

PRACTICE GUIDELINES

Debriefers are observers too: leveraging learning objectives to focus debriefer observations and frame the debriefing conversation

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ABSTRACT

Debriefing is challenging and daunting for the novice debriefer. Debriefing literature is focused on the debrief conversation and the process of debriefing, with little guidance provided on how to observe the scenario and prepare for the debrief. Research in the simulation learner observer role reveals that engagement with the scenario through directed observation primes the learner to notice actions and events which may have been otherwise overlooked. Similarly, using the scenario learning objectives to prime and focus their attention, novice debriefers can develop their own observation tool to support data gathering during the scenario. By engaging with the learning objectives to clarify what they may expect to see or hear if the learning objectives are achieved, debriefers are better positioned to notice and collect relevant observational data and frame a debriefing conversation anchored to the scenario objectives.

Introduction

The process of debriefing is a well-researched and described in the literature and is considered one of the most important contributors to learning and facilitating change in simulation-based education [1–4]. Key components include a structure for debriefing [5–10], learner-centredness [11,12], psychological safety [13] and feedback on debriefing [14–16]. The focus of the debriefing literature is on the process during the debrief conversation and post-debrief review, with very little guidance available for the debriefer on how to observe the scenario in preparation for the debrief. Planning for observing a scenario includes developing a clear understanding of the learning objectives and how they may be achieved by learners in the scenario [8,10,15]. Debriefing is challenging [7] and further guidance in preparing for the debriefing conversation may be helpful.

Research into the observer role for learners in simulation has reported equivalent learning to hands-on learners when the learners are directed in their observations [17,18]. Directed observation is when a learner is provided with a briefing and/or observational guide containing information on specific learning objectives, activities or behaviours to consider when watching a scenario [17–19].

Although the perspective is different, debriefers are also observers of the scenario and the strategies used to support directed observation for learners can be leveraged for debriefers.

The debrief is more than the actual conversation. Prior to facilitating a debriefing conversation, the debriefer must observe the scenario to collect data on what occurred [3]. This data then informs the subsequent questions posed and subjects explored [7,11]. The questions that remain less clear are what data should be collected and how is it prioritized within the constraints of time, learning needs and learner-centredness? These are complex questions, and for the novice debriefer further clarity in this space could prove helpful. This article applies the concept of the directed observer learner role to observing a scenario for the purpose of facilitating a debrief, regardless of the debriefing technique or method selected. We provide guidance to leveraging the learning objectives of the scenario to direct and frame your observation, data collection and subsequent debriefing conversation.

Focus on the learning objectives

Research in the learner observer role has demonstrated that directed observation to specific elements improves learning outcomes and provides opportunity to see what may have been overlooked [18,20]. Like all educational activities, simulation scenarios have learning objectives which both define and direct the scenario and the debrief. Learning objectives should reflect the expected outcomes, specify learner behaviours required to meet those outcomes and be sufficient in detail for effective learner participation [21]. Engagement of learners with the learning objectives focuses their observation on the same elements that educators will be applying to the hands-on learners. When the observing debriefer focuses on the same learning objectives there develops a shared understanding between learners and educators on the expected outcomes and subsequent debriefing conversation. The objectives can be then referred to during the debrief with both learners and educators examining how the learning objectives were or were not met [21]. Rudolph et al [5] refer to this as assessing the performance gap between what was meant to be achieved and what was actually achieved. Many debriefing tools do not provide this specific guidance, rather the content of the debriefing conversation may be seen as serendipitous, drawing solely on what the learners wish to discuss. Focusing the debrief conversation on the learning objectives can be learner-centred when learners actions are viewed from a stance of curiosity and interest [11].

