Title:
The Use of Case Studies and Smart Device Apps to Increase Student Engagement

Nicole M. Giancaterino, DNP, MSN
Nursing, Chamberlain College of Nursing, South Elgin, IL, USA
Deanna A. Janz, DNP
Dept. of Nursing, Chamberlain College of Nursing, Jacksonville, FL, USA

Session Title:
Education Posters Session 1

Keywords:
Case Studies, Digital Applications and Learner Engagement

References:
Flood J.L. & Commendador, K. (2015). Avatar case studies: A learning activity to bridge the gap between classroom and clinical practice in nursing education. *Nurse Educator,* PubMed ID: 26132174.

Montenery, S. M., Walker, M., Sorensen, E., Thompson, R., Kirklin, D., White, R., & Ross, C. (2013). Millennial generation student nurses' perceptions of the impact of multiple technologies on learning. *Nursing Education Perspectives*, *34*(6), 405-409. doi:10.5480/10-451.

Yu, W. W., Lin, C. C., Ho, M., & Wang, J. (2015). Technology facilitated PBL pedagogy and its impact on nursing students' academic achievement and critical thinking dispositions. *Turkish Online Journal of Educational Technology - TOJET*, *14*(1), 97-107.

Abstract Summary:
The purpose of this project is to demonstrate to educators how to incorporate technology based instruction methodologies with the utilization of smart device apps and case studies throughout a nursing course.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The nursing educator will attain an understanding on how to better engage the digital learner within the classroom environment.	Examples of free applications (apps) available on any smart device will be provided to facilitate course content and learner engagement.
The nursing educator will learn how to improve student engagement through the utilization of progressive story-telling.	An interactive virtual pregnancy can be experienced through a free pregnancy application, and the online progressive case studies provided a better understanding of pregnancy, intrapartum, and postpartum nursing care.

Abstract Text:

In an accelerated Bachelor's of Science in Nursing (BSN) course, e-books are available to all nursing students. In addition, an on-line progressive case study approach was used. The nursing educator also

implemented a free pregnancy application (app) (among many to choose from) to engage the digital world nursing student learner with the implementation of an interactive virtual pregnancy experience. Both the free pregnancy app and the course's online progressive case studies provided a better understanding of pregnancy within a "safe" simulated client experience. The goal was to bring the obstetrical content to life and assist with critical thinking while maintaining an engaging and fun learning environment. The app engaged learning with a daily calendar on timely information on their "virtual" pregnancy, changes in fetal growth and development, and bodily changes. The app provides an interactive checklist and expert advice on everything from nutrition to relaxation, safety, common concerns, and what to expect at each visit both within the office, and once admitted to the hospital. Fetal kick counters, nutritional dos and don'ts, contraction timers, and automated text messaging brought the virtual pregnancy to life. Students visualize their baby's growth with a widget using real-world examples of fruits and veggies. Students learn the importance of monitoring their baby's movements. Nursing related safety topics in which all pregnant clients should be taught are repeatedly emphasized within each trimester of their virtual pregnancy. The learner also had unlimited accessibility to award-winning videos of their virtual baby's development in the womb to the experience of birth, virtual baby kick-counters, contraction timers and interactive case studies. Weekly text messages alerted the learner to the changes in their virtual baby as a feature of the free app. During the students immersion within the specialty area 8 week course, the course objectives and outcomes were supported with the progressive case studies and utilization of the free app to support learning both inside the boundaries of the classroom and outside of the traditional learning environment. Having the availability of the progressive case studies and virtual pregnancy experience on the home screen of their smart phone or laptop enhanced and supported the engagement of course content for the nursing student.