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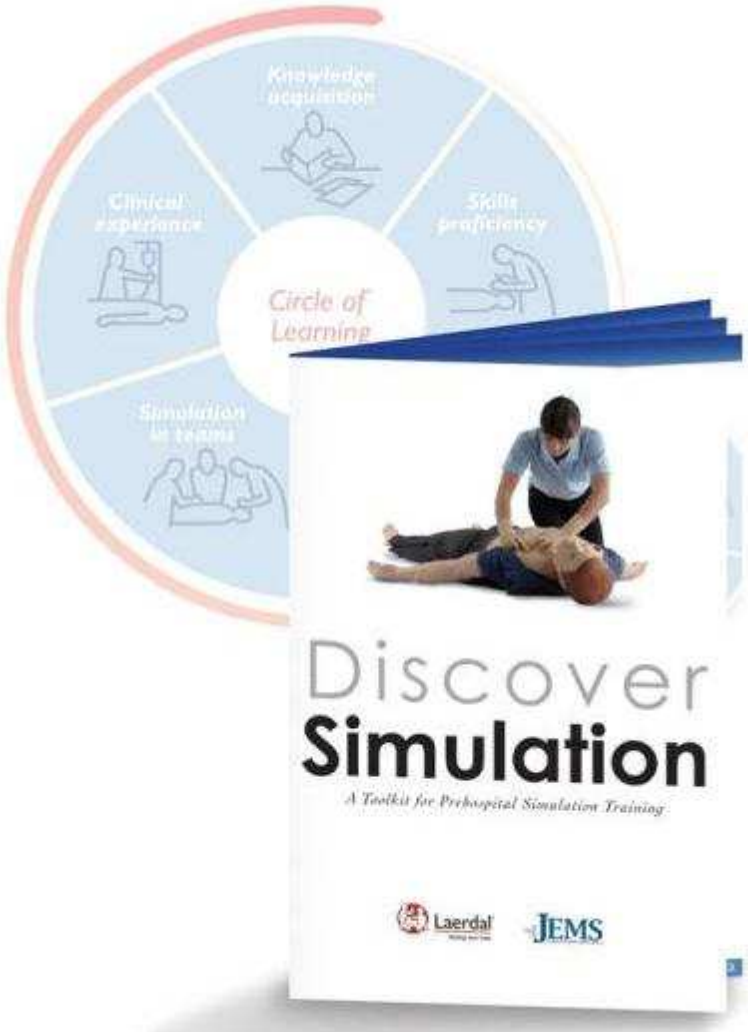
Discover Simulation



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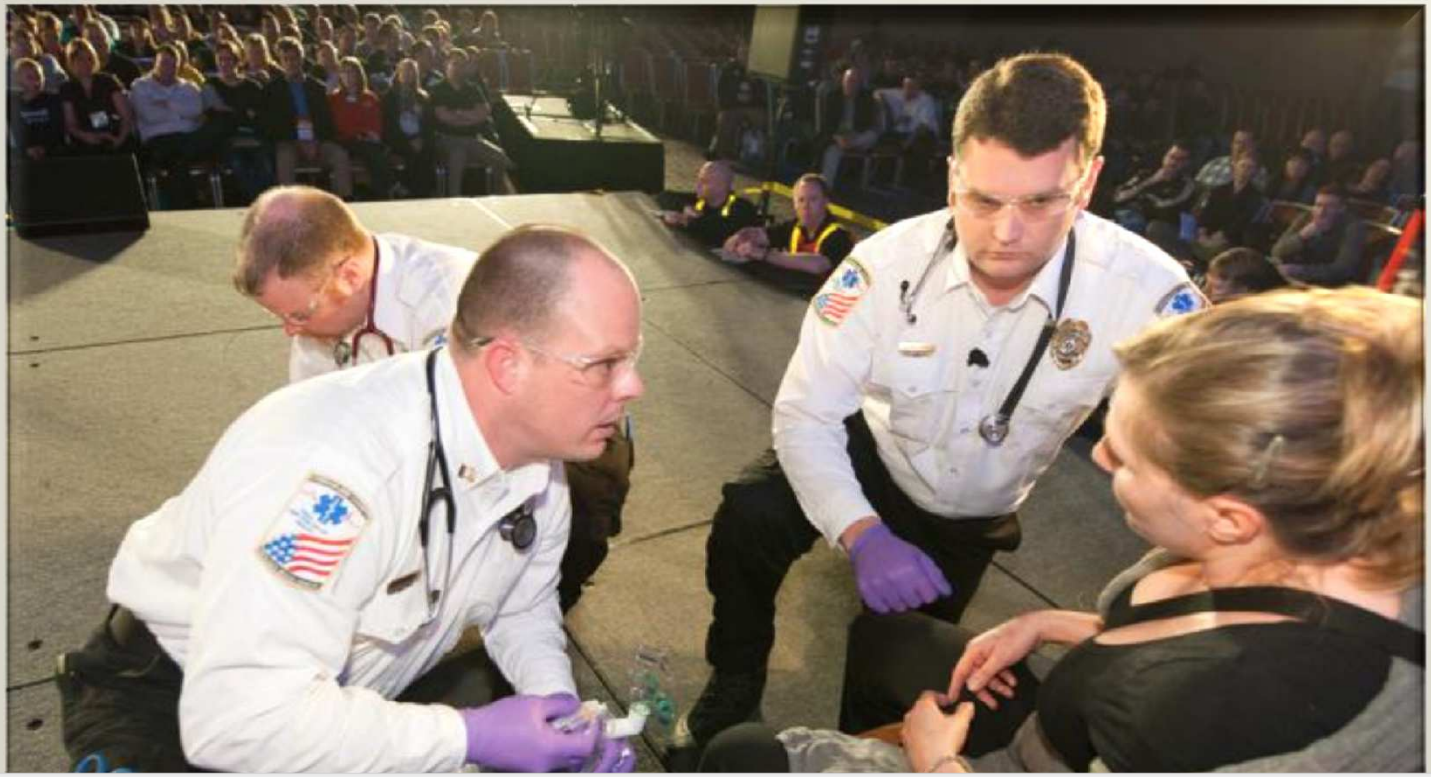
Agenda

- Overview of Discover Simulation Toolkit
- Needs Assessment / Implementation
- Knowledge/Skill Acquisition
- Simulation in Teams
- Debriefing
- Close the Performance Gap

Agenda

Overview



Laerdal and JEMS provide comprehensive approach to teaching using blended learning methodology

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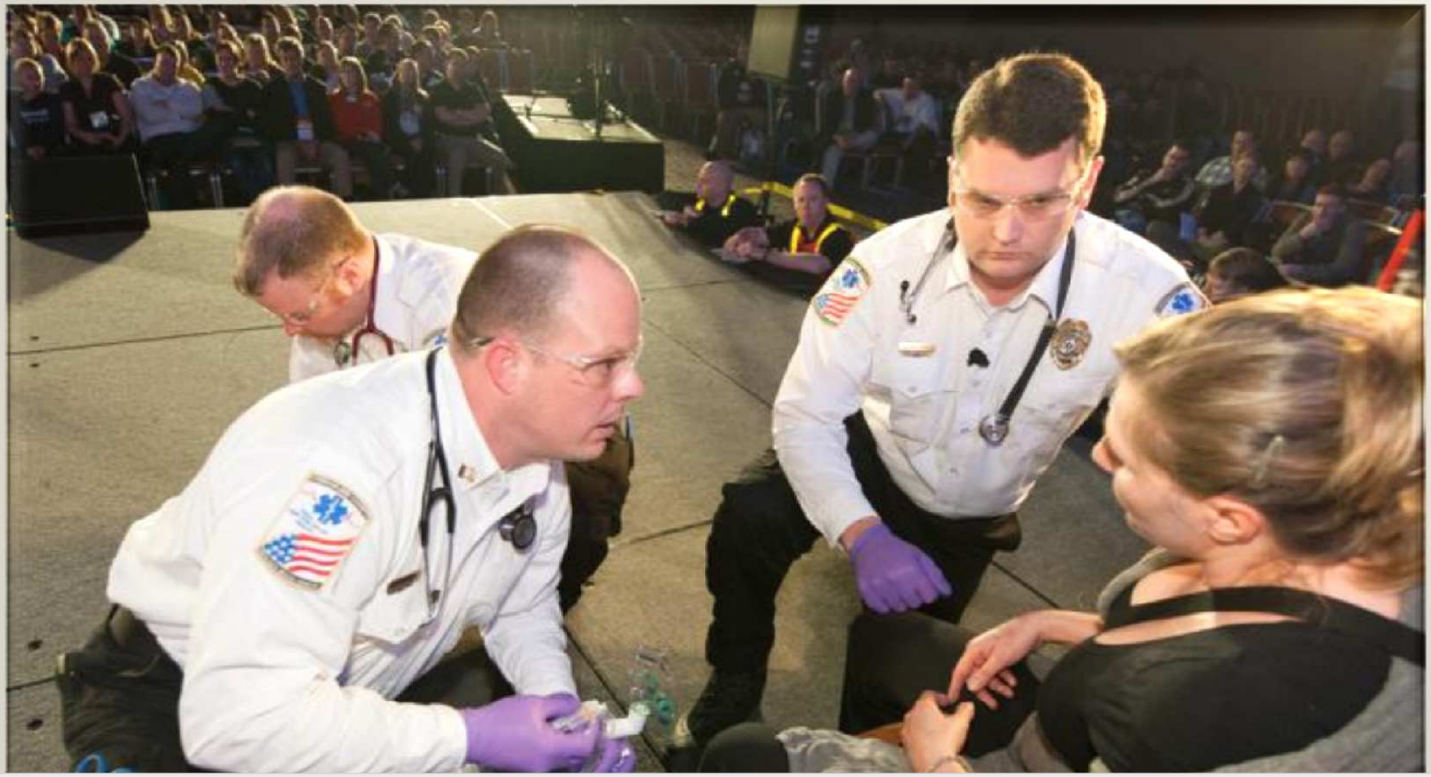
Overview



