Planning for Simulation: From Learning Objectives to Outcomes

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Reilly & Oermann (1990) “objectives are the tools that guide learning and are essential in simulation”.

The objectives of the simulation reflects the student learning outcomes your nursing program plans to achieve.
Smith & Roehrs (2009) defines design characteristics as:

1) Clear objectives
2) Suitable problem
Writing objectives

1) Specific
2) Attainable
3) Detailed
4) Purposeful
Jeffries (2012) Shares a list of potential simulation outcomes such as:

knowledge gained
Skills performed
Participants satisfaction
Critical thinking
Self confidence
I get it! Objectives are important & must compliment the learning outcomes: how do I get started?
Making Students aware of the Simulation Objectives

* Make students aware of simulation objectives in pre-briefing
* Review simulation objectives in de-briefing
* Technique referenced by Jeffries in 2007 where the study was looking at learning styles in relation to simulation.
Establish clear objectives for the sim and a suitable problem then.....

Write the story:

* 1) Beginning
* 2) Middle
* 3) Ending

Write the story:

* 1) Pre-briefing
* 2) Simulation
* 3) De-briefing

* (Aschenbrenner, Milrom, & Settles, 2012)
Moving students toward the objective of the simulation.

1) Cues
2) Anticipate potential problems
3) Follow the students
4) Thorough examination of equipment in “beginning” or “pre-brief”.
5) Cue the family member
6) Involve a content expert

(Aschenbrenner, Milrom, & Settles, 2012)
Mental Health Simulation for second year RN students.

Simulation Student evaluations was poor

Why?
Dean--------Schizophrenia & Paranoia

History:  mother is care giver and fell, she is in rehab.  Attempted to harm himself in the past.. High school education

Story Line:  Brother brings him to ER of a hospital with psych unit.  He is admitted to psych unit.  Believes someone is out to get him, will not eat as the food is poisoned. Restless and pacing, sees spy's.  Oriented times 3.

Presenting symptoms:  Auditory and visual hallucinations (believes he has secret military knowledge), X-military.  No marijuana for 10 years. Has never used alcohol or tobacco.
Lucy------- bipolar

History: Has children, no other family, unemployed and boyfriend left.

Story Line: Admitted via police for soliciting money at local “Wally World “as she wants to head to California to audition for American Idol. She stopped taking her Lithium.

Presenting symptoms: Pacing/ Singing/complaints of nausea and diarrhea. Confused, blurred vision, tremors. Lucy had neighbors’ phone number and ER called her and she came in to sit with Lucy.
Good Story Line
Proven over time

No reason identified that this sim should not work for us!
HESI Data:
Psychosis
Abuse
Stress & Coping

RN NCLEX Data:
Psychosocial Integrity 6-12 % exam
Galen Students ranked at 55% of National Population of Graduates in this category.
97% Galen Graduates pass the NCLEX-RN examination the first time?
<table>
<thead>
<tr>
<th>Program Student Learning Outcome</th>
<th>Course Student Learning Outcomes</th>
<th>Clinical Student Learning Outcomes</th>
<th>Simulation Student Learning Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>3) Communication/Information Technology Use</td>
<td>2) Use effective verbal, non-verbal, written, and computer skills while providing care for clients experiencing complex mental health issues and communicating with other health care providers. 5) Promote dignity, respect and privacy for clients experiencing complex mental health issues.</td>
<td>1) Provide care to clients with complex mental health alterations utilizing the nursing process, caring measures, and client advocacy.</td>
<td>Assess therapeutic communication techniques used to care for the simulated patient.</td>
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<td>4) Critical Thinking/ Clinical Judgment</td>
<td>10) Provide competent and evidence-based nursing care based on the nursing process and primary, secondary, and tertiary levels of health promotion to promote health and prevent illness and disability for clients experiencing complex mental health issues.</td>
<td>3) Explore interventions used by nurses and other mental health professionals for clients with mental health alterations.</td>
<td>Use a mental health assessment to gather data for each patient to use to create a care map due post simulation.</td>
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<td>1) Safe, Patient – Centered Care</td>
<td>1) Incorporate clinical judgment to provide accurate safe individualized care that moves clients experiencing complex mental health issues and assist them toward positive health outcomes. 6) Implement relevant teaching and learning strategies designed to achieve positive health outcomes for self, clients, families and communities.</td>
<td>3) Explore interventions used by nurses and other mental health professionals for clients with mental health alterations.</td>
<td>Evaluate nursing interventions used to safely administer medications to the mental health simulated patient.</td>
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<td>6) Leadership/Professionalism</td>
<td>1) Incorporate clinical judgment to provide accurate safe individualized care that moves clients experiencing complex mental health issues and assist them toward positive health outcomes. 2) Use effective verbal, non-verbal, written, and computer skills while providing care for clients experiencing complex mental health issues and communicating with other health care providers.</td>
<td>3) Explore interventions used by nurses and other mental health professionals for clients with mental health alterations.</td>
<td>Determine the effectiveness of the nursing interventions used in the simulation while caring for mental health patients.</td>
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</table>
Student evaluations indicated comments such as:

