MULTI-MODAL EDUCATION FOR FACULTY DEVELOPMENT USING THE PEARLS HEALTHCARE DEBRIEFING TOOL

WGU | LEAVITT SCHOOL OF HEALTH

Lauren Acree MSN, RN, CPN, CHSE
Western Governors University
Lauren.Acree@wgu.edu

Victoria Johnson PhD, MSN, RN, CHSE
Western Governors University
Victoria.Johnson@wgu.edu

Jazal Khatri MSN, RN
Western Governors University
Jazal.Khatri@wgu.edu

WGU | LEAVITT SCHOOL OF HEALTH

ABSTRACT

Problem:
Introduction of a new evidence-based debriefing tool, The PEARLS Healthcare Debriefing Tool published by Bajaj et al. (2017), into Prelicensure BSN simulation curriculum at a large online university created an opportunity for improved Professional Development of Learning Lab Instructors.

Goal:
The goal of this quality improvement project is to improve the effectiveness of Learning Lab Instructors leading debriefing sessions in the prelicensure BSN program after student participation in standardized simulations.

Aim:
The aim of this quality improvement project was to improve instructor effectiveness in applying the PEARLS Healthcare Debriefing Tool into the student simulation debriefing process.

Measure:
The project applied a one-group pretest-posttest model using the Peer and Self-Assessment Debriefing Instrument (PADI) published by Saylor et al. (2020), a tool used to measure instructor effectiveness with leading debriefing sessions.

Analysis:
Major improvements in instructor effectiveness were found after participation in multi-modal education for the application of the PEARLS Healthcare Debriefing Tool and areas for continued improvement were discovered.

BACKGROUND

Standards & Evidence-Based Practices:
- Aligned with INACSL Standards (2021)
  - The Debring Process
  - Professional Development
- Supports best practices in simulation debriefing
- Meets unique needs of each individual learner by providing multiple modes of education
- Standardized debriefing tool to create consistency in WGU nursing simulation experiences across five states

Educational Framework:
- Guided by Theory of Multiple Intelligences (Gardner, 2011)
- Use of Multi-Modal Education: visual, auditory, kinesthetic, and reading

Application of the PEARLS Healthcare Debriefing Tool:
- Promotes student reflection during debrief by:
  - Creates a Supportive Atmosphere
  - Facilitates Self-Discovery
  - Encourages Resourcefulness
  - Engages Observers
  - Leads, Does Not Control
  - Deepens Understanding

PURPOSE

Effective teaching:
- The purpose of this quality improvement project was to improve instructor effectiveness in applying the PEARLS Healthcare Debriefing Tool into the student simulation debriefing process.
- By enhancing facilitator skills and prioritizing effective debriefing strategies, the quality of simulation-based education can improve and enhance competencies and capabilities of future nurse educators and health care professionals (Lebo & Ryan, 2024).

Professional Development:
- Initial and ongoing professional development supports the simulationist across their career (INACSL, 2021).