Goal: Help make simulation training easy

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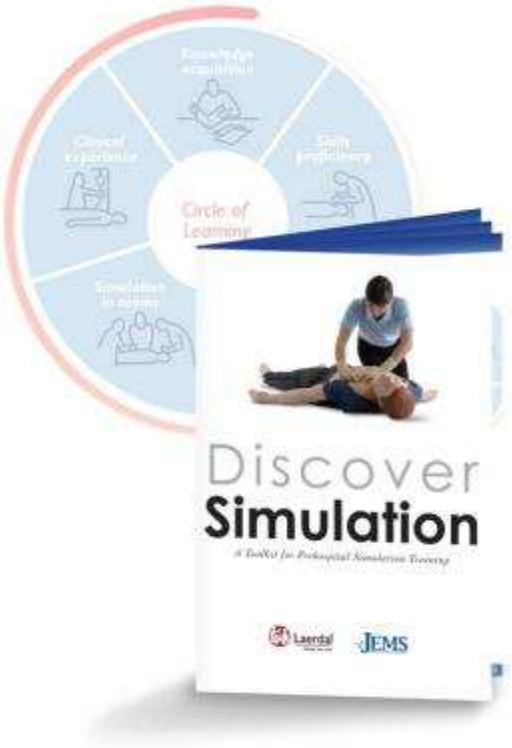
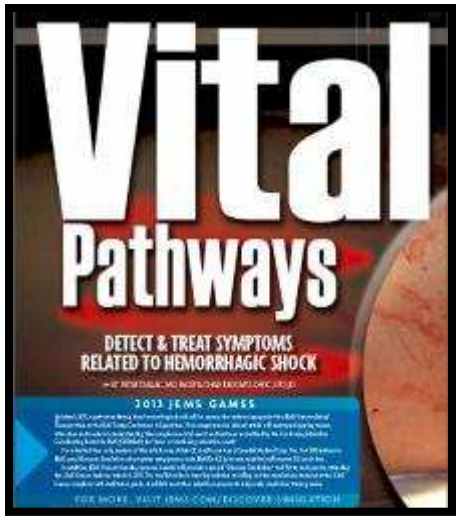
Overview

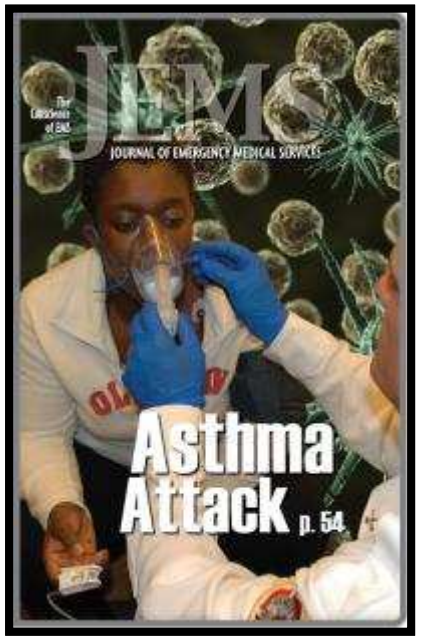
Turn-key education system…



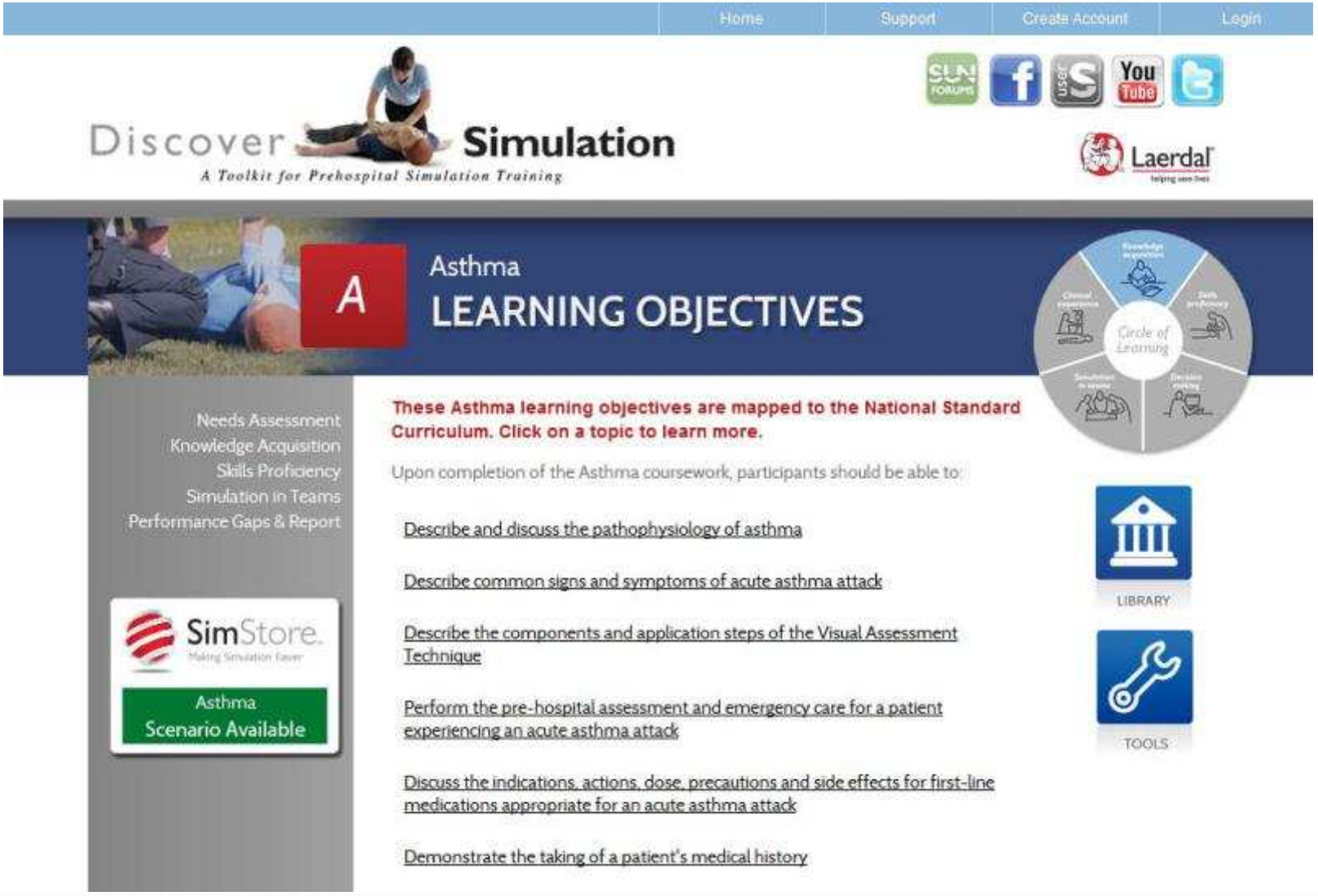
4 Topics

Includes
articles and matching scenarios





Discover Simulation Components



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Discover  Simulation

Instructor Self-Efficacy Questionnaire

Self-efficacy is the belief in one's own abilities to
organize and execute the actions required to manage prospective situations.

1	2	3	4	5
I cannot perform this task. I do not have the knowledge or skills to perform the task.	I am learning to perform this task but could not actually do so without supervision or assistance.	I learned how to perform this task but I do not feel comfortable performing the task without supervision or assistance.	I can usually perform this task without supervision or assistance. I may refer the directions or another aid if I forget something.	I can perform this task without supervision or assistance. I can assist others.

