The Center for Medical Simulation

Debriefing Assessment for Simulation in Healthcare (DASH) ©

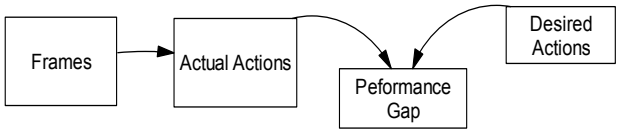
Introduction

Debriefing clinical simulation experiences is increasingly understood as a crucial step in clarifying and consolidating insights and lessons from simulations. The Debriefing Assessment for Simulation in Healthcare is designed to assist in evaluating and developing debriefing skills. Additional information, rating forms and contact information can be found at the DASH website: www.harvardmedsim.org/Research/DASH.

Background on the debriefing process

In the context of healthcare simulation, debriefing is a conversation among two or more people to review a simulated event or activity in which participants explore, analyze and synthesize their actions and thought processes, emotional states and other information to improve performance in real situations. High participant engagement is a hallmark of strong debriefings because it leads to deeper levels of learning and increases the likelihood of transfer to the clinical setting.

Improving sub-optimal performance is a goal of most debriefings but debriefings can also explore excellence in performance: What actions or thought processes allowed a person or team to be so effective? Debriefers make an implicit comparison between a desired level of performance and the level of performance they observe in the simulation. The gap between the "desired" and "actual" levels of performance is depicted in the figure below. Debriefers can help close the performance gap by critiquing, discussing, and suggesting ways to improve trainee's actions. Alternately or additionally, they can help close the performance gap by exploring the "frames" that drove trainees' actions. Frames are internal images and assumptions about external reality that guide actions. Debriefings can focus on frames or actions or both.



Healthcare professionals take psychological risks when they allow their performance to be watched and analyzed by peers and instructors. Thus, developing and maintaining a psychologically safe learning environment is important. To do this, skilled debriefers give participants the benefit of the doubt, and regard mistakes and good performance as a mystery to be analyzed rather than as a crime to be punished or success to be simply lauded. They develop and maintain an environment that is not harsh and negative, nor one that hides their opinion in a falsely non-judgmental way.

What is the DASH?

The DASH is a generalized assessment tool that allows assessment of debriefings from a variety of disciplines and courses, varying numbers of participants, and a wide range of educational objectives, as well as various physical, and time constraints. The setting might affect the ratings. For instance, if the setting is ideal and there is enough time, it may be reasonable and possible to see "extremely or consistently effective" ratings. If the setting is less than ideal and time is constrained, then it is reasonable to see the best ratings reach "somewhat or mostly effective" ratings.

The DASH evaluates the strategies and techniques used to conduct debriefings by examining concrete behaviors. It is based on evidence and theory about how people learn and change in experiential contexts. There are six *elements* in the DASH: (1) Sets the stage for an engaging learning environment. (2) Maintains an engaging context for learning; (3) Structures debriefing in an organized way; (4) Provokes interesting and engaging discussions and fosters reflective practice; (5) Identifies performance gaps. (6) Helps close performance gaps. Each of the six *elements* is defined by its *dimension descriptions* with positive, noted as (+), and negative (-), *behavioral examples*. There is some purposeful overlap between the Elements. Raters should ignore the overlap and rate each Element independent of the others. Raters should bear in mind that the rating is for the Element and not for each Dimension, i.e., Dimensions and Behavioral Examples are provided only to help describe the Element to the rater. Element #1 is only used when the rater can observe the beginning of the simulation session.

Directions for scoring

Raters score each Element using the dimension descriptions and example behaviors as guides. A DASH score is comprised of five (or six, if the introduction has been observed) Element ratings. The scale for each Element is based on a 7-point effectiveness rating. Raters must study the Elements and be completely familiar with each one. Once thoroughly familiar with the Elements, the scale will be very easy to use and provide reliable and valid scores. It is expected that short debriefings and ones that focus only on actions (not frames) are unlikely to be scored higher than a 4, 5, or occasionally 6.

