

Simulation Education Evidence-Based Best Practices

Session 5

Scenario Design and Development

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Presenters

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Disclosures

Relevant to the content of this educational activity, the speakers and moderator have no conflict(s) with commercial interest companies to disclose.

Overview of Program – Seven Sessions

Session Topic with associated WORKBOOK	Date
Session 1: Introduction to Simulation	4/28/2021
Session 2: Creating a Supportive Environment and Psychological Safety to Learner and Facilitator	5/26/2021
Session 3: Debriefing Growth and Assessment	6/23/2021
Session 4: Evaluation of Student Learning	7/28/2021
Session 5: Scenario Design and Development	8/25/2021
Session 6: Curricular Integration and Alignment to Learning Outcomes	9/22/2021
Session 7: Interprofessional Simulations	10/27/2021

Session #5: Scenario Design and Development

Learning Objectives

1. Examine the criteria and required elements associated with best practices for simulation design.
2. Critique existing scenarios according to best practices for scenario design.
3. Examine the criteria and required elements associated with best practices for simulation operations.
4. Discuss expectations and timeframes to effectively collaborate with Simulation Centers to prepare for simulation base experiences (SBE).

Polling Question - Select All that Apply



Healthcare Simulation Standards of Best Practice™ Scenario Design (2016)

Criteria

1. Perform a needs assessment.
2. Construct measurable objectives.
3. Structure the format of a simulation based on the purpose, theory, and modality for the simulation-based experience.
4. Design a scenario or case to provide the context for the simulation.
5. Use various types of fidelity to create the required perception of realism.

[Link to Design Standard](#)



Healthcare Simulation Standards of Best Practice™ Scenario Design (2016) (cont.)

6. Maintain a facilitative approach ... participant centered... driven by the objectives, participant's knowledge or level of experience,expected outcomes.
7. Begin simulation-based experiences with a prebriefing.
8. Follow simulation-based experiences with a debriefing and/or feedback session.
9. Include an evaluation of the participant(s), facilitator(s), the simulation-based experience, the facility, and the support team.
10. Provide preparation materials and resources
11. Pilot test before full implementation.



Drafting Ideas for new SBE scenario

- Worksheet for brainstorming
 - Available as a fillable pdf
 - 5 pages including review tool
- Once done brainstorming transfer to your institution's template

WORKSHEET and STORYLINE for DRAFTING SIMULATION Brainstorming Tool for developing simulation Activities

Needs Assessment:

Who are the Learners/participants? Where from? How many? What disciplines?

What are the Gaps in Knowledge and Skills?

Source(s) of Identified Gaps

Assumptions of Educators/discipline RE: learning, teaching, nature of knowledge, etc.

Purpose/Goal of Simulation Activity

Potential sources for similar existing simulations

Formative Summative High-Stakes

Review Tool to Critique SBE scenario

Review Tool for Evaluating the Design and Implementation of Simulations using Best Practices

Purpose: Considering elements for best practices in simulation¹, this tool² helps review the design of a simulation activity and how educators operationalized the simulation. (Note - this tool is separate from evaluation of the participant).