1. I can perform a Learning and Performance Needs Assessment.

Pre-course	1	2	3	4	5
Post-course	1	2	3	4	5

2. I can describe the deliberate practice model.

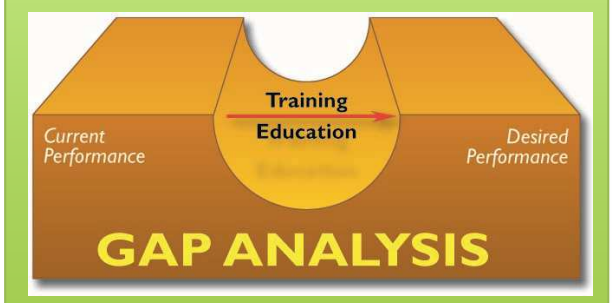
Pre-course	1	2	3	4	5
Post-course	1	2	3	4	5

Phases of Sim-Based Learning

Needs Assessment

Discover Simulation

SimStore

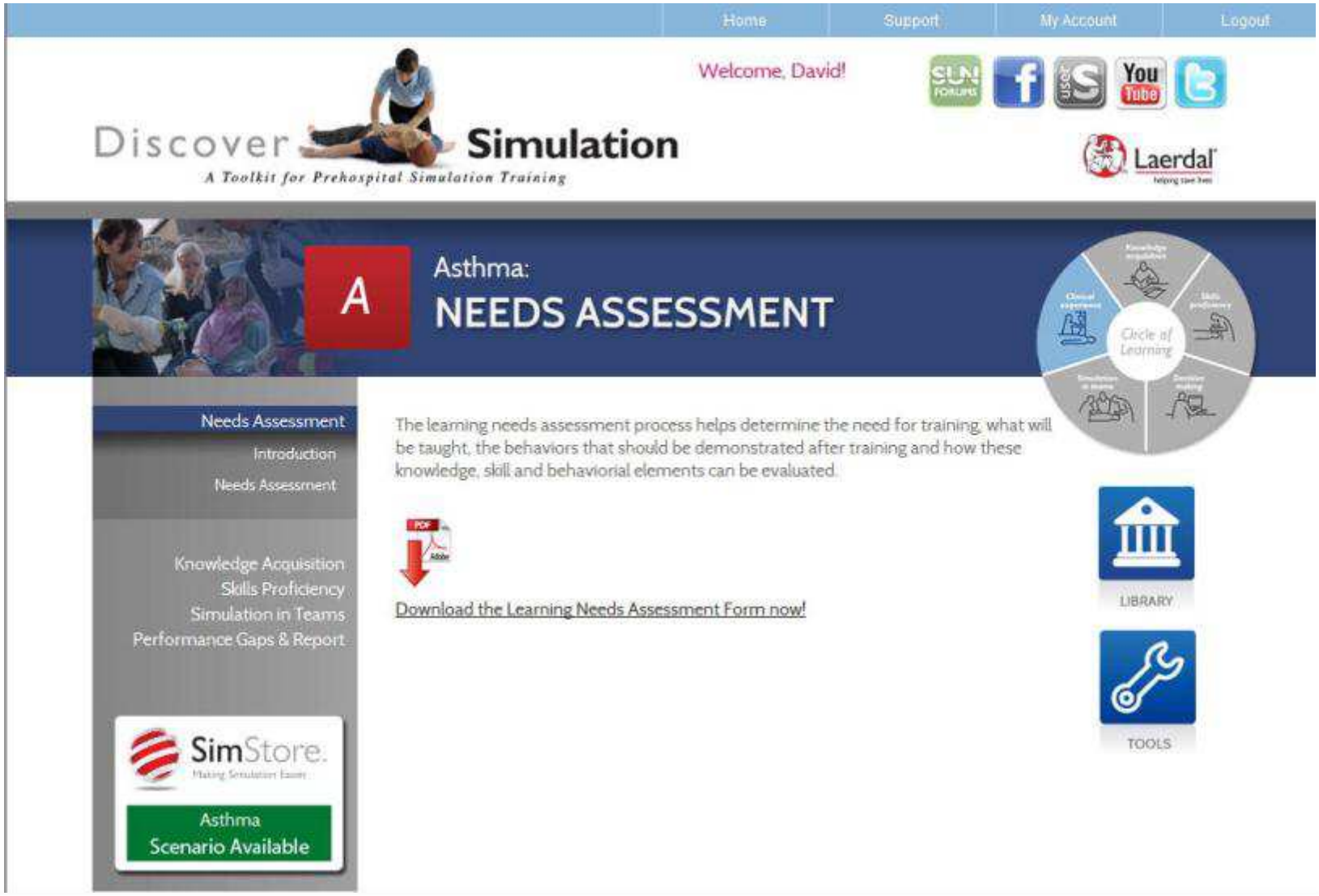


Gather Information

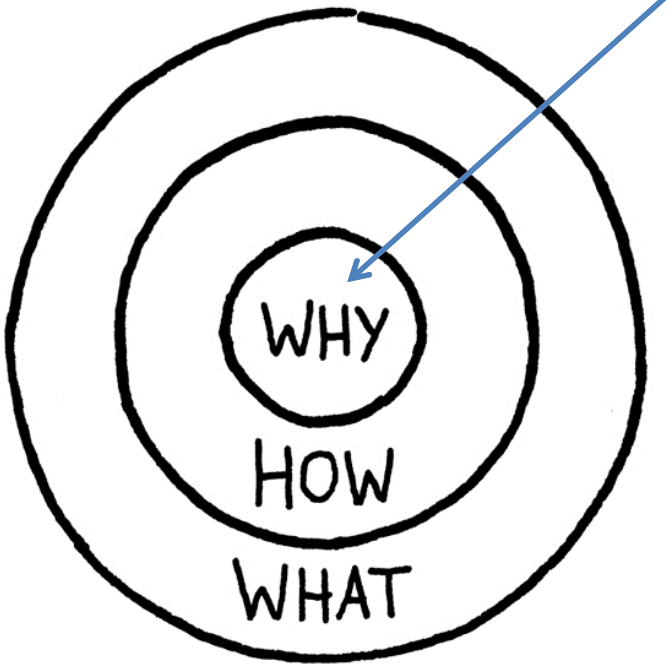
Prepare

Close the Gap

Perform Learning Needs Assessment

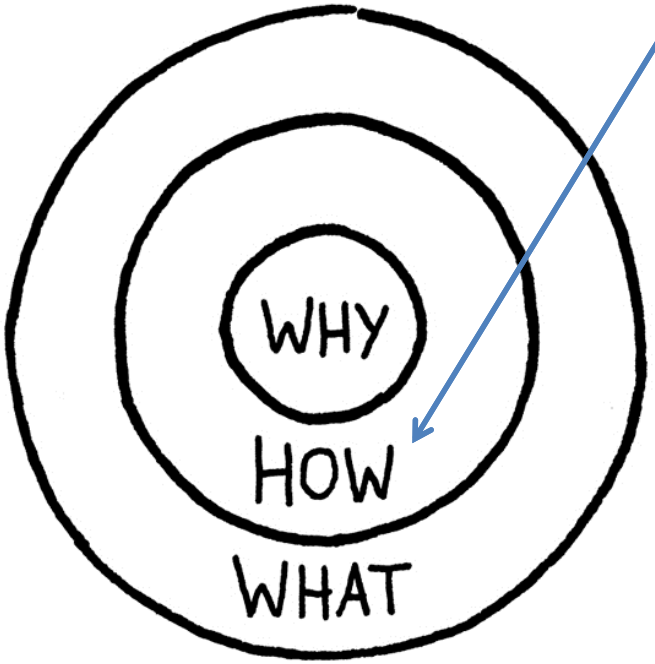


Perform Learning Needs Assessment

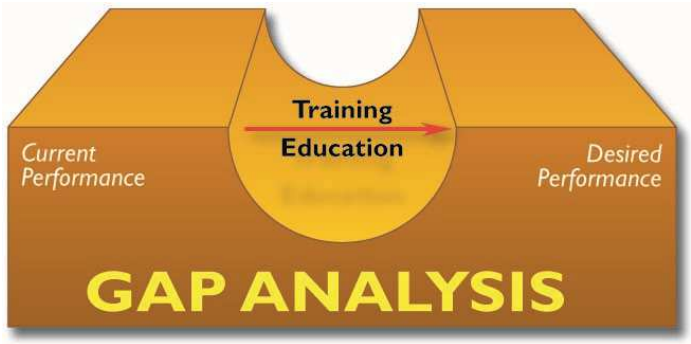


- When performance expectations change
- When quality is questioned
- When assessing individual and/or team competency
- When new employees are being on-boarded