SMART learning objectives

Clear learning objectives drive both the design and debriefing of scenarios [22,23]. The SMART goal acronym (Specific, Measurable, Achievable, Relevant, Timely) originally designed for business management [24] can assist in developing clear and observable learning objectives [25,26]. SMART learning objectives support both directed observation and data collection whilst observing the scenario. For example, a learning objective of *good communication between the*

team members is neither specific nor measurable, and achievement can be highly subjective. Whereas an objective of *information is gathered and shared amongst the team members* is more specific, can be measured (or observed), is achievable and is relevant to the learners. The scenario design would provide opportunities for this objective to be observed and data on when, how and under what circumstances it was achieved (or not) or engaged with can be collected by the debriefer. If the learning objective is not fully achieved during the scenario, there is the opportunity to explore it further in the debrief. Designing the scenario to facilitate the observation and achievement of learning objectives is therefore important.

Preparation for debriefing: what would good look like?

SMART learning objectives enable the educator to know what they would see or hear if the learning objective was being achieved. Consideration of the actual activities the debriefer is looking for primes them to notice these activities including positive examples, which may have gone unnoticed without this priming [27,28]. Observing learners are more engaged with a scenario when they are focused on what they should be looking for and can achieve similar learning outcomes to their hands-on peers [17,18]. Whilst engagement with observing the scenario is not generally an issue for debriefers, priming will focus attention to the learning objectives. Without this priming debriefers will tend to focus on what interests them which may or may not be related to the learning objectives. Ideally both observing learners and debriefers will be focused on similar if not the same objectives. The debriefer can, whilst still being open to what is generally happening in the scenario, actively look for examples related to the learning objectives. These concrete examples are then the foundation of a robust debrief no matter what debriefing format is selected. Concrete examples help focus the debrief on specifics for improving or repeating.

When planning to observe a scenario for the first time it can be useful for the educator to ask themselves the following questions:

1. What would it look like if this learning objective was achieved (what does good look like)?
2. What would learners need to do to achieve this learning objective?
3. What are the common stumbling blocks?
4. What is important and cannot be missed?

Using these questions the educator can write a list of concrete actions, behaviours or words that they would expect to see or hear, highlighting those which are very important and cannot be missed. Some learning objectives have common difficulties, errors, traps or challenges for learners which we have collectively called common stumbling blocks. Identifying these in advance primes the debriefer to observe how they are managed during the scenario. Using this list as a guide the debriefer can observe the scenario, noting actions which support the achievement of the learning objectives and where important

things were missed. These notes then form the evidence for their judgement as to whether the learning objectives were achieved, what was done well and where they think improvements can be made.

This task is relatively simple when the learning objective is based on an algorithm or evidence-based protocol and may not require any further refinements other than consideration of common errors or stumbling blocks. However, learning objectives related to teamwork, human factors and other behavioural skills can be harder to measure, so it is imperative that these are SMART learning objectives. When they are specific and measurable it is much easier to articulate what you would expect to see and hear if the learning objective was achieved. When the standard required is articulated it is easier for learners to appreciate where they have met or not met the standard [29]. Concrete examples can springboard the discussion to developing a shared understanding of why things happened as they did. Once this clarity is achieved the learners, both hands-on and observers can work together with support from the educator to generate strategies for improvement.

Focus on the observations

When watching a scenario, the debriefer can find themselves reacting to an event in a positive or negative way. These reactions can serve as an alert to something that may be worth exploring. The danger here is the debriefer follows their own story based on what they saw rather than exploring what occurred [10,30,31]. This story may be related to an unconscious bias which influenced the debriefer's conclusion [32]. For example, a drug may be given which is incorrect for the scenario design and the conclusion unconsciously drawn by the observing debriefer is that the learners do not know the correct treatment, and so the debriefer may mentally prepare to provide information around drug selection and dosage, before clarifying the underlying reason for the 'incorrect' drug administration.