Name of Simulation Reviewed: _____

Date: _____

Reviewer(s): _____

Best Simulation Practice Element			
Reviewed During the Design and Development of the Simulation			
<i>Objectives and Outcomes (INACSL Standard)</i>	YES	NO	Ideas for Revisions
• Objectives are aligned to participant knowledge level and experience	<input type="radio"/>	<input type="radio"/>	
• Objectives are driven and correspond to program and/or course outcomes	<input type="radio"/>	<input type="radio"/>	
• Objectives are S.M.A.R.T --- specific, measurable, achievable, realistic and within the timeframe of the scenario.	<input type="radio"/>	<input type="radio"/>	
• Objectives incorporate domains of learning (affective, psychomotor, cognitive)	<input type="radio"/>	<input type="radio"/>	
• Objectives incorporate evidence-based practice	<input type="radio"/>	<input type="radio"/>	
• Assessment measures and methods are determined prior to start of simulation activity	<input type="radio"/>	<input type="radio"/>	
<i>Simulation Design (INACSL Standard)</i>	YES	NO	Ideas for Revisions
• A needs assessment was used to develop participant objectives	<input type="radio"/>	<input type="radio"/>	
• The simulation activity contains a pre-briefing, simulation activity, and a debriefing	<input type="radio"/>	<input type="radio"/>	
• A storyline exists that provides the context for the start of the simulation scenario	<input type="radio"/>	<input type="radio"/>	
• Scenario contains Events/Activities that allow participant(s) opportunity to achieve objectives	<input type="radio"/>	<input type="radio"/>	
• Pre-established cues (reality and conceptual) exist for facilitators to deliver during the simulation to allow participant(s) to progress towards meeting objectives	<input type="radio"/>	<input type="radio"/>	
• Simulation scenario has identified timeframes and scripts for each event	<input type="radio"/>	<input type="radio"/>	
• Scenario modalities, storyline, and cues considers the multi-dimensional levels of fidelity (physical, psychological, conceptual)	<input type="radio"/>	<input type="radio"/>	
• Scenario identifies the necessary set up and equipment	<input type="radio"/>	<input type="radio"/>	
• Housing location for scenario documents is identified	<input type="radio"/>	<input type="radio"/>	
• Simulation has been pilot tested	<input type="radio"/>	<input type="radio"/>	
Reviewed During the Implementation of the Simulation (Briefing, Simulation Activity, and Debriefing)			
<i>Professional Integrity (INACSL Standard)</i>	YES	NO	Ideas for Revisions
• Facilitators discuss with participants expectations of professional behavior and confidentiality of the simulation scenario	<input type="radio"/>	<input type="radio"/>	
• Facilitators provide honest, respectful, and meaningful direction and feedback.	<input type="radio"/>	<input type="radio"/>	

Healthcare Simulation Standards of Best Practice™ Operations (2017)

Criteria

1. Implement a strategic plan that coordinates and aligns resources of the SBE program to achieve its goals.
2. Provide personnel with appropriate expertise to support and sustain the SBE program.
3. Use a system to manage space, equipment, and personnel resources.
4. Maintain and manage the financial resources to support stability, sustainability, and growth of the SBE program's goals and outcomes.
5. Use a formal process for effective systems integration.
6. Create policies and procedures to support and sustain the SBE program.

[Link to Operations Standard](#)



Simulation Operations - Take Aways!

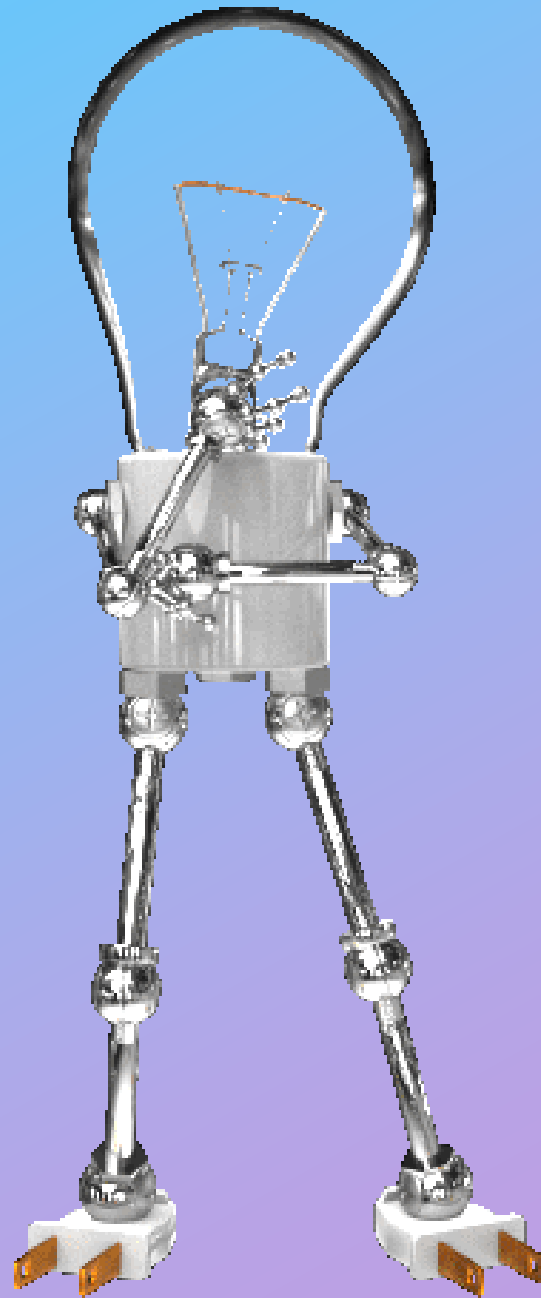
Simulation Criteria	Points to Consider
Strategic Plan	Mission, Vision, Goals, and Objectives Leadership Stakeholders Action Plan Evaluation Plan Professional Development
Personnel	Job Descriptions Roles and Responsibilities Formalized and On-the Job Training
Resource Management	Day to Day operations Technical Support

