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Abstract

Teaching in the cyberspace classroom requires that we move beyond old models of pedagogy into new practices that are more facilitative. Teaching in cyberspace involves much more than simply taking old models of pedagogy and transferring them to a different medium. Unlike the face-to-face classroom, in online distance education, attention needs to be paid to the development of a sense of community within the group of participants in order for the learning process to be successful.
Entering the Online Classroom

Colleges and universities today are in transition. Factors contributing to that transition are economic pressures from mounting costs, demands by the business world for graduates who are able to function in a knowledge society, and greater diversity among students who choose to go on for higher education (Palloff and Pratt, 1999, p.3).

"Universities are feeling the pressure to control costs, improve quality, focus directly on customer needs, and respond to competitive pressures. Information technology (IT) has the potential to solve many of these problems. It can change the roles of students and faculty, facilitate more learner-centered, personalized education, save money through improved business processes and distance education, and expand the scope and content of the curriculum (Horgan, 1998, p.1)."

The response of many institutions to these changes is the development of online distance learning courses and programs. These courses and programs can take many forms including: The creation of a static course on a website which students can access at any time (or course conversion), but which includes minimal interaction among the learners; the development of a course site involving the use of asynchronous discussion as the basis for teaching and learning; and other technological advances such as synchronous chat and streaming audio and video. The more that instructors involve their students in the learning process online, however, the more likely that students will achieve a successful learning outcome. Our preference is for asynchronous learning environments in which students can read material and post to discussions on their own time schedules. The asynchronous environment allows students the luxury of time for thought and reflection on material, which we believe enhances the learning process.

The online classroom is a potentially powerful teaching and learning arena in which new practices and new relationships can make significant contributions to learning. In order to successfully navigate the power of this medium in education, faculty must be trained not only to use technology, but also to shift the ways in which they organize and deliver material. This shift can maximize the potential for learners to take charge of their own learning process and can facilitate the development of a sense of community among the learners.

The shift to online learning poses enormous challenges to instructors and their institutions. Many faculty and administrators believe that the cyberspace classroom is no different from the face-to-face classroom and that approaches used face-to-face will surely work online. Many further believe that all that is needed to successfully teach online is to "convert" the course material. We believe, however, that when the only connections we have to our students is through words on a screen, we must pay attention to many issues that we take for granted in the face-to-face classroom (Palloff and Pratt, 1999, p.xiv). It is our best practices that must follow us into the cyberspace classroom and those practices are the basis for what we term "electronic pedagogy," or the art of teaching online.
Keys to Success

The transition to the cyberspace classroom can be successfully achieved if attention is paid to several key areas. They are: Ensuring access to and familiarity with the technology in use; establishing guidelines and procedures which are relatively loose and free-flowing, and generated with significant input from participants; striving to achieve maximum participation and "buy-in" from the participants; promoting collaborative learning; and creating a double or triple loop in the learning process to enable participants to reflect on their learning process. All of these practices significantly contribute to the development of an online learning community, a powerful tool for enhancing the learning experience. Each of these will now be reviewed in more detail.

Access to and Familiarity with Technology

Many institutions mistakenly believe that all it takes to implement an online distance learning program is to install a fancy software package and train faculty to use it. Certainly, an instructor needs to be knowledgeable about the technology in use and comfortable enough with it to assist a student should difficulty be encountered. An instructor should also be able to construct a course site that is easy for students to access and use (Palloff and Pratt, 1999, p.59). However, the instructor's responsibility must not end there. "Technology does not teach students; effective teachers do (Whitesel, 1998, p.1)." The issue, then, is not the technology itself, but how we use it in the design and delivery of online courses.

A related and important issue is our students' ability to access the course site and successfully navigate it. The most visually appealing course, complete with audio, video, and chat is useless if a student is utilizing old hardware or is living in a remote area with limited Internet access. Consequently, the software used for course delivery should be:

- Functional (i.e., it does what we need it to do which is to facilitate teaching online)
- Simple to operate for both faculty and students
- User-friendly, visually appealing, and easy to navigate (Palloff and Pratt, 1999, p.68)

Establishing Guidelines and Procedures
An important beginning to an online course is the presentation of clear guidelines for participation in the class as well as information for students about course expectations and procedures. Guidelines are generally presented along with the syllabus and a course outline as a means of creating some structure around the course.

Guidelines, however, should not be too rigid and should contain room for discussion and negotiation. "Imposed guidelines that are too rigid will constrain discussion, causing participants to worry about the nature of their posts rather than to simply post (Palloff and Pratt, p.18)."