At times the trigger for the conclusion drawn by the debriefer may have been forgotten or subconsciously observed, so all the debriefer has is their conclusion. It is important to be aware that it may be an erroneous conclusion [11,30]. To counter this the debriefer needs to take a step back and ask themselves why they have come to this conclusion, to uncover the observation which prompted the conclusion. Following the example earlier, the observation is a specific drug and dose were given, and anything else is a conclusion. Anchoring a question with the observation and asking why is more likely to get to the true reason. This may be as originally concluded but may also be something entirely different. In our example this could be related to misdiagnosis, miscommunication, poor scenario design or a variety of other reasons, all of which require different responses than information on drug selection and doses. Rudolph et al [11] suggest combining your observations with your judgement of the observation as part of the question as a means to support learner psychological safety. Revealing your judgement serves to support your reason for asking the question and maintaining a stance that your conclusion may be incorrect allows for shared exploration.

Supporting learner-centredness: create a shared agenda

Finding the balance between addressing the learning objectives as part of a curriculum and meeting learner needs can be challenging. For feedback to be useful it must result in positive improvement for the learner [31,33] and the learning objectives provide a measurable starting point as a standard for achievement [31]. Learners require an active role in feedback including self-evaluation [33]. Providing the observers and the hands-on learners if appropriate with the learning objectives prior to the scenario primes them to focus their attention to their achievement [18,19,34] and helps set the scene for self-evaluation in specific areas. Cognitive loading means learners can only focus on improving one or two areas at a time so focusing them on specific areas is useful [31]. The debriefer may have additional objectives but should include those objectives the learners were directed to observe as part of the debrief.

Creating a shared agenda for the debrief is an important part of this collaboration between the learners and debriefer and is central to the distribution of power. It allows for clarification and gathering of information on both sides, incorporating peer feedback and developing a shared understanding [31]. The provision of peer feedback by the observers supports their learning [35]. A scenario constructively aligned with the learning objectives sets the foundation for a focused debrief. Understanding the time allocated for the debrief, the learning objectives and assessment of performance against those objectives, and the learner's agenda becomes a co-operative negotiation process [36].

A skilled debriefer can integrate the learners' agenda with their own by finding areas of commonality and acknowledging the learners' interest in exploring the topic further. For example, during the debrief opening where feelings and first impressions are explored the debriefer may note that several people commented on being unsure of the 'patient's' problem and this aligns with the debriefer's noting of an incorrect drug being given. With that information the debriefer could potentially start the exploratory or analysis phase of the debrief by saying 'Several people said they were unsure of the patient's problem, what did you think was going on?' Clarifying this allows the debriefer to then follow up with the drugs given and why they were selected. Starting with the learners' agenda of 'we were confused' opens the door to discussing a potentially more challenging topic of an error in a learner-centred way. It may also mean that the 'error' is easily explained without detailed discussion. By coupling those two items the debriefer can meet learner needs and the requirements of the learning objectives and approach this from a learner-centred perspective. At times the learner agenda may override one or more learning objectives, particularly if the scenario did not go as planned. Acknowledge this and make a shared decision on what is most important to discuss under the circumstances [12]. Ignoring unexpected events or performance challenges will undermine learner trust and psychological safety.

Conclusion

Debriefing is challenging, particularly when balancing learner-centredness and curriculum requirements. Unconscious conclusions and biases may reduce the clarity of message, and the desire to be learner-centred can result in meandering and unsatisfactory conversations without clear objectives. By taking an observer stance and priming with SMART learning objectives the debriefer can gather data which supports a concrete, observation-driven discussion with curriculum in mind. Taking time to create a shared agenda which balances the needs of the curriculum with learners, asking questions based on observations not conclusions and encouraging self-reflection against the expected standards will enhance learner-centredness and feedback regardless of the debriefing method selected.

