Rhode Island College School of Nursing

in this issue >>>

Issue
WIN/20-21

RHODE ISLAND COLLEGE

ON POINT

Virtual Reality Simulation

page 4

Look for the give-away 😊!

Simulation Focus

Editor's Note >>>

A Virtual Existence

2019 - 2020

Now many months deep within a global pandemic – the virtual world has come to the forefront as a necessary mechanism for communication and engagement. How are you doing? I trust a great deal of uncertainty exists about the eventual outcomes as we try to teach via video conferencing with students. Thank goodness for breakout rooms! I wish more students would enable their video screens. When screens are down and audios are on mute, I wonder if anyone is listening. But listening is the very thing our students need from us, and what we all need from each other. Safety has been our top priority this year. Safety is the main tenet of simulation-practicing to prevent harm. As we navigate forward, we will figure out new ways to assess safety….(continued on page 4)

Psychological Safety

A Simulation Concept

Psychological safety is a concept applied in simulation and is a sensory experience felt by participants during simulation activities. According to the Healthcare Simulation Dictionary (HSD; 2020), *psychological safety* is, "the feeling (implicit or explicit) within a simulation-based activity that participants are comfortable participating, speaking up, sharing thoughts, and asking for help as needed without concern for retribution or embarrassment." (p. 38)

Related concepts, are *psychological fidelity* and *psychological risk*. *Psychological fidelity* refers to the level of realism presented within the simulation. *Psychological risk* refers to a mental threat perceived leading to feeling unsafe (HSD, 2020). Understanding related concepts helps simulation educators discern psychological safety, specifically in the context of the learner's experience. The purpose of providing a safe learning environment enables participants to more fully engage in the simulation activity.

Learners participating in simulation need to feel safe about speaking up…

**Debriefing Assessment for Simulation in Healthcare (DASH/CMS-Harvard).*

At RICSON, *psychological safety* is applied when educators explain to learners that the simulation is designed so participants can learn from their mistakes. The DASH* assessment *Element 2*, "I maintained an engaging context for learning," depicts psychological safety when facilitators successfully empower participants to share thoughts and feelings without fear of reprisal. Learners are more likely to reflect at a deeper level within a safe learning environment.

Resources >>>

The Baker's Dozen Simulation Articles by Specialty 2020

Integrating **Diversity, Equity, and Inclusion** into a Simulation Program
Speaking Up about Errors in **Routine Clinical Practice**: A Simulation-Based Intervention with Nursing Students
NLN/Jeffries Simulation Framework for **Simulated Participant*** Methodology ***Actors**
A Family Care Rubric: Developing **Family Care** and **Communication** Skills during Simulation
Integrating **Healthcare Interpreters** into Simulation Education
Students Like Peer Evaluation during **Home Visit** Simulation Experiences
The Effects of Virtual Simulation on Undergraduate Nursing Students' Beliefs about Prognosis and Outcomes for **People with Mental Disorders**
Development of Virtual Reality Simulation Program for **High-Risk Neonatal Infection** Control Education
Clinical Simulation Training in Nurses Caring for **Pediatric Oncology** Patients
Promoting **Interprofessional Communication** with Virtual Simulation and Deliberate Practice
Buprenorphine Induction Simulation: Focus on Patient Safety and Quality Care
Simulated **Nurse Video Consultations:** An Innovative Proposal During COVID 19 Confinement
AneSBAR Handoff Rubric for **Nurse Anesthesia** Students

For PDF versions of all articles listed, see RICSON's Share Point Folder – SIMULATION PROGRAM – Bakers Dozen 2020

Simulation Effectiveness Tool – Modified (SET-M)

The SET-M (Leighton, et. al, 2018) is a valid and reliable tool capturing data within subscale categories of a) prebriefing, b) learning, c) confidence, and d) debriefing. The overall reliability reported is .936. (for additional subscale alpha's see: https://sites.google.com/view/evaluatinghealthcaresimulation/set-m). The RICSON Simulation Program uses the SET-M for all scheduled simulation surveys which should occur immediately after debriefing by a trained debriefer. Competencies in facilitation and debriefing are part of the RICSON Simulation Educator Designation (SED) Program. All faculty, including adjunct faculty, are required to demonstrate competency in facilitating and debriefing of RICSON simulation activities. Contact psadlon@ric.edu for more information.