METHODOLOGY

This project was guided by the Theory of Multiple Intelligences (Gardner, 2011) which rejects the idea that everyone learns the same way. Multi-Modal education offers multiple modes of learning that support visual, auditory, kinesthetic, and reading learning methods. The project applies a one-group pretest-posttest model using the Peer and Self-Assessment Debriefing Instrument (PADI) published by Saylor et al. (2016). A pretest occurred after a self-led educational PowerPoint and a posttest occurs after the application of a second educational modality; an evidence-based role-play video training produced by the university.
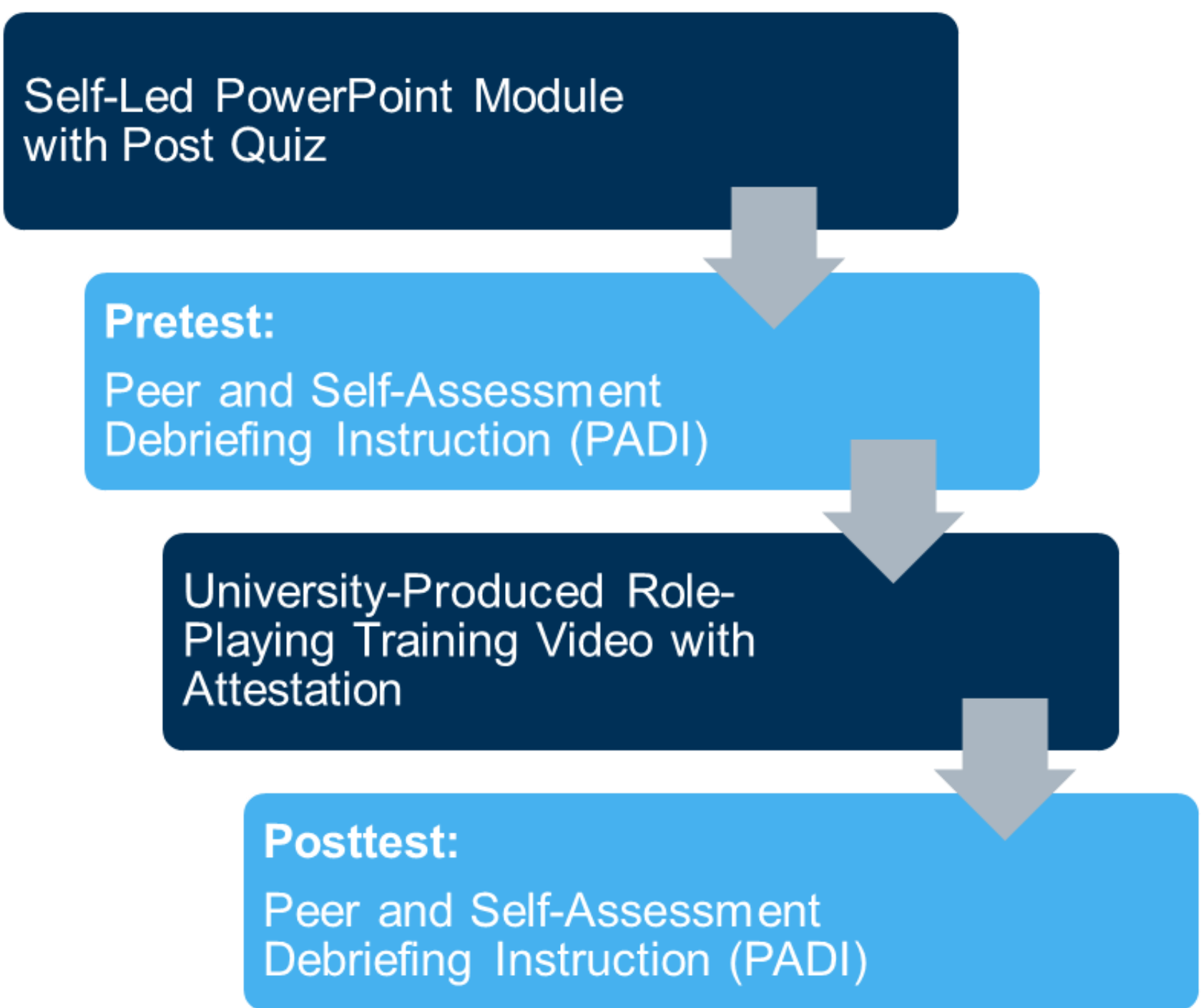
Figure 1: Project Design

Self-Led PowerPoint Module with Post Quiz

↓

Pretest: Peer and Self-Assessment Debriefing Instruction (PADI)

↓

University-Produced Role-Playing Training Video with Attestation

↓

Posttest: Peer and Self-Assessment Debriefing Instruction (PADI)

Figure 2: The PEARLS Healthcare Debriefing Tool

*Figure 3: WGU PEARLS Healthcare Debrief Training Video*

RESULTS

Quantitative Results:
- PADI #1 resulted in 100% participant inclusion of 10 debriefing concepts while PADI #2 resulted in 100% participant inclusion of 25 debriefing concepts.
- After participation in both the self-led educational PowerPoint and WGU produced PEARLS Training Video, debriefing resulted in 100% inclusion of all concepts related to Verbal and Non-Verbal Communication and Facilitating Learner's Connection of Simulation Experience to Clinical Practice.

