

Erica Frost MSN, RN, CNE, CCRN-K

Instructor at Trudy Busch Valentine School of Nursing, Saint Louis University

INTRODUCTION & DISCLOSURES

- A nurse since 2002, teaching full-time since 2014
- Certifications in critical care nursing and nursing education
- Entering dissertation phase of PhD in nursing education
- Life-long St. Louisan!
- No disclosures





- By the end of this presentation, attendees will:
 - Describe the evidence supporting escape rooms as a teaching and learning strategy
 - Create a basic virtual escape room
 - Discuss potential applications of virtual escape rooms in their teaching and learning environments

WHAT IS AN ESCAPE ROOM?

- An active learning approach incorporating game-based learning (Smith & Davis, 2020)
- Can be physical or virtual (online)
- Participants follow a narrative-based challenge using puzzles, tasks, and a time limit (Fotaris & Mastoras, 2019)



REVIEW OF EVIDENCE-ADVANTAGES

- Teamwork & Collaboration, community building
- Student enjoyment & engagement and Increased motivation
- Student-reported learning gains
- Improvements in critical thinking and problemsolving
- Leadership skills (Fotaris & Mastoras, 2019)
- Foundational knowledge gains, application of learning, and self-reflection (Hermanns et al., 2017)
- Improved course retention rates and grades (López-Pernas et al., 2019)





REVIEW OF EVIDENCE-CHALLENGES

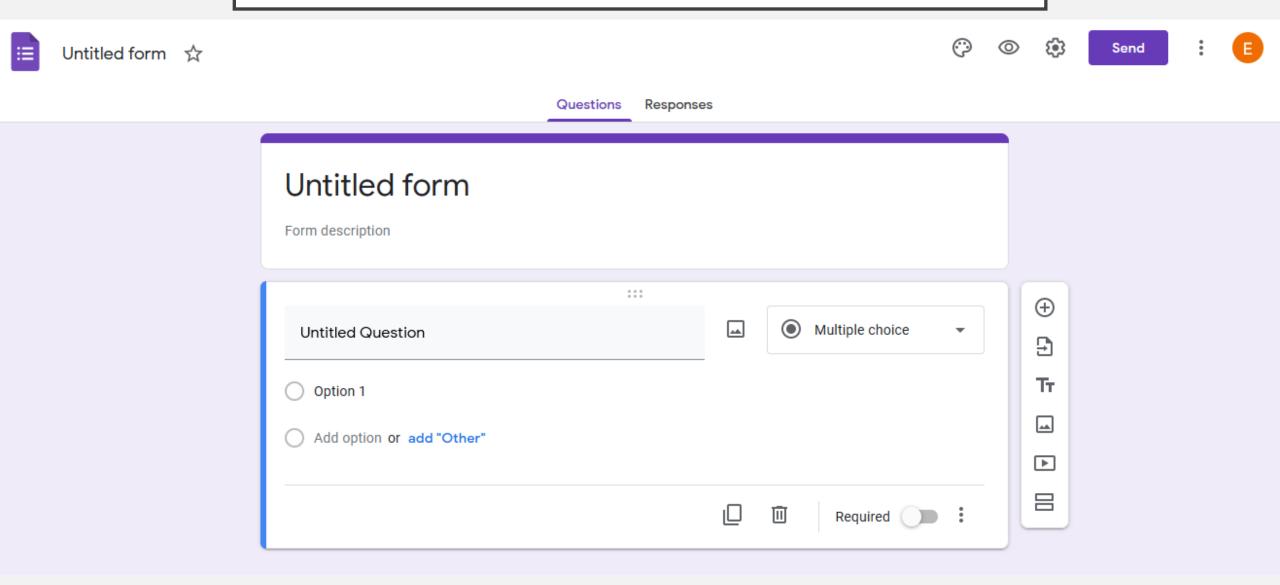
- Time and resources (Fortaris & Mastoras, 2019)
- Class sizes (particularly for physical rooms)
 (Fotaris & Mastoras, 2019; Kubin, 2020)
- Student frustration if cuing/clues not available (Cates et al., 2020; Hermanns et al., 2017)



WHAT MAKES AN ESCAPE ROOM GREAT?

