

Using Simulation Data for making Evidence-based Curriculum Decisions: Applying Lessons from a Scoping Literature Review

Beth Rogers, PhD, RN, CNE, CHSE

Texas Christian University

Sterling Roberts, DNP, RN, CHSE

Georgia College & State University

Emily Jerge RN, CHSE

D'Youville College

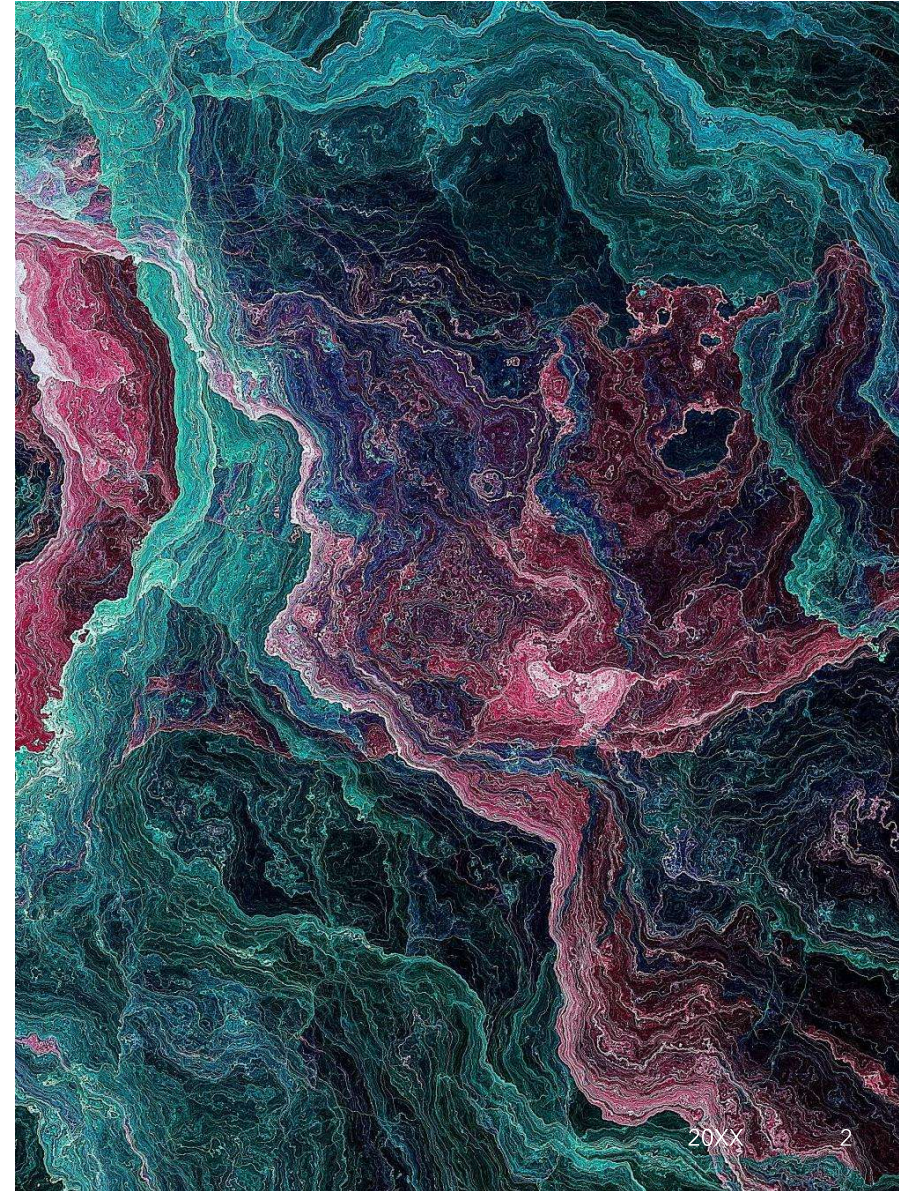
Raquel Bertiz, PhD, RN, CNE, CHSE

Montgomery College



Conflict of Interest

Neither the planners or presenters have any real or perceived vested interest that relate to the presentation.