Rating Scale

Rating	Descriptor
7	Extremely Effective / Outstanding
6	Consistently Effective / Very Good
5	Mostly Effective / Good
4	Somewhat Effective / Average
3	Mostly Ineffective / Poor
2	Consistently Ineffective / Very Poor
1	Extremely Ineffective / Abysmal

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Element #1 –Sets the stage for an engaging learning environment. *This rating has to do with how well the debriefer introduces the simulation experience and the course. Before any simulation or debriefing begins, the instructor helps participants be clear about what is expected of them, helps them understand the benefits and limits of the simulated clinical setting, provides guidelines that create an environment that is safe for sharing thoughts and feelings, e.g., that they won't be shamed or humiliated, and that the focus is on learning, not on "catching" people in a mistake.*

DIMENSION	Dimension Description Example Behaviors
Clarifies course objectives, environment, roles, and expectations	**Simulation-based courses flow better and participants engage more when they understand the point of what they are doing, their role, the instructors' roles, and what is expected of them.** (+) Introduces self and invites others to introduce themselves; shares and invites others to share personal qualifications and experience, background and interest in the course. Presents a course overview and learning objectives. Introduces and describes the simulators, ancillary equipment, location of supplies, role of actors, etc. Discusses the roots of the cases and why certain cases or tasks have been included in the course; e.g., they are from actual cases that had bad outcomes; they are particularly difficult or amenable to practice, etc. Explicitly states expectations for participant's role in simulation course and debriefing; requests that the participant engage in discussions and attempt to be self-reflective. States etiquette rules for debriefing: to be respectful, curious, and polite about others thoughts and actions; respectful disagreement is encouraged. Explicitly describes own role: to facilitate discussion; to comment on performance based on observing similar simulations; act as a resource on own area of expertise (e.g. PALS, ACLS; CRM; Teamwork; Clinical); ensure that the training objectives are met. (-) Not describing objectives, roles and expectations is ineffective.
Establishes a "fiction contract" with participants	**The "fiction contract" is a joint endeavor that debriefers and students create. The instructor agrees to make the simulation as real as possible within resource and technology constraints, Participants agree to do their best to act as if everything is real.** (+) Explains that instructor and participant have to collaborate to create an engaging simulation and learning environment. States that the instructor(s) obligation is to do everything to make the simulation as real as possible within resource and technology constraints. Asks the participant to do their part to act, as best they can, as if the simulation is real; acknowledges that the participant will likely act differently in the simulation environment than in the clinical environment. States a fair and balanced assessment of simulator strengths and weaknesses. (-) Not discussing the challenges of realism, stating or assuming that trainees should act the same way they in the real clinical setting, implying that "good" students will "play along" are ineffective.
Attends to physical care and comfort	**Although it may seem secondary, informing participants about logistical details and providing a physically comfortable environment helps them focus on learning.** (+) The debriefing room is clean. When available, chairs, tables, white board, video, simulation devices or other educational materials are orderly, clean and ready when the participant arrives. The participant is briefed on availability of food and drink, transportation or logistics considerations, locations of bathrooms, etc. (-) Not orienting participants to course logistics and the physical environment is ineffective.
Conveys a commitment to respecting learners and understanding their perspective.	**Participants often worry that simulations are designed to expose their weaknesses or humiliate them.** (+) To counter these notions, instructors offer a clear alternative approach by conveying that he or she will be giving trainees the benefit of the doubt; states something like "mistakes as puzzles to be solved, not crimes to be punished". States that he or she understands that trainees are trying to accomplish something positive, even when they make mistakes. Instructors may state a "basic assumption" about trainees that they are intelligent, well-trained, and are trying to do their best to learn and improve. (-) Showing little respect for the participant's anxiety, capitalizing on the participant's subordinate status; stating or implying that poor performance will be punished are ineffective.

