The Virtual Clinic Learning Environment: Developing and Using Serious Games in the College of Nursing
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RATIONALE/NEED
Media use statistics show that screen media usage in young adults far exceeds that of print media. In one study researchers found that out of the average 458 minutes spent with media every day, young adults spend about 38 minutes of that time reading printed media (Rideout, Foehr, & Roberts, 2010).

Leveraging this media familiarity and ease of use has the potential to greatly improve learning outcomes for young adults who are familiar with gaming technology.

METHODS/DESCRIPTION

Bloom’s Variables

- Aptitude
- Quality of Instruction
- Ability to Understand Instruction
- Time Allowed for Learning
- Obtaining Mastery of a Topic
- Perseverance

- The CaseBuilder is a menu driven content creation tool that allows Subject Matter Experts, with no formal game design background, create cases for the Virtual Clinic Learning Environment.
- The open-ended ability to add as many questions and variables creates enormous flexibility for the instructor to craft detailed and in-depth patients for the student to experience.
- The CaseBuilder is also used to instruct students by having them critically think about the variables required as they design cases of their own.

RESULTS
At the conclusion of each Virtual Clinic Learning Environment (VCLE) case, students complete a survey about their experience of completing VCLE cases to determine how well the activity assisted them in synthesizing the knowledge, skills, and competencies needed for advanced nursing practice and inter-professional collaborative practice.

Student ratings of the Virtual Clinic: (Scale 1-7)

- Better understanding my role as an APRN (5.29)
- More effectively implement therapeutic interventions (5.26)
- Formulate an appropriate diagnosis (5.88)
- Synthesize knowledge, skills, competencies for APRN (5.81)

EVALUATION PLAN
- Modified to include questions that directly assess pedagogical outcomes with regard to Bloom’s five variables to obtain mastery in learning (aptitude, quality of instruction, ability to understand instruction, perseverance, and time allowed for learning).
- Developed questions about the student case building experience to measure how case building activities address discipline-specific and inter-professional learning outcomes.
- Evaluation via the new built-in survey tool will provide feedback about student experiences with the VCLE.

IMPACT/LESSONS LEARNED

Effective Serious Games

- Does learning feel like play?
- Are experiences interconnected?
- Does the player learn by doing?
- Is failure reframed as iteration?
- Is feedback immediate and ongoing?
- Is the challenge constant and consistent?

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