Objectives

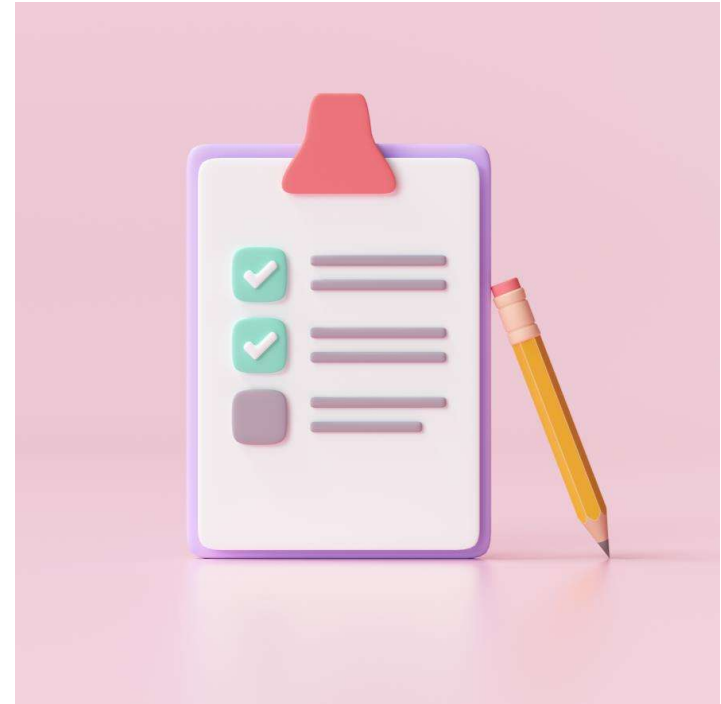


- Identify how current curriculum evaluation processes utilize simulation data.
- Confront current nursing curriculum evaluation processes.
- Engage participants in conversations for innovating curriculum decision-making processes by using simulation data.

Please fill
out the
audience
poll by
scanning
the QR
code

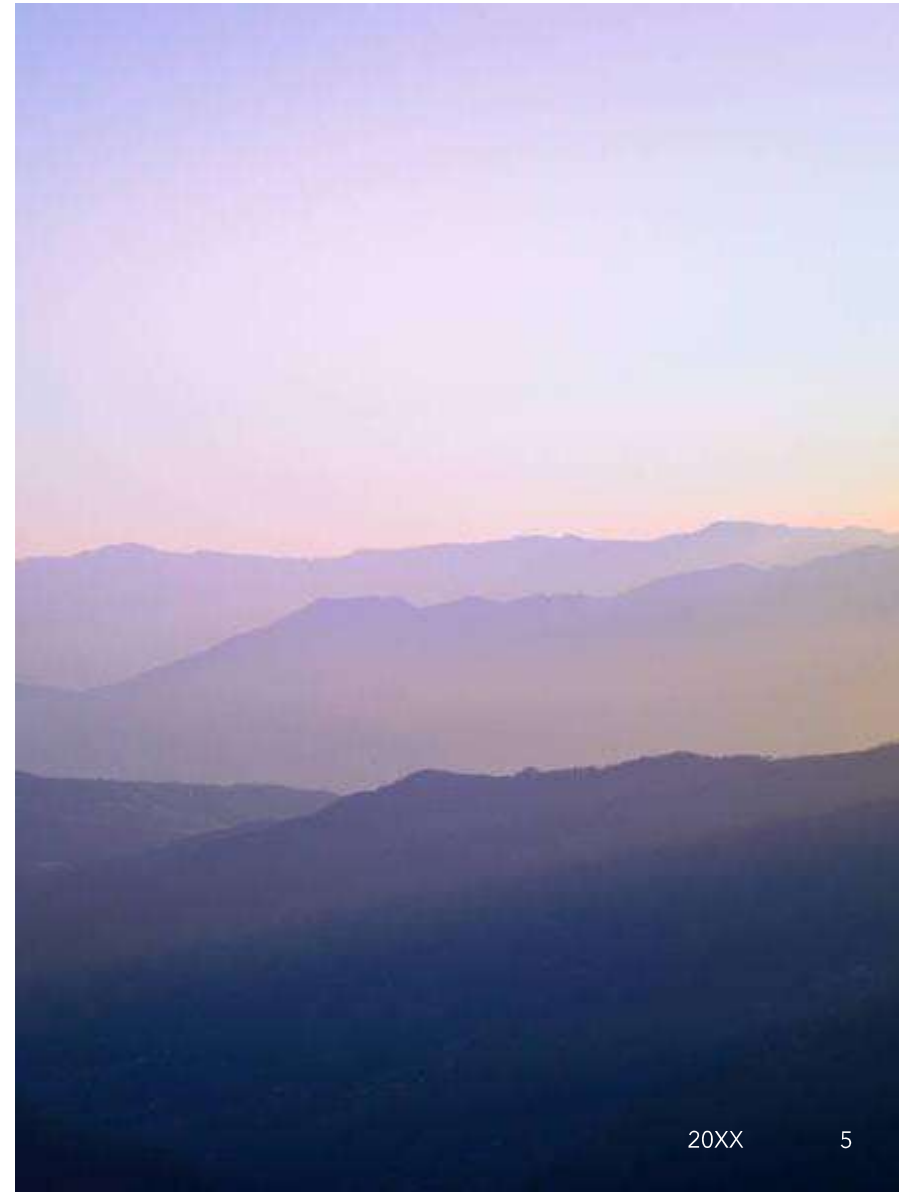


- [Poll Results](#)



