DEVELOPING COURSEWARE FOR NURSING EDUCATION USING THE ADVANCED TECHNOLOGY CLASSROOM

AN ABSTRACT OF

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by

Elese R. Jones

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Abstract

This project involved the development of a module for the course Computer Applications in Nursing, titled Health Care Information Systems, for presentation in the Advanced Technology Classroom (ATC) at Western Connecticut State University, and the subsequent evaluation of the effectiveness of the technology. Specifically, the evaluation sought to determine whether the use of keypads increased learning and retention of key learning points.

The module was developed and presented in the ATC. Seven of eight project objectives were achieved; the final form of the module and evaluative materials could not be presented to graduate students. Five module objectives and seven key learning points were developed. The content was developed based on the objectives and key learning points. This included information about the health care information system development process, hardware, software, classification, patient care systems, implementation, and security. Sixty-one graphics were developed and a run-time presentation diskette was created. Nine keypad and 10 pre-test/post-test questions were

developed to test the key learning points. The module was developed and presented by the investigator. A knowledge pre- and post-test developed by the investigator and Thomas' (1988) Nurses Attitudes Toward Computing in Nursing were the evaluation instruments.

The module was presented twice in its original form, and then in a quasi-experiment study design. The two initial presentations of the module were made to graduate nursing students and resulted in modification of the module in terms of content, graphics, and pre-test/post-test questions.

A quasi-experimental study was conducted as a final evaluation of the module to assess the effectiveness of the interactive process utilizing keypads in prompting retention of key learning points. The sample included 31 senior nursing students in a baccalaureate nursing program: 16 students in the control group and 15 in the experimental group.

Results of statistical analysis of pre- and post-test knowledge scores indicated that students in both groups learned (p = .001), but that there were no significant differences between the groups (F = .05, p = .87). The study hypothesis was rejected.