Element #2 – Maintains an engaging context for learning. *This rating overlaps Element #1 and has to do with how well the debriefer maintains a good learning environment. Throughout the debriefing, the instructor helps trainees be clear about what is expected of them, helps them, learn from a simulated clinical setting, feel that the environment is safe for sharing thoughts and feelings, e.g., that they won't be shamed or humiliated; and that the focus is on learning, not on "catching" people in a mistake.*

DIMENSION	Dimension Description Example Behaviors
Clarifies debriefing objectives, roles, and expectations	**Debriefings flow better and participants engage more when they understand the point of what they are doing, their role, the instructors' roles, and what is expected of them.** (+) Explicitly states expectations for participant's role in debriefing; requests that the participant engage in discussions and attempt to be self-reflective. Explicitly describes own role: to facilitate discussion; to comment on performance based on observing similar simulations; act as a resource on own area of expertise (e.g. PALS, ACLS; CRM; Teamwork; Clinical); ensure that the training objectives are met. (-) Leaving debriefer and participant roles undefined and debriefing objectives vague or unstated is ineffective.
Helps participants cope with and learn in a limited realism context	**Participants want to perform well and often feel badly when they don't. If they feel tricked or frustrated by the simulation technology or worry they won't be seen as competent, they will complain. Sometimes they are simply frustrated when limited realism confounds their problem solving process. Debriefers can help trainees address these issues by acknowledging the legitimacy of their complaints, but keeping the debriefing focused on the case, not the simulation technology.** (+) Acknowledges the participant's issues or complaints by paraphrasing and sympathizing (e.g. "You were frustrated with the breath sounds. Yes, they are not very good.") States that the physical properties of the simulator are different from the real world. States that the participant likely acts differently in the simulated environment. States or enacts that despite simulation limitations, there are still useful things to discuss. Allows complaints about realism and then directs discussion to fruitful areas. For example: "Yes, breath sounds can be difficult on the mannequin so I sympathize with that. I wonder has anyone ever had trouble diagnosing breath sounds in real life and what that's like for you?" (-) Arguing with trainee about realism; denying the legitimacy of their complaints; showing resentment that participants did not fully engage in the simulation are ineffective.
Sets a tone regarding realism	**Instructors help establish the seriousness and realism of scenarios by treating them as "cases" and treating mannequins, standardized patients, and other actors in the scenario as though they were people with integrity and real motivations. For example, if an actor playing another clinician is angry and yelling, the debriefer would help participants think about exploring the character's concern.** (+) Talks about mannequins, standardized patients, or other characters as though they are real people with real concerns and encourages participants to do likewise. (-) Laughing at or belittling the technology, or characters in the simulation is ineffective.
Conveys respect for the learner	**Conveying respect and positive regard for the participant helps create a debriefing context friendly to the conversational probing needed for a rich debriefing. Instructors generate a favorable environment when they treat participants as a respected and competent team member within a given clinical profession. Conveying such respect can go hand in hand with pointed critiques of participant's performance. It does not require "sugarcoating" one's judgments. It does require asking questions and respectfully listening to the answers.** (+) Shows genuine curiosity by eliciting participants' thoughts and listening to the answers.. Creates a social dynamic in the debriefing wherein the participant can freely express a point of view and explore their thinking. (-) Asking and answering one's own questions, talking over participants, demeaning them or ridiculing their answers is ineffective.

ELEMENT #3 – Structures debriefing in an organized way. *This rating has to do with how effectively the debriefing is organized. An effective debriefing should have a start, middle and end; each phase has a purpose. In this instrument, the phases are collapsed into a starting reactions phase, a middle understanding phase (that includes both analysis and generalizing to other settings) and a summary phase. While some debriefers may use a different structure including more phases, this measure can still be applied. Ineffective debriefings do not have a logical sequence.*