Problem

- Currently, there is no known process for making evidence-based nursing curriculum decisions.
- There is increased emphasis for using valid and reliable evidence to inform nursing curriculum decisions.
- Simulation can provide the opportunity for real-time data collection to document and measure learner competencies.



Methodology

6 databases

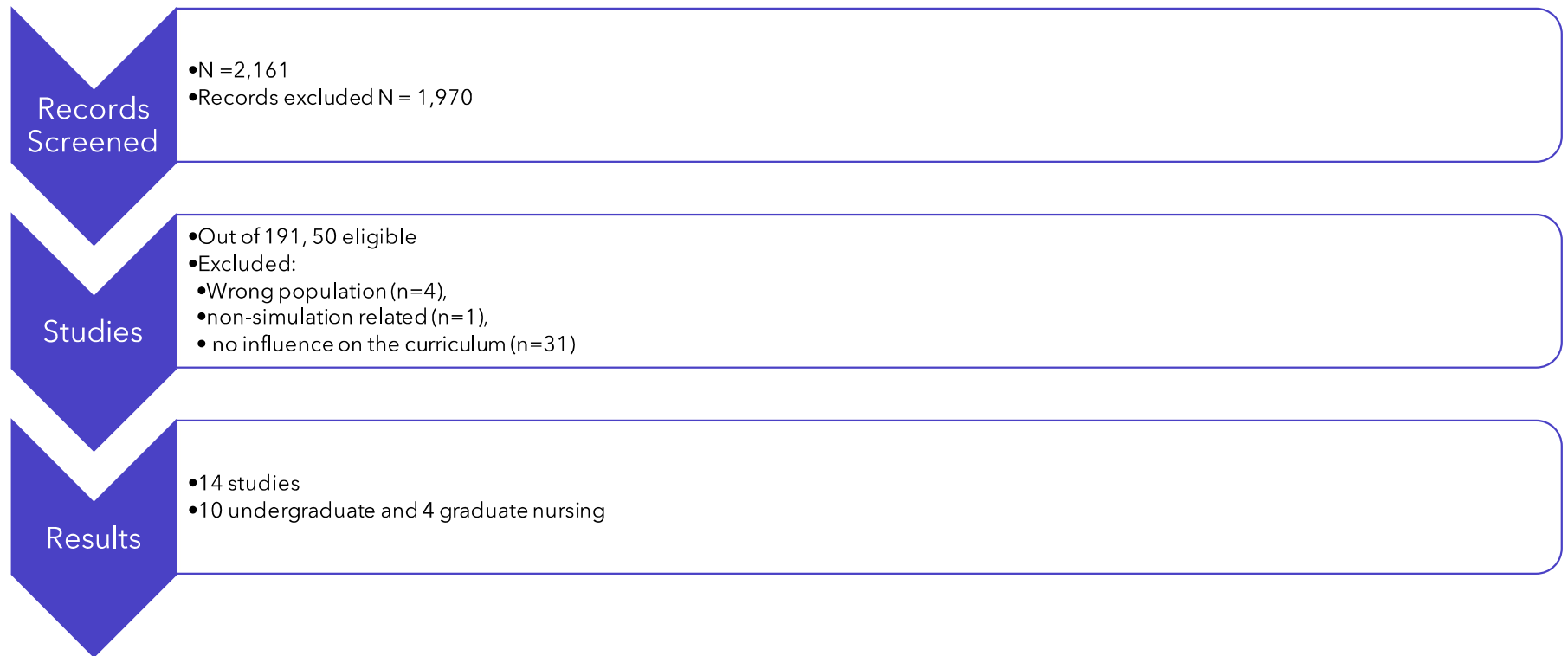
Written in English

Since 2006

Undergraduate Nursing

Graduate Nursing

Databases Results



How Does Simulation Data Influence the Nursing Curriculum?

Measure Outcomes

- Sim Objectives
- Clinical Objectives
- End of Program Outcomes

Competency

- Skill
- Practice
- Holistic Nursing

Program Evaluation

- Simulation
- Course

How Does Simulation Data Influence the Nursing Curriculum?

