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A BRIEF EXAMINATION OF ONLINE LEARNING

By Jeffrey Bathe

The recent growth of online course offerings has progressed in a similar fashion to this country's westward expansion during the 19th century— at a rapid pace without regard to all of the real and potential consequences. This is especially troubling since there are many more casualties (e.g., withdrawn and failing students) than with traditional methods of education (Bathe, 2001a). However, with caution and examination of the processes at the student, faculty and administrative levels, there are opportunities to effectively use online teaching technology while avoiding pitfalls and maximizing student success.

After consideration of anecdotal reports on alternative learning at area community colleges, I determined that the following areas merited further study: the role of online learning; faculty concerns and training; administrative/institutional issues; and student attitudes and performance.

Issues Related to Online Learning

Online Courses as an Educational Tool

Despite all of the media hype and discussion, Milliron and Miles (1999) reported that the Internet has not changed what works in education; instead it has enabled further development of these concepts. According to Milliron (1999), Internet-based methods can be used to improve and expand learning opportunities as demonstrated by innovative instructors who are embracing both modern and traditional strategies to create a hybrid learning environment. For example, a psychology course may blend interactive television, online discussion and course CD-ROMs with applied problem-solving situations to enhance learning.

Use of the Technology

The use of technology in educational environments has been expanding in recent years. According to Green (2000) and The Campus Computing Study (CCS), more than 55% of courses use e-mail as a communication tool. The CCS study also showed that over 40% of courses utilize Internet resources (e.g., web-enhanced and online). One reason for the increase is the range of potential uses. Black (1998) noted that online learning can provide for asynchronous collaborative learning and self-paced learning, as well as synchronous communication.

However, with the use of technology there is a cost. Kilian (1997) reported that it is not cheaper or easier to teach online, that it is not for everyone, and that is does not provide for the nonverbal communication that some faculty see as essential.

Kerka (1996) reported that "learning at a distance can be both isolating and highly interactive." A major challenge is the lack of non-verbal cues; however Kerka (1996) argues that the development of communication protocols can assist in developing relationships. In fact, online courses can provide new opportunities for collaboration leading to the expansion of social skills.

Digital Divide

De los Santos and de los Santos (2000) argue that community college students need access to the tools that allow them to critically evaluate the mass of information that is available. A 1999 National Telecommunications and Information Administration report discusses inequities in students' ability to do this, given the fact that over 75% of households with incomes over

$75,000 have at least one computer, as compared with less than 32% of households with incomes between $25,000 and $35,000 (de los Santos & de los Santos, 2000). To further compound the problem, those with lower incomes have even less access.

The presence of a racial/ethnic divide is particularly evident in the income gap, as illustrated by the fact that in households earning between $15,000 and $35,000 a year, 32% of whites owned computers, while only 19% of blacks and Hispanics did so. This margin had grown 8% over a five-year span, showing a potential worsening of the problem. (Guessoum, 2000)

Faculty Issues

Changing Faculty Roles

Online education is actually changing the role of teaching staff. Roe (2001) reports that some faculty members are concerned about administrative pressure to incorporate technology into their courses. Kilian (1997) suggests that if there is going to be real online access, there is a need to avoid rushing into ill-conceived projects that lack the planning and support needed to be successful.

The instructor is still the content expert in the online instructional model. However, unless the instructor is also technically skilled, there is a need for the assistance of others. No matter how good the quality of the content and design, a course cannot be delivered without the correct use of technology. This can be problematic for some faculty, since working with someone outside of their discipline can be seen as a challenging experience (Meyen et al 1999).

In preparation to teach online, faculty need to develop specific competencies, including the ability to utilize e-mail, send attachments, understand presentation software, and ideally, experience teaching in a technology-assisted class (Gellman-Danley, 2000). Bathe (2001b) reported that having experiences using technology in teaching prior to undertaking online instruction is essential to success. He found that faculty with this background had a clearer understanding of the time commitment involved with online teaching, and were better prepared to design quality coursework (Bathe, 2001b).

