Developing and Implementing an Online Nursing Course

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Abstract

Many basic nursing education programs prepare their graduates to care for a limited number of patients in hospital settings. However, the current trend is to deliver more health care to various community settings (Hunt, 1998). Though computer training is often not provided in nursing programs, nurses practicing in these alternate community settings are feeling an increasing demand for computer skills. Today, even the nursing licensure examination is administered by computers.

In addition, with the tremendous expansion of health information and knowledge, much of the content presented in nursing programs becomes outdated quickly. Staying current is vital for the nursing professional. This may be accomplished through continuing education and pursuing advanced degrees. Since full-time practitioners have little time and often-inflexible schedules, the demand for continued education is hard for them to meet.

Instructional uses of the computer are important and may help to address these issues. Many programs have been developed worldwide offering courses partially or completely via computer mediated communications (CMC) (Harasim, Hiltz, Teles & Turoff, 1995). Others have taken CMC a step further, offering classes online that can be taken at a distance. Nursing education is beginning to move in the direction of distance education. This article describes development and results of utilizing WebCT's online delivery software, to manage a virtual classroom for a nursing course.

Introduction

More than ever, nursing education programs need to introduce or expand basic computer skills. Providing computer education increases access to information and advanced degrees, facilitates the teaching/learning process, decreases anxiety associated with computer use, and enhances job skills.

Two significant difficulties face our nursing students at the State University of West Georgia: time and distance. This is especially true of the non-traditional student. Most have full-time positions in health care facilities (with varied work schedules) along with family responsibilities. These students are highly motivated adult learners; they want to attain the best education possible but have little time to spend driving to classes and clinical. Among the different strategies that were examined to help minimize the time and distance factors, online course delivery was determined to be the optimal choice.

Theoretical Basis

Theories provide direction and guidance for structuring professional nursing practice, education, and research (Kozier, Erb, & Blais, 1997). Investigating the theoretical basis for online education was also important. The work of Otto Peters (Moore & Kearsley, 1996), Desmond Keegan (Keegan, 1998), and Michael Moore (Moore & Kearsley, 1996) was researched. Each offered various degrees of insight into the creation of courses, and the successful behaviors of teachers and learners.

Another aspect to consider was the appropriateness of forcing traditional teaching/learning paradigms into this new medium. To help address this concern, the Miller/ Padgett model of efficient and effective distance education was used (Miller & Padgett, 1998). This model depicts the various dimensions of the conditions both inherently found and needed in a successful distance learning environment. It is three-dimensional model that addresses place, group size, and time. Portions of the distance learning environment take place in real time (synchronous) and portions take place at students' discretion (asynchronous). With the help of this model, Contemporary Issues in Nursing was redesigned to meet the needs of the distance learner.

Course Description

For this course, the students were registered nurses in the Bachelor of Science in Nursing program at UWG. Enrollment was limited to 12 students, all of which had access to a computer with Internet capabilities. Their self-described level of experience ranged from novice to knowledgeable. Those new to the online environment were unsure about how they are supposed to behave, and need clear guidelines about what was expected of them in online discussions. For this reason, a section on Netiquette was added to the course materials.

Contemporary Issues in Nursing, a required course, provides the student with the opportunity to explore professional issues and human values related to contemporary nursing practice. The learning goals included the following:

1. To create a virtual classroom environment in which values, opinions, and ideas are expressed and acknowledged in a caring manner.

2. To examine sociocultural factors influencing health/illness behavior and health care delivery.

3. To utilize systematic methods to resolve value conflicts and moral/ethical dilemmas.

4. To consider the relationship of scientific and technological advancements to decision-making.

Teaching strategies included (but were not limited to) selected readings, online asynchronous and synchronous classroom discussion, research, guest and student presentations, and projects. The students contracted for their grade. Since learning to use the technology effectively is a critical skill to be acquired early in the teaching process (Gunawardena, 1992. P. 59), students were required to complete our university's online tutorial "Student Guide to Using WebCT"**.**

Design

Based on work completed in preparation for this course, three key ideas were stressed; humanize the virtual classroom; create an interactive environment, and stress collaboration. To keep mindful of these, the acronym HIC (humanize, interact, and collaborate) was used.