Expert advice >>>

Spotlight:

Evaluating Simulation

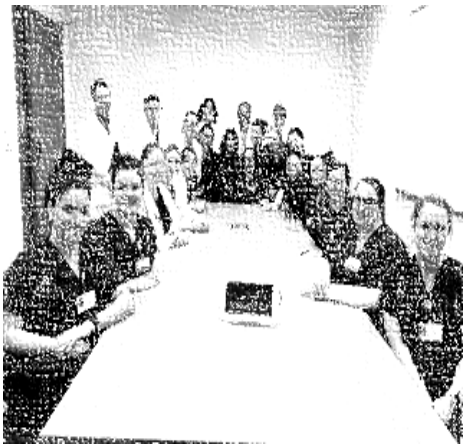
How simulation is evaluated depends on the context. What is being evaluated? The design? The participants? The facilitators? The operational team? This *Spotlight* section of evaluation will focus participant evaluation. ***Evaluation should be part of every learning activity endpoint. As educators, best practice determines understanding the context in which it is applied.*** Participant evaluation should be determined before the simulation. Using best-practice, identify whether the simulation evaluation is ***formative, summative, or high-stakes.*** Students need to know what to expect. Clearly identify expected outcomes. Use a reliable method of assessment (***see sidebar at left***). Review course simulations each year to revise evaluation methods for improving assessment practices.

The International Nursing Association for Clinical Simulation and Learning (INACSL) website: www.inacsl.org publishes a variety of evaluation tools for assessing participant outcomes. The Simulation Thinking Rubric (STR) by Doolen (2015) recently reported internal rater reliability as 0.74, with revisions in development. Another example is the ISBAR nurse-to-physician communication rubric ($\alpha = 0.931$) reported by Veronda, et al. (2021). Simulation educators can use a variety of tools to assess student outcomes of simulation activity – and the time to decide what works best is **before** deployment of the activity. See https://www.inacsl.org/resources/repository-of-instruments/#knowledgelearning for additional instruments.

Essential Tips for First-Time Debriefing

Debriefing environments should promote a learner-centered atmosphere; where respect for others and the ability to share thoughts and communicate ideas within a safe environment is considered essential. But how can we ensure we are creating a debriefing session where everyone feels empowered to engage?

Learning is the outcome of debriefing, not the simulation itself. Several frameworks are available for first-time debriefers, and without acquiring knowledge beyond the framework, debriefers may find themselves sticking to the 'recipe' of asking scripted questions such as, "What went well?" If you are new to debriefing, using cognitive aids (like a novice) is practical. Most debriefing frameworks have at least three phases – a reactions phase, an analysis phase, and an outcomes phase. Each framework may split the three phases into sub-categories. For example, a popular debriefing framework in nursing education is *Debriefing for Meaningful Learning* (DML; Dreifurest, 2015). DML uses six phases; engage, explore, explain, elaborate, evaluate and extend. Worked into a three-phase framework it might become: Reactions (engage and explore), Analysis (explain and elaborate) and Outcomes (evaluate and extend). Frameworks are helpful for first time debriefers who can rely on structure for managing conversations. In debriefing, the key for managing conversations is remembering the focus is learner-centered, not didactic-teaching centered. One disadvantage of following a pre-scripted plan is that learners may never get the chance to deepen in their reflection of performance gaps and thus, fail to recognize opportunities for improvement. ***See side bars at right….***



Debriefer as Leader

- Use a frame of engagement
- Guide from the side
- Help others navigate
- Demonstrate critical thinking
- Promote positive thoughts
- Help learners reflect
- Illustrate the bigger picture
- Use analysis for developing future action

Connecting the dots…

During debriefing, when students think and then speak about their simulation experiences, they may stop at recall, and fail to reflect. Reflecting requires an internal assessment of prior, current and potential future actions based on what was recently learned. Beyond reflection, the focus should be on recognizing what learning has occurred. In other words, ***connecting the dots.***

Envisioning for the future…

Debriefing skills can be acquired through practice. In Cheng and colleagues (2020) article, *A Conceptual Framework for the Development of Debriefing Skills*, three stages (discovery, growth, and maturity) are illustrated with corresponding characteristics of debriefers, requisite knowledge and key skills associated within each stage. Examples of each are given. For more information, see article on the RICSON Share Point Folder – Simulation/Debriefing.

ask the experts >>>

Q: What should I do if students talk too much during simulation debriefing interrupting others?

A: One strategy in debriefing is to set the ground rules prior to beginning questioning. After facilitating a reactions phase (releasing emotions), tell the group to respect each other's contributions and communicate in a way that allows all group members to participate in the discussion. As the facilitator, focus the conversation with long-winded learners by offering a closure question – such as "What is the one thing most important here?"

