
Reflections on Teaching Health Education via the Web

By

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In California, as elsewhere, institutions of higher education have attempted to provide access to traditional students, as well as to previously unserved and underserved student populations. According to the California State Governor's Office, in the next decade, California colleges and universities can expect a 40% increase in enrollment. This more than doubles the expected enrollment increases of any other state. As these new students flood the educational arena, student access may be hindered as educational facility construction lags behind student growth. Distance learning programs have already been proffered as one solution to the burgeoning student population.

New technologies have appeared on the academic scene bringing with them a multitude of unique teaching and learning opportunities. International Data Corporation (IDC) has projected that, "the number of college students enrolled in distance-learning courses will reach 2.2 million in 2002, up from 710,000 in 1998." This amounts to a growth rate of 33% annually. IDC also predicts that 85% of two-year, and 84% of four-year colleges will offer distance learning courses in 2002; up from 58%, and 62%, respectively.

Distance Health Education via the Web

Health education is one of the disciplines that can benefit from the breadth and currency of information to be found on the WWW. Traditional health education classes

have historically suffered from two main problems: 1) providing up-to-date information and, 2) providing individualized health recommendations.

Currency is critical to health education since the health field is dynamic and changes daily. The volume of current research in health is staggering and the need to update one's knowledge of health areas is a constant concern of the health educator. Health textbooks, by the time they are published, are flawed by outdated information. One of the instructor's roles is to supplement the textbook by providing relevant and up-to-date information in the classroom setting. The WWW can aid and abet this process. The Web includes sites that are maintained and updated by organizations that specialize in the various health disciplines. Nearly every major health organization and association has a web-presence. Not only is health information accurate and up-to-date, it is also comprehensive and provided by specialists in the given field who are better equipped for the task of disseminating timely health information.

While health educators are in the business of making healthy recommendations to students, these recommendations are usually generic and therefore often inappropriate to the individual. However, on the WWW, there are numerous health-related databases that allow students to enter their own personal information and receive health recommendations that are individualized. These health databases can be found in every topic area from nutrition analysis to coronary-risk profiles. This kind of interactivity can supplement in-class presentations and provide a more individualized approach to health delivery. Besides supplementing in-class materials, the WWW can also be used to deliver course content. For students who have geographical, financial, time schedule or other barriers to education, distance education may serve as a viable solution.

Distance Education Research

My own doctoral studies have provided me the opportunity to investigate the efficacy of online courses. I chose to address three problems. First, since current adult learning theory promotes a learner-centered view of education, instructors need to assess student characteristics so they might adapt their teaching methods to the learning preferences of their students. I selected such characteristics as GPA, ethnicity, course load, units completed, and age, and compared these characteristics for online health education ($N = 96$), all-health ($N = 585$), and all-campus ($N = 9156$) students. I also compared the learning style differences between my online classes and a traditionally taught comparison group ($N = 135$). Second, since there existed no clear evidence that students who enrolled into online classes were as successful as students in traditional classes, I chose to compare the success rates of traditional and online groups using four criteria: exam scores, class grades, attrition, and satisfaction. Third, there was a need to better advise faculty and prospective online students of the characteristics suggestive of success in an online mode. Academically successful (grade of "C" or better), and academically non-successful (grade of "D," "F," or "W") students were profiled using selected demographics, questionnaire data, and learning styles.

Thus, the purpose of my dissertation was to identify unique characteristics of online students, evaluate the success of online students compared to on-campus students, and to identify characteristics suggestive of student success. The goal was to minimize the likelihood of future academic non-success in online health students.

The results showed that students enrolled in the online health education classes were older, more academically experienced, and had a current course load not typical of

a full-time (i.e., 12-15 units) student. Online classes had a higher percentage of the ethnic majority (White), and more female students, when compared to all-health and all-campus groups. Online students tended to be more independent and less dependent in their styles of learning. Students enrolled in the online classes were at least as successful (and often more successful) as the on-campus students when success was measured by exam scores, obtaining a grade of "C" or better, and by student satisfaction. However, online students dropped out of online classes nearly twice as often as equivalent on-campus students, thus online course enrollment represented a real risk for students who were not adequately prepared, or whose profile did not match that of the successful online student. Finally, successful online students exhibited an average prior college GPA of 3.02, and displayed strongly independent learning styles. Thus, if a student has proven to be successful in the past, chances are good that (s)he will also perform well in an online class. This is especially true if the student can be described as a "strongly independent" learner. That is, if they match the archetype of the independent learner in terms of autonomy and the ability to be self-directed.

Conclusion

Distance education will clearly play an important role in the future of higher education. As increasing student enrollment threatens to overfill educational facilities, online education is poised to meet student needs for access. I have no regrets in choosing to teach my health education classes in an online format. Using the WWW to supplement health instruction, or as a primary vehicle for health content delivery, can be a rewarding experience for both the student and the instructor. The breadth and currency of the WWW can be a boon to the health educator in supplementing in-class lectures, discussion, and activities. Careful planning and the appropriate and innovative use of

technologies can solve many of the problems associated with distance education, and satisfactorily meet the special needs of students in the 21st century.