits of communicating asynchronously is the removal of the necessity to be online at the same time with the person that you are communicating with, it can lead to lags in the communication process.

Even though communication differs with respect to location, time, and immediacy, another difference lies in the difficulty of understanding the emotionality of written words in the online environment (Sakhel, 1999). In the face-to-face classroom, students are able to hear the voice fluctuations of instructors which often helps to provide meaning to what is being said. If misunderstandings still exist, questions can be asked immediately to clarify the intentions of the message being spoken.

On the contrary, once issues have been discussed in the face-to-face environment, they can be forgotten or even misconstrued. In the asynchronous forum, questions are posted and

remain available to learners for as long as instructors choose to keep them available. This practice can assist instructors in managing questions that arise throughout the course. If learners are required to post questions to a specific Questions and Concerns forum, instructors only have to answer the question one time; other students can read through the forum and check if the question has already been addressed.

In the face-to-face environment, instructors may receive several phone calls or student office visits that relate to the same concern. Even though they could send out an email that addresses the question being raised, the flow of the discussion is fragmented by several emails that are sent back and forth until the issue is resolved.

However, in the online classroom, it is very easy to miss the meaning of communication due to the absence of voice indicators. This may lead to misunderstandings or cause the student to read things into the message that simply do not exist. In order to help ease this foggy issue, some instructors rely upon emoticons to suggest the feeling or mood of the message. As technology improves, instructors may use voice over IP, or VOIP (Kilgore, 2004), to help alleviate these concerns synchronously. Through VOIP, instructors and students utilize a headset and microphone to communicate over the Internet achieving the virtual equivalence of communicating in the face-to-face classroom.

Moreover, a solution even exists for asynchronous forms of communication; Horizon Wimba provides a solution that incorporates voice recorded threads into the forums of the Blackboard Learning Management System. Students click on the title of the thread and simply listen to the message that has been posted by the instructor or other learners in the class.

Besides concerns of emotionality, issues exist as to the type of learner that succeeds in the face-to-face or online environment. Students that are classified as introverts, or quiet and

self-reserved, often do not participate in the face-to-face classroom; however these same students excel in the online classroom where social pressures are less pronounced (Palloff & Pratt, 1999). Conversely, students that are classified as extroverts, or gregarious and unreserved, "may have more difficulty establishing their presence in an online environment, something that is easier for them to do in the face-to-face classroom" (Palloff & Pratt, 1999, p. 8).

Nonetheless, communicating in the online classroom often allows for increased equity. In an asynchronous forum, a student is not only expected to participate, but does not have to compete for talk time with the extrovert. For example, students can read the question that is being presented, reflect on their own experiences, research additional sources on the topic, and then construct a meaningful, intelligent response that will contribute to the depth of the conversation.

Along the same line of equity in conversations, issues such as gender, race, physical attributes, or ethnicity are often irrelevant in the online environment; whereas in the face-to-face environment, these characteristics can often lead to stereotypes or discriminatory behaviors.

Collaboration

Collaboration, or working together in an intellectual endeavor, can occur face-to-face as well as online. However, the didactic approach can be easily implemented in the face-to-face environment but not as successfully in the online environment. Procter (2002) suggests that in the online arena, the didactic and constructivist models are juxtaposed with constructivism helping to provide an environment for learner engagement.

Conversely, the didactic approach places the focus on instructors as disseminators of knowledge and learners as the passive recipients of that knowledge. Nonetheless, collaboration is a basic element of most distance education environments (Lopez et al., 2002) where the focus is

on learner-centered approaches that are based upon constructivist principles and adult learning theory (Lang, McTavish, & Brinsmead, 1999).

Methods of Assessment

Whether teaching in the face-to-face environment or online, assessment is an essential aspect of the teaching learning process. Verneil & Berge (2000) support this and extend it by stating that "course subject matter assessment will be totally determined by the subject matter, teaching style, and the educational philosophy" (p. 18).

There are many assessments that will work in both settings such as the following: essays, reflections, collaborative projects, individual projects, or discussion content. However, when traditional paper and pencil assessments are used in the online setting, issues of validity are often raised due to the fact that the examinations may not be proctored (Yang & Cornelious, 2005). To address this concern, instructors should utilize authentic forms of assessment. Mueller (2003) describes authentic assessment as "a form of assessment in which students are asked to perform real-world tasks that demonstrate meaningful application of essential knowledge and skills" (¶1). Yang and Cornelious (2005) also support this by suggesting that "a variety of performance assessments should be established by instructors for quality online instruction. These assessments should be aligned with course objectives and subject aims, and should enhance students' vocational and disciplinary skills" (p. 10).