To facilitate interaction, students were assigned Abuddies"; each was paired with someone from another geographical area. Those with less computer competence were paired with a student with more expertise. In the online forum interaction among students was stressed, versus the traditional setting's teacher/ student flow of information. This shift in classroom behavior can make some students uncomfortable. Therefore, positive steps to build confidence and competence in online instruction are fundamental (Berg, Z.L., 1995). The first week was spent addressing this potential problem, by encouraging the students to seek support and from positive feedback from one another.

Another approach used to humanize the classroom was the gallery where students submitted a photo and short biography. To encourage personal interaction students participated in their own weekly chat sessions as well. Working with their buddy, students completed the assignments and then shared their findings with the rest of the class. In addition, seminars via the chat room included otherwise inaccessible outside guest experts.

Collaboration is essential in nursing by facilitating critical thinking (Gokhale, 1995). In addition a collaborative learning environment is one that promotes peer interaction, evaluation, and teamwork (Whipple 1987). However, expediting collaboration among students also requires a change in the teacher's role. Thus, the instructor becomes primarily a facilitator structuring learning opportunities, serving as a resource person, encouraging students to work together, contribute special knowledge and insights, and weaving together various discussion threads and course components (Rohfeld & Hiemstra, 1995, p. 91).

An important aspect of Internet instruction that also had be addressed was that faculty lose the ability to read student faces and body language. With the absence of these cues, it was difficult to know when to adjust content, teaching styles, and levels of support. It became imperative to make everything as well defined as possible, so there would be little room for misconceptions about what expected. In addition, participants were queried often and given choices for self-directed learning. By allowing students to explore options, the hope was to maximize the ability of the course to meet the unique needs of each individual. To ensure personal support, each student was called weekly, in addition to synchronous chat sessions.

Evaluation

Evaluation should be practiced continuously throughout the design, development, and implementation stages to ensure that things work as anticipated and intended (Moore & Kearsey, 1996). Experts in evaluation recommend that more than one technique be used to obtain a complete picture of how well a course is working. Additionally, experts recommend that a neutral individual conduct evaluations --someone who is not part of the design or development team and has a relatively objective position (Shaeffer & Farr, 1993).

Methods used to evaluate Contemporary Issues in Nursing included using the student tracking and chat room logs available through the WebCT software. The student tracking tool measured each individual student's usage of course components --who used them, when were they used; how long were they used? The chat room logs were also reviewed for levels of participation, as

well as to measure student's level of understanding of concepts.

