Evaluation of Competency-Based Online Learning Modules for Nurses in Emergency Planning and Response

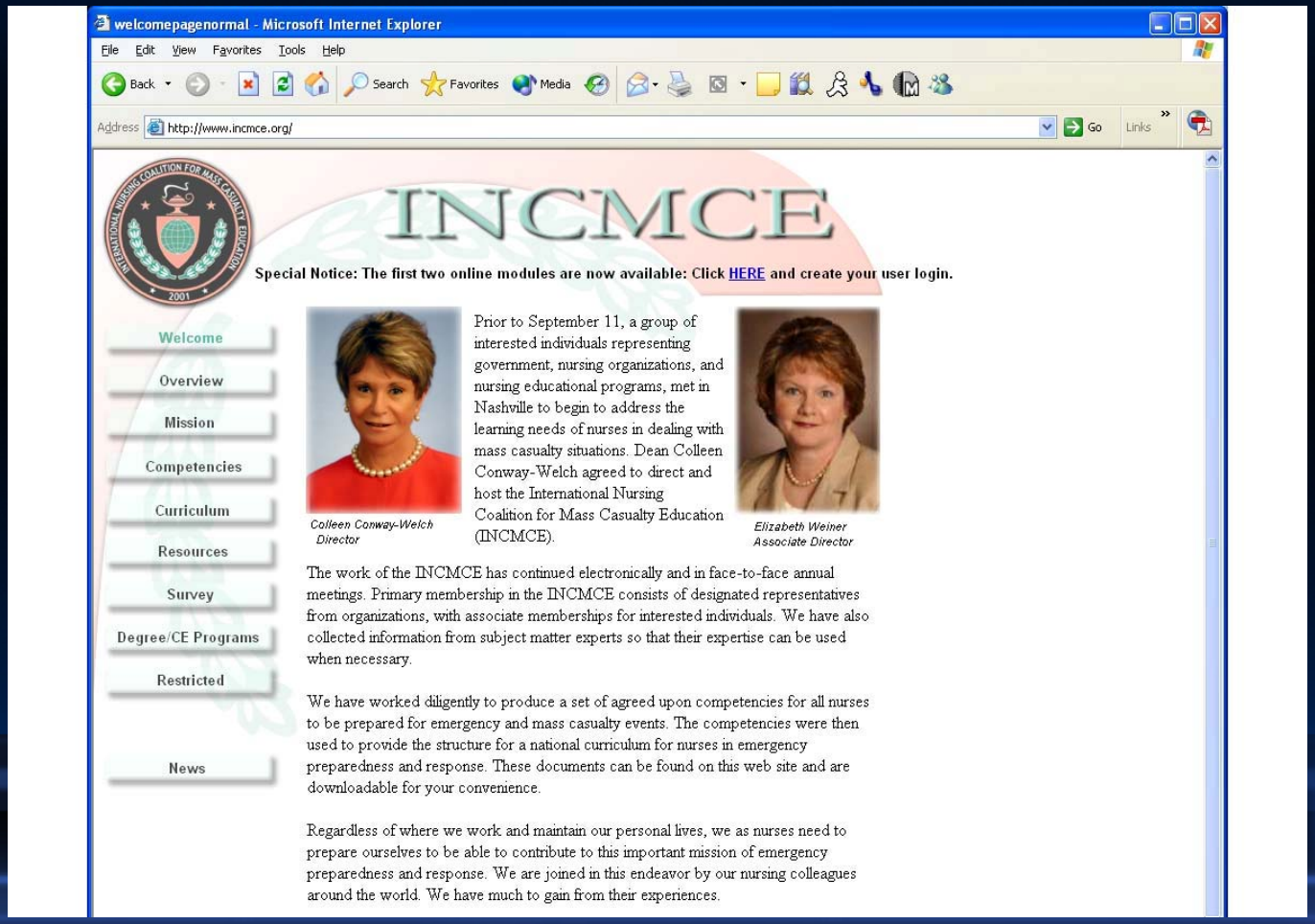
Linda Norman [a], Elizabeth Weiner [a], Margaret Irwin [b], Jeffry Gordon [a], Lynn Slepski [c], Patricia Trangenstein [a]

a *Vanderbilt University School of Nursing, Nashville, TN USA*

b *Independent Consultant, Nashville, TN, USA*

c *Department of Homeland Security, Washington, DC, USA*

www.incmce.org
International Nursing Coalition for Mass Casualty Education



Name Change in April 2007

- From International Nursing Coalition for Mass Casualty Education (INCMCE)

- To Nursing Emergency Preparedness Education Coalition (NEPEC)

…committed to emergency preparedness and disaster response education of nurses

www.nepec.net

Mission

- To provide a platform for nurse educators, practice and professional organizations, governmental agencies and others to pool expertise, make recommendations and disseminate best practices about emergency preparedness and disaster response education in the US and worldwide