Nonetheless, paper and pencil type exams that are prevalent in the traditional classroom, such as multiple-choice, true or false, or matching may still be valuable from a student perspective online; students can take the exams online to see if they are mastering the basic content and receive immediate feedback through the assessment tool. Instructors may even

utilize this approach in an open book fashion to ensure that the students have at least reviewed the fundamental concepts of the unit being studied.

Finally, Downey (2001) addresses the need to consider bandwidth capabilities and the desired rate of feedback when thinking about assessment (p. 14). Students that connect at slower bandwidths may experience difficulties depending upon the size and length of the exam. If this is the case, then another form of assessment would probably be considered or assignments could be sent to instructors through email as attachments.

Faculty Development and Training

Faculty development can be considered an important aspect of both the traditional and online realms. Instructors should possess the pedagogical skills that are necessary to help students achieve the desired outcomes of the course (Yang & Cornelious, 2005). Willis and Cifuentes (2005) examined this issue as instructors moved through an online or traditional training course; the extent to which instructors utilized technology in their classrooms after the training increased demonstrating that training is beneficial to both online and traditional delivery methods.

However, it is imperative that instructors receive training when moving from the traditional classroom to the online courseroom. Training should not only encompass technological skills, but changes that occur in the pedagogical delivery of course content. Downey (2001) suggests that online program planners often underestimate the importance of the training process; "this often overlooked aspect of online instructional programs is frequently a primary cause for program failures" (p. 16).

Since instruction in an online course occurs at a distance, the first training concern should be to ensure that instructors have the appropriate technological skills for teaching in this

environment. Yang and Cornelious (2005) propose that "in order to design and deliver effective online instruction, instructors should know what qualifications they must have. First, they need to upgrade their technical skills in order to keep abreast of technological developments" (p. 6).

Even though it is imperative for online instructors to possess the necessary technical skills, it is equally important that they be trained in pedagogical methods for delivering instruction in this format. "Instructors should understand that online education is not merely uploading teaching materials, receiving and sending email messages, and posting discussion topics to the Internet" (Yang & Cornelious, 2005, p. 7). Carroll-Barefield et al. (2005) also support this in stating that "creating online courses is not just a matter of dropping existing materials into an existing online environment" (§11).

To achieve this, training should be provided that addresses differences in online classroom management, alternative instructional methods, authentic assessment, developing online presentation style, online collaboration and interaction, as well as time management. Covington, Petherbridge, and Warren (2005) propose the use of peers in training and the development of online courses (§12). Through this approach, early adopters can help other colleagues from making similar mistakes when beginning to teach online.

Attendance

Attendance is one area that differs significantly between the face-to-face and online classrooms. Obviously, in the face-to-face environment you can see that the student is physically present. However, this does not guarantee that the student is mentally in attendance (Palooff & Pratt, 1999).

Unlike the physicality of the traditional setting, online instructors can only verify attendance by observing student participation through discussion forums and assignment

submissions. Therefore, it is possible to count the student as present if the assignments are being completed and turned in on time. However, instructors must pay careful attention to participation so they can identify as quickly as possible any signs of student distress.

Access to Student Population

Probably the biggest difference between face-to-face and online delivery methods is the population that can be included in each type of instruction. In order for students to participate in the face-to-face classroom, that is to actually be present, geographic limitations begin to present themselves. Students must reside in an area that they can physically drive, within reasonable time limits, to the actual campus for their classes. These classes are usually held on specific days and times which often present complications for non-traditional or graduate level students who often have outside responsibilities such as employment or families.

In the online environment, classes can be held synchronously or asynchronously without the travel commitments that are necessary in the face-to-face approach. This removal of travel and the necessity to be at a physical location at a specific time opens the doors for many students who cannot participate in a traditional form to strive for advancement or higher degrees (Willis & Cifuentes, 2005).

Not only does online learning improve the ability for students locally to participate, online courses open the classroom to the entire world, or at least to anyone that has access to an Internet connection. This global classroom allows for students from many countries, cultures, or races to share their thoughts and experiences while participating in the online classroom. "Web-based instruction (WBI) brings courses to individuals and groups who might not otherwise have access to them" (Willis & Cifuentes, 2005).