It is useful to use the guidelines as a first discussion item in a class. This facilitates students in taking responsibility for the way they will engage in the course and with one another, and serves to promote collaboration in the learning process.

**Achieving Maximum Participation**

Participation guidelines in an online course are critical to its successful outcome. As online instructors, however, we cannot make the assumption that if we establish minimum participation guidelines of two posts per week, for example, that students will understand what that means. We must also include expectations about what it means to post to an online course discussion. "A post involves more than visiting the course site to check in and say hello. A post is considered to be a substantive contribution to the discussion wherein a student either comments on other posts or begins a new topic (Palloff and Pratt, p.100)."

In addition to being clear about expectations for participation, the following are some suggestions that we have found will enhance participation in an online course:

- Be clear about how much time the course will require of students to eliminate potential misunderstandings about course demands.
- As the instructor, be a model of good participation by logging on frequently and contributing to the discussion.
- Be willing to step in and set limits if participation wanes or if the conversation is headed in the wrong direction.
- Remember that there are people attached to the words on the screen. Be willing to contact students who are not participating and invite them in. Create a warm and inviting atmosphere which promotes the development of a sense of community among the participants (Palloff and Pratt, p.107).
The incorporation of these suggestions into the development of an online course can assist in the promotion of collaborative learning, potentially contributing to stronger learning outcomes.

Promoting Collaboration

Collaborative learning processes assist students to achieve deeper levels of knowledge generation through the creation of shared goals, shared exploration, and a shared process of meaning-making. Jonassen et al (1995), note that the outcome of collaborative learning processes includes personal meaning-making and the social construction of knowledge and meaning. Stephen Brookfield (1995), describes what he terms "new paradigm teachers" who are willing to engage in and facilitate collaborative processes by promoting initiative on the part of the learners, creativity, critical thinking, and dialogue.

Given the separation by time and distance of the learners from one another and from the instructor, and given the discussion-based nature of these courses, the online learning environment is the type of learning arena that, "(a) lets a group of students formulate a shared goal for their learning process, (b) allows the students to use personal motivating problems, (c) takes dialogue as the fundamental way of inquiry (Christiensen and Dirkink-Holmfield, 1995, p.1)."

Engagement in a collaborative learning process forms the foundation of a learning community. When collaboration is not encouraged, participation in the online course is generally low and may take the form of queries to the instructor, rather than dialogue and feedback.

Promoting Reflection

When students are learning collaboratively, reflection on the learning process is inherent. Additionally, when students are learning collaboratively online, reflections on the contribution of technology to the learning process are almost inevitable. "The learning process, then, involves self-reflection on the knowledge acquired about the course, about how learning occurs electronically, about the technology itself, and about how the user has been transformed by their new-found relationships with the machine, the software, the learning process, and the other participants (Palloff and Pratt, p.62)."

The construction of a course that allows these naturally occurring processes to unfold greatly enhances the learning outcome and the process of community building. It is more than reflection on the meaning and importance of course material. The reflection process transforms a participant in an online course from a student to a reflective practitioner and hopefully sets in motion the potential for lifelong reflective
learning. Purposeful facilitation of this process involves incorporating the following questions into a course:

- How were you as a learner before you came into this course?
- How have you changed?
- How do you anticipate this will effect your learning in the future? (Palloff and Pratt, p.140)

The reflective process embedded in online learning is one of its hallmarks and most exciting features. If an instructor is willing to give up control of the learning process and truly act as a facilitator, he or she may be amazed at the depth of engagement with learning and the material that can occur as a result.

**The Final Transition: Evaluation of Students and Ourselves**

Harasim et al (1996), state, "In keep with a learner-centered approach, evaluation and assessment should be part of the learning-teaching process, embedded in class activities and in the interactions between learners and between learners and teachers (p.167)."

In the spirit of collaboration and reflection, evaluation of student progress and performance should not fall to the instructor alone. Students should be encouraged to comment on each other's work. Self-evaluation should be embedded in performance evaluation. Quality and quantity of participation should be a measure of overall student performance. Examination may not be the best measure of student performance in the online environment. In a truly collaborative learning process, concerns about cheating become irrelevant.

Making the transition to the online learning environment means developing new approaches to education and new skills in its delivery. It means engaging in self-reflection as instructors to determine our own comfort level in turning over control of the learning process to our students. It means promoting a sense of community among our students to enhance their learning process. But, most of all, it means abdicating our tried and true techniques that may have served us well in the face-to-face classroom in favor of experimentation with new techniques and assumptions. In so doing, we will meet the challenges of preparing our students to navigate the demands of a knowledge society and, in the process, learn something new ourselves, thus supporting our own quests for lifelong learning.

**References**