Figure 4: Peer and Self-Assessment Debriefing Instrument (PADI) Results
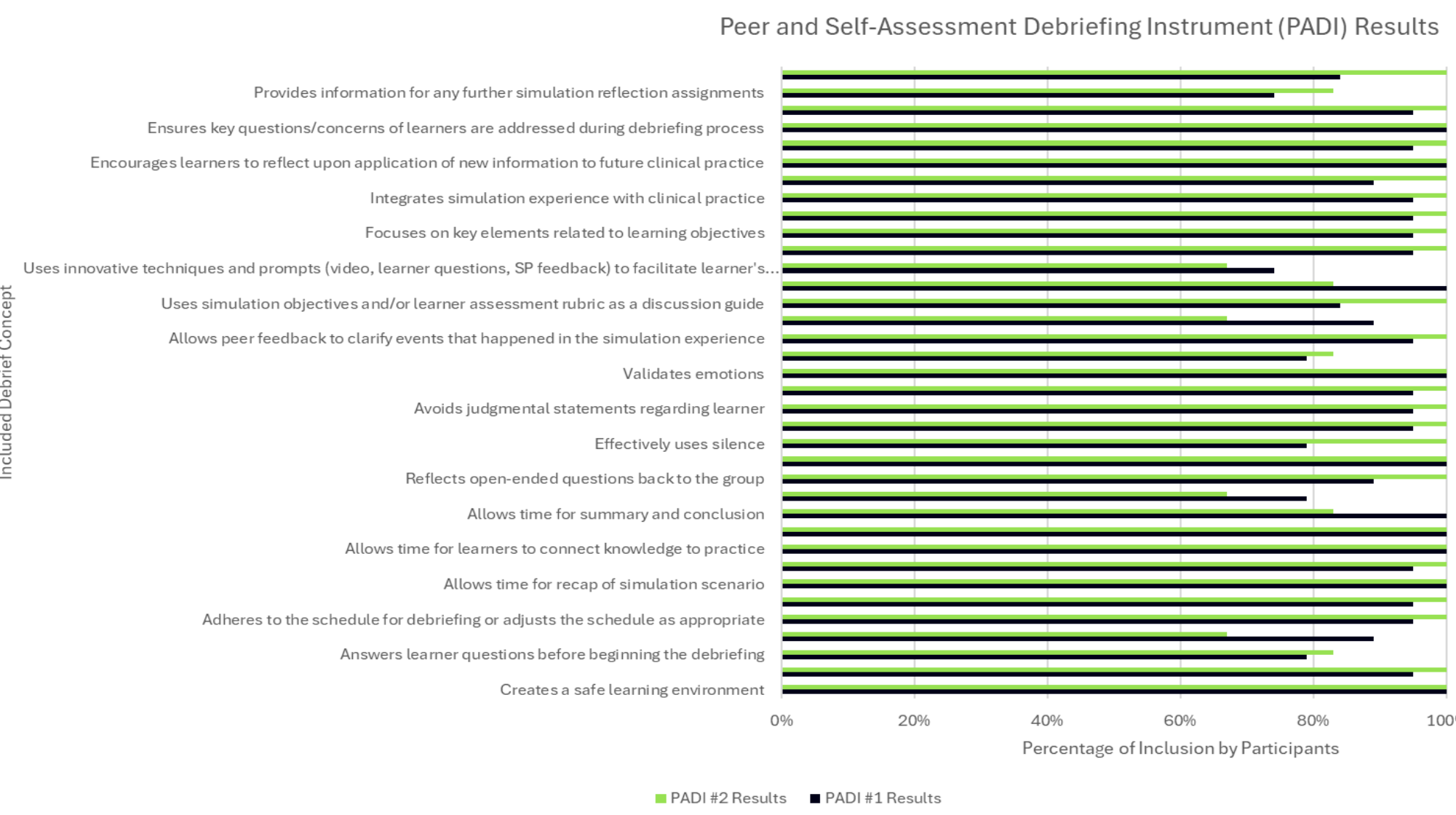
Major areas of improvement with the addition of WGU produced PEARLS Training Video:
- Effectively uses silence 79% inclusion to 100%
- Reflects open-ended questions back to the group 89% inclusion to 100%
- Uses simulation objectives and/or learner assessment rubric as a discussion guide 84% inclusion to 100%
- Encourages learners to integrate prior knowledge and apply new information gained in simulation experience 89% inclusion to 100%
- Offers learners remediation/additional experience if appropriate 84% inclusion to 100%

