KEY CONCEPTS

Assessment of healthcare simulation facilitation informed by practice in low-resource settings

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FACILITATION OBSERVATION AND RATING METHOD

1	2	3	4	5
CHECKLIST	TIMING	FLOW	BEHAVIOUR	RATING
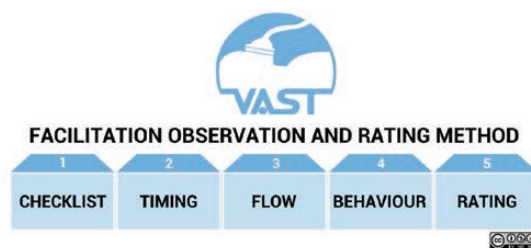
Vital Anaesthesia Simulation Training (VAST)[1] is a not-for-profit organisation focused on capacity building for simulation education in low-resource settings, including simulation faculty development. The VAST Facilitation Observation and Rating Method (VAST FORM) allows collection of rich data to guide reflective learning conversations[2] on facilitation performance. The approach taken in the design of the VAST FORM was to merge de-novo components derived from tacit knowledge of effective facilitation practice in low-resource settings (Parts 1 and 4) with adaptations of existing approaches to facilitation assessment (Parts 2, 3, and 5). Beta-testing and iterative refinement has occurred following use in Australia, Ethiopia, Nepal, and Rwanda. Observations can be made by peer-observers, by expert raters, and for self-assessment, if the session has been video-recorded. The VAST FORM is now fully integrated into VAST's faculty development processes, with work in-progress focused on building a validity argument to support its use. An associated User Guide and training resources assist in application of the VAST FORM.

PART 1 - CHECKLIST supports skill acquisition for novices at facilitation and debriefing through scaffolding[3] and making facilitation processes explicit. CHECKLIST is both a cognitive aid for people in active facilitation roles and a tool for observers of a simulation session. It aims to reduce the intrinsic cognitive load associated with learning a new task[4].

PART 2 - TIMING enables charting of time allocation during a simulation session, adapted with permission from an approach by O'Shea et al.[5]. Observers graph the time spent during each stage of the simulation session, e.g., setup of the scenario, briefing, scenario, and phases of debriefing. Whilst there is no 'best-practice', TIMING is intended to support reflection on time management and how it influenced the learning opportunity.

PART 3 - FLOW allows an observer to track verbal interactions during a debrief, adapted with permission from a process described by Dieckmann et al.[6]. Charting makes the communication pattern of the debrief explicit, identifying if it has been predominantly led by the debriefer, restricted to one or several participants, or inclusive and balanced amongst the group. Reflection on facilitation performance using FLOW is intended to take into consideration the context, familiarity of the participants with the debriefing process, power dynamics within the group, and the intended learning objectives of the session.

PART 4 - BEHAVIOUR is informed by a modified Delphi study[7] with fifty healthcare providers from twenty countries. BEHAVIOUR categorises the most important competencies for effective simulation facilitation into three broad categories: *Techniques*, *Artistry*, and *Values*[8]. Behavioural examples of each competency are provided in the VAST FORM User Guide. BEHAVIOUR is intended to be used to make specific observations on facilitation practices and how they have influenced learning and the simulation environment.

PART 5 - RATING uses a global rating scale to enable a summative assessment by expert observers on the level of facilitation performance. The scores reflect the three levels of VAST facilitator roles and responsibilities; 1. *Trainee-facilitator* – needs ongoing support during sessions, 2. *Facilitator* – competent for independent facilitation, 3. *Instructor* – able to mentor others. Learning conversations conducted with the use of RATING also include crafting an action plan for future skill development.

Developing skills in simulation facilitation is a complex undertaking, one assisted by reflection on performance[9]. Until now, no facilitation assessment process has been directly informed by facilitation practice in low-resource settings[10]. The VAST FORM provides a novel, flexible, and comprehensive approach to formative and summative assessment of facilitation performance.

Declarations

Authors' contributions

All authors contributed to the conceptualisation, drafting, and final review of the infographic.

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Availability of data and materials

None declared.

Ethics approval and consent to participate

None declared.

Competing interests

Dr Mossenson is Founder and Managing Director of Vital Anaesthesia Simulation Training (VAST) Ltd. Prof Livingston

is a VAST Director. Drs Rubio-Martinez and Khalid are VAST Instructors.

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