DIMENSION	Dimension Description Example Behaviors
Beginning – Conducts a reactions phase	**This phase allows participants to express their initial emotional reactions to the simulation and for the instructor to provide information or facilitate a conversation that clarifies the facts underlying the simulation. The instructor's questions and responses to what the participant says can help or hinder the development of psychological safety. Inviting reactions and listening with interest helps create a sense of safety. The debriefer ascertains the participants' understanding of the case and may clarify salient facts. The participants' comments provide hints about their concerns, and inform the debriefer about what objectives are most important to cover.** (+) Asks questions that allow participant to express their initial reactions to the case; allows emotions to be expressed. Accepts reactions by paraphrasing; may encourage the participant to elaborate. Discusses facts necessary to eliminate confusion expressed by the participant. (-) Ridiculing or shifting right to analysis may leave the participant feeling unsettled or unsafe and is ineffective.
Middle – Conducts an analysis phase	**The purpose of the analysis phase is to allow participants to make sense of simulation events, their concerns, and to help participants move toward accomplishing course objectives. The debriefer should attempt to discover relevant issues and the needs of the learner and then help the participant understand how to think and act effectively in similar situations. In this phase the debriefer also helps the participant know how lessons can be generalized to other situations.** (+) Asks questions that prompt the participant to discuss and reflect on what happened in the simulation. Listens to issues raised by the participant so that the instructor can tailor short micro lectures to address learner concerns. Strikes a thoughtful balance between issues raised by participants and objectives of the course & curriculum. Asks questions and provokes discussion leading participants to speculate how lessons learned apply in their clinical setting; helps the participant generalize from the simulation experience. (-) Immediately telling the participant what to DO differently next time (e.g. give .15 mg of epinephrine for the first dose not .30 mg) without eliciting their thinking about why they did is less effective.
Ending – Conducts a summary phase	**The purpose of the summary phase is to signal the end of the debriefing, to review salient points, and to translate lessons learned from the debriefing into memorable principles that trainees can take with them to improve their practice.** (+) States that it is time for the discussion to close. **The debriefer asks participants to summarize what they have learned.** Asks participants a question or set of questions to help them summarize what they have learned. (e.g., What went well? Given similar circumstances, what might you do differently next time? What lessons will you use in your practice? The debriefer may summarize important points if the participants did not cover them. May recommend reading or activities participants can pursue to improve. (-) Ending the debriefing abruptly with no summary of main learning points is ineffective.

ELEMENT #4 - Provokes interesting and engaging discussions and fosters reflective practice. *This rating is an assessment of how well the debriefer engages the participants in interesting discussions and helps them to be reflective practitioners. The purpose of debriefing is to get participants to focus on important topics, and generate in-depth discussion. Debriefings should not focus on simple elicitation of knowledge and facts alone. Rather, good debriefings require the participant to apply, analyze, synthesize and evaluate information. The ultimate goal of debriefing is to encourage participants to personally reflect on their approach to clinical practice and inspire improvement.*