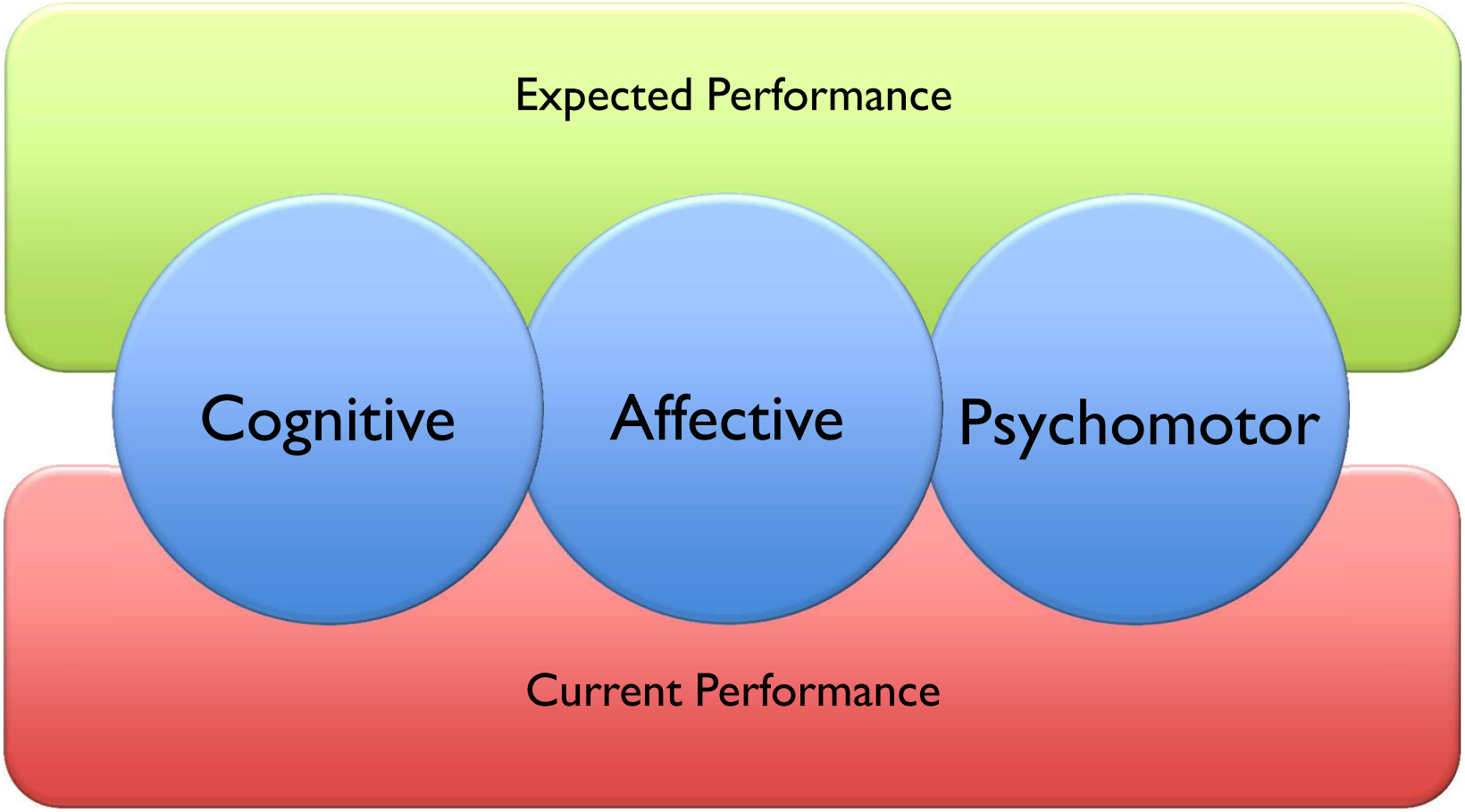
Perform Learning Needs Assessment



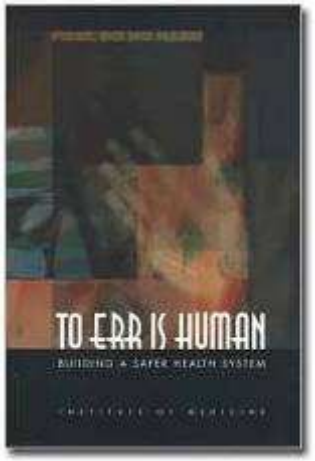
- Identify target audience
- Determine expectations for performance
- Identify current practices
- Evaluate if current practices meet accepted standards and expectations



Perform Learning Needs Assessment



Assess Needs -Why Use Simulation?



Reduce
Human Error

Assess Systems

Increase
Skill Development

Practice in
Controlled Environment

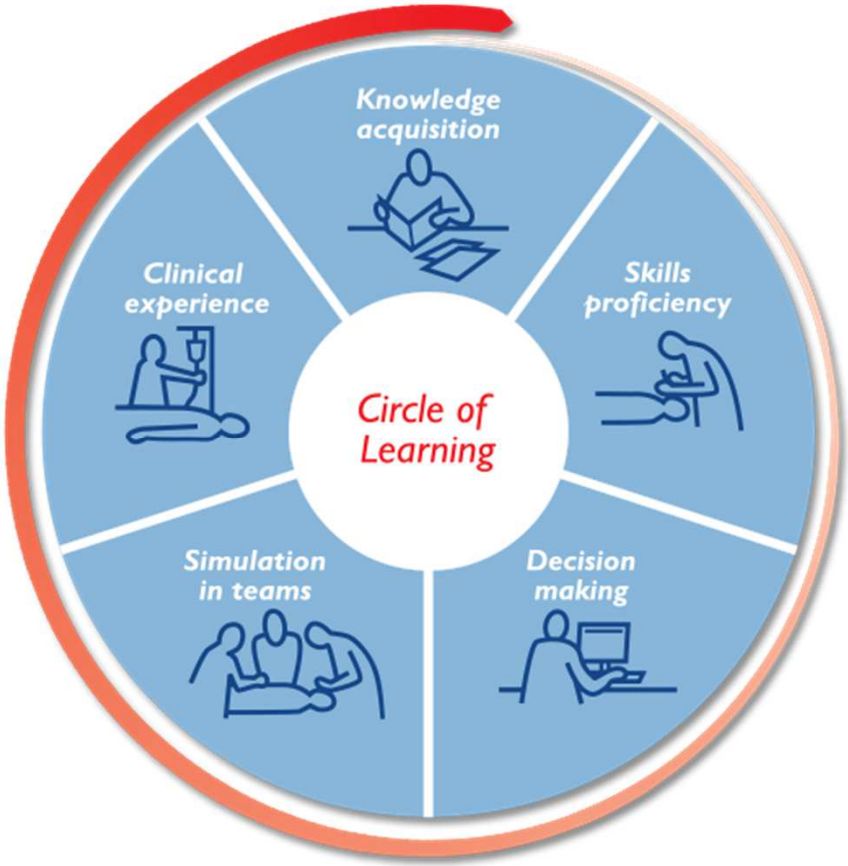
On-Demand
Access to Patients

Regulatory
Requirements

Assess Needs

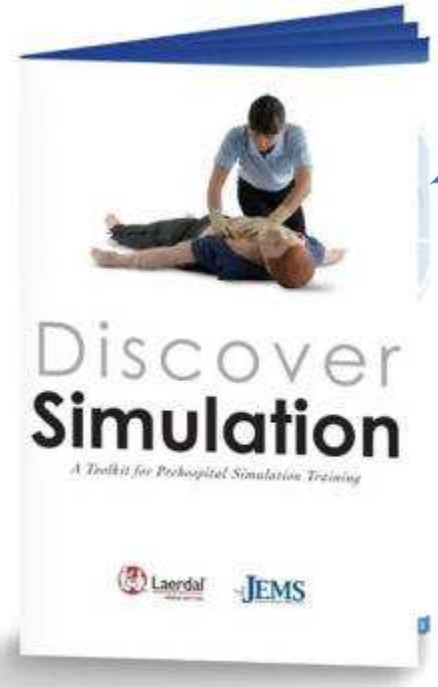
Review and discuss case study – select group spokesperson

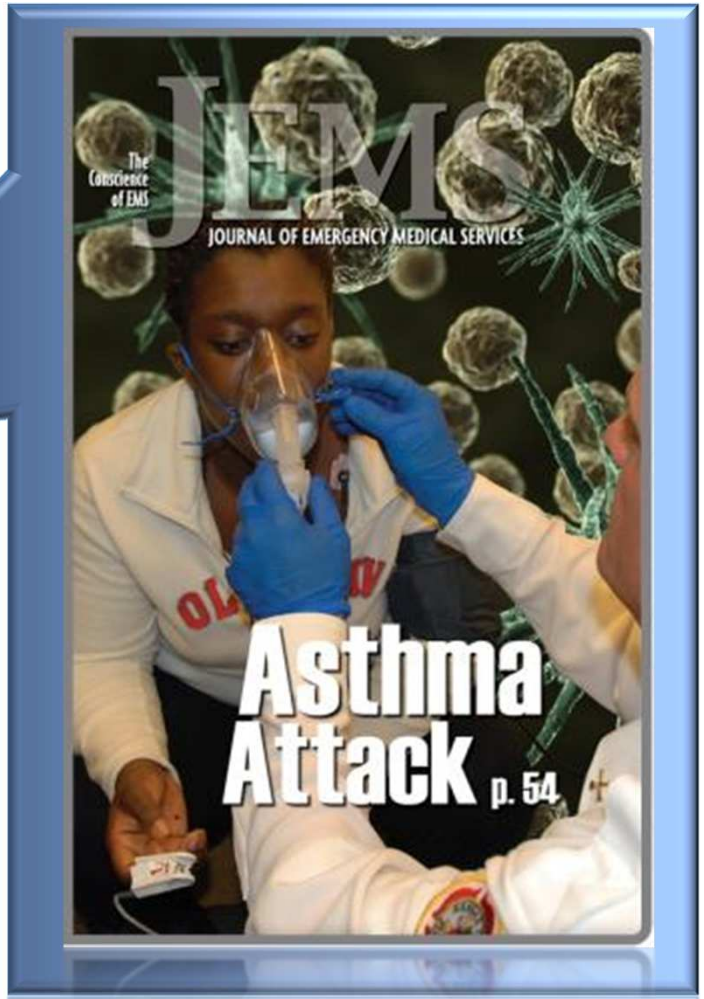
Knowledge Acquisition



Discover Simulation Components

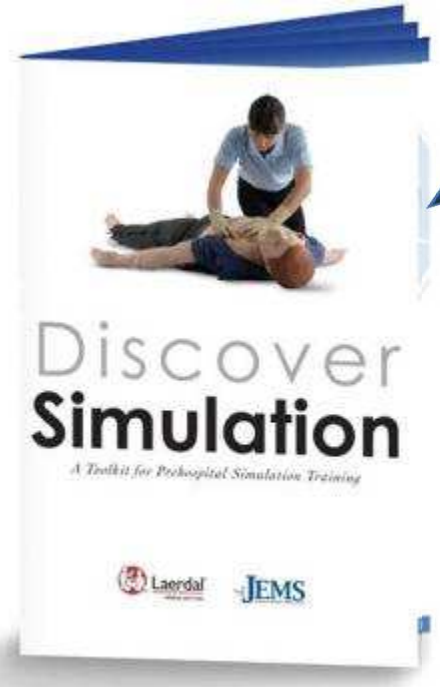
Article &
Pre/Post Test >





Discover Simulation Components

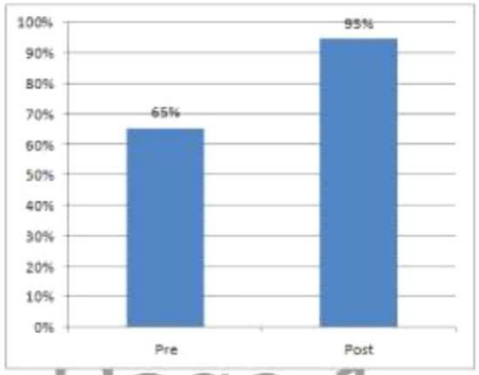
Item analysis worksheet >



Asthma Knowledge Assessment

Number of learners completing both the pre-test and post-test: 21

Pre-Test / Post Test Assessment



Page 1

Item Analysis (percentage of number of correct responses by item number)

