Project Year

2004

Project Team

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Project Title

Nursing Education in Information Technologies

Audience

Students in the course *Information Technologies in Nursing* (100.316B), a required course for all undergraduates at the School of Nursing, offered each semester.

Pedagogical Issue

Because nursing is not practiced in a vacuum, but, rather, is a team effort to improve the health of an individual, the development of teamwork as a skill is valuable. However, traditional methods of teaching informatics emphasize students repeating what they learn back to the instructor, rather than developing group processes and collaborating with one another.

Solution

We propose to develop and deliver an undergraduate course (100.316B - *Information Technologies in Nursing*) online, using web-based learning (WBL) to create an alternative, more engaging method of teaching informatics content to undergraduate students. The project team will explore the use of WBL to aid learning through a group process, where students teach one other and the instructor functions as a facilitator. This project will be treated as a pilot for the development of additional on-line nursing courses.

Technologies Used

Courseware (WebCT development)

Project Abstract

The undergraduate course *Information Technologies in Nursing* (NR 100.316) intends more than giving students theoretical knowledge of informatics; it also aims to help students develop applied practical skills. Consequently, we need an alternative and more engaging method of teaching informatics content and skills to undergraduate students, emphasizing active and self-directed learning. Our goal is to redesign this course in a web-based learning environment, with more interactive activities. Student-centered web tools (agendas, forums, notes, online quizzes, access to online knowledge bases and experts, glossaries, chat rooms, tutorials, virtual classrooms, etc.) will support the students' independence and allow them to participate in the course at their own paces and schedules. The

instructor begins to function more as a facilitator in the learning process rather than as a dispenser of knowledge. The course content (information technology) is supported by the use of these information technologies in the learning process.

Course content being delivered exclusively in an online format is a new practice at the School of Nursing; however, we believe that the SON is ready to embark upon such a change, and we have strong support from our administration. The SON has formed a Distance Education Task Force that is examining the need for WBL in nursing education at Hopkins. The Task Force (prior to the announcement of the Technology Fellowship) had already begun investigating potential courses to pilot in a WBL environment.

Additional innovation will be built into this class in the form of a potential international collaboration with Dr. Ursula Hubner of Osnabruck University. We believe that creating an international online discussion of nursing and informatics can only serve to strengthen students' views of the global issues facing the profession of nursing.

We will use several methods for evaluating the impact of this project on the course. First, we will use an objectives-based approach in the form of a traditional course evaluation, but we will modify the evaluation based on a model used to evaluate online courses at the University of Maryland. This will enable us to gauge the response of the students to the WBL environment. We will also examine how successful the students are at attaining course learning objectives, through measures of student performance. Finally, we will use a professional review assessment which is more subjective in nature: we will ask several experienced peers in WBL to evaluate and critique our course and provide suggestions for improvement.

This project will be designed and built to be scalable, meaning that we intend to repurpose some of the material for other, similar projects. It is expected that the pilot course of *Information Technologies in Nursing* will lead to other opportunities for the development of online courses. The interest surrounding WBL is high in the SON. There is explicit support for maintaining this course and for facilitating the growth and development of other courses that can be delivered in this fashion.