



WELCOME TO Simulation 101

In this infographic, we'll guide you through the fundamentals of simulations, common modalities and highlight the key phases of the simulation process to ensure a safe learning environment

WHAT IS SIMULATION?

A technique that replaces real experiences with guided experiences that evoke or replicate substantial aspects of the real world in an interactive manner (Gaba, 2004).



Absorb Knowledge & Practice Skills



Promotes interaction & collaboration



Hands-on experience in a safe environment



Increases knowledge retention



Motivates learner



Improve non-technical skills

LOW TECH MODALITIES

Role Playing



Tabletop Simulation

An educational tool intended to provide students/learners an opportunity to apply knowledge through formal discussion of a described scenario

Mental Simulation

Cognitive rehearsal of a task in the absence of overt physical movement that can be used to learn cognitive, kinesthetic, psychomotor, or technical skills.

Standardized Patient/Person



MID TECH MODALITIES

Take-home Simulation

A combination of devices, software, tasks, instructional videos, target performance levels, log sheets, and program overview materials that are provided to participants for use at in-home or other similar locations for completing simulation activities

Procedural Simulation

The use of a simulation modality to assist in the process of learning to complete a technical skill(s), or a procedure, which is a series of steps taken to accomplish an end

Manikin-Based Simulation



HIGH TECH MODALITIES & OTHER

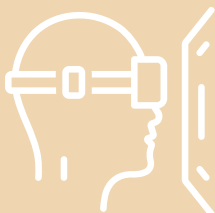
Computer-Based Simulation

The modelling of real-life processes with inputs and outputs exclusively confined to a computer, usually associated with a monitor and a keyboard or other simple assistive device

Hybrid Simulation

The union of two or more modalities of simulation with the aim of providing a more realistic experience.

Virtual Reality Simulation



Discrete Simulation

The operation of a system as a discrete sequence of events in time. Each event occurs at a particular instant in time and marks a change of state in the system.

Immersive Simulation

A real-life situation that deeply involves the participants' senses, emotions, thinking, and behaviour; creating an immersive simulation depends on the alignment with learning objectives, the fidelity of the simulation, and participant's perception of realism.

SIMULATION PROCESS



PRE-BRIEF

Presents a quick overview of the simulated-learning experience (the goals, objectives, logistics, introduction of all participants)



PRACTICE

Active practice using one or multiple of the modalities

DEBRIEF

A quick summary of the simulation and the learning objectives. Students' questions should be addressed



GUIDED REFLECTION

Encourages insightful learning, allowing the participant to link theory with practice and research

FEEDBACK

Information given to the learner about the learner's performance relative to learning goals or outcomes

