Faculty Competencies and Incentives for Teaching in E-Learning Environments

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INTRODUCTION

In 2001, Michele Bunn offered her readers *timeless* and *timely* issues in distance education. There were predictions that virtual universities would shift from a teacher-centered to a student-centered learning environment. Although emerging technologies have allowed for more student-centered approaches, university instructors remain a key factor in the success or failure of distance education efforts in university settings. Shifts in technological advances over the past five years have made the term "distance education" less accurate. Learners are not necessarily located away from campuses, but instead choose the flexibility to learn asynchronously. Therefore, we will use the term e-learning, rather than distance education.

Timeless issues impacting e-learning typically include the core values of universities in regard to strategic planning, faculty competence, and incentives. Administrative decision-making determines relevant *timely* issues that tend to fall into three categories: (1) student-related issues, (2) instructional issues, and (3) organizational issues (Bunn, 2001). These three areas will frame our discussion.

BACKGROUND

The research on distance education faculty participation in the 1990s focused on the need to provide appropriate technological infrastructure, faculty training, and support for course development efforts. Enhancing faculty participation required that resources be directed to adequate levels of support and training so that instructional technologies were used for the benefit of students (Howard, Schenk, & Discenza, 2004).

While faculty recognized the potential of technology-enhanced instruction, intervention strategies were necessary to alter how people perceived and reacted to distance education technologies. Incentives such as release time, mini-grants, continuing education stipends, and recognition in the promotion and tenure process, were recommended to encourage faculty participation (Dooley & Murphrey, 2000; Murphrey & Dooley, 2000).

Today, technological infrastructure at universities is often in place. Many universities now include wireless technology and require students to come to the university armed with their own laptops and technological skills. Similarly, many faculty enter the profession equipped with technological competence. The need for training and support, while still important to some, has become replaced by the need to locate the appropriate resource personnel to create advanced multimedia. University instructors continue to want incentives to participate in e-learning due to the time and effort required to participate effectively. Most importantly, time and effort spent on e-learning activities is time diverted from scholarly work in research and the development of new knowledge. In addition, many faculty often lack the mechanics of how online teaching differs from lecture in terms of instructional material development, communication channels, interactions, and more authentic forms of assessment.

STUDENT-RELATED ISSUES

According to Bunn (2001), timeless student-related issues for e-learning incorporate the "policies and practices that define how students are treated in the administrative system. These timeless issues include the basic approaches to recruitment, enrollment, retention, and graduation" (p. 58).

Students are viewed as clients or customers with choices for their courses and programs. The view of a student as a customer poses a timely issue in regard to student-centered instructional design and delivery.

E-learning draws on the ability of learners to be self-directed, thus, incorporating adult learning principles (andragogy) in the design and delivery of content (Richards, Dooley, & Lindner, 2004). Andragogy is based on the following six assumptions about the learner: (1) learner's need to know; (2) self-concept of the learner; (3) prior experience of the learner; (4) readiness to learn; (5) orientation to learning; and (6) motivation to learn (Knowles, Holton, & Swanson, 1998).

Educators, who put their interests and needs (intentional or unintentional) over those of the learners, restrict meaningful learning. The ultimate goal of an educator should be to facilitate learning (Leamnson, 1999). This will require the educator to be a teacher, coach, mentor, facilitator, motivator, and/or authoritarian depending on the learners' personal characteristics.

Developing learning activities that require learners to draw on and share their prior experiences facilitates deeper and more meaningful learning. Noted philosopher, educator, and author, John Dewey (1938) stated that the education process begins with experience and that "all genuine education come about through experience" (p. 13). For example, learner-led threaded discussion groups can be used to help learners think about how course materials can be used in various contexts.

It is necessary for the educator to maintain a sense of community regardless of where the learning takes place. While this is readily accomplished in a classroom setting, it requires more planning and effort for e-learning courses (Brown, 2001). Grow (1991) theorized that in asynchronously delivered courses, an educator's traditional role of providing feedback is less important than the role of motivator, coach, or delegator, implying that the instructor must establish a learning climate. Effective learning seems to require student engagement (Kearsley & Shneiderman, 1999). However, instructor behaviors alone cannot determine student success rate. Success is at least partially controlled by student behavior. Previous research has shown, for example, that length of engagement in an asynchronously delivered course was positively related to a student's perception of learning (Lindner, Hynes, Murphy, Dooley, & Buford, 2003).

Learners can be successful in a variety of settings, and few, if any, differences in performance will be identified based on delivery method. While the delivery method may not impact success, delivery strategies do. Delivery strategies can be defined as those methods used to engage students in the instructional materials. It can be argued that through various interactions, engagement results in learning—not grades (Merrow, 2003). Moore (1989) developed a model for

Figure 1. Vicarious interaction (Based on Hillman, Willis, & Gunawardena, 1994; Moore, 1989)

Interactions Facilitate Learning and
Promote Self-Directedness
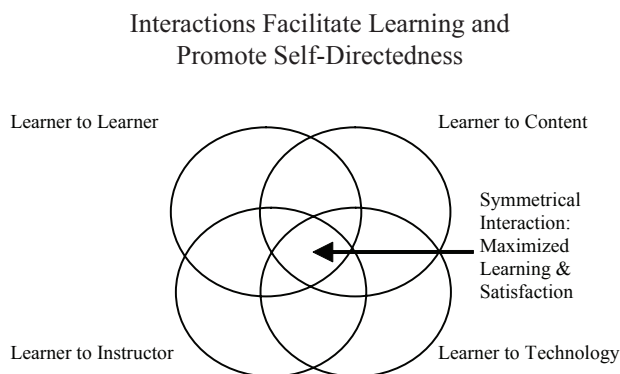
describing interactions used to engage learners in a distance education environment. His model included three types of interaction: (1) learner to learner; (2) learner to content; and (3) learner to instructor. Hillman, Willis, and Gunawardena (1994) expanded this model to include an additional type of interaction: learner to technology (interface). Zhang and Fulford (1994) expanded the model yet again to include vicarious interaction. Vicarious interaction captures the value to a learner of the interactions between others in the learning environment—the learning benefits of watching, reading, (or listening to) others interact. Discussion boards, for instance, are said to encourage vicarious interaction. Vicarious interaction contributes to overall perceived interaction, learner satisfaction, and quite possibly learning (Kawachi, 2003; Swan, 2004).

Figure 1 illustrates the interconnectedness among the types of interactions. To maximize learning and increase satisfaction in e-learning environments, opportunities for learner to learner, learner to content, learner to instructor, and learner to technology interactions should be included, and vicarious interaction should be encouraged. The authors believe that students will self-select the amount of each type of interaction necessary to maximize their learning and satisfaction. This individually balanced or "symmetrical" selection of interaction opportunities should facilitate deeper and more meaningful learning, increase overall learning satisfaction, and promote self-directedness among learners. The challenge for faculty members is to remain up-to-date with the ever-increasing range of technologies developed to support the various types of interaction. Acquiring the knowledge needed for the systematic selection of these tools into an instructional design, as well as the skills needed for their day-to-day management in instructional settings, presents tremendous challenges for faculty members.

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