April 2007

Tailored instructional methods for students with diverse levels of computer knowledge and skills

Yuh-Fong Hong PhD
UT School of Nursing at Houston

Follow this and additional works at: http://digitalcommons.library.tmc.edu/uthshis_atldayabs

Recommended Citation

Citation Information: Hong, Yuh-Fong PhD, "Tailored instructional methods for students with diverse levels of computer knowledge and skills" (2007). DigitalCommons@The Texas Medical Center, Advances in Teaching and Learning Day, Advances in Teaching and Learning Day Abstracts. Paper 47.
http://digitalcommons.library.tmc.edu/uthshis_atldayabs/47
The purpose of this online course is to ensure new nursing graduate students know how to use computer technologies required to complete academic and research activities. Powerful computers, high speed internet, digitalized resources and databases are widely available in educational institutes. New renovation and updates are being released at faster pace than ever. All these developments are necessary for a student to utilize computer programs and synthesize large amount of data in a limited time for any given academic research project. However, students found themselves to be expected to equip with enormous amount of computer skills when entering graduate programs. In a previous survey conducted in the school of nursing, 98% graduate students (n=58) felt the needs to learn computer skills to facilitate their learning. However, they are clueless about where, how and what to learn those necessary skills. Thus, a tailored online course was developed for them.

Due to the diversity of computer skills and learning preferences among nursing students, multiple instructions were used to develop an online Information Systems course. Two instructional methods were made available to students: detailed step-by-step video demonstration and picture-and-text format. Contents included basic computer skills, Microsoft Word and PowerPoint, APA styles, journal database search, and EndNote. Six assignments were created to connect those skills so students need to utilize skills learned from previous modules to finish the next assignment.

Data collected in this semester (n=16) revealed that all students believed their computer skills improved a lot after completing this course and those skills learned are also useful for other courses. No relationship was found between students’ previous computer skills and instructional methods they chose. Fifty percent of students reviewed both instructions but 69% of students preferred step-by-step video demonstration. Implications for how to use this data to improve online courses will be presented.