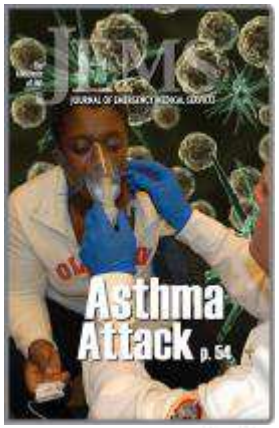
Item	Pre	Post
1	81%	90%
2	52%	90%
3	100%	100%
4	48%	100%
5	62%	100%
6	24%	29%
7	81%	90%
8	62%	95%
9	48%	76%
10	57%	81%

Item	Pre	Post
11	86%	100%
12	86%	95%
13	71%	95%
14	81%	95%
15	62%	95%
16	62%	95%
17	71%	95%
18	62%	95%
19	76%	95%
20	33%	86%

Knowledge Acquisition

Discuss how data from the pre-test and post-test may be used to improve the quality of training.

Knowledge Acquisition



Discover Simulation

Asthma Article Facilitation Guide

Introduction – Facilitating a discussion about the Asthma article allows learners to ask questions about the practical application of the information in the article. Guided dialogue also allows for groups to discuss pre-existing knowledge or challenge assumptions about current assessment techniques, other skills, or treatment choices.

Involving multiple levels of learners in this discussion also promotes mentor-learner relationships, encourages open communication about what may be unclear or inconsistent information, and promotes a culture of competency at all levels, despite differences in years of experience that may exist among those involved.

Directions:

1. Download the article from www.laerdal.com/discoversimulation

REMEMBER: Reflection, combined with feedback, enhances performance.

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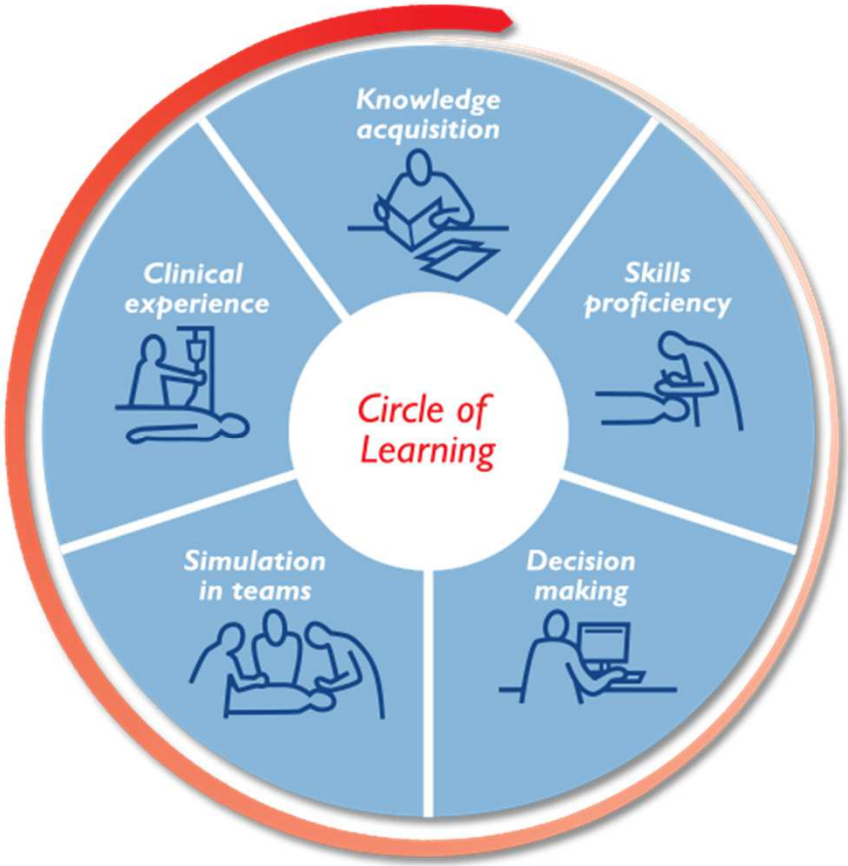
Skills Proficiency



Skills Proficiency

Discuss the availability of relevant skills checklists

Discuss the importance of validity and reliability

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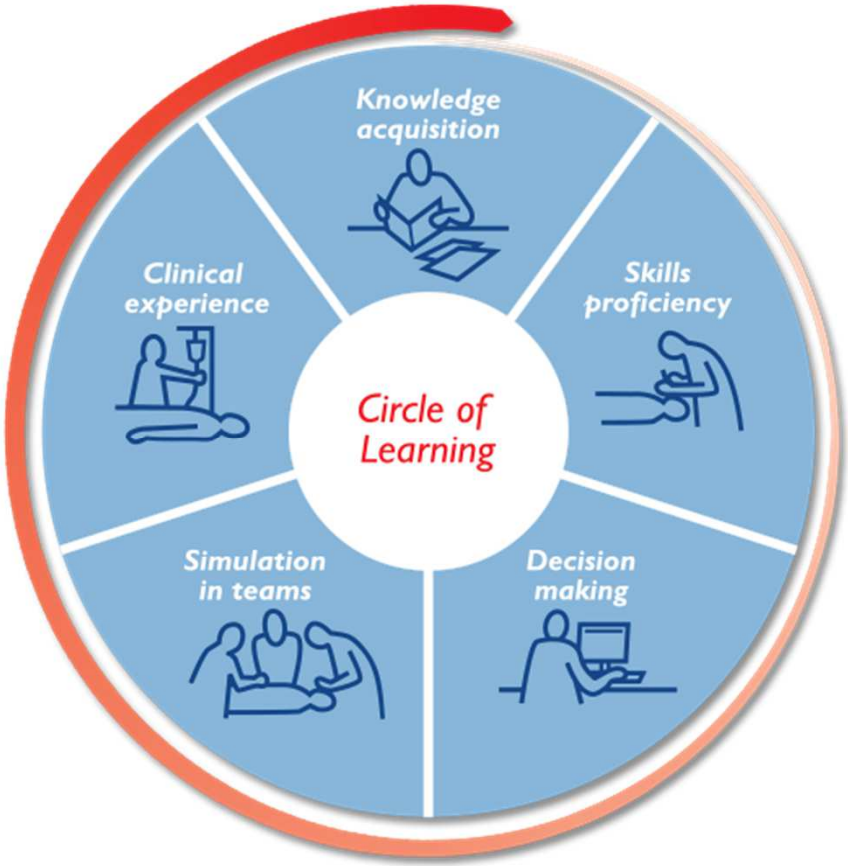
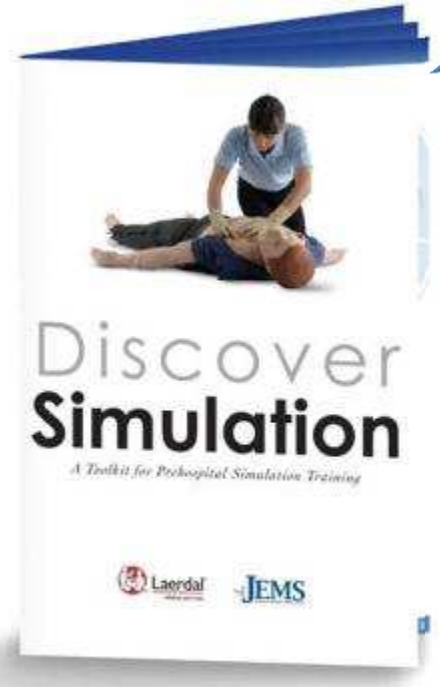
Simulation in Teams



