Title:
Critical Thinking Instruction and Technology-Enhanced Learning From the Student Perspective

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Session Title:
Poster Presentations
Slot (superslotted):
PST: Friday, April 8, 2016: 10:00 AM-10:45 AM
Slot (superslotted):
PST: Friday, April 8, 2016: 12:00 PM-1:15 PM
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PST: Friday, April 8, 2016: 2:30 PM-3:15 PM
Slot (superslotted):
PST: Friday, April 8, 2016: 6:00 PM-7:00 PM
Slot (superslotted):
PST: Saturday, April 9, 2016: 7:30 AM-8:30 AM
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PST: Saturday, April 9, 2016: 12:00 PM-1:15 PM

Keywords:
Course design, Critical thinking and Instructional strategies

References:
Garrison, D. R. (2011). E-learning in the 21st century: A framework for research and practice. New York, NY: Routledge Taylor & Francis Group. Romeo, E. M. (2013). The predictive ability of critical thinking, nursing GPA, and SAT scores on first-time NCLEX-RN performance. Nursing Education Perspectives, 34(4), 248-253. Retrieved from http://go.galegroup.com.ezproxy.lib.ucalgary.ca/ps/i.do?id=GALE%7CA343945760&v=2.1&u=ucalgary&it=r&p=HRCA&sw=w&asid=f7a5b436d30a463fc67a4f2e1df48402 Roschelle, J., Bakia, M., Toyama, Y., & Patton, C. (2011). Eight issues for learning scientists about education and the economy. The Journal of the Learning Sciences, 20, 3-49. doi:10.1080/10508406.2011.528318

Abstract Summary:
A study on critical thinking development and the use of technology with undergraduate nursing students is presented. Instructional strategies students identified to be beneficial include the intentional integration of critical thinking instruction, subject-specificity and applicability of critical thinking to real life scenarios, and content and type of questioning used.
Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
1. The learner will be able to identify strategies to develop student critical thinking.	The factors deemed important to facilitate learning from the student perspective will be identified to develop instructional strategies beneficial for engaging students in course content and critical thinking development.

2. The learner will be able to design a course to facilitate critical thinking and technology-enhanced learning.	The factors deemed important to facilitate learning from the student perspective will be identified to develop instructional strategies beneficial for engaging students in course content and critical thinking development.
3. The learner will be able to create course material and questioning beneficial to student learning and critical thinking development.	Student preferences on critical thinking instruction, questions asked, and technology used will be shared to inform course design and implementation.

Abstract Text:

A mixed methods research study examining critical thinking development within technology-enhanced learning environments was implemented with undergraduate nursing students. Critical thinking and informational and communication technology literacy are important assets for students graduating from today's educational settings to competently and efficiently perform in the professional arena (Roschelle, Bakia, Toyama, & Patton, 2011). The capability to think critically is essential in the complex, fast-paced health care settings where patient situations are diverse, complicated and rapidly changing (Romeo, 2013). A blended learning approach, encompassing two technology-enhanced learning environments, was structured on the Community of Inquiry framework (Garrison, 2011) to support the development of critical thinking: a classroom response system face-to-face in-class and an online discussion forum out-of-class. The Community of Inquiry framework incorporates constructive collaborative inquiry to facilitate the establishment of a supportive environment for critical thinking development (Garrison, 2011).

To gather data from the students' perspectives, they were surveyed with closed and open-ended questions to ascertain engagement in critical thinking development and preferences of learning methods as supported through the technology-enhanced settings. Qualitative content analysis was implemented to assess for critical thinking demonstration through the online discussion forum exchanges. Pre-and posttesting was also included to assess for changes in students' critical thinking. The use of various data sources and analyses aimed to provide a comprehensive understanding of nursing student critical thinking development and engagement with technology-enhanced learning environments.

The study findings revealed students' appreciation for critical thinking instruction intentionally integrated into the course and aligned with subject-specific content. Inquiry and application of course material to professional practice engendered relevance for student learning. Students identified questions they deemed helpful to their development of critical thinking, facilitating their capability to connect course material to their practice settings. Notably, the findings are limited to the nursing students who participated in the research study, however the instructional strategies and technology-enhanced learning acknowledged as beneficial can provide basis for course design and implementation for the development of critical thinking.