Identify Gaps

- Curriculum
- Learner
- Faculty

Determine Progression

- High Stake
- Clinical Readiness

Implement Change

- Skill practice
- Faculty Training
- Remediation
- Clinical Instruction
- Simulation
- Course

Key Takeaways

- No group simulation
- Few used repeated measures
- Few studies were designed to measure curriculum impact
- Most studies describing curriculum impact were descriptive
- We need more evidence to understand best practice for using simulation data to influence nursing curriculum

Discuss With Your Neighbor

- How do you use simulation data for evaluating the nursing curriculum?
- What trends do you see in simulation data that could influence curriculum decisions?
- What obstacles do you face for using simulation data as evidence for curriculum effectiveness?

Measure
Outcomes

Competency

Program
Evaluation

Identify Gaps

Determine
Progression

Implement
Change

References

- Bensfield, L. A., Olech, M. J., & Horsley, T. L. (2012). Simulation for high-stakes evaluation in nursing. *Nurse Educator*, 37(2), 71–74. <https://doi.org/10.1097/NNE.0b013e3182461b8c>
- Bussard, M. E. (2018). Satisfactory completion of End-of-Course outcomes using simulation. *Journal of Nursing Education*, 57(8), 489–492. <https://doi.org/10.3928/01484834-20180720-07>
- Coffman, S., Doolen, J., & Llasus, L. S. (2015). Program development and evaluation of the concierge model of simulation. *Online Journal of Nursing Informatics*, 19(2), 8–1.
- Cummings, C. L. (2015). Evaluating clinical simulation. *Nursing Forum*, 50(2), 109–115. <https://doi.org/10.1111/nuf.12075>
- Ehly, E., & Fitzwater, J. (2021). Telephone triage simulation activity for prelicensure nursing students. *Journal of Nursing Education*, 60(6), 352–355. <https://doi.org/10.3928/01484834-20210520-10>
- Fusco, L. A., Alfes, C. M., Weaver, A., & Zimmermann, E. (2021). Medication safety competence of undergraduate nursing students. *Clinical Simulation in Nursing*, 52, 1–7. <https://doi.org/10.1016/j.ecns.2020.12.003>
- Leach, J. L. (2014). Using simulation to expose shortcomings in clinical learning outcomes. *Nursing Education Perspectives (National League for Nursing)*, 35(1), 56–57.

References

- Ling, C., Fuller, A., Taylor, L., & Johnson, H. (2018). Triangulation of Multifactorial Assessment: Bringing Objectivity to Objective Structured Clinical Examination Evaluation. *Clinical Simulation in Nursing*, 16, 40–47. <https://doi.org/10.1016/j.ecns.2017.10.009>
- Johnson, H. L., Beatty, J. R., Archer, H. R., Best, N. I., Trautmann, J. L., Williams, J. K., Williamson, J. M., Seibert, D. C., & Taylor, L. A. (2023). Applying the RIME framework to level nurse practitioner curriculum competencies. *Nurse Educator*, 48(1), 43–48. <https://doi.org/10.1097/NNE.0000000000001258>
- Mauro, A. M. P., Tracey, D. L., LoGrippe, M. T., Anderson, S., Bravo, A., Byrne, C., Geissler, B., & Escallier, L. A. (2018). Simulation innovation to redesign the baccalaureate curriculum to address population health. *Nurse Educator*, 43(5), 232–237. <https://doi.org/10.1097/NNE.0000000000000494>
- Schlairet, M. C. (2011). Simulation in an undergraduate nursing curriculum: Implementation and impact evaluation. *Journal of Nursing Education*, 50(10), 561–568. <https://doi.org/10.3928/01484834-20110630-04>
- Starkweather, A., Sargent, L., Nye, C., Albrecht, T., Cloutier, R., & Foster, A. (2017). Progressive assessment and competency evaluation framework for integrating simulation in nurse practitioner education. *The Journal for Nurse Practitioners*, 13(7), e301–e310. <https://doi.org/10.1016/j.nurpra.2017.04.012>

References

Thomas, C. M., Yocom, D., Kaulback, M., & Meehan, C. D. (2021). Using simulation evaluation for prelicensure nursing program review. *Nurse Educator*, 46(1), 34–38. <https://doi.org/10.1097/NNE.0000000000000860>

Thrower, E. J. B., Fay, R., Cole, L., Stone-Gale, V., Mitchell, A., Tenney, E., Smith, S., & Swint, C. (2020). A systematic process for evaluating teaching methods in nursing education. *Nurse Educator*, 45(5), 257–260. <https://doi.org/10.1097/NNE.0000000000000761>



Questions:

**B.A.Rogers@
tcu.edu**

Thank you

