Faculty Development in Simulation-Based Pedagogy: A Model to Share

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Why there is slow up-take

- Fear of technology
- Fear of the equipment
- Manipulation of the high fidelity manikins
Introduction

- History of simulation
- Simulation modalities
- High-fidelity simulation in nursing
- Learning theory and teaching with simulation
- Implementing Faculty development
Simulation is NOT new
Simulation modalities

- Standardized patients
- Computer-based simulation
- Virtual reality simulation
- Patient simulators
Blend and Mix

Fidelity

Hi-tech Manikin
Partial Task Trainer
Orange

Standardized Patient
Role-Player
Untrained Person

Realistic Scenario
Minimal Context

Matched to Learners
Poorly Matched to Learners
High-Fidelity Simulation in Nursing

- Patient safety and reduced medical errors
- Improved team communication
- Avenue for interprofessional education
- Critical thinking and clinical reasoning skills
- Augments traditional education pedagogies
- Need for a “bridge” between theory and practice (Reilly & Spratt, 2006; Tuoriniemi & Schott-Baer, 2008)
Learning Theories

- Behaviorist Theory
  - Focus on learning outcomes
  - Interprofessional education evaluation and design (Hean, Craddock & O’Halloran, 2009).

- Constructivist Theory
  - Cognitive and social approaches to learning
  - Experience problem-solving, clinical reasoning, and decision-making (Hean et al., 2009).
Learning Theories

• Adult Learning Theory
  • Relevant to life and work
  • Replicates the environment
  • Immediate feedback

• Bloom’s taxonomy of learning
  • High-fidelity sim provides learning in all three domains
    • Cognitive
    • Affective
    • Psychomotor
Why Sim – benefits for the faculty
Why Sim – benefits for the faculty

- No risk to a patient
- Allows for repetition
- Presentation of uncommon/serious outcomes
- Errors can be allowed
- The simulation can be frozen
- Recording, replay, and critique

(Flanagan, Nestel & Joseph, 2004)
Why Training?
Why Training?

• High-fidelity simulation is an effective pedagogy (Waxman & Telles, 2009).

• Faculty development fosters competency in simulation technology
  • Increasing simulation trained educators to meet increasing demands

• Allows for standardization
The facilitator has specific simulation education provided by formal coursework, continuing education offerings, and targeted work with an experienced mentor.
Faculty Simulation Development at U of W

- Recruitment
  - Screening process
- Curriculum development
- Training – Phase One
  - Didactics
  - Observation
- Training – Phase Two
Training – Ask yourself, what do want them to take away?

• Learning Objective:
  • Following the workshop, the participant will be able to demonstrate the process of configuring the manikin and computer based on the simulation scenario.
Training – How are you going to accomplish your objectives?

- Learning Experience
  - Didactics
  - Interactive hands-on activities
Debriefing Techniques

• Learning Objective
  • Following the workshop the participant will be able to
    • explain the importance of debriefing
    • identify components of debriefing
    • Model debriefing strategies

• Learning Experience
  • Didactics and interactive hands-on activities
Why Debrief?

• Perceived by students as highly important
• Can “make or break” the simulation session (Rall, Manser, & Howard, 2000)
• Learning occurs as connections are made and events understood
• Learners begin to understand general principles applied to sim that can be applied in future experiences with patients
Debriefing Process

- Goals of debriefing
- Process of debriefing
  - Setting the environment
  - Review objectives
- Debriefing techniques
  - Debriefing tools
How would you evaluate how the training worked?
Please complete the following evaluation of the workshop using the following scale:

1 = strongly disagree  
2 = disagree  
3 = neither agree or disagree  
4 = agree  
5 = strongly agree

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<tr>
<th>Statement</th>
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<th>4</th>
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<tbody>
<tr>
<td>1. The workshop was helpful in learning about simulation</td>
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<td>2. The workshop was well thought out.</td>
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<td>3. The workshop was well organized.</td>
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<td>4. As a result of the workshop, I have a better understanding of the use</td>
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<td>of simulation as an important education pedagogy.</td>
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<td>5. The feedback that I have received during the hands-on sessions was</td>
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<td>constructive, positive, and helpful.</td>
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<td>6. The instructors facilitating the workshop were knowledgeable and</td>
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<td>facilitated my learning.</td>
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<td>7. I consider the workshop a valuable use of my time.</td>
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<td>8. I was satisfied with the amount of hands-on experience with the</td>
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<td>simulation equipment and manikins provided during the workshop.</td>
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<td>9. The workshop challenged and engaged me in a realistic way.</td>
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<td>10. The workshop increased my self-confidence in facilitating a simulation session.</td>
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Additional comments ______________________________________________________
Training Phase Two

• Summer 2016
  • Revisiting debriefing
  • Addressing any issues following Phase One
  • Introduction of new techniques

• Fall 2016
  • Peer observation
Lessons Learned

• Feedback tool post observation
• Revisit the evaluation tool after first two observations
• Addressing any Faculty challenges
Questions

Thank you