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References

1. Cantrell MA. The importance of debriefing in clinical simulations. *Clinical Simulation in Nursing*. 2008;4(2):e19–e23.
2. Dreifuers KT. Using debriefing for meaningful learning to foster development of clinical reasoning in simulation. *The Journal of Nursing Education*. 2012;51(6):326–333.
3. Dreifuers KT, Decker SI. Debriefing: an essential component for learning in simulation pedagogy. In: Jeffries PR, editor. *Simulation in nursing education from conceptualization to evaluation*. 2nd edition. New York: National League for Nursing. 2012. p. 105–130.
4. Dieckmann P, Molin Friis S, Lippert A, Ostergaard D. The art and science of debriefing in simulation: ideal and practice. *Medical Teacher*. 2009;31(7):e287–e294.
5. Rudolph J, Simon R, Raemer DB, Eppich WJ. Debriefing as formative assessment: closing performance gaps in medical education. *Academic Emergency Medicine: Official Journal of the Society for Academic Emergency Medicine*. 2008;15(11):1010–1016.
6. Cheng A, Hunt EA, Donoghue A, et al. Examining pediatric resuscitation education using simulation and scripted debriefing: a multicenter randomized trial. *JAMA Pediatrics*. 2013;167(6):528–536.
7. Eppich WJ, Cheng A. Promoting excellence and reflective learning in simulation (PEARLS): development and rationale for a blended approach to health care simulation debriefing. *Simulation in Healthcare: Journal of the Society for Simulation in Healthcare*. 2015;10(2):106–115.
8. Eppich WJ, Hunt EA, Duval-Arnould JM, Siddall VJ, Cheng A. Structuring feedback and debriefing to achieve mastery learning goals. *Academic Medicine: Journal of the Association of American Medical Colleges*. 2015;90(11):1501–1508.
9. Husebø SE, O'Regan S, Nestel D. Reflective practice and its role in simulation. *Clinical Simulation in Nursing*. 2015;11(8):368–375.
10. Phrampus PE, O'Donnell JM. Debriefing using a structured and supported approach. In: Levine A, DeMaria Jnr S, Schwartz A, Sim A, editors. *The comprehensive textbook of healthcare simulation*. New York: Springer. 2013. p. 73–85.
11. Rudolph J, Simon R, Dufresne RL, Raemer DB. There's no such thing as "nonjudgmental" debriefing: a theory and method for debriefing with good judgment. *Simulation in Healthcare: Journal of the Society for Simulation in Healthcare*. 2006;1(1):49–55.
12. Cheng A, Morse KJ, Rudolph J, Arab AA, Runnacles J, Eppich WJ. Learner-centered debriefing for health care simulation education: lessons for faculty development. *Simulation in Healthcare: Journal of the Society for Simulation in Healthcare*. 2016;11(1):32–40.
13. Rudolph J, Raemer DB, Simon R. Establishing a safe container for learning in simulation: the role of the presimulation briefing. *Simulation in Healthcare: Journal of the Society for Simulation in Healthcare*. 2014;9(6):339–349.
14. Cheng A, Grant V, Dieckmann P, Arora S, Robinson T, Eppich WJ. Faculty development for simulation programs. Five issues for the future of debriefing training. *Simulation in Healthcare: Journal of the Society for Simulation in Healthcare*. 2015;10:217–222.
15. Cheng A, Palaganas J, Eppich WJ, Rudolph J, Robinson T, Grant V. Co-debriefing for simulation-based education: a primer for facilitators. *Simulation in Healthcare: Journal of the Society for Simulation in Healthcare*. 2015;10(2):69–75.
16. Sevdalis N, Lyons M, Healey AN, Undre S, Darzi A, Vincent CA. Observational teamwork assessment for surgery: construct validation with expert versus novice raters. *Annals of Surgery*. 2009;249(6):1047–1051.
17. Delisle M, Ward MAR, Pradarelli JC, Panda N, Howard JD, Hannenbergh AA. Comparing the learning effectiveness of healthcare simulation in the observer versus active role: systematic review and meta-analysis. *Simulation in Healthcare: Journal of the Society for Simulation in Healthcare*. 2019;14(5):318–332.
18. O'Regan S, Molloy E, Watterson L, Nestel D. Observer roles that optimise learning in healthcare simulation education: a systematic review. *Advances in Simulation (London)*. 2016;1:4.
19. Johnson BK, Zulkosky KD, O'Regan S. Observer roles: their purpose, power, and value to health care simulation. In: Jeffries P, editor. *Clinical simulations in nursing education – advanced concepts, trends, and opportunities*. 2nd edition. National League for Nursing. Philadelphia: Wolters Kluwer. 2023.
20. Johnson BK. Simulation observers learn the same as participants: the evidence. *Clinical Simulation in Nursing*. 2019;33:26–34.
21. Jeffries P, Rogers KJ. Therotical framework for scenario design. In: Jeffries P, editor. *Simulation in nursing education*

