

Title:

Adaptation to Curriculum Delivered via iPad Technology

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Session Title:

Research Poster Session 2

Slot (superslotted):

RSC PST 2: Saturday, 29 July 2017: 12:00 PM-1:30 PM

Slot (superslotted):

RSC PST 2: Saturday, 29 July 2017: 2:45 PM-3:30 PM

Keywords:

Early adopters, Technology and iPad

References:

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Abstract Summary:

The purpose of this research study is to determine how skills and attitudes in undergraduate and graduate students in a large, Midwestern university nursing program change when transitioning to the integration of iPads in the curriculum.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Articulate the research surrounding iPad integration in health professions education.	Review background, significance and problem as well as methods of the study.
Evaluate the drivers, moderators and speed bumps to adapted curriculum.	Describe the qualitative and quantitative results and the emerging themes from the results.
Using moderators, identify strategies to overcome barriers to integration.	Review strategies for using moderators to influence the student experience, including gaining buy in, drivers, moderators and speed bumps, and tips for success in integrating technology

Abstract Text:

Purpose:

With the emergence of new and innovative technology, an evolution of nursing education must be considered. Traditional methods of teaching, while effective, cannot be expected to be successful with the new technology literate populations of students. Instead active learning strategies that utilize tablets and other technologies are becoming more of the norm than the exception. Initiatives incorporating tablets into educational programs are largely aimed at improving the student experience through increased engagement, collaboration, and interactivity (Wong, 2012; Bond-Raacke & Raacke, 2008). The thoughtful integration of emerging technologies throughout the teaching and learning environment relies on the successful diffusion of the innovations, and that diffusion depends on acceptance of change (Rogers, 2003). This study aimed to fill this gap by exploring student perceptions, attitudes, and skill levels related to iPad use before, during, and after the first year of the iPad Initiative.

Methods:

This convergent mixed methods study was designed to examine the skills and attitudes toward using an iPad to support curriculum for sophomore Bachelor of Science in Nursing (BSN) and Doctor of Nursing Practice (DNP) students at a Midwestern university. Data were collected using an investigator-developed survey to identify student perceived iPad skill levels and attitudes towards the iPad before, during, and after the first year of the implementation of a one-to-one iPad requirement (i.e., the iPad Initiative). We used focus groups to identify factors that contribute to students' attitude and skill levels. Initial data were

collected from participants during the iPad orientations in August of 2013 (sophomore BSN n = 158; DNP n = 29). Follow-up sessions occurred at the end of fall semester 2013 (survey only) and spring semester (survey and focus groups) 2014. Qualitative and quantitative data were rigorously analyzed.

Results:

Significant improvement was seen in students' perception of their technology proficiency. However, students reported significantly less use of the iPad than they had predicted in the fall. Preliminary analysis of qualitative data resulted in a variety of themes including portability of the device and increased access to information. Students were concerned about the cost of the iPad and felt that the technology was under-utilized by their professors. Once data analysis from both sets of data concluded, the results were fully integrated in order to develop plausible conclusions. The overall findings of the study (meta-inference) was informed by all data sets from all participant groups.

Many themes emerged from the quantitative data that were divided into three subgroups. The first group described positive attitudes and attributes that are called drivers. The second group of themes articulate negative experiences or attitudes that were classified as speed bumps. The third and final group of themes were seen as moderators of both the positive (drivers) and negative (speed bumps) themes. These moderators must be carefully considered when planning a technology integrated curriculum. Additionally, the results of this study elucidated challenges inherent in being early adopters of technology in education.

Conclusion:

Meaningful technology integration requires a thorough understanding the the challenges that may be faced initially. Faculty use of technology was a strong moderator of the student experience. Thoughtful and well planned faculty development can be a useful first step to proficient use of technology in the classroom and therefore a positive student experience. This study identifies the challenge of being early adopters of technology and offers insight into the specific indicators to be considered in implementing a successful technology initiative.