“I do not want to act”
“I would not make students do the simulation”
“The roles were confusing”
“Let the faculty do the role play”
Student evaluations
Percentage of satisfaction:

Spring 2013 QTR 89.7% satisfaction
Summer 2013 QTR 82% satisfaction
Fall 2013 QTR 98.2% satisfaction
Simulation comments after the changes:

“This was the best sim in my entire time at Galen!”
“The Faculty was excellent!”
“I was better prepared for a live Mental Health patient”
“This was really the best sim for communication”
### Program Student Learning Outcomes (PSLO):
1. Safe, Patient-Centered Care
2. Caring Behaviors
3. Communication/Information Technology Use
4. Critical Thinking/Clinical Judgment
5. Teamwork/Collaboration
6. Leadership/Professionalism

#### Evaluation Criteria

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>PSLO 1-6</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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<tbody>
<tr>
<td>Objectives/Information</td>
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<td>3</td>
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<td>Support/Cues</td>
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<td>I was supported in the learning process.</td>
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<td>Problem Solving/Complexity</td>
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<td>4</td>
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<td>The simulation provided me with opportunity for the patient.</td>
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<td>Guided Reflection/Debriefing</td>
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<td>1, 4</td>
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<td>Feedback provided was constructive and centered around patient safety and care.</td>
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<td>1, 4</td>
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<tr>
<td>Fidelity</td>
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<td>2, 3, 4</td>
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<td>The scenario resembled a real-life situation.</td>
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<td>2, 3, 4</td>
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<td>Active Learning</td>
<td></td>
<td>3, 5, 4, 6</td>
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<td>I actively participated in the debriefing session after the simulation.</td>
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<td>3, 5, 4, 6</td>
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<td>I received cues during the simulation in a timely manner</td>
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<td>1,</td>
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<td>Diverse Ways of Learning</td>
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<td>The simulation offered a variety of ways in which to learn the material.</td>
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<td>High Expectations</td>
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<td>1-6</td>
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<td>I was challenged in my thinking and decision-making skills.</td>
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<td>1-6</td>
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<td>Teamwork/Collaboration</td>
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<td>3, 5</td>
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<td>I collaborated effectively with my peers during the simulation.</td>
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<td>3, 5</td>
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<td>Satisfaction with Current Learning</td>
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<td>3, 4</td>
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<td>The teaching methods used in this simulation encouraged critical thinking.</td>
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<td>3, 4</td>
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<td>My instructor incorporated information technology into the simulation.</td>
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<td>Self-Confidence in Learning</td>
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<td>1, 2, 4, 6</td>
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<td>I am confident that the simulation has assisted in improving my ability to provide safe and competent care.</td>
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<td>1, 2, 4, 6</td>
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Describe the best or most useful part(s) of the simulation.

Describe the least useful part(s) of the simulation.

Describe the part(s) of the simulation experience you would change and why.

Describe your overall satisfaction with the simulation as a learning experience.
Validity & reliability

* One campus did a 2 quarter trial to prove this was a valid tool for Galen.

* Reliability was shown by using an inter-rater reliability method.
Assessment

* Simulation can be used in academia as low risk assessment or as high risk assessment.

* Simulation can be used to determine the performance of health professionals.
QUESTIONS?

Here comes a nursing student and it looks like she wants to ask a question... everyone act like you can't see or hear her.