Specific Aims

- Bring together the best of international expertise to inform the mission
- Identify core competencies
- Create sound curricula
- Develop improved methods of disseminating information
- Strengthen networking
- Inform policy-makers

First Activities

- Agree on Competencies for all nurses in emergency planning and response
- Survey US nursing programs about content taught prior to and post 9/11/2000 that related to emergency planning and response

Online Modules

- Funded by US Agency for Healthcare Research and Quality and US Health Resources and Services Administration Bioterrorism Curriculum and Development Grant
- Designed to meet nursing competencies
- Reflective of national “How People Learn”

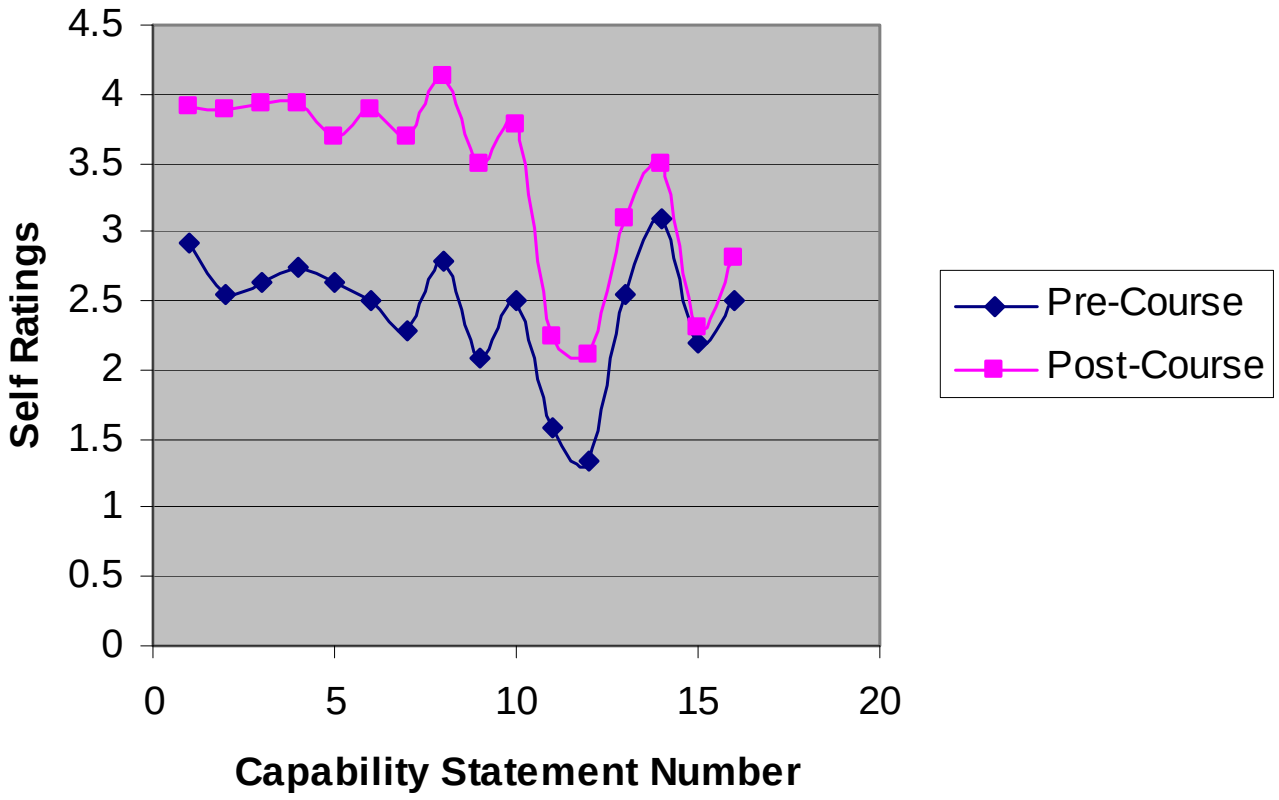
Methods

- 953 nurse learners from 33 Medical Reserve units and 6 states hosting volunteer nursing registries completed first 3 modules
- Pre and post-test design to assess self-rated confidence of skills and assessment of technology use in delivery of the content
- Demographic data and validation of content also completed

Results

- Paired t-tests of pre-course and post-course total confidence scale scores indicated a significant increase in mean ratings ($p<.01$)
- First ten items (basic competencies) accounted for significance

Mean Participant Ratings from Pre-Course and Post-Course Self Evaluations of 16 Capability Statements



Assessment of Technology Use

- Using Flashlight Survey Tool (Teaching, Learning, and Technology Group)
- 5 point Likert scale with 5 being most positive
- Overall mean scores for the 10 item questionnaire were 4.2, falling between agree and strongly agree

References and Contact

- [1] Weiner E, Irwin M, Trangenstein P, and Gordon, J. Emergency preparedness curriculum in US nursing schools. Nsg Ed Perspectives 2005: 26(6), 334-339.

Contact

- Betsy.Weiner@Vanderbilt.edu