At the end of the course, students completed a survey rating various aspects of the course and suggesting their degree of satisfaction. Their level of satisfaction was so high that nearly all partipants said they would like to take an online course again (see Figure 1 below). Though these types of evaluations do not always provide highly scientifically reliable or valid data, the qualitative information was valuable nonetheless (Moore & Kersey, 1996).
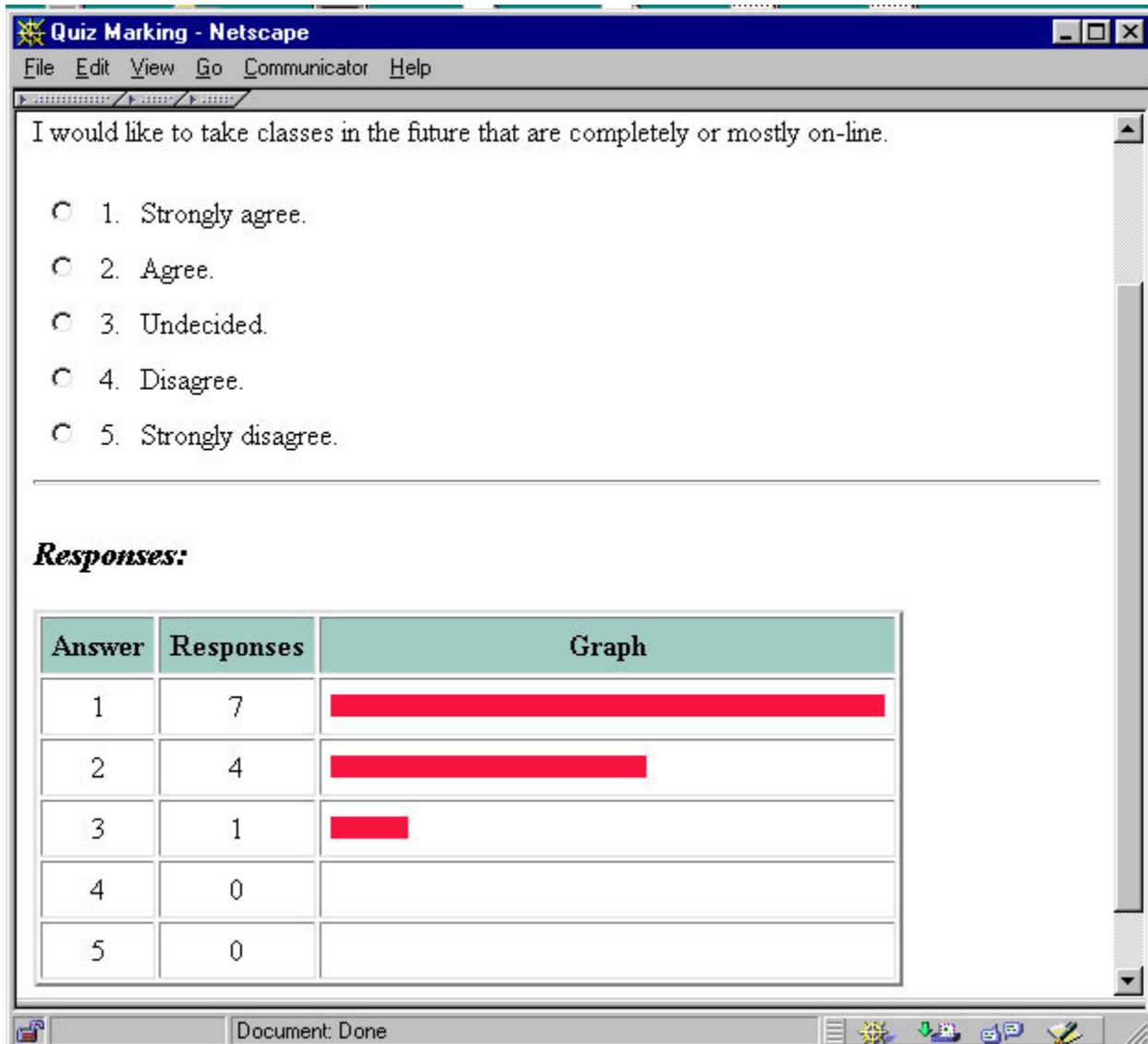

Figure 1. Eleven out of twelve students said they would like to take courses in the future that are mostly or completely online .

The questionnaire did not measure learning effectiveness. Learning was evaluated through the learning activities where the students were required to explain or apply information.

Perspectives

Students indicated the following as positive aspects of taking the course online: decreased travel time, economical savings, valuable technical support, increased faculty support, guest speakers,

collaboration with fellow students, interesting hyperlinks, enhanced computer skills and having the classroom open 24 hours a day.

The principal challenge was personal computer problems. For example, a student=s access to multimedia is limited by the amount of RAM memory, the speed of their processor, the speed of their modem and the amount of hard drive storage space that is available. As one researcher commented , "Technical difficulties could result in loss of critical mass for student discussions (Owston, 1997). " When students must budget their busy schedules, a lost Internet connection can be devastating. As the availability of computers continues to drive down the prices, technical problems will undoubtedly decrease.

Positive aspects of teaching an online course included decreased travel time, collaboration with students and experts, usually quiet students were more vocal, and an increase in student creativity. The main complaint was that the course was labor intensive.

Conclusion

The delivery of nursing programs via distance education has great potential. The implementation of this online course showed how online distance education broadens educational opportunities, eliminates long commutes, and enhances computer skills for nursing students. Nevertheless, whether or not the online method is as effective as a traditional nursing classes remains to be seen. A comparison and evaluation of the same course that is offered by the same instructor in both an online and traditional classroom setting should be included in future agendas.

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