

**Title:**

There's an App for That: Using Mobile App Technology to Educate Nurses at the Bedside

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**Session Title:**

Technological Innovations in Education

**Slot:**

D 04: Saturday, April 9, 2016: 10:45 AM-12:00 PM

**Scheduled Time:**

10:45 AM

**Keywords:**

Education, Innovation and Technology

**References:**

Jeffries, P.R. (2007). Simulation in nursing education – from conceptualization to evaluation. New York, NY: National League for Nursing. Swearingen, S. (2009). Journey to leadership: Designing a nursing leadership development program. The Journal of Continuing Education in Nursing, 40, 107-112.

**Abstract Summary:**

This visual session will provide the testimony of how a healthcare system transitioned up to 16 hours of didactic nursing orientation content into mobile technology that engages the nurse, the preceptor and the patient at the bedside.

**Learning Activity:**

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
At the end of the presentation, the learner will be able to identify at least one learning event experience that could be improved with innovation application.	The learner will be provided with visual examples and explanations of new app technology that has been proven to heighten the learners experience.
At the end of the presentation, the learner will be able to construct a plan to implement innovative technology into their identified learning experience.	The learner will be provided with the plan of how a large system level organization was able to build and implement mobile technology.

**Abstract Text:**

Technology continues to transform and influence the modes of effective education in the healthcare arena. A growing workforce of new age innovators fill our institutions to provide our patients with safe and efficient care. In appreciation and congruency with our workforce it is vital for the training and education we provide to be as transformational and influential as is expected. A large Midwestern healthcare system invested their educational efforts to develop an innovative, immersive, mobile training platform for new and novice nurses. The technology served as dual purpose training and gap analysis tool.

The first mobile application developed was the "Smart Pump" training module. This module is an interactive learning experience containing formative training, paired with simulated summative tests. The module is built to be self-paced for the diverse adult learner population. The module also offers real-time

feedback to coach and identify gaps in which additional training is necessary. Those gaps may then be shared with a preceptor to provide a focus and direction of education. This education was created in response to complaints from nurses, stating that they had previously been trained on the infusion pumps and did not need the original two hour education. The module was designed to take approximately 30 minutes to complete in its entirety. This transition resulted in greater nurse satisfaction as well as a possible cost savings of \$61,000 per year. When surveyed 70% of nurses that participated in the mobile application learning, rated the experience as “highly preferred.”

The second mobile application developed was ‘Heparin.’ This application was used as a gap analysis tool in response to a rising number of reported Heparin infusion adverse events. The Heparin app was a short interactive summative that was required to take less than 3 minutes to complete. The mobile platform resulted in 804 nurses completing the summative analysis in one months time. The real-time dashboard and documentation found on the app revealed unit level and individual levels of gap analysis data. The total count of nurses that passed the summative was 604 and the additional 160 nurses were called back for remediation. An unexpected reaction to the real-time mobile application was a significant decrease in Heparin infusion adverse reactions at the time of the application implementation on the units. Mobile tablet education has been an innovative, effective and time efficient solution to training and clinical gap analysis.