Performance gaps remaining after participating in the WGU produced PEARLS Training Video and Self-led PowerPoint:
- Uses innovative techniques and prompts (video, learner questions, SP feedback) to facilitate learner reflection on actions
- Finishes any evaluative paperwork and forwards to appropriate parties
- Provides information for any further simulation reflection assignments
- Answers learner questions before beginning the debriefing
- Appropriately tables untimely topics and returns to them for a later discussion

Qualitative Results:
- "I didn't find the PowerPoint training particularly helpful for learning the PEARLS debriefing. What truly helped me was taking the time to review the tool itself and apply it in practice."
- "I liked the video examples that brought to life the information I read in the PowerPoint."
- "The video provides higher level of engagement and provides example how to use PEARLS in practice."
- "I liked how they showed two different methods, one incorrect and one correct, on the importance of taking time with doing quality debriefing."
- "I learn more effectively with practical demonstration."

Figure 5: Learning Lab Instructor Feedback Word Cloud

LIMITATIONS

- Small Sample Size (PADI #1: n=19) (PADI #2: n=6)
- Lack of Demographic Data
- Data Collected from Single Institution of Higher Education
- Quality Improvement Project only included self-assessment and not peer-assessment data

CONCLUSION

- Improved instructor effectiveness in applying the PEARLS Healthcare Debriefing Tool after multi-modal education
- Positive qualitative feedback from participants
- Plan for continued improvement in the future:
  - Inclusion of both PowerPoint and WGU produced PEARLS Training Video in Learning Lab Instructor orientation
  - Inclusion of recorded simulation videos for reference during debriefing
  - Embedded participants will be encouraged to participate in debriefing process with students
  - Instructors will be encouraged to begin filling out scoring rubric for intermediate level students during debriefing to include feedback on debrief participation and detailed student notes
  - Standardized discussion with instructors on how to table untimely topics for the future respectfully
  - Include peer feedback for future improvement

REFERENCES

- Bajaj K, Meguerdichian M, Thoma B, Huang S, Eppich W, Cheng A. The PEARLS Healthcare Debriefing Tool. Debrief2Learn. 2017. https://debrief2learn.org/pearls-debriefing-tool.
- Bajaj, K., Meguerdichian, M., Thoma, B., Huang, S., Eppich, W., & Cheng, A. (2018). The PEARLS healthcare debriefing tool. Academic Medicine, 93(2), 336. https://doi.org/10.1097/ACM.0000000000002035
- Gardner, H. (2011). Frames of mind : The theory of multiple intelligences. Basic Books.
- INACSL Standards Committee, Decker, S., Alinier, G., Crawford, S.B., Gordon, R.M., & Wilson, C. (2021, September). Healthcare Simulation Standards of Best PracticeTM The Debriefing Process. Clinical Simulation in Nursing, 58, 27-32. https://doi.org/10.1016/j.ecns.2021.08.011
- INACSL Standards Committee, Hallmark, B., Brown, M., Peterson, D.T., Fey, M., & Morse, C. (2021, September). Healthcare Simulation Standards of Best PracticeTM Professional Development. Clinical Simulation in Nursing, 58, 5-8. https://doi.org/10.1016/j.ecns.2021.08.007
- Lebo, C., & Ryan, A. (2024). Innovative Insights: Teaching Best Debriefing Practices Through Debriefing the Debrief. Journal of Nursing Education, 0(0), 1–3. https://doi.org/10.3928/01484834-20240425-01
- Nagle, A & Foli, K. (2022). Student-Centered Reflection During Debriefing: A Mixed-Methods Study. Nurse Educator, 47, 230-235. https://doi.org/10.1097/NNE.0000000000001140
- Saylor, J. L., Wainwright, S. F., Herge, E. A., & Pohlig, R. T. (2016). Peer-Assessment Debriefing Instrument (PADI): Assessing Faculty Effectiveness in Simulation Education. Journal of allied health, 45(3), e27–e30.