

Simulation Guide

This checklist is intended for use by a lecturer when setting up a simulation.

CONCEPT 1: THEORETICAL UNDERPINNING

The theoretical framework or model underpinning SBL activity is described.

- **Key aspects of the theory/model to be applied to SBL are identified**
- Behaviourism (deliberate practice, actionable feedback)
- Social Learning Theory (self-efficacy)
- Constructivism (experiential learning, reflective practice, situated learning, transformative practice)
- Considerations: teachers as facilitators to guide and support
- Learning by doing
- Active exploration with a life-like environment
- Facilitated debriefing

CONCEPT 2: INFRASTRUCTURE, RESOURCES AND GOVERNANCE

Resources and infrastructure are sufficient to support SBL activity.

- **Faculty leaders identified**
- **Sufficient funding available**
- **Infrastructure fit for purpose**
- **Sustainability is considered**
- What resources are required?
- What resources are already available?
- What resources need development?
- Has cost effectiveness been considered?
- Will simulation technicians be required and available?
- Are the environment, lab, rooms fit for purpose?
- Will scenarios be designed by experienced simulation designers?

CONCEPT 3: SIMULATION-BASED LEARNING ACTIVITY DESIGN

Curriculum and competency mapping is undertaken to identify gaps.

- **Needs assessment undertaken in conjunction with curriculum mapping**
- **Learning experiences are scaffolded across the curriculum**
- **Students have sufficient skills required for SBL activity**
- What gaps have been identified and how can SBL activities fill these gaps in learning?
- What skills will students require to complete the SBL activity? Where/when have these been taught?
- How is SBL activity complexity increased across the program?
- Have cultural and diversity aspects in scenarios been considered?

Outline clear learning objectives.

- **Activities align with curriculum and course learning objectives**
- **Learning objectives are measurable**
- **Learning domains are identified: psychomotor and/or cognitive and/or affective**
- Do the activities match the learning objectives?
- Do the learning objectives guide the SBL activities?
- Are the learning objectives relevant to professional and industry requirements?

Student preparation.

- **Students are adequately prepared for SBL activity**
- **A student pre-briefing/orientation session is conducted**
- **The professional standards expected of students throughout the SBL activity are clearly outlined**
- Is there sufficient information prior to the SBL activity to prepare students?
- Has adequate time been allowed for in SBL design?
- Does the pre-briefing include overview of the learning objectives, SBL structure, activity timing, SBL environment, any technological requirements?
- Have professional standards and student expectations been clearly articulated?

Fidelity/realism.

- **The level of fidelity required to meet learning objectives is considered**
- Is the SBL based on reality?
- Is the SBL linked to real-practice and the workplace?
- Does the environment represent reality?
Are the patient medical files and charts (electronic or hard copy) presented to replicate real practice?

Teamwork/IPL (interprofessional learning).

- **Learning objectives specific to teamwork/interprofessional practice are measurable**
- Do the activities match the learning objectives in relation to IPL?
- Does the debrief include reflection and discussion around IPL learning objectives?

CONCEPT 3: SIMULATION-BASED LEARNING ACTIVITY DESIGN... Cont'd.

Feedback.

- **Feedback is provided immediately to students**
 - Is immediate feedback provided?
 - Is the feedback related to the learning objectives?
 - Who is providing the feedback – student to student, facilitator to student?
 - Suggested Tools: Plus/Delta Model

Debrief.

- **A structured debrief is incorporated into SBL design**
 - Does the debrief session take place immediately after the activity?
 - Does the debrief encourage students to reflect on their practice, self-evaluation and feedback on their perceptions of the experience?
 - Does the debrief session relate to the learning objectives?
 - Suggested Tools:
SHARP Method
PEARLS (Promoting Excellence And Reflective Learning in Simulation)
3D Model of Debriefing Defusing, Discovering, and Deepening

Reflection.

- **Guided student reflections are embedded to enhance learning**
 - Will the students' reflections be oral or written?
 - How will students be supported and guided to reflect?
 - Will the facilitators be required to reflect on their performance?
 - Suggested Tools: Lasater Clinical Judgment Rubric (LCJR)

Deliberate practice/ Mastery.

- **Deliberate practice opportunities are provided**
 - Does the activity include opportunities for deliberate practice?
 - Has this been articulated to students?

Pilot activity.

- **Pilot the activity prior to implementation**
 - Is a pilot activity feasible?
 - Can aspects of the activity be piloted tested prior to implementations?
 - Suggested Tools: PDSA approach?

Engages students.

- **Active learning is embedded**
 - Are all involved- active participants vs observers?
 - What activities can the observer complete to remain engaged?
 - Has group size been considered?

CONCEPT 5: ASSESSMENT & EVALUATION

SBL activity evaluation.

- **Quality improvement evaluation undertaken**
 - Have all aspects of the activity been evaluated?
 - Does the evaluation include student satisfaction and/or self-confidence considerations?
 - Has adequate time be allocated for students to complete evaluations?
 - Suggested Tools: SDS- LI, SDS-ADE

Student assessment.

- **Assessment requirements are considered and articulated - Formative vs Summative**
 - What aspects of learning will be assessed- knowledge, skills, critical thinking, teamwork etc
 - What will be formatively assessed?
 - What will be summatively assessed?
 - Is high-stakes assessment involved? Has this been articulated to students?
 - Will the assessments be undertaken before, during or after the activity?

CONCEPT 6: CONTRIBUTE TO SBL RESEARCH

Research contribution.

- **The research contribution of this activity has been considered**
 - Have possible research questions been considered? Who will lead the research?
 - Is research ethics approval required? How will research results be disseminated?

CONCEPT 4: TRAINING

SPs (Simulated Participant).

- **SP training is provided**
 - Does the training cover all the key aspects of the activity? Provide details of activity structure, learning objectives, role and scenario, feedback requirements, sample of SP scenario.
 - Are the SP expectations explicated stated?

Facilitators and faculty staff.

- **Facilitator training is provided**
 - Are facilitators suitably qualified? Prof. qualifications,
 - Teaching using simulation, Interprofessional facilitators
 - Facilitator understanding of the learning objectives?
 - Understanding of the students' current knowledge?
 - Have facilitators received sufficient training in facilitation and debriefing?

CONCEPT 7: Safety (physical, psychological, environmental)

Safety considerations.

- **Psychological safety is considered**
- **Environmental safety is considered**
 - What risks are there to the students?
 - What risks are there to the SPs?
 - What risks are there to the facilitators?
 - Are the simulation resources confidential? If so, has this been communicated to students and facilitators?