Proposed Steps for Online Course Conversion

As stated previously, many instructors fail to understand that there is a significant difference between the traditional face-to-face classroom and that of the online courseroom (Palloff & Pratt, 1999). Even though objectives and expected course outcomes may remain similar, the planning of instructional activities, creation of content and interaction between students and instructors take on new and different forms (Xiaoshi, 2000).

The following sections will provide general recommendations for the conversion of a traditional face-to-face course to a form that could be delivered in the online realm. These suggestions range from understanding the commitment of the institution, to the instructional design process, management considerations, and various other issues such as assessment. The proposed steps will be organized into three phases that address the course conversion process. Phase one relates to the course conversion process and will be examined in greater detail than phase two and three.

Finally, content management systems have gained increasing popularity in colleges and universities; therefore, these suggestions will be geared towards the use of a content management system such as Blackboard or WebCT.

Phase One: Vision, Support, and Planning

Before embarking on the journey of course conversion, instructors should investigate institutional support from various perspectives. Unless a distance program already exists at the institution and procedures are in place to guide this process, discussions should take place that include instructors, department chairs, colleagues, and the Dean or Provost. Through these discussions, instructors will identify the amount of support and the resources that will be made

available for this endeavor. It is also a good time to discuss how this course and the new delivery method fit in with university or departmental mission statements.

At the departmental level, instructors should examine their courses and their expected outcomes with colleagues to determine if they are appropriate for conversion (Palloff & Pratt, 1999, p. 72). The nature of the course content or processes that need to be addressed throughout the course will determine if it is feasible to begin the planning and preparation for course conversion.

Team Development. As mentioned earlier in this paper, it is possible to approach course conversion from the standpoint of single entity creation or a team design effort. Since the team approach is the preferred method for course conversion, design processes described herein will revolve around a team approach and the use of various experts in the development process. Nonetheless, instructors remain the “key players” in this process; however, team members will focus on specific responsibilities and are described in the following sections.

SUBJECT MATTER EXPERT

Instructors remain the integral members of the course conversion team, serving as Subject Matter Experts (SME). After all, instructors will be driving the delivery and execution of their finished products. In serving as the Subject Matter Expert, the instructor “identifies course needs, establishes the goals, objectives, instructional events, and readings, writes the course content, writes tests or quizzes if applicable, develops criteria for student evaluation, and reviews and approves all products developed by the design team” (Youngman et al., 2000). In the end, the instructor “maintains overall responsibility for the content and instructional strategies of a course” (Boettcher & Conrad, 1999).

INSTRUCTIONAL DESIGNER

The instructional designer should serve as the team leader for the conversion process (Youngman et al., 2000). It is ideal that instructors and the instructional designer work closely together in an effort to perform course needs analysis, task analysis, and instructional analysis (Youngman, et al., 2000). However, the instructional designer should take the lead in providing design guidance with respect to established learning theory. Boettcher and Conrad (1999) support this by stating that the instructional designer should “recommend instructional strategies, assessments, media tools, and course management techniques that will effectively meet the needs of the learner, the course goals, and performance objectives” (p. 50).

REFERENCE LIBRARIAN

Even though many online courses will choose to utilize a course textbook, reference librarians will help provide much needed assistance in finding appropriate alternative resources for the courseroom. Referred to as “content researcher” (Boettcher & Conrad, 1999, p. 50) or “content specialist” (Levy, 2003), the reference librarian should conduct searches for information that is based on the objectives that have been identified by instructors. When finished, instructors can evaluate the sources and choose which items will be utilized in content development.

If any issues arise with respect to copyright, the reference librarian is probably most knowledgeable in following the process to obtain the appropriate permissions. Since regulations for copyright differ from the traditional classroom, it is imperative that “the institution protect their interests while maintaining academic freedom for their instructors” (Levy, 2003, ¶31).

GRAPHIC DESIGNER

Since many online courses are textual in nature, graphic designers can help to create course content that is visually stimulating. By addressing the visual aspect of the course content

development process, issues of motivation and learning style may be addressed or at least improved.

The graphic designer may also serve as the “Multimedia Specialist” (Youngman et al., 2000). As technology grows and improves, the visual aspect of the course will most likely include forms of audio, video, and animated objects.

