Immersion: improving fidelity in simulation based-education.

Colin Parry - Simulation Technician, Guy’s & St Thomas’ NHS Foundation Trust
Dr. Libby Thomas - PhD Student Simulation and IPE, KCL
Disclosures

• Colin – Paid (a bit) by Simulation at GSTT

• Libby – Paid by no-one
Outline

• Explore the different types of fidelity
• Consider how fidelity impacts on the participants immersion in simulations
• Work in small groups to come up with innovative ideas to improve immersive simulated experiences
• Learn tips and tricks to improve fidelity from the technician who had “been there and done that!”

@libbylilias #SLSN2016 #sociologicalfidelity
Definition

- **Fidelity**
  
  An overarching term which donates the degree of faithfulness with which a situation has been *designed* (objective / educator perspective)
In groups:

What are the different types of fidelity?

What do they mean?
Fidelity

- Psychological fidelity
- Equipment fidelity
- Environmental fidelity

Simulating

Beaubien, 2004

@libbylilias #SLSN2016
#sociologicalfidelity
Definitions

• **Fidelity**
  An overarching term which donates the degree of faithfulness with which a situation has been *designed* (objective / educator perspective)

• **Authenticity**
  How closely a simulated experience feels compared to an actual clinical experience (subjective / student perspective)
True or not?

Higher technology = higher fidelity

Higher fidelity = better learning

Real feel vs. real deal
‘Suspension of disbelief’
In groups:

Which fidelity is most important in…

1. Isolated Nursing simulation?
2. Psychiatry?
3. Physiotherapy Outpatients?
4. Stroke / HASSU?
5. Intensive care?
6. General practice?
7. Emergency Department?
The senses...
How We Perceive

- Sight 83%
- Sound 11%
- Smell 3.5%
- Touch 1.5%
- Taste 1.5%

Roberson D, Janice N, Bryant E Improving Wound Care Simulation with the Addition of Odour: A Descriptive, Quasi-experimental Study. OWM, Volume 54 – Issue 8 – August 2008
Sight

Environment
- In-situ
- simulated

Patient
- SP
- Manikin

Moulage

Equipment

Video
Sight: Moulage

Simulation at Guy's & St Thomas' London

Showing we care

Guy's and St Thomas' NHS Foundation Trust
Sight: Environment
Sound

Communication.
- Between patient and participant
- Between embedded practitioner and scenario lead

Ambient noise.
- YouTube
- Recording from your clinical environment.
Smell / Taste

Nail varnish remover – Ketoacidosis

Moulagesciences.com - simulated odour

Sensorycots.com - smell generators
Touch

How do we deal with touch in simulation?

- Embedded practitioner
- Moulage
Questions ?