



Iowa Department of Public Health

Advancing Health Through the Generations

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Iowa Survey of Issues in E-Learning for Nursing Education September 2005

SUMMARY

The purpose of this study was to learn about nursing faculty experiences and perceptions related to E-learning in Iowa. E-learning is defined as the utilization of computer mediated communications for education. This type of learning may be combined with face-to-face learning, or other distance learning modalities, or it may be offered by itself as a form of distance learning. Other names may include Web-based learning or Online learning.

The study analyzed the perceptions and demographics of 278 nursing educators in Iowa. The results reveal that many faculty who teach nursing in Iowa believe there is value in the use of E-learning to increase access to nursing education. The faculty members reported a need and desire for training to effectively use this evolving technology. The recommendations address strategies to enhance the use of E-learning in nursing education in Iowa.

Information provided by the study will be used by the Iowa Department of Public Health, Center for Health Workforce Planning to inform nursing educators and promote the effective use of E-learning to prepare faculty and students for success in the health workforce.

METHODOLOGY

In this study, data was collected on faculty perceptions and practices that will assist in increasing access to nursing education through the use of E-learning in Iowa and other states. A 50-item questionnaire was created based on a review of the literature related to nursing faculty and E-learning. The questionnaire was evaluated by an expert panel review and pilot tested. The final survey was approved by the Institutional Review Board at Capella University in Minneapolis, Minnesota.

Paper surveys were mailed to all nursing program directors in Iowa for distribution to a total of 853 full-time and part-time faculty members. Additionally, surveys were emailed to the University of Iowa for distribution to 547 adjunct faculty members. Respondents returned the surveys by email, fax or postal mail. A total of 278 participants returned completed surveys for a response rate of 19.9 percent. Data analysis was conducted using SPSS 13.0 for Windows Graduate Student Version ® software.

RESULTS

Demographics

- 1. E-learning is used by educators in Baccalaureate (BSN), Baccalaureate Completion (BSNC) and graduate programs more than by educators in Practical Nursing (PN) and Associate Degree Nursing (ADN) programs.**

In BSN/BSNC programs, 70.1 percent used E-learning with students. In graduate programs 76.6 percent used E-learning. In PN and ADN programs 40.6 percent of educators used E-learning.

- 2. E-learning is used more by educators who have been in academia for five or more years than those who have been in academia fewer than five years.**

Fifty-nine percent of respondents who had been educators for five or more years used E-learning compared to 46.7 percent of those who had been educators for fewer than five years. The mean number of years as an educator of all participants was 11.90 years. The mean number of years as an educator for those using E-learning with students (12.59 years) was not statistically different from those who do not use E-learning (11.44 years).

- 3. E-learning is used more by educators who are prepared at the graduate level than by those who have not earned a graduate degree.**

In this study, 62.2 percent of graduate-prepared faculty used E-learning and 34 percent of undergraduate-prepared faculty used E-learning. Among the graduate-prepared educators, those with Master's degrees in non-nursing professions comprised 51.7 percent of total respondents who used E-learning. *Note: Teaching assignments may impact the use of E-learning. For example, faculty who are not graduate-prepared may be more likely to teach clinical or laboratory courses where less E-learning is used.*

- 4. Age of faculty members appears to have no relationship to the use of E-learning.**

The mean age of participants was 48.64 years. The mean age for those using E-learning with students (48.4 years) is not statistically different from those who do not use E-learning (48.9 years).

- 5. Training modality has an effect on the use of E-learning.**

More participants were 'self-taught' ($n=73$) than trained by any other method. However, faculty trained in the use of E-learning ($n=60$) are more likely to use E-learning with students.

- 6. Faculty who are currently pursuing a higher degree through the use of E-learning are more likely to use E-learning with their students.**

Faculty members who use E-learning as student themselves are more likely to use E-learning as an educator than those do not use E-learning as a student and those who are not currently enrolled.

Perceptions

- 7. Faculty members agree that workload increase could be a potential barrier to the use of E-learning. However, they report that compensation, release time, promotion, and training are all important factors that would affect their adoption and use of E-learning in the classroom.**

8. **79.9 percent of nursing faculty indicate they would be interested in some type of training related to E-learning.**
9. **44.2 percent of nursing faculty indicate that ‘teaching from home’ would encourage them to continue teaching while 43.2 percent indicate that ‘teaching from home’ would have no effect on their decision to continue teaching.**
10. **Faculty agree that the flexibility of E-learning is a benefit that could potentially recruit and retain new, veteran, and retired faculty and nurses into academia.**
11. **Faculty are uncertain about the extent to which E-learning would encourage or increase cheating on the part of students.**
12. **Faculty agree that E-learning is flexible for students overall and may encourage some practicing nurses to attain higher degrees.**
13. **Faculty agree that reaching rural populations is a potential benefit of E-learning.**
14. **Faculty agree that computer skills are an important part of a professional nurse’s competency set and E-learning can assist students in attaining these skills.**

RECOMMENDATIONS

The knowledge gained from the data in this survey is valuable to stakeholders in Iowa who wish to improve access to health occupations education through the use of E-learning. Understanding faculty perceptions and addressing them is a key component to successfully implementing and utilizing E-learning. Three main observations drive the following recommendations:

- Faculty see value in the use of E-learning for both students and faculty.
- Faculty need and desire training related to the use of E-learning.
- Faculty acknowledge common barriers (student organizational skills, faculty workload) that need to be addressed in training.

RECOMMENDATION #1: Faculty Development in E-learning Program (FDEP) – This program will be a comprehensive faculty development program designed to give nursing faculty the tools they need to successfully use E-learning in all aspects of their teaching. The program should include two phases. The first phase will cover technical competency and must be conducted within the course management system of the academic place of employment. The second phase will involve a three to four week online training program that will cover online learning theory, course development, and course management. This second phase should also be conducted within the faculty’s course management system if possible.

Given the identified need for this type of training, it is recommended that a group of stakeholders provide leadership and pursue statewide funding for this program. Combining forces at this level will help more faculty members attain the training they need.

It is further recommended that faculty receive some type of compensation and/or recognition for their effort in this area. Experts agree that implementing E-learning is an intensive venture in the beginning and may increase the workload for faculty. For this reason it should not be considered just another part

of the existing workload. It is strongly recommended that that stakeholders and administrators consider this issue carefully when training is developed and implemented.

RECOMMENDATION #2: E-learning Interest Group – Given that new faculty are joining academia quite frequently, some type of program to sustain high quality training is recommended. Creating a group of resource people may assist in meeting this ongoing need. The group could consist of point people either from different schools or from different course management systems (i.e., all schools that use Blackboard ® or WebCT ®). These point people would serve as resources in online learning theory for nursing and health occupations faculty. They would not be responsible for technical support or Help Desk requests. Rather, they would serve as experts and tutors in issues related to the development and maintenance of high quality learning interactions online.

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