WEB DEVELOPER

The Web Developer assists in the creation of any original resources that need to be created in an html format. If instructors request that data or feedback be collected, the Web Developer will need to create the necessary pages and CGI scripting in order to accomplish this task. This may not be necessary as most content management systems have some form of statistical collection built into the application.

NETWORK SPECIALIST

The Network Specialist plays a vital part in the course conversion process. Several of the team members (i.e., Graphic Designer, Web Developer) may need to place files for the course on different network resources such as streaming or web servers. Folders need to be created and the appropriate permissions given so that content can be loaded and accessed in an efficient manner.

The Network Specialist may also be involved in the creation of faculty and student accounts for the content management system. If problems arise, the Network Specialist will need to be available for trouble shooting and technical support assistance.

Professional Development & Training. After the conversion team has been identified and responsibilities appropriately assigned, the Instructional Designer will need to begin the training process with the instructors. Even though individual instructors may be extremely intelligent and have been teaching for many years, training should be conducted to help ensure a successful

transition to the online classroom. Training should focus on identifying differences between the face-to-face classroom and the online courseroom, utilizing the various technologies that are available, and learning how to navigate, customize, and build the courseroom within the content management system.

Pedagogical Differences. Before beginning the course conversion process, instructors will need to understand the differences that exist between the face-to-face classroom and the online courseroom. It is advisable for the team to plan weekly or bi-weekly meetings well in advance of content creation so that issues may be identified and appropriate plans constructed.

Instructors and the Instructional Designer will need to focus heavily on the differences in communicating with students since there will be an absence of face-to-face contact. This communication will be an fundamental thread that runs throughout the entire course from announcements, to the writing of content, to the management of forum discussion questions. Clear, concise, and specific writing will help to minimize confusion or misunderstandings.

The delivery of course content in this environment will need to be addressed. As mentioned previously, the didactic approach tends to be very difficult in the online realm and is often discouraged. Therefore, the Instructional Designer may need to introduce constructivist ideas to instructors if they are not familiar with that epistemology.

The Design Process. When instructors have a grasp of the pedagogical differences that exist between the face-to-face classroom and the online courseroom, the actual design and conversion of the traditional course to the online format can begin. It is at this point in the project that attention must be given to aspects of the instructional design process. Considering that courses can be designed to focus on different epistemological considerations, these steps may

vary to some extent. “Although many models for course development are available, the major components are universal” (Miller, 2000, p. 778).

ANALYSIS

The Analysis component of the course conversion process should exist of at least two stages. Carroll-Barefield et al. (2005) suggests that the first step should involve “analysis of the curriculum to determine the appropriate conversion process and the design of a curriculum conversion plan” (¶13). It may be beneficial at this time for Instructors and the Instructional Designer to meet with other colleagues to brainstorm what content will need to be included, the activities to be developed, and the interactions that will be conducted in the courseroom: learner to content, learner to instructor, or learner to learner.

In addition to curricular concerns, consideration must be given to the analysis of the students that will be participating in the online course. What is the educational level of the students? What technological skills will they possess? What learning styles will the students bring to the courseroom? Spending time on these and other student issues may help to minimize the chances for difficulties when conducting the course.

OUTCOMES AND ASSESSMENT

Before converting or creating any new content, instructors should examine the course goals, objectives and outcomes. “As with any good course, an instructor needs to begin with the end in mind” (Palloff & Pratt, 1999, p. 88). This step is important because the aforementioned items may need to be modified due to the nature of the delivery platform. Nonetheless, instructors should consider “what should learners know, be able to do, or think about a particular topic at the end of the course” (Boettcher & Conrad, 1999, p. 54).

Established earlier in this paper, issues of assessment in the online courseroom are often debated due to the absence of a proctor during the examination. Therefore, when developing the course goals or objectives, instructors should evaluate the forms of assessment that can be utilized to determine if the learner has achieved the stated objectives or performances.

In achieving this, instructors should consider the use of authentic forms of assessment. By considering alternative forms of assessment, not only will issues of academic dishonesty be addressed, but students will be required to examine issues from higher levels of understanding. Palloff and Pratt (1999) add that “cheating on exams should not be a concern in an effective distance-learning environment because knowledge is acquired collaboratively through the development of a learning community” (p. 6).

