

Web Based Training in Nursing Informatics For Practicing Nurses

A combination of grants from the U.S. Department of Labor and the Health Resources and Services Administration provided funding by which practicing registered professional nurses could learn to use computer hardware and software with the delivery mode being asynchronous, online modules.

Problem: Most registered professional nurses have had no formal education about computer hardware and software yet are expected to work with computers and complex software at work and while pursuing additional degrees. This places a great burden on employers and individual nurses.

Goal and Objectives: The goal of this grant is for university faculty to join their colleagues employed in the healthcare industry to decide what working nurses need to know about computer hardware and software and then deliver that knowledge in the form of asynchronous, online modules that award continuing education units. The specific objectives are:

- 1) Develop a community partnership of those interested in nursing informatics.
- 2) Develop curriculum to meet identified nursing informatics learning needs of RNs in a variety of practice areas.
- 3) Create and make available online modules to provide opportunities to meet these needs.
- 4) Evaluate program and disseminate findings.

Population Served: The target population for the project is working registered professional nurses in San Diego and Imperial Counties (Southern California). A needs assessment of the population was completed (500 respondents) with very interesting findings:

- 98.4% use computers in their work
- 12% are very satisfied with their computer skills
- 47% are not satisfied or not sure
- 85% are interested in improving their skills
- 84% have Internet access at home

Currently there are 400 nurses enrolled in the project. Of those, 300 entered demographic data demonstrating the two largest sectors represented are nurses who work in hospitals (66%) and school nurses (26%).

Content Presented: The Nursing Information Council (NIC) that was formed from the interested community partners and project staff (university faculty) determined the need for the following modules each with multiple tutorials leading the learner from simple to the fairly complex knowledge:

- 1) Nursing Informatics Concepts
- 2) Basic Computer Concepts
- 3) Basic User Skills and Troubleshooting
- 4) Internet and WWW
- 5) Electronic Communication
- 6) Privacy/Confidentiality including HIPAA

- 7) Locating and Evaluating Web Resources
- 8) Web Resources for Nursing Practice
- 9) CPRS, Terminology and Future Trends

The poster presentation includes a discussion of how the web site and streaming modules work including a limited demonstration as well as a discussion of the numerous lessons learned during this project.

Lessons learned include:

Technical Lessons :

Agency computers blocked plug-in media players so the nurses could not access the modules at the workplace as originally planned.

Modules had to be delivered in multiple formats so that all participants could use them with little difficulty.

Not all participants can handle modules necessitating greater bandwidth so design tradeoffs had to be made.

Users are impatient and will give up on the program if it does not work immediately and easily.

Lessons About Participants:

The program must have a “hook” such as free continuing education units to be successful.

Community based nurses were easier to access than hospital based nurses.

Staff Lessons:

Everything takes longer than you plan!

Have as many people as possible review your work.

Design tutorials that go from the simple to the complex so as to meet the needs of all learners.

Summary: The project is continuing and is highly successful. Nurses continue to enroll in the modules. The module content is being integrated into the undergraduate nursing curriculum at San Diego State University along with application of knowledge learned.