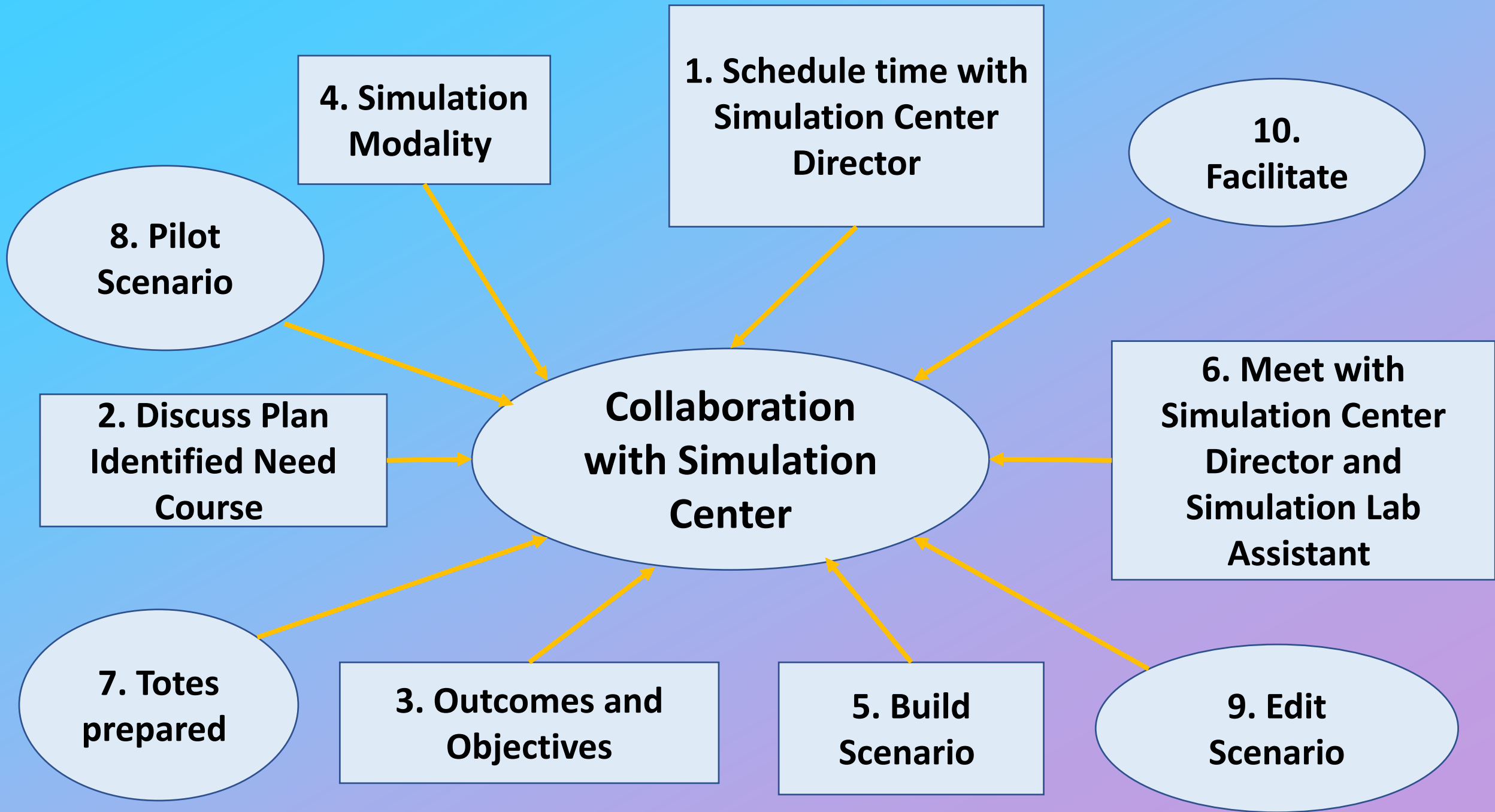
Simulation Operations (continued)

