

Title: Cognition: Engagement to Expertise

➔ During workshop, make your own notes starting on page 2.

Learning Objectives: At the conclusion of this workshop, participants will be able to:

Objective 1: Describe at least one psychology experiment that demonstrates a role of emotion in learning.

Objective 2: Formulate a definition of engagement that incorporates both the role of emotion and its importance in developing expertise.

Objective 3: Describe at least one way that you could (or do) promote expertise in your sim center by improving engagement.

Overview:

Most of us believe in the power of simulation to improve complex decision-making and teamwork and that engagement is important for such simulations. Why? This workshop is focused on engagement: what it is, why it matters, and how do we get it. We suggest:

- Engagement in a simulation is a process using emotion and reflection to ascribe meaning to the simulation for application to other situations.
- Experts recognize situations and identify likely responses much too fast for conscious thought; engagement matters because it trains these expert instincts.
- Facilitators promote engagement by working with participants to derive a story about their simulation experience that is useful for the future.

Workshop Design:

The proposal above draws on diverse sources that take time to integrate (separate handout for after the workshop). However, given our suggestion that engagement helps us develop meaning, we plan to have fun knocking down a straw man. We hope this will help participants reflect on the analogies between the results of famous psychology experiments and their experience with simulation. Our villain opposes program and faculty development costs with the argument, “Mushy stuff is irrelevant to proper chest compressions.”

Terms:

Emotions are neurophysiological events, while feelings are the corresponding subjective experiences.

Engagement in a simulation is a process using emotion and reflection to ascribe meaning to the simulation for application to other situations. (Definition proposed here)

Expertise is a set of capabilities within a specific domain that cannot be transferred quickly from one person to another but only learned with deliberate practice.

Part I: Why Engagement Matters

Message: Expert decision-making requires not only declarative knowledge but also a highly trained set of instincts.

Write here: How did you learn the things that made you an expert that you could not learn by studying for a written test?

Part II: What Is Engagement (step 1)

Message: Engagement includes an emotional response that enables us to apply knowledge more readily.

Write here: In your experience, can Greg be a metaphor for a simulation scenario?

Part III: What Is Engagement (step 2)

Message: Emotion affects our development of generalities and meaning.

Write here: Is there a difference in outcome between engaged and disengaged simulation participants?

Part IV: How Do We Get Engagement

Message: We get engagement by helping participants arrive at a story that is useful in their future.

Write here: What is the story of a simulation told by a disengaged participant? What is the story told by an engaged participant? How do we influence someone else's cause-and-effect story?

Our answer to the penny-pinching villain: Engagement is necessary for steps performed in the simulation lab to become instinctive actions in the real world.

Part V: Application

Message: Engagement in simulation provides participants with personal stories to use in future decisions. The game-changing capabilities of simulation lie significantly in helping us understand cause-and-effect in a way that will guide our future actions.

Discuss (using your notes above): Describe at least one way that you could (or do) promote expertise in your sim center by improving engagement.