



Enhancing Realism




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Welcome to the
2010 National SUN Meeting!


Enhancing Realism
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Enhancing Realism



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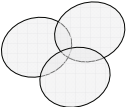
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Learning Objectives


- Define environmental fidelity, equipment fidelity and psychological fidelity.
- Discuss boundaries of fidelity in simulation-based teaching and how to overcome those obstacles.
- Define the term suspension of disbelief and explain its use in simulation-based teaching.
- Discuss the use of fiction contracts.
- Identify examples of how to establish realism for each of the four types of fidelity.
- Demonstrate moulage application techniques

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Overview of Presentation



Fidelity Definitions & Limitations



Suspension of Disbelief & Fiction Contracts



Adding Realism to Simulations


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Fidelity Defined

Fi-del-i-ty *

1. The quality or state of being faithful
2. The degree to which an electronic device accurately reproduces its effect



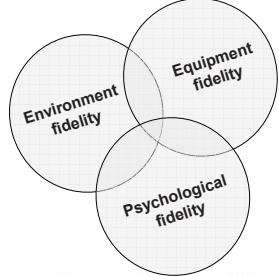
His Master's Voice
RCA Nipper

* www.merriam-webster.com/dictionary/fidelity

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Simulation Fidelity




Environment fidelity

Equipment fidelity

Psychological fidelity


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Environmental Fidelity

The extent to which the simulator duplicates motion cues, visual cues, and other sensory information from the task environment.




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Equipment Fidelity

...the degree to which the simulator duplicates the appearance and feel of the real system.




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Psychological Fidelity

...the degree to which the trainee perceives the simulation to be a believable surrogate for the trained task.



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Examples of Fidelity Limitations

- Environment:
 - Classroom space as surrogate for operating room.
- Equipment:
 - Pretending to administer a medication
- Psychological:
 - Unrealistic acting by a standardized patient or confederate

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More than just a Simulator

"At any level of integration, there should be certain minimum criteria that are met to better ensure success. This includes identifying the training needs for a given population, defining the outcomes that are expected from these learners, using the appropriate type of simulation that is based on the defined outcomes rather than the technical features, and measuring outcomes".


Issenberg MD, S. Barry, 2006, The Scope of Simulation-based Healthcare Education, Simulation in Healthcare, Volume 1, Number, 4, Winter 2006, pages 203-208

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Simulation based Training


- Simulation based training takes into consideration not just equipment fidelity, but also psychological and environmental fidelity which provides for the learner a bigger picture. That bigger picture is simulation fidelity.
- Simulation fidelity is the result of implementing Psychological, Environmental and Equipment Fidelity.
- Simulation Fidelity is where the greatest buy-in or suspension of disbelief occurs.

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Suspension of Disbelief

- Term originated by a poet and philosopher to justify the use of non-realistic elements in literature.
- Goal: audience agrees to provisionally suspend their judgment in exchange for the promise of entertainment.
- The term and practice is widely advocated by simulation-based teachers.
- The practice is not without criticism, however.



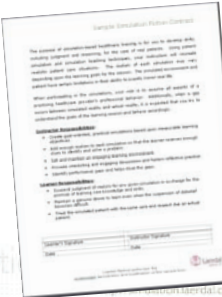
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Fiction Contract

An agreement to suspend your disbelief

- **Learner agrees to...**
- Suspend judgment of realism for any given simulation in exchange for the promise of learning new knowledge and skills.
- Maintain a genuine desire to learn even when the suspension of disbelief becomes difficult.



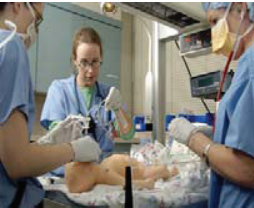
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Actors or Extras Defined

Actor

1. one who assists in a plot
2. an accomplice
3. One that adds to the simulation by playing a role



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Use of Actors or Role Players


The actor enhances realism by playing various roles...

- Spouse:
 - provide patient's medical history
 - Describe a physical finding not available using a simulator (cool skin, cyanosis, etc.)
- Physician or nurse:
 - Enter scene to support SBAR
 - Provide a "cue" when the learner is struggling
- Other:
 - Disrupter
 - Helper

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Simulator Considerations

- First, do no harm
- Strive for realism
- Understand the limitations of the Simulator
- Allow the learner to engage the Simulator before the start of the simulation. (properly introduced/given orientation)




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Activity

Given what we have discussed and demonstrated, let us now bring into practice some of the elements of Psychological, Environmental and Equipment Fidelity with a hands on exercise.


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Equipment Fidelity Activity

- Using directions and a box of props, teams will "mouflage" their simulator to achieve the following physical findings:
 - Male to female conversion
 - Obesity
 - Peripheral edema
 - A male around the age of 65

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Debrief

- What were some of the challenges
- What worked well for you
- What are some other things you could have done using material that is not present
- How can you translate some of this into practice or bring this to other educators?

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Some Website Resources for Consideration

- www.pocketnurse.com
- www.imageperspectives.com
- www.militarymouflage.com
- www.behindthesimcurtain.com

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Questions or Comments







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Next Steps

- Practice....
- Set realistic goals
- Develop an action plan
- Faculty enrichment/Continuing Education/Staff Development
- Budget for formal training
 - Time: Hands-on time with Simulator
 - Financially: Custom training with Simulation Experts
- Networking
- Set time lines and realistic goals

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<p>Courseware</p> 		

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