Discover Simulation Components

Prepare for Simulation >

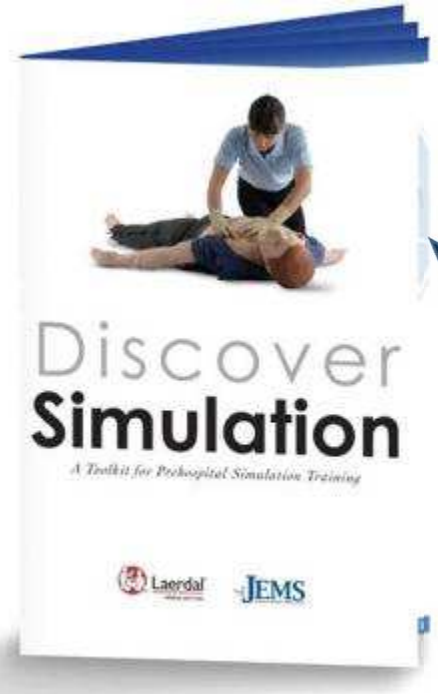


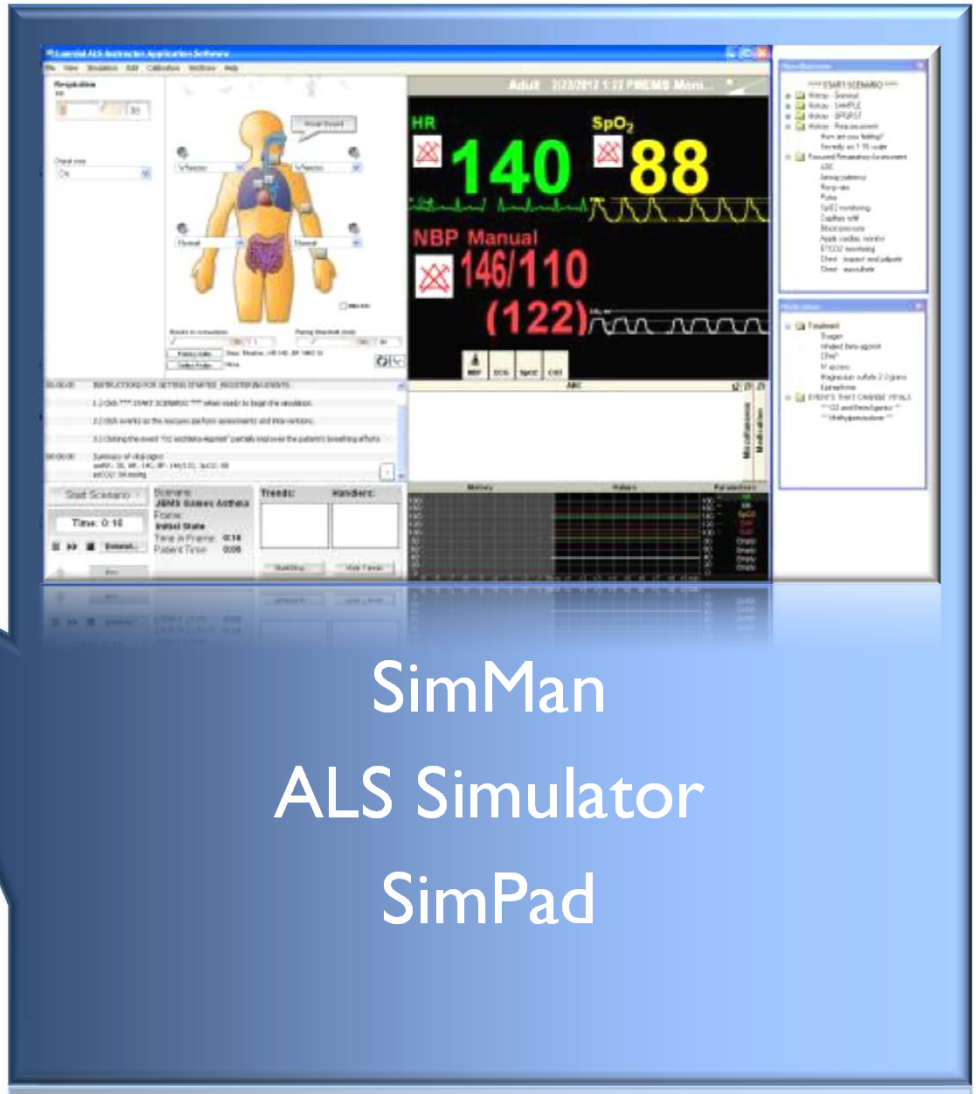
Prepare…

1. the learners
2. the instructors
3. the simulator
4. the learning environment

Discover Simulation Components

Scenario file >



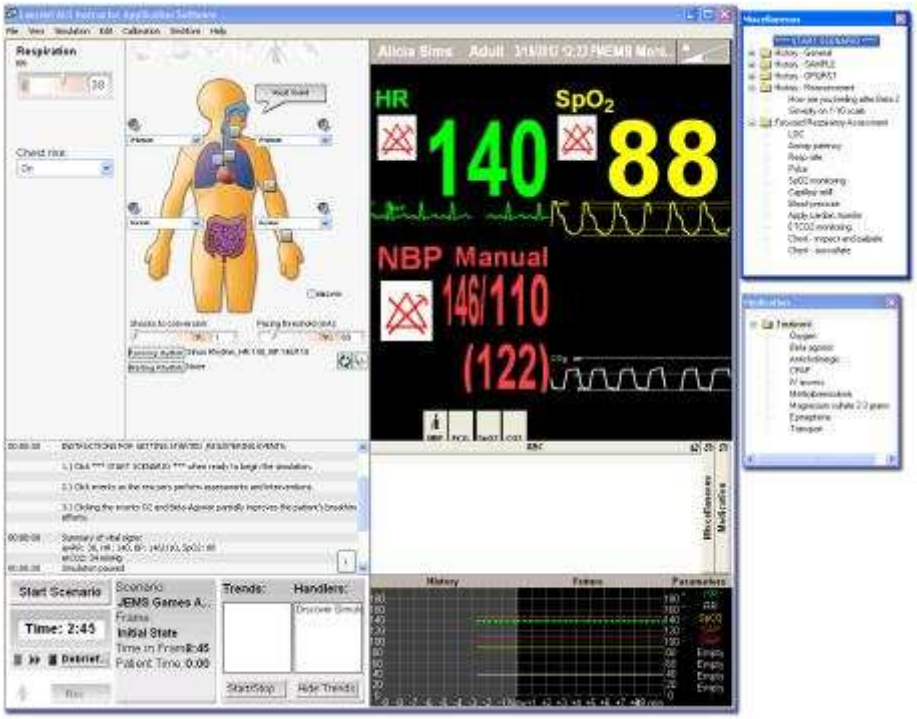


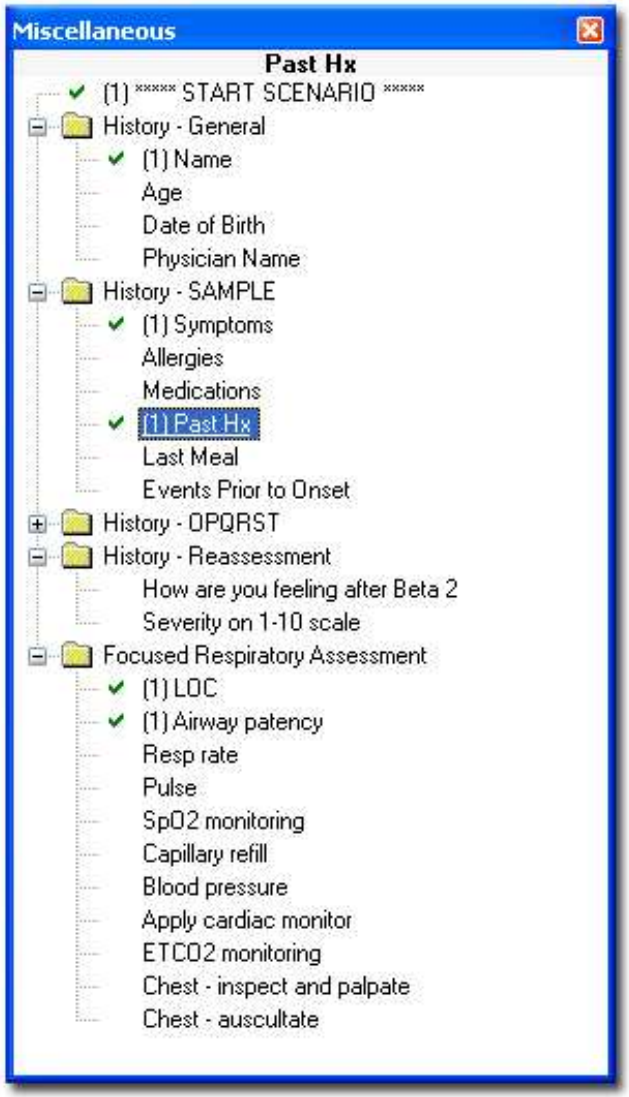
SimMan

ALS Simulator

SimPad

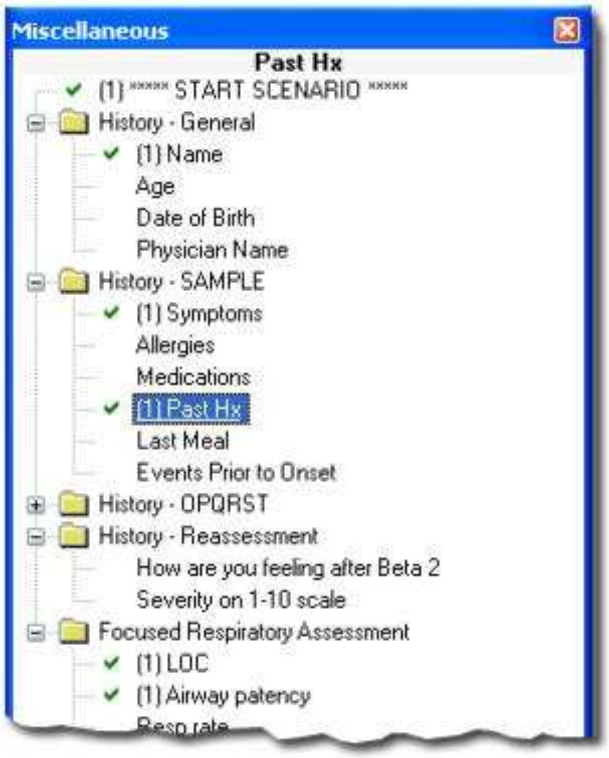
Discover Simulation Components



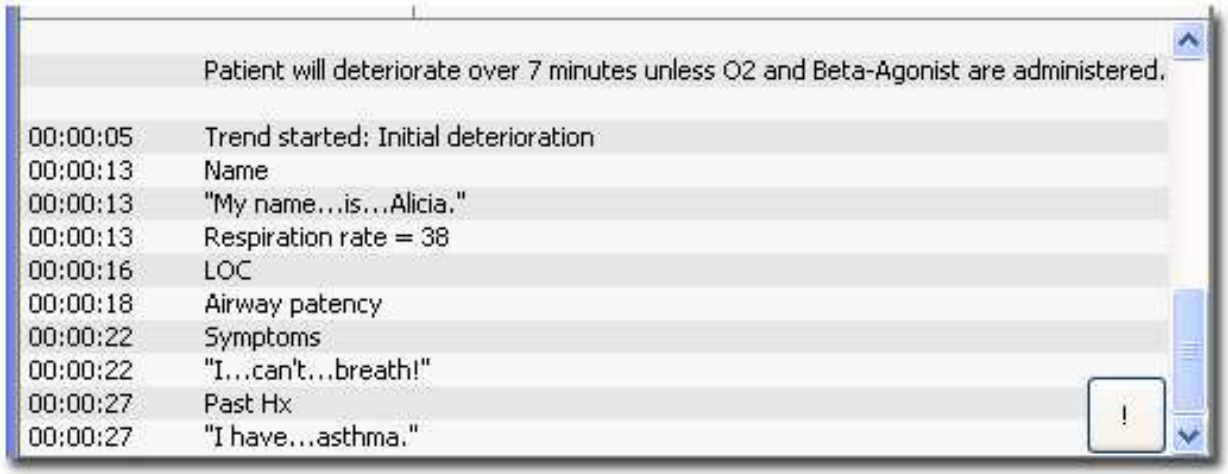


Discover Simulation Components

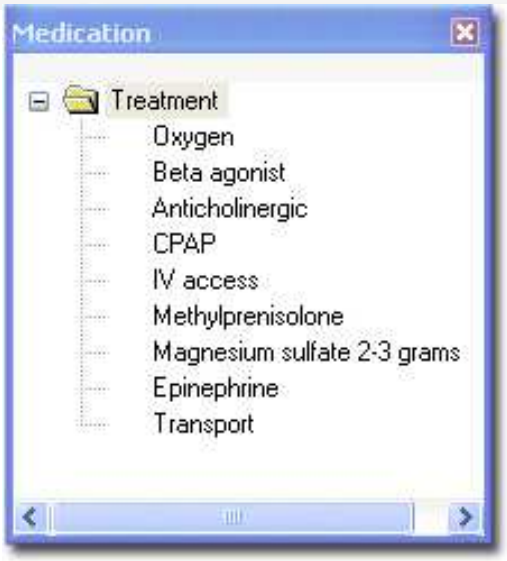
1. Watch learner's performance
2. Click events

