Workshop

Designing Effective Simulation Scenarios for Health Educators

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Workshop Abstract

Title of Workshop: Designing Effective Simulation Scenarios for Health Educators

Name of presenters: Tez Brown-Cotterell, Marilyn Simard and Aubrey Sozer

Topic Area: Simulation Based Teaching

Goal of the workshop: For the audience to learn how to create and apply a simulation scenario.

Intended Audience: For this presentation the audience for this workshop are the INTAPT students, but could also be applied to any professional who is looking to improve their competency to build simulation based teaching.

Objectives of workshop:

1. Recognise three situation when simulation learning can be applied in your workplace
2. Name five benefits of using simulation learning in your role as a teacher
3. Describe the six steps needed to create a clinical scenario based on Bambini's model
4. Apply the knowledge gained during this workshop to create a clinical scenario independently

Overview of the workshop design:

This is a three hour interactive workshop in building a simulation scenario. We take the learner through the six steps of building a scenario based Deborah Bambini's "Writing a Simulation Scenario: A Step-By-Step Guide". In this workshop participants will be divided into two working groups to each create a simulation scenario. As the presenters describe each step the learners will be involved in applying these steps to build and complete a final scenario. Once both scenarios are complete, the groups will each take turns facilitating their own scenario and participating in the other group's scenario. At the end both groups will receive a debriefing and evaluation on the scenarios they have created.

Workshop Summary

Introduction

Simulation-based learning allows learner to experience real situations in a controlled environment and without being subjected to the stress of real life. In the medical field, simulations are used since the early 1960s to teach cardiorespiratory resuscitation with medical manikin.

Application of Simulation (some examples):

- Routine learning and repetition of clinical and communication skills
- Practice of complex clinical situations
- Design and testing of new clinical equipment
- Performance assessment

Simulation Types:

- Part-task trainers
- Computer-based systems
- Complex manipulation
- Integrated simulators

Benefits and Challenges of Simulation:

Benefits	**Challenges**
Risks are avoided	Cost
Undesired interference is reduced	Administrative challenges
Tasks/scenarios can be created to demand	Need time to create and run scenarios
Skills can be practised repeatedly	To make the situation real
Training can be tailored to individuals	Identify competencies/abilities to be assessed
Retention and accuracy are increased	To establish instruments/metrics to conduct the assessment
Transfer of learning to real situation is enhanced	Technical/programming difficulties
Diagnosis of educational needs	Attitude of learners

Recapitulation of Pendleton's Model (INTAPT 2019-2020)

1. The learner says what they thought was done well
2. The teacher says what they thought was done well
3. The learner says what was not done well and could be improved upon
4. The teacher says what was not done so well and makes suggestions for improvement

Six steps to create a clinical scenario based on Bambini's model

Writing the simulation scenario can be challenging but rewarding. Following a step by step approach can makes the task less daunting and the end result equally fulfilling. In this workshop we use a six step framework to building a simulation scenario. This starts with a determination of the outcome of the simulation experience. That is the knowledge and skills you intend for the learners to acquire having gone through the experience. It is important that one ensures that this is aligned the organisation's policy or in keeping with recommended standards. After which the context of the scenario is determined. This is what provides the realism of the experience and includes the physical environment, actors/players, location to name a few. All of this to approximate the real-life context as closely as possible. Creating the objectives of the scenario is the step that follows. Objectives should be congruent with the intended outcome(s) and are the action arm to the outcome. That is, what does the learner have to do for the outcome to be achieved? The objectives therefore will contain a verb from the order level in keeping with the stage of the learner. Once these are done then comes the script of Flow of the scenario. This is how the story unfolds and includes the beginning phase which lays the scene. The middle phase follows which is where the challenge of the scenario unfolds after which comes the End phase which closes the script. Once this is done we now review and refine the scenario to ensure it unfolds logically. Lastly we add complexities according to the level of the learner involved and the specific points of emphasis. We will not be exploring debriefing in this workshop but this is an important element and should be done at the end of all such encounters.

Workshop Oultine

Start	Activity	Faculty	Materials	Mins
8:30	Welcome	Marilyn	PowerPoint	2
8:32	Icebreaker	Aubrey	Poll EV	1
8:33	Pre test	Aubrey	Poll EV	3
8:36	Objectives of workshop	Marilyn	PowerPoint	1
8:37	Introduction to subject	Marilyn	PowerPoint & Video	4
8:41	Simulation Types	Marilyn	PowerPoint & Props	2
8:43	Application of simulations	Marilyn	PowerPoint	1
8:44	Interactive game benefits & challenges	Marilyn	PowerPoint & Flip chart	5
8:49	Explain the workshop	Aubrey	Scenario worksheets	4
8:53	Recap of Pendelton's model	Aubrey	-PowerPoint & Summary	1
8:54	Step 1. Talk & Discuss: Desired outcomes for simulation scenario	Tez	-PowerPoint -Scenario worksheet -Feedback Model examples	5
8:59	Step 2. Talk & Discuss: Context for simulation scenario	Tez	PowerPoint	5
9:04	Step 3 a. Talk: Objectives of building scenario	Tez	-PowerPoint -Bloom's taxonomy objective verbs handout	6
9:10	b. Group work: Objectives (make 2 objective, 1 objectives will be given to them)	Aubrey	-PowerPoint -Scenario worksheet -Bloom's taxonomy objective verbs handout	15

			-Feedback Model examples	
9:25	Step 4 a. Talk: Flow of the scenario	Tez	-Scenario worksheet -Bloom's taxonomy objective verbs handout -Feedback Model examples	10
9:35	b. Group work: Flow the Scenario (build flow based on scenario given)	Aubrey	-Scenario worksheet -Bloom's taxonomy objective verbs handout -Feedback Model examples	25
10:00	Break			15
10:15	Step 5. Talk: Back to the beginning	Marilyn	-PowerPoint -Scenario worksheet	1
10:16	Step 6 a. Talk: Adding complexity	Marilyn	-PowerPoint -Scenario worksheet	2
10:18	b. Group Work: Adding complexity	Aubrey	-PowerPoint -Scenario worksheet	10
10:28	Debrief	Aubrey	PowerPoint	4
10:32	Scénario A	Aubrey	Completed scenario A	12
10:44	Debrief Scenario A	Aubrey	Plus/Delta	12
10:56	Scénario B	Aubrey	Completed scenario B	12
11:08	Debrief Scenario B	Aubrey	Plus/Delta	12
11:20	Post-test	Aubrey	Poll EV	5
11:25	Summary/References	Marilyn	PowerPoint	2
11:27	Debrief and Evaluations	All	PowerPoint	33

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