- from conceptualization to evaluation. 2nd edition. New York: National League of Nursing. 2012. p. 25–42.
22. Waxman KT. The development of evidence-based clinical simulation scenarios: guidelines for nurse educators. *The Journal of Nursing Education*. 2010;49(1):29–35.
 23. Aschenbrenner DS, Braun Milgrom L, Settles J. Designing simulation scenarios to promote learning. In: Jeffries P, editor. *Simulation in nursing education: from conceptualization to evaluation*. 2nd edition. New York: National League for Nursing. 2012. p. 43–76.
 24. Doran GT. There's a S.M.A.R.T. way to write management's goals and objectives. *Management Review*. 1981;70(11):35–36.
 25. Harrington DW, Simon LV. Designing a simulation scenario. In: StatPearls [Internet]. Treasure Island, FL: StatPearls Publishing. 2022. <https://www.ncbi.nlm.nih.gov/books/NBK547670/>.
 26. Bambini D. Writing a simulation scenario: a step-by-step guide. *AACN Advanced Critical Care*. 2016;27(1):62–70.
 27. Bandura A. Observational learning. In: Donsbach W, editor. *The international encyclopedia of communication*. John Wiley & Sons, Ltd. 2008. doi: [10.1002/9781405186407.wbieco004](https://doi.org/10.1002/9781405186407.wbieco004). <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781405186407.wbieco004>.
 28. Bandura A. *Social learning theory*. New York City, NY: General Learning Press. 1971.
 29. Boud DJ, Molloy E. What is the problem with feedback? In: Boud D, Molloy E, editors. *Feedback in higher and professional education: understanding it and doing it well*. Oxon: Routledge. 2013. p. 1–11.
 30. Grenny J, Patterson K, McMillan R, Switzler A, Gregory E. *Crucial conversations: tools for talking when stakes are high*. 3rd edition. New York: McGraw Hill. 2022.
 31. Johnson CE, Keating JL, Boud DJ, et al. Identifying educator behaviours for high quality verbal feedback in health professions education: literature review and expert refinement. *BMC Medical Education*. 2016;16:96.
 32. Marcelin JR, Siraj DS, Victor R, Kotadia S, Maldonado YA. The impact of unconscious bias in healthcare: how to recognize and mitigate it. *The Journal of Infectious Diseases*. 2019;220(220 Suppl 2):S62–S73.
 33. Boud DJ, Molloy E. Decision making for feedback. In: Boud D, Molloy E, editors. *Feedback in higher and professional education: understanding it and doing it well*. Oxon: Routledge. 2013. p. 202–218.
 34. O'Regan S, Ekelund K, Watterson L. Emotional activation in simulation: measuring the influence of participant roles and scenario design. *Simulation in Healthcare: Journal of the Society for Simulation in Healthcare*. 2021. doi: [10.1097/SIH.0000000000000615](https://doi.org/10.1097/SIH.0000000000000615)
 35. Ladyshevsky RK. The role of peers in feedback processes. In: Boud DJ, Molloy E, editors. *Feedback in higher and professional education: understanding it and doing it well*. Oxon: Routledge. 2013. p. 174–189.
 36. Links MJ, Watterson L, Martin P, O'Regan S, Molloy E. Finding common ground: meta-synthesis of communication frameworks found in patient communication, supervision and simulation literature. *BMC Medical Education*. 2020;20(1):45.