

MEETING STUDENT LEARNING OUTCOMES THROUGH SIMULATION: OBJECTIVES TO EVALUATION

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OBJECTIVES

- Describe the process from development, pre-brief, simulation to debriefing experiences toward achievement of student learning outcomes.
- Describe and create objectives to reflect learning outcomes specific to course objectives for class, lab and clinical experiences within curricular framework.
- Describe approaches to evaluate student performance in simulation experiences.

Faculty participation is encouraged and necessary.

Key Reasons for Utilization of Simulation in Nursing Education

- Simulation
 - Resembles reality
 - Creates a safe environment for students to learn and practice psychomotor, teamwork, collaborative work, and communication skills
 - Provides an opportunity to respond to a situation/problem as under natural circumstances and for competency testing

Key Reasons for Utilization of Simulation in Nursing Education

- Simulation
 - Creates an opportunity for standardization of assessment of student learning
 - Safety and quality of patient care is dependent on teamwork, communication and a collaborative work environment.
 - Is practical as the “real thing” may not be the best teaching/learning experience due to cost, safety and opportunity in the clinical setting



Useful Features of Simulation

- Provides feedback for competencies
- Repetitive practice
- Curriculum Integration



NCSBN Simulation Study Highlights

- Best practices include terminology, professional integrity of the participant, participant objectives, facilitation, facilitator, the debriefing process, and participant assessment and evaluation
- Evidence that up to 50% simulation can be effectively substituted for traditional clinical experience in all pre-licensure core nursing courses under conditions comparable to those described in the study
- Question: What did you find intriguing related to study results?



Current Use

Why and how is Simulation used as a teaching method here?



Faculty Involvement and Responsibility

- Development
- Facilitating simulation experience
- Debriefing
- Formative evaluation



Development of the Simulation Experience

- Who, What, When, Where, Why, How?
- Based on
 - Curriculum Sequence and objectives Course Objectives, NCLEX Client Need Categories, QSEN, Nursing Process, NLN Competencies, BSN Essentials, and others
- Critical Thinking and Clinical Judgement:
 - Clinical reasoning to promote a positive outcome for a client



Types of Simulation Experiences

- Task-Training
- Virtual reality
- Manikin based
- Standardized patients (actors)
- Case Studies
- Multi-Disciplinary
- Hybrid



Stages of Simulation Scenario

- Pre-brief
- Scenario
- De-brief
- Repeat Similar Experience
- Evaluation



Planning for Simulation

- Objectives
- Student Preparation assignments
- Students engagement learning activities
- Specific Evaluation Content:
 - What is being evaluated?
 - Resource List



Facilitation of Simulation Experience

- Discussion Question:

What are faculty responsibilities in Simulation?



Pre-Brief with Students

- Preparation
 - What do students need to know prior to the simulation?
 - How do students “know” this?
- Deliverables
 - Samples: Templates for specific medications, system disorder, diagnostic and/or therapeutic procedures, nursing skills, legal/ethical dilemmas, growth and development



Scenario Experience

- Care
 - Hand-off/over skills
 - Direct care skills
 - Organization
 - Clinical Reasoning
- Documentation
 - Accurate documentation is integral to safe patient care
 - Identify omissions of information
 - Identify errors in data (Assessments, vital signs)
 - Identify incorrect process for amendments (corrections)
 - Identify confidentiality violations



De-Brief

- Faculty Role as a facilitator
 - Faculty trained in simulation pedagogy in adequate numbers to support learners
 - Discussion of Actual Events within the Scenario
 - Nursing Process
 - Safety
 - Team work
 - Confidentiality
 - Documentation
 - Real World connection—next steps for improvement?—Subject Matter Experts



Expectations during Debrief

- Student awareness of review of behaviors:
 - Review of video of actual care
 - What went well?
 - What did not?
 - How did this affect outcomes?
 - What are the consequences of specific nursing actions?



Safe Setting for Debrief

- Safe setting for discussions
 - Express feelings
 - Discuss reactions to outcome
 - Confidentiality—where and with whom is this information shared?



Student Nurses Accountability/Just Culture

- Learning to recognize mistakes and learn from them
- Safe environment to develop essential nursing skills
- Increasing self-confidence
- How does Just Culture relate to Simulation in the learning environment?
 - Opportunity to feel more at ease reporting problems
 - A sense of accountability for system improvement
 - Your Thoughts?



Sample Questions during Debrief session

- What was your role during the simulation?
- Were you effective in that role? Why? Why Not?
- How would you describe your behavior during the simulation experience?
- Were you exhibiting professional behaviors?
- What emotions did you experience?



Sample Questions during Debrief session

- Did you adequately prepare for the experience...knowledge of condition, treatments, possible complications?
- What were some of your challenging decisions? What influenced those decisions?
- How can you improve?



Evaluation

- Formative Assessment to enhance student learning outcomes:
 - Faculty have important role in providing formative feedback—what does this mean?
 - Knowledge Acquisition and Retention
 - Videotaped student performance
 - Critical Thinking and Self-Confidence
 - Student Self-Evaluation



Sample Evaluation Instrument

- Creighton Competency Evaluation Instrument
 - Used by clinical instructors to rate students on behaviors that collectively demonstrate clinical competency
 - Assessment, communication, clinical judgment, and patient safety



Next Steps

- Similar Care Experience
- Evaluation for transfer of knowledge
 - What are the specific student behaviors reflecting transfer of knowledge between theory and clinical that are needed at this level within the curriculum?



Integration Throughout Curriculum

- Revisions necessary?
- Alignments for:
 - Curriculum
 - Course
 - Specific Learning Concepts/Topics



Tour of Simulation Lab

- Tour of Simulation Lab and Mock Simulation as possible
- Discuss Actual Processes Used for Simulation Experiences
- Discuss opportunities to facilitate students meeting learning outcomes

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