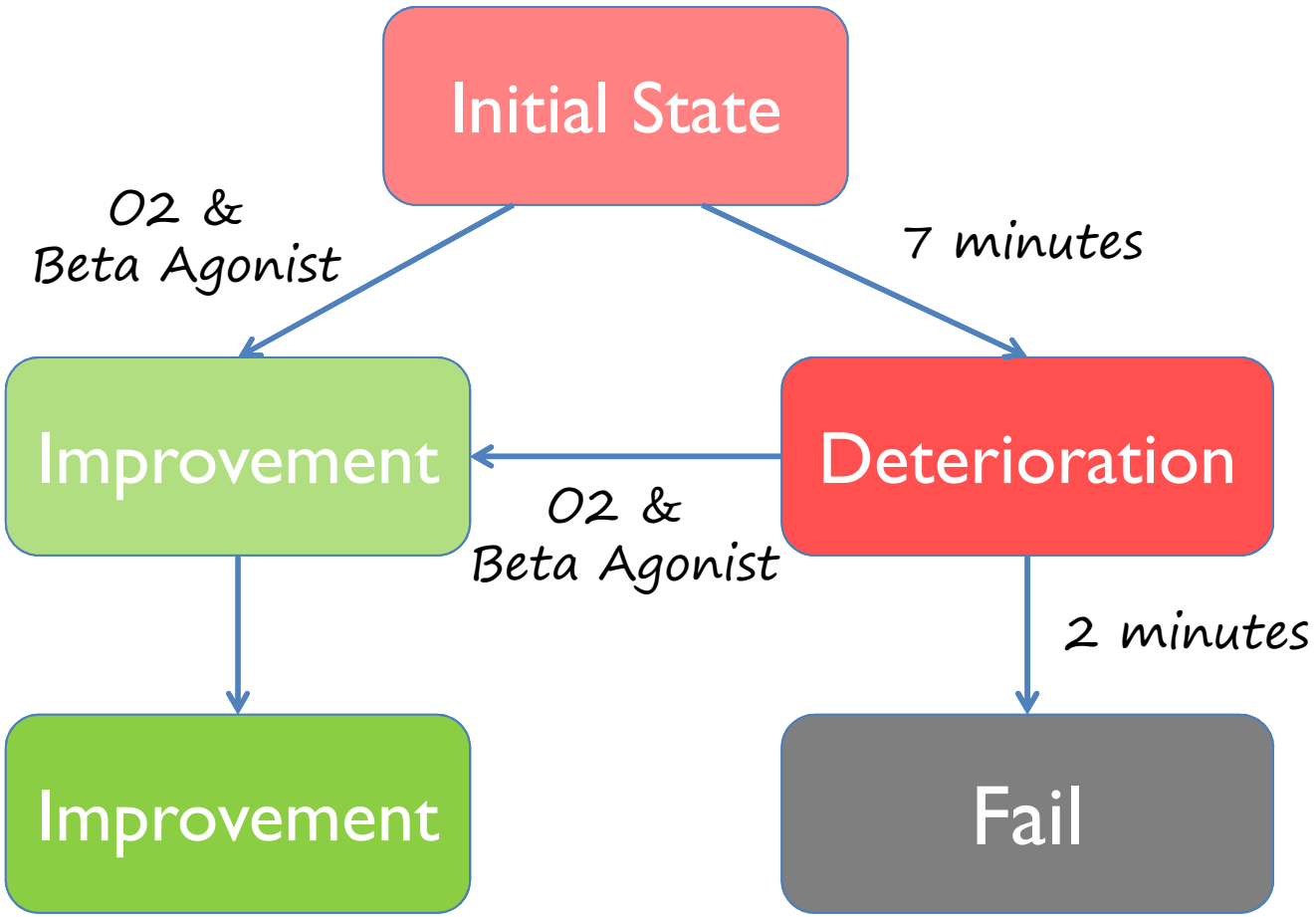


3. Performance is registered in the debriefing log



Discover Simulation Components



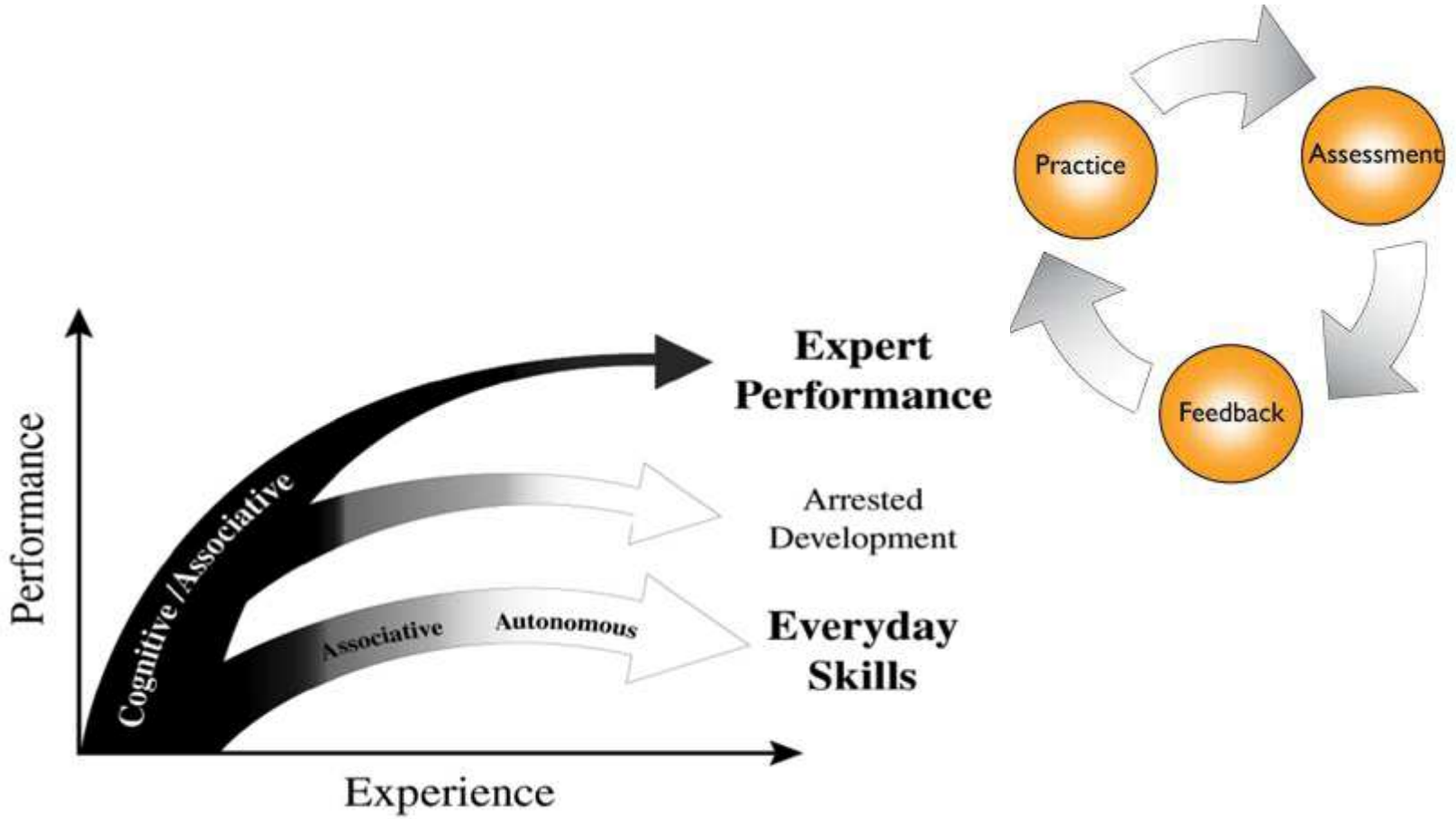


Discover Simulation Components

Debriefing can make or break a simulation session

LUNCH
1200 - 1245

The Role of Deliberate Practice



Discover Simulation Components

CONCEPTS AND COMMENTARY

There's No Such Thing as "Nonjudgmental" Debriefing: A Theory and Method for Debriefing with Good Judgment

Jenny W. Rudolph, PhD, Robert Simon, EdD, Ronald L. Dufresne, MS, and Daniel B. Raemer, PhD

We report on our experience with an approach to debriefing that emphasizes disclosing instructors' judgments and eliciting trainees' assumptions about the situation and their reasons for acting as they did. To highlight the importance of instructors disclosing their judgment skillfully, we call the approach "debriefing with good judgment." The approach draws on theory and empirical findings from a 15-year research program in the behavioral sciences on how to improve professional effectiveness through "reflective practice." This approach specifies a rigorous self-reflection process that helps trainers recognize and resolve pressing clinical and behavioral dilemmas raised by the simulation and the judgment of the instructor. The "debriefing with good judgment" approach is comprised of three elements. The first element is a conceptual model drawn from cognitive science. It stipulates that the trainees' "frames"—comprised of such things as knowledge, assumptions, and feelings—drive their actions. The actions, in turn, produce clinical results in a scenario. By uncovering the trainee's internal frame, the instructor can help the learner reframe internal assumptions and feelings and take action to achieve better results in the future. The second element is a stance of genuine curiosity about the trainee's frames. Presuming that the trainee's actions are an inevitable result of their frames, the instructor's job is that of a "cognitive detective" who tries to discover, through inquiry, what those frames are. The instructor establishes a "stance of curiosity" in which the trainees' mistakes are puzzles to be solved rather than simply erroneous. Finally, the approach includes a conversational technique designed to bring the judgment of the instructor and the frames of the trainee to light. The technique pairs advocacy and inquiry. Advocacy is a type of speech that includes an objective observation about and subjective judgment of the trainees' actions. Inquiry is a genuinely curious question that attempts to illuminate the trainee's frame in relation to the action described in the instructor's advocacy. We find that the approach helps instructors manage the apparent tension between sharing critical, evaluative judgments while maintaining a trusting relationship with trainees.

(*Simul Healthcare* 2006;1: 49–55)

Sharing critical judgments is an essential part of learning in simulation and debriefing. Instructors often avoid giving voice to critical thoughts and feelings because they do not want to appear confrontational and they worry that criticism might lead to hurt feelings or defensiveness on the part of the trainee. Voicing critical judgment poses a dilemma for many instructors: "How can I deliver a critical message and share my expertise while avoiding negative emotions, preserving social 'face' and maintaining my relationship with the trainee?" This paper offers an approach to debriefing that addresses this dilemma.