CONTENT AND ACTIVITY DEVELOPMENT

Once again, it is important to reiterate that creating an online course does not simply mean uploading all traditional files to the course management system. However, instructors may want to revise the materials that are used in their traditional courses by rewriting content in a conversational tone. The content will also need to be very comprehensive because there will be no face-to-face discussion of the material; discussions usually take place in writing in the discussion forum section of the course. Liu (2004) supports this by stating that “providing clear instruction is the top issue in course design” (p. 1349).

However, this may be an optimal time to add new materials and resources to the course. “During the redesign of the course, it is a good idea to begin the search for digital and online resources as early as possible” (Boettcher & Conrad, 1999, p. 54). These new resources may determine or influence the design of instructional activities; therefore, it is advisable to identify them as early as possible in this phase.

After instructors have gathered and identified all of their content, they should work with the Instructional Designer to perform the essential task of designing the instructional activities. Initially, most courses will require learners to read and research specific concepts for the unit being covered; this activity is considered interaction between the learner and the content. If following a constructivist approach or designing based upon adult learning principles, a focus question or problem should be provided so that students have a guiding idea for their inquiry.

After reading and research has been conducted, a vital part of most online courses is the discussion of topics in the forum area of the courseroom. The forum provides an area for learners to discuss the concepts being studied while reflecting upon and sharing their own experiences.

In order to help the discussion develop, instructors should provide posting dates or expectations ahead of time. Students should post to the forum early in the week; this allows others to read the post and respond back to the author, creating the online dialogue. Since the discussion is not taking place in real-time, students have the ability to reflect, research, and compose postings that hopefully reach to deeper levels of understanding.

Additionally, to assist learners in focusing on key issues, instructors should develop rubrics (Carroll-Barefield et al., 2005) and upload them to the courseroom. These rubrics should identify the key objectives for the discussion forum as well as the qualitative and quantitative nature that will be used in the evaluation process.

Considering that discussion forums are generally asynchronous activities, instructors may consider utilizing some synchronous activities in the delivery of the course content. However, it is important to note that this will require the learners as well as instructors to be logged in to the courseroom at the same time. In order to conduct a successful synchronous activity, instructors

should plan ahead and have specific questions typed beforehand. Copying and pasting the questions into the chat tool will help to reduce the wait time that is produced by typing.

Furthermore, instructors will need to consider how to manage the synchronous activity. Most content management systems provide chat tools that allow instructors to control who can type at any given time. If learners wish to speak, they are required to click on an icon of a hand to simulate that they are raising their hand. If using this approach for the first time, it is generally a good idea for instructors to practice with colleagues before attempting a live session with their students.

Finally, collaborative activities can be very beneficial in the online courseroom. Some online programs design activities where students work together to research a specific course topic. After the topic has been examined, the collaborative group constructs a paper that is then presented to the rest of the class. Instructors can extend this activity by having the group write a series of questions on the topic, post them to a discussion forum, and then moderate the postings to that forum.

If instructors choose to utilize a collaborative activity, they should address the problem of getting started and the immediacy of responses. When beginning a collaborative effort in an asynchronous fashion, the identification of a topic and the division of labor may take several days to complete due to the nature of this type of communication. Therefore, instructors may suggest that students establish their topic and individual responsibilities synchronously and then switch to an asynchronous mode for individual reporting to the group.

MODULAR DEVELOPMENT

A goal of designing the online courseroom is to make the navigation as easy as possible (Carroll-Barefield et al., 2005). One way instructors can do this is by creating a series of modules

(Davis et al., 1999). The way the course materials and activities are developed and organized will help to reduce the technological barriers that can interfere with the learning process. If done in an appropriate manner, technology and the course management system should appear somewhat transparent to the user allowing them to focus on the concepts being studied. Liu (2004) suggests that “effective interface design will influence student learning and accessing information” (p. 1349).

In order to create this effective interface design, instructors can utilize the menu structure of a content management system. By customizing the links to reflect a period of time, such as Week 1, or a content name, all course materials for that week, or unit, can be placed in one location reducing the need to jump all over the courseroom.

Instructors may begin by creating an Introduction folder that presents a review of the previous week’s materials, presents the current week’s learning objectives, as well as an overview of the course content for the upcoming week. Since most online course syllabi consist of many pages, instructors may choose to present only the current week’s material in this folder.