DIMENSION	Dimension Description Example Behaviors
Uses observable actions and outcomes as the basis for inquiry and discussion	**Examining visible actions of the participant (clinical, social, teamwork) and outcomes of the case (e.g. patient coded, important information was lost) allows debriefer and participant to work with verifiable, public data as the starting point for discussion. From that point, debriefings explore the participant's personal "frames" that drove participant actions.** (+) Asks questions based on observed actions and results. Uses observations of behavior and interactions to launch discussion of thought processes or ways to improve action in the future. Debriefers reveal their inference or beliefs about trainee performance as tentative (e.g. I wonder if you knew what the rhythm was) and does not assume knowledge of what the participant was thinking at the time (-) When debriefers state their invisible inferences or beliefs about trainee performance as fact (e.g. you didn't know what the rhythm was) without acknowledging them as an inference and subjecting them to correction by participants, this is poor debriefing practice because the instructor does not know what the trainee thinks.
Reveals own reasoning and judgments	**There is a long tradition of Socratic dialogue and questioning in healthcare education. The problem with asking questions without revealing one's own thinking is that trainees are often confused about why a question is being asked; worse, they may feel manipulated or unfairly trapped. Debriefers can avoid these problems by revealing their own reasoning or rationale for pursuing a line of questioning when they do so in a way that is curious and respectful of the learner.** (+) Describes own reasoning to make clear why the topic is important for the debriefing. Respectfully states personal judgments or concerns about participant performance (good, bad, unusual, interesting, alarming, etc.) so that the participant does not have to guess why the question is being asked or is confused about the debriefer's point of view. States supporting information for the debriefer's point of view (personal experience, seeing others, reading, etc). (-) Keeping one's own concerns or reasoning hidden and asking leading questions in which the debriefers point of view is hidden is ineffective: e.g. wouldn't it have been better to call for help before?
Uses non-verbal techniques to facilitate discussion	**Debriefers use non-verbal techniques both consciously and unconsciously during debriefing. This element relates to the effectiveness of the non-verbal techniques.** (+) Involves everyone; doesn't allow one or two people to dominate the discussion; draws in people who are quiet by asking them substantive questions about the scenario. Uses body language such as head nods, eye contact, posture, proximity and distance, standing or sitting, and facial expression to help show interest, kindness, to pose a challenge, or to show power, but all in the service of a productive discussion. Uses silence to give the participant time to think about questions. (-) Grimacing, rolling ones eyes, looking bored, leaving no silent time so participants can speak up are all ineffective.
Uses video, replay and review devices (used if available)	**Video or other replay and review devices are an effective educational technique and can be used to help the participant see their actions as they relate to key objectives of the debriefing.** (+) Shows 2-4 short segments of video to illustrate and introduce topics. Replay is used as a springboard for discussion. Uses replay equipment efficiently: the debriefer finds desired segments with very little delay. The debriefer links playback to key objectives; uses replay and review devices to help make interesting points or to deepen a discussion. Pauses the replay if substantial discussion evolves. (-) Playing long pieces of video with no discussion or framing of the purpose is ineffective.
Recognizes and manages the upset participant	**At its best, simulation is emotionally engaging. With that in mind, there are times when a participant may become upset. The skilled debriefer will help the participant clear the air and help get the group back to an emotionally stable state. This dimension provides a description of how well the debriefer handles the upset participant. However, even a moderately upset participant will allow for consideration of this dimension.** (+) Appears to notice and recognize when someone becomes upset; states this as an observation and respectfully checks with the participant whether their observation is accurate. The debriefer invites or allows the participant to describe feelings if the participant wishes. May use a variety of techniques to re-establish equilibrium; e.g., if the participant is upset about their own performance, the debriefer normalizes the behavior by putting it in the context of performance in other similar simulations (e.g. "We've done this scenario 40 times and almost everyone handles it the same way you did); allows other participants to defend or bolster a fellow participant; may openly deal with the root of the emotional upset. Guides the discussion and timing to help the participant confront and resolve the upset; may change the pace of the discussion; distributes the conversation to others exploring their perspective or their contribution to the troublesome issue instead of focusing exclusively on the upset participant; effectively retreats to less emotional material but comes back to the difficult issue either within the debriefing or afterwards privately with the trainee. (-) Ignoring, hounding or ostracizing the upset participant is not effective.

Element #5 – Identifies performance gaps. *This rating has to do with how well the debriefer describes the observed performance gap and explores the basis for the gap. Debriefings should provide participants concrete feedback about performance. When performance is sub-optimal, the debriefer explores the basis for the performance gap including knowledge, skills, and attitudes. In the event that performance was excellent, the instructor assists the participant in identifying the knowledge, skills and attitudes that contributed to that excellent performance.*

DIMENSION	Dimension Description Example Behaviors
Describes performance gaps	**Clear feedback on how participant performance either falls short of or exceeds the objectives for the simulation course is crucial for learning**. (+) States judgments or critiques that identify the gap between how the participants actually performed and how the debriefer expected them to perform. Describes positive and negative performance gaps. This can be done directly or with humor or metaphor. (-) Failing to reveal expertise, sugar-coating, camouflaging or asking leading questions in hopes the participant will state the gap the instructor observed but does not want to say is ineffective.
Explores the basis of the performance gap (when appropriate)	**Often it is useful to help participants understand how their cognitive frames (such as assumptions, beliefs), or feelings contributed to their performance. Debriefers should help participants explore these bases of their actions. Occasionally, it is necessary (because of time constraints) or sufficient (because of course objectives) to focus only on correcting <u>actions</u> rather than helping participants rethink their <u>frames</u>.** (+) Asks questions or initiates lines of discussion that help learners analyze the case along both clinical and behavioral dimensions. Explores why participants took certain actions; goes beyond the "what" to the "why;" avoids focusing exclusively on the do's and don'ts of participant actions and encourages the participant to reflect on what they were thinking at the time. When appropriate to the goals of the course, helps the participant to explore and understand behavioral issues that contributed to the performance gap such as team situational awareness, communication style, planning, etc. When appropriate to the goals of the course, helps the participant understand the kinesthetic or psychomotor issues that contributed to the performance gap. (-) Focusing only on correcting actions is somewhat effective. Focusing only on correcting actions when the incorrect action has been repeated several times is ineffective because to change it will likely require understanding of the underlying frames.