The existing debriefing literature[1–4] provides little guidance on how to create an environment in which trainees feel simultaneously challenged and psychologically safe[5] enough to engage in rigorous reflection. By "rigorous reflection," we mean a process that brings to the surface and helps resolve the clinical and behavioral dilemmas and areas of confusion raised by the simulation experience. Drawing on a 35-year research program on improving professional effectiveness in the business world through "reflective practice,"[6–17] this article articulates a model of debriefing for medical simulation exercises. The research program from which we adapted our approach has studied and helped thousands of practicing business executives and managers improve their personal and interpersonal effectiveness through the discipline of reflective practice. "Reflective practice" is a term coined by the late MIT professor Donald Schön to describe the discipline of examining the values, assumptions, and knowledge-base that drives one's own professional practice [see reference 12]. The debriefing model has three primary components: The first component is a conceptual model, drawn from research in cognitive science and on reflective practice, that guides the instructor on how to illuminate the mental models that were salient in guiding trainees' actions during the simulation. The second is an underlying debriefing "stance" that unites the apparently contradictory values of curiosity about and respect for the trainee and the value of clear evaluative judgments about trainee performance. The third component is a way of

From the Center for Medical Simulation (J.W.R., R.S., R.L.D., D.B.R.), Cambridge, Massachusetts; and Harvard Medical School (R.S., D.B.R.); Veterans Affairs Boston Healthcare System (J.W.R.); the Department of Anesthesia and Critical Care, Massachusetts General Hospital (R.S., D.B.R.); the School of Public Health, Boston University, Boston, Massachusetts; and the Carroll School of Management, Boston College (R.L.D.), Boston, Massachusetts.

This study was supported by the US Department of Veterans Affairs' Merit Review Entry Program, the Josiah Macy, Jr. Foundation, the Risk Management Foundation of the Harvard Medical Institutions, and the Harvard-MIT Division of Health Sciences and Technology, School of Public Health (J.W.R.).

Reprints: Jenny W. Rudolph, PhD, VA Boston Healthcare System, Boston, MA (email: jrudolph@bu.edu).

The authors have reported they have no conflict of interest to disclose.

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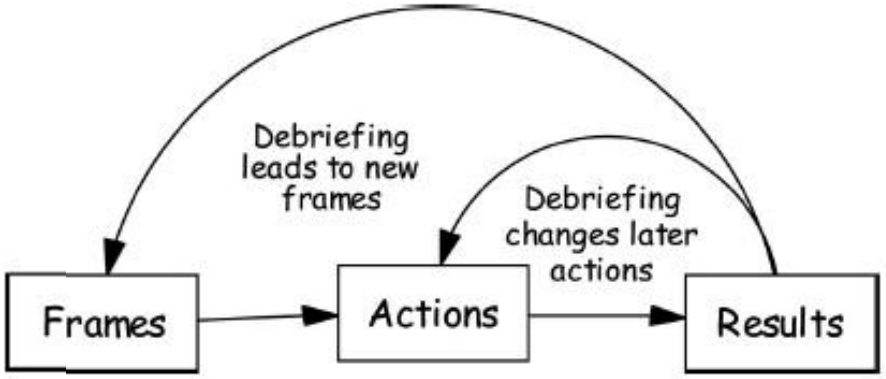


You can see actions, but never frames

Rudolph J, et al. There's no such thing as "nonjudgmental" debriefing" A theory and method for debriefing with good judgment. Simul Healthcare 2006;1: 49–55

Discover Simulation Components

Advocacy

- My perspective
- Use first person
- Make perspective clear
- I observed _____
- I'm concerned / pleased because

  _____

Inquiry

- Short, open ended questions
- "I wonder what happened…"
- I'm curious how you see it?"

Discover Simulation Components

Beginning – Reactions Phase

Allow participants to express their initial reactions (emotion OK)

Discusses facts as necessary to eliminate confusion

Avoid ridiculing or shifting right to analysis

Middle – Analysis Phase

Ask questions that prompt the learner to discuss and reflect

Listen with genuine curiosity – seek to understand their "frames"

Avoid telling the participants what to do without getting them to reflect first

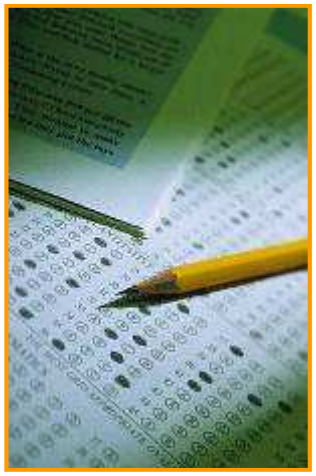
End – Summary Phase

Ask participants to summarize what they learned

"what went well?"

"Given a similar situation, what would you do differently?"

Evaluate the Program

Level I	Level II	Level III	Level IV
			
Reaction	Learning	Behavior	Outcome / ROI Return on Expectations

Kirkpatrick, D.L., Evaluating Training Programs: The Four Levels. San Francisco, CA: Berret-Koehler Publishers, 1998.

Implementation

Next Actions

1. Register for free scenario
2. Join the Discover Simulation forum

www.laerdal.com/discoversimulation