Editor's Note – A Virtual Existence (Continued from page 1)

…and to investigate ways to evaluate student learning using virtual reality (VR). Competency is also important for all of us who create and deploy VR. This newsletter issue focuses on advancing ways to implement, debrief, and evaluate simulation using best-practice evidence. The Baker's Dozen simulation articles by specialty provide grounding for creating virtual experiential learning – and evaluating virtual simulation activities are new topics that every simulation educator should know. In the coming months, my hope is to strategize collaboratively and embrace VR as a viable alternative whilst we wait and listen (attending to mute buttons and blank screens) as the pandemic fades and we become visible once again. ***Be safe and well-informed****. ~**Penni Sadlon, PhD, RN, CHSE, Simulation Director***

On Point Virtual Reality Simulation

Virtual Reality Simulation can be as complex as reality. Differences exist between **Virtual reality(VR), Virtual simulations, VR environments, and VR worlds**[1]. **Virtual Reality Simulation (VRS)** uses a variety of tools to mimic real situations or structured procedural tasks. Equipment used in VRS may include 3-dimensional features, "physical or other interfaces, such as a keyboard, a mouse, speech and voice recognition, motion sensors, or haptic devices" [1] (p. 54). Having the resources necessary to implement VRS requires simulation educator expertise in VR technology, the space to create a VR room, equipment accessories, such as head-mounted devices (HMDs), and access to VR technology experts. Many larger academic institutions have VR simulation curriculums for medical, nursing and other health professionals in training. For schools without adequate financial or human resources, VRS development may be out of reach. In Mendez[2], recommendations for implementing VR and augmented reality (AR) require serious commitment and engagement from faculty who view VR/AR as a viable and beneficial way to improve student-centered interactive learning.

In this ***On Point*** discussion, the term Virtual Reality Simulation or VRS is defined and distinguished from virtual simulations (e.g. v-Sims).

Virtual Reality Survey!!
FIRST TEN (10) RESPONDENTS WILL RECEIVE A LAMINATED CARD SET OF INACSL BEST PRACTICES!!!

LINK TO SURVEY:
https://ric.qualtrics.com/jfe/form/SV_57JdKpnkqDRHdtz

Virtual Simulations occur when plausible situations are portrayed on a computer screen.[1] The computer flight-simulator is a good example. In nursing education, many educational products have integrated virtual simulations in the course materials. When using virtual simulation in a course, a prebriefing before and debriefing after should occur. Offered by Rin and Shin,[3] an instructional design template provides faculty with a conceptual framework for implementing VRS and virtual simulations incorporating educational and virtual simulation elements. Creating VRS and virtual simulation is a complex undertaking that necessitates understanding the technical factors that can impact student learning.[3] One of the benefits of virtual simulation over in-person simulation is that the learner can *repeat actions* until they understand it correctly. In-person simulations may not be designed to give immediate feedback on all actions. [3] Within a virtual environment, customization allows faculty to plan learner level specific educational objectives. In ready-made virtual simulations, direct-care activities through *deliberate practice* may not align with course outcomes. Some ready-made products may not have customization features. It is important for faculty to understand the context of a ready-made virtual simulation in combination with learning objectives and course outcomes.

[1]Lioce L. (Ed.), Lopreiato J. (Founding Ed.), Downing D., Chang T.P., Robertson J.M., Anderson M., Diaz D.A., and Spain A.E. (Assoc. Eds.) and the Terminology and Concepts Working Group (2020), Healthcare Simulation Dictionary –Second Edition. Rockville, MD: *Agency for Healthcare Research and Quality*; September 2020. AHRQ Publication No. 20-0019. DOI: https://doi.org/10.23970/simulationv2.

[2]Mendez, K., Piasecki, R., Hudson, K., Renda, S., Mollenkopf, N., Nettles, B. S., & Han, H. (2020). Virtual and augmented reality: Implications for future nursing practice. *Nursing Education Today, 93*, 104531. https://doi.org/10.1016/j.nedt.2020.104531

[3]Rin, D. & Shin, K. (2021). Effective instructional design template for virtual simulations in nursing education. *Nursing Education Today*, *96*, 104624. https://doi.org/10.1016/j.nedt.2020.104624

SIMULATION EDUCATION DESIGNATION (SED) Programs

RHODE ISLAND COLLEGE

JANUARY 17th , 2021 SED Program (for first timers)

RHODE ISLAND COLLEGE

JANUARY 23RD, 2021 SED RENEWAL Program

For more information please contact: psadlon@ric.edu

INACSL

International Nursing Association for Clinical Simulation and Learning(INACSL)

Future Conferences

INACSL Conference, 2021
June 16-19, 2021
Denver, CO
Sheraton Denver Downtown Hotel

INACSL Conference, 2022
June 15-18, 2022
Milwaukee, WI
Conference Location: Wisconsin Center
Conference Hotels: Hilton Milwaukee City Center and Hyatt Regency Milwaukee

INACSL Conference, 2023
June 14-17, 2023
Providence, RI
Conference Location: Rhode Island Convention Center
Conference Hotels: Omni Providence, Graduate Providence, and Hilton Providence

INACSL Conference, 2024
June 12-15, 2024
Raleigh, NC
Conference Location: Raleigh Convention Center
Conference Hotels: Marriott Raleigh City Center, Sheraton Raleigh Hotel, and Residence Inn Marriott Downtown Raleigh

For more information see www.inacsl.org