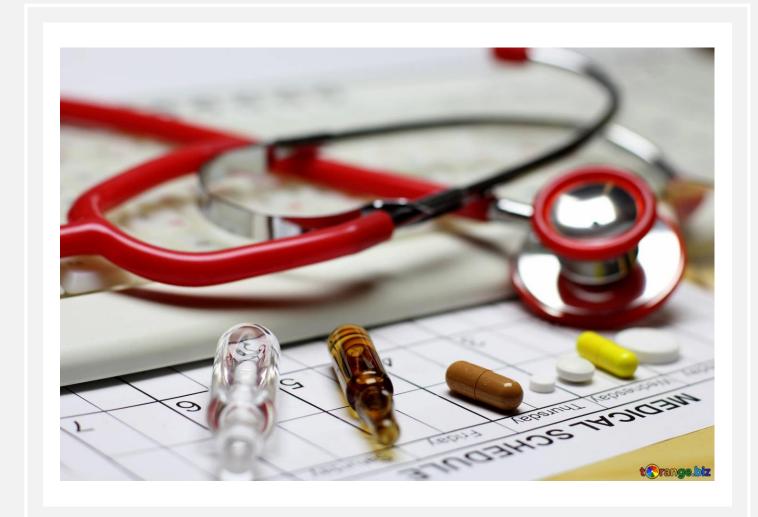
- It tells a story!
- Visuals- Images, videos, audio
- Address all domains of learning (affective, cognitive, psychomotor)
- Based on a learning theory
- Synchronous virtual rooms work better than asynchronous (Neumann et al., 2020)
- Pilot/test multiple times (Fotaris & Mastoras, 2019; Smith & Davis, 2020)
- Encourage students to search for information
- Prebriefing and Debriefing are essential (Cates et al., 2020)

INTRODUCTION TO GOOGLE FORMS



EXAMPLE ESCAPE ROOM

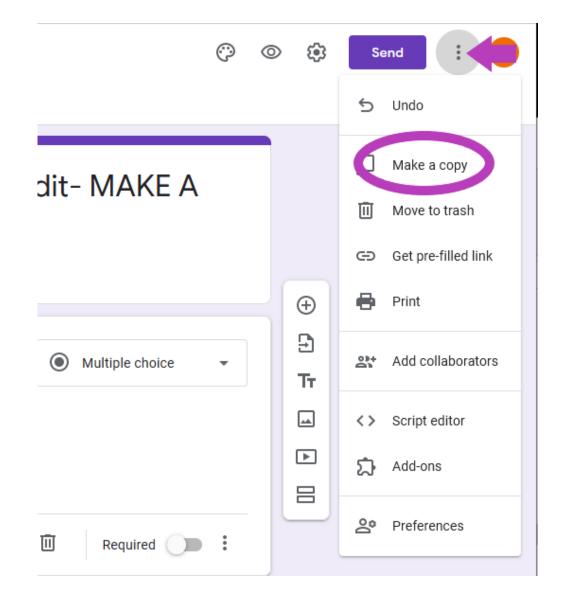
- Created for pre-licensure nursing students
- Activity took about an hour to complete
- Students were a mix of in person and online synchronously
- Two instructors for questions
- Positive feedback and reflection



DON'T WORRY-HERE'S A TEMPLATE

Do **NOT** edit- MAKEA **COPY**

https://tinyurl.com/4vnzh9jc



REFLECTION

- How can you use a virtual escape room in your teaching and learning environments?
- What topics would be a good fit for this technology?
- Who can be a resource for you at your institution?





QUESTIONS ??

Contact me
Erica Frost MSN, RN, CNE, CCRN-K

Erica.frost@slu.edu

REFERENCES

- Cates, A. L., Krueger, J., Simpson, s. & Stobart-Gallagher, M. (2020). Comparing the effectiveness of a virtual toxicology escape room at two emergency medicine residencies. *Curēus*, *12*(10), e11262-e11262. https://doi.org/10.7759/cureus.11262
- Fotaris, P., & Mastoras, T. (2019, October). Escape rooms for learning: A systematic review. In *Proceedings* of the European Conference on Games Based Learning (pp. 235-243).

 Https://doi.org/10.34190/GBL.19.179
- Hermanns, M., Deal, B., Hillhouse, S., Opella, J. B., Faigle, C., & Campbell IV, R. H. (2017). Using an "Escape Room" toolbox approach to enhance pharmacology education. *Journal of Nursing Education and Practice*, 8(4), 89-95. https://doi.org/10.5430/jnep.v8n4p89
- Kubin, L. (2020). Using an escape activity in the classroom to enhance nursing student learning. *Clinical Simulation in Nursing*, 47, 52-56. https://doi.org/10.1016/j.ecns.2020.07.007
- López-Pernas, S., Gordillo, A., Barra, E., & Quemada, J. (2019). Examining the use of an educational escape room for teaching programming in a higher education setting. *IEEE Access*, 7, 31723-31737. https://doi.org/10.1109/ACCESS.2019.2902976
- Neumann, K. L., Alvarado-Albertorio, F., & Ramírez-Salgado, A. (2020). Online approaches for implementing a digital escape room with preservice teachers. *Journal of Technology and Teacher Education*, 28(2), 415-424. https://www.learntechlib.org/primary/p/216209/
- Smith, M. M., & Davis, R. G. (2020). Can you escape? The Pharmacology review virtual escape room. Simulation & Gaming, 52(1), 79-87. https://doi.org/0.1177/104687812096636