

## **Nursing Education Research Conference 2020**

### **Disruptive Nursing Education for the 21st Century: Bringing Telehealth Clinic to the Pathophysiology Classroom**

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#### **Purpose:**

Establishing a “clinic based” telehealth simulation teaching strategy for a didactic course diversifies the monolithic classroom lecture. Using technology to enhance student problem-solving and decision-making skills increases engagement, encourages critical-thinking and accelerates learning.

Challenges to face to face classroom delivery demands faculty and staff collaborate to create a uniquely integrated telehealth learning experience with technology resources currently available across the school of nursing.

#### **Methods:**

Using the communications video platform, students, standardized patients, and faculty participated in a case-based, virtual patient encounter. From the beginning of the semester, students were informed that this particular class would include an interactive, standardized patient learning interaction, very different from the usual classroom lecture delivery. A PowerPoint (PPT) presentation was created and recorded as a series of short educational videos which students were directed to watch prior to class.

Companion case-studies were developed in collaboration with a content expert, and a set of standard questions were developed to guide the student and standardized patient (SP) interactions.

24 hours before the scheduled class a wintery weather mix threatened school closure requiring fast action by faculty and simulation center staff. In eight hours, eight simulation patients were expertly trained by the faculty and staff to not only represent the cases but to navigate video software and its capabilities. Course faculty randomly assigned students to small groups with a corresponding online group link; students were directed to interview the SP virtually (on video) and complete a comprehensive patient history and review laboratory reports. Following the interview, students continued to work in their assigned group link to prepare for a group presentation the following week.

The following class each group presented their case. Presentations included:

- Case presentation (Chief Complaint, pertinent positives/negatives)
- Detailed pathophysiology
  - Differential diagnoses
  - Primary diagnosis (defend)
  - Key clinical and laboratory features
- Use talk-back approach to share with classmates how to present the findings to the patient using layman’s term
- Identify concepts that might appear on an examination

#### **Results:**

The impact of the experience was more exciting and positive than faculty could have imagined! A short “Tell Us About Your Experience” survey revealed 31 of 36 (86%) students report wanting more experience with telemedicine. 34 (94%) reported that telehealth must be included in today's nursing education. Student didactic feedback included: “I love the podcasts instead of lecture” and “I found this style very helpful as it allowed me to bounce my thoughts and ideas off of my classmates. As a result, I had to dig down inside the iceberg and pull out information I had put in hibernation.”

**Conclusion:** Case-studies/problem-based learning activities in combination with a telehealth learning mechanism brought real life experiences into the classroom. The innovative educational approach described here promoted numerous conversations and brainstorming sessions between faculty and stimulated several new educational initiatives. This resourceful approach increased learner engagement, improved learner satisfaction and improved learner performance on the content exam. “Tele-medicine/ Tele-health is the way of the future!” (student comment).

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**Title:**

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**Keywords:**

Telehealth, case-based learning and pathophysiology

**Abstract Summary:**

Establishing a “clinic based” telehealth simulation teaching strategy for a didactic course diversifies the monolithic classroom lecture. Using technology to enhance student problem-solving and decision-making skills increases engagement, encourages critical-thinking and accelerates learning. Faculty collaborated to create a uniquely integrated telehealth learning experience with technology resources currently available.

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**Author Summary:** Dr. Taylor is a Fellow in the Academy of Nursing and a Fellow in the Academy of Nursing Educators. She has renowned experience in building creative, transdisciplinary interactive workshops to foster learning and enthusiasm for nursing students.

**Any relevant financial relationships? Yes**

Relationship	Description of Potential Conflict
Business Owner and Consultant	CEO, GuIDE to Degree, LLC

Signed on 06/05/2019 by *Laura A. Taylor*

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