Faculty Workload and Compensation

As the role of faculty changes due to the utilization of this technology, the way that faculty workload and compensation are computed needs to be re-examined (Allison & Scott, 1998). Stocker (2001) argues that the potentially negative impact on students and the loss of human relations are among the concerns that faculty have in relation to technology. In addition, time constraints and preference for traditional methods are also factors inhibiting participation (Betts, 1998). Faculty interest might be expected to increase if there were more information available about the format and if ample training opportunities were provided. Finally, financial incentives and release time were deemed essential in encouraging participation.

Faculty Satisfaction with Online Teaching

Betts (1998) reported that reasons for faculty satisfaction with distance education included an ability to reach new audiences, the opportunity to develop new ideas, and were also associated with personal motivation to use the technology. In addition, some faculty saw learning new skills as an intellectual challenge and used it to improve their own job satisfaction. Inman et al. (1999) found that the more experience instructors had in the traditional classroom, the less initial satisfaction they experienced in an alternative format.

Administrative Issues

Pressure to Go Online

With the push for the use of technology in teaching and learning, pressure is placed upon community colleges to stay current in their offerings. Administrators need to remain aware that there is no one way to approach the expansion into the online environment, and at the same time be cognizant of successes and failures at neighboring institutions. It is important to plan for change in these arenas with input from the faculty and support staff in order to ensure that there is effective use of the technology and that it promotes student and faculty learning and fulfillment.

Financial Considerations

To fully implement these initiatives, administrators need to make available incentives for faculty and to provide information about the benefits of the format (Betts, 1998). Also, faculty already involved with distance education need encouragement to promote the format and to serve as a resource for those getting started in the effort.

Villadsen et al. (2000) stressed the importance of administrators providing training and professional development opportunities for faculty in addition to monetary incentives. During an era of tightening budgets, this is difficult, but still critical to ensure faculty support and their attainment of critical skills.

There have been concerns about the costs of providing online instruction, but Berg (2000) has found that 90% of distance learning programs are profitable. Whereas the majority of these programs are making profits at rates of less than 30% (61%), there are other groups that are making 31- 50% (13%) and greater than 50% (13%). This profitability results in large measure from the reduced space requirements, and to the flat-fee structures for many course management systems. While the upfront cost related to the development of the online infrastructure can be substantial, the potential benefits and long-term cost reductions generally justify the expense.

Student Issues

Performance and Preferences

Reports indicate that increasing numbers of students are learning online (McClenney, 1998). Research has shown that students perform as well or better in courses that are multimedia-based when compared with those receiving instruction in similar lower-division university courses (e.g., Erwin & Reippi, 1999; and Hurlburt, 2001). However, despite some advantages of online courses (including the opportunity to review course materials and independent learning), Hurlburt (2001) reported that students thought that the traditional course was a better experience.

Hurlburt's view is supported by other studies. For example, Davies and Mendenhall (1998) reported that 57% of students who participated in online lessons preferred the classroom experience. This was attributed to the social aspects of the class and/or to students' better ability to remember materials that were presented orally. Those students that preferred the online experience stated that flexibility was a key factor.

Fredericksen, Pelz, and Swan (2000) reported that the quality of interaction with the instructor is the most significant contributor to a student's perception of learning. Further, Fredericksen et al. (2000) found that students who had high levels of satisfaction with the help desk had higher levels of learning than those with lower satisfaction.

Summary

If handled properly, online instruction can expand learning opportunities and the skills of learners taking these courses. If faculty are allowed to take advantage of training opportunities at their own institutions or those provided by state-wide organizations, such as the Illinois Online Network, they will have a broader understanding of the technology and build better relationships with those who are most important in this discussion, the students.

Administrators have many issues to address in this rapidly changing environment. Providing financial resources for training, materials, and faculty compensation, in a time when resources are scarce offers a challenge. While not all students benefit from the new learning modalities, it clearly meets the needs of many. Such advantages as flexibility of time and place and varied learning formats make online learning an educational experience that will be valued by many students in the coming years.

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