Element #6 – Helps close performance gaps. *This rating has to do with how effective the debriefer helps learners to close negative performance gaps or to repeat excellent performance. Debriefings should assist participants to develop the knowledge, skills, and attitudes to close the gap between the level of performance the instructor desires and what was observed. In the event that the performance was excellent, the instructor assists the participant in identifying the knowledge, skills and attitudes that contributed to that excellent performance. The skilled debriefer is knowledgeable in the subject area and is able to use performance gaps revealed in the simulation to generate discussions about how to improve or maintain clinical performance.*

DIMENSION	**Dimension Description** Example Behaviors
Helps close the performance gap through discussion and teaching	**Once the basis of a performance gap is understood, it is time to help participants understand how to perform more effectively next time. The approach to closing the performance gap can be done by discussing changes in <u>frames and actions</u> or just changes in <u>actions</u>.** (+) Uses discussion about the current case to elicit techniques (from participants) to improve future performance. When analyzing participant thought processes and frames is part of the debriefing, uses information the participant has shared about their thinking to help arrive at new ways to think about and solve clinical problems. If discussion does not surface adequate new practices, the instructor uses short lectures to share knowledge based on experience or research that informs participants how to improve performance. (-) Not suggesting or eliciting ways to close performance gaps is ineffective.
Demonstrates firm grasp of the subject	**Effective debriefers have expertise in the subject area. Topics in debriefings may involve issues that have to do with the clinical situation, behavior, teamwork, ethics, etc. The debriefer discusses topics knowledgeably without overstepping the boundaries of expertise.** (+) Imparted knowledge is reasoned and current. Encourages correct practices and knowledgeably elaborates underlying principles. Is obviously comfortable with the material being discussed and checks to make sure the participant understands. Informs participants when the limits of the debriefer's knowledge are reached. Appears to value eliciting the best knowledge available above maintaining an appearance of knowing everything. (-) Providing incorrect information or allowing unacceptable practices to go unaddressed is ineffective.
Meets the important objectives of the simulated case. (The rater must know the objectives to use this dimension.)	**Simulated cases take place within a larger curriculum and have educational objectives associated with each case. The debriefer meets the goals of the curriculum. If objectives are discussed other than the intended ones, the debriefer appears to make rational choices.** (+) Discusses all the important educational objectives of the scenario. If there is a deviation from the curriculum, the choices are clearly ones with high educational benefit. Discusses objectives in such a way as to demonstrate comfort and expertise with relation to the objectives. The debriefer checks to ensure the participant understands the principle, technique or approach under discussion. (-) Allowing the conversation to meander onto topics not crucial to curriculum, and/or not ensuring that key learning points are made is ineffective.

SCORESHEET.

Please rate each of the elements for the debriefings using the scale :

Rating	Descriptor
7	Extremely Effective / Outstanding
6	Consistently Effective / Very Good
5	Mostly Effective / Good
4	Somewhat Effective / Average
3	Mostly Ineffective / Poor
2	Consistently Ineffective / Very Poor
1	Extremely Ineffective / Abysmal

	Element #1 – Sets the stage for an engaging learning environment	**Element #2 – Maintains an engaging context for learning**	**Element #3 – Structures debriefing in an organized way.**	**Element #4 - Provokes interesting and engaging discussions and fosters reflective practice.**	**Element #5 – Identifies performance gaps.**	**Element #6 – Helps close performance gaps.**
Debriefing A						
Debriefing B						
Debriefing C						