Simulation Criteria	Points to Consider
Financial Support	Budget (Capital and Operating Expenses) Return on Investment
Systems Integration	Technology Administration Education
Policies and Procedures	Human Resource (hiring, leave of absence, coaching, termination) Evaluations Equipment maintenance Safety Scheduling Confidentiality Audiovisual

*Adapted from the INACSL Standards Committee (2017, December). INACSL standards of best practice: SimulationSM: Operations. *Clinical Simulation in Nursing*, 13(12), 681-687. <https://doi.org/10.1016/j.ecns.2017.10.005>.

Collaborating with the Simulation Center





Society in Healthcare Accreditation



SSH Accreditation of Healthcare Simulation Programs

Congratulations to the Newly Accredited Simulation Programs

◀ Achieve recognition for your healthcare simulation program

Set your program apart by becoming an SSH Accredited Program. SSH Accreditation is a peer-reviewed, customized evaluation of your healthcare simulation program. This accreditation examines simulation program's processes and outcomes in assessment, research, teaching/education, and systems integration.

◀ Expanding quality healthcare simulation worldwide

The SSH Council for Accreditation of Healthcare Simulation Programs accredited its first healthcare simulation program in 2010. There are now over 100 SSH Accredited Programs from 10 countries, and SSH is the largest healthcare simulation accrediting body in the world. [Learn more about Full Accreditation.](#)

◀ The Standards fit any healthcare simulation program

The Standards of Performance were developed with all programs in mind. The Standards are not prescriptive but instead describe the desired outcomes and processes that are hallmarks of quality healthcare simulation. SSH Accreditation is designed for simulation programs in:

- Academic/University settings
- Hospitals
- Medical Associations
- Stand-alone facilities
- Other educational settings

◀ Provisional Accreditation

If your program is new to simulation, or doesn't have two years of outcomes data to share, consider [SSH Provisional Accreditation](#). You'll receive constructive feedback from healthcare simulation experts regarding processes and outcome development, validate your simulation program through a peer review process, and much more.

[Link to
https://www.ssih.org/Credenti-aling/Accreditation](https://www.ssih.org/Credenti-aling/Accreditation)

Questions - what questions do you have so far?



References

INACSL Standards Committee. Standards of best practice: SimulationSM. *Clin Simul Nurs*. 2016;12(Supplement):S1-S50. doi:10.1016/j.ecns.2016.10.001

Paige JB. Review tool for evaluating the design and implementation of simulation practices (Tool Kit 20-2). In: Foisy-Doll C, Leighton K, eds. *Simulation Champions: Fostering Courage, Caring, and Connection*. Philadelphia, PA: Wolters Kluwer; 2018.

Paige, J. B., Graham, L., & Sittner, B. (2020). Formal Training Efforts to Develop Simulation Educators: An Integrative Review. *Simulation in Healthcare*, 15(4).