After students have identified the week’s agenda, an Assignments folder should be created that explains in detail all of the expected requirements for the week. This folder should contain required readings, instructions for files or links to be examined, as well as discussion forum questions and their evaluation rubrics.

To continue the development process, instructors should create a Course Documents folder that will house all files that will support the concepts being presented throughout the week. In this location, students will be able to view tutorials, visit web links, or open topic related documents (Davis et al., 1999).

Finally, hyperlinks should be created in the weekly folder that will take learners directly to their discussion forums. Creating direct links helps reduce the number of clicks that a student must perform while giving them easy access to the desired location.

Phase Two: Implementation

It is important to state that before beginning the implementation or delivery phase, instructors should have all course materials and activities created and loaded to the online course module (Youngman et al., 2003). With this accomplished, instructors can focus on facilitating the learning process and interacting with learners in the course forums.

Prior to the beginning of the online course, it is a good idea for instructors to send an email to the students (Carroll-Barefield et al., 2005) welcoming them and inviting them to explore the courseroom. At this time, instructors can introduce expectations, etiquette, and avenues for obtaining support throughout the duration of the course.

Furthermore, at the beginning of the Implementation phase, the design team should focus on the following issues: orientation, documentation, and communication and support.

Student Orientation. One way the institution can support instructors and their students is to create an online orientation module. Removing any technological barriers prior to the start of an online course is optimal. Therefore, an online orientation should be developed to help students become comfortable with navigating the courseroom and performing some of the basic tasks necessary for successful course completion. Levy (2003) supports the need for orientation by stating that “Students that are not prepared for the online environment can have a negative impact on other students and the instructor in the online classroom” (¶23).

Communication and Support. During the implementation phase, it is a good idea if instructors communicate on a regular basis with the conversion team. If possible, periodic team meetings may be held to assess any issues that may need to be addressed immediately.

Documentation. As with most first attempts in any project, modifications and additions will probably be necessary. The conversion of a traditional course to the online format is no exception. In order to assist in the revision of the course after it has been delivered the first time, instructors should keep a journal, or documentation, of items that will need to be added, revised, or deleted.

Phase Three: Evaluation

At the conclusion of the course, instructors should reconvene with the design team to evaluate the pros and cons of their development efforts. “Evaluation is one of the most important steps in the move to the Web. Although you have carefully planned the course, you will no doubt want to change some features after seeing the course components in action” (Boettcher & Conrad, 1999, p. 57). To achieve this several avenues should be examined.

First, the team should explore the comments that were submitted by the students through the course evaluation tool. While reading through student comments, issues may begin to arise, such as the need for improved feedback or easier course navigation.

After student comments are considered, instructors should share the documentation that they have collected during the implementation of their courses. It is often hard to think back and remember all of the issues that may have arisen during course delivery, so the journal should prove to be extremely valuable.

After considering all suggestions, a list of key issues should be created. Finally, the course conversion process should be carried out once again from the beginning addressing the areas that have been identified.

Summary

In summary, the Internet and advances in educational technologies are paving the way for the expansion of online learning. As this occurs, instructors are facing the necessity to transform their traditional face-to-face courses to the online delivery format. In doing so, instructors should realize that online courses need to be redesigned to meet the needs of learners who will not share the same physical location that they have become accustomed to in the past. To accomplish this, instructors must understand that differences exist between the delivery of the traditional face-to-face course and the online course.

In order to ensure the proper conversion of the traditional course to the online format, development teams should be created that consist of experts for each component of the design process (Downey, 2001). The development team could consist of instructors, or Subject Matter Experts, an Instructional Designer, Reference Librarian, Graphic Designer, Web Developer, and a Network Specialist. After the team has been assembled, the conversion process can be broken into three phases. Phase one addresses the creation of a vision and planning process; this phase also includes the instructional design process that culminates with the creation of the online course. Phase two consists of the implementation of the online course while phase three addresses the evaluation of phase one and two for redesign before the second iteration of the course.

In conclusion, many differences exist between the traditional face-to-face classroom and the online courseroom. Courses cannot simply be created by uploading traditional content into an

online content management system. The conversion requires an understanding of how students will communicate, collaborate, and learn online. If appropriate attention is given to the training of instructors and the instructional design process, the online courseroom can provide a stimulating and rewarding vehicle in the pursuit of learning.

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