

**UWE
Bristol**

University
of the
West of
England

NHS

Health Education England



**Developing Simulation in Healthcare Education:
Catalysts, Conflicts & Clinical Confusion!**

Jon Newton

A dark slate sign with a rough, natural edge is mounted on a wall of vertical wooden planks. The sign is held up by a black wire that forms a triangle at the top. The word "WELCOME" is printed in a white, classic serif font in the center of the slate. Above and below the text are decorative white flourishes consisting of symmetrical, flowing lines with small floral motifs at their centers. Two small dark spots, possibly screws or rivets, are visible on the top edge of the slate.

WELCOME



Agenda

Is high-fidelity simulation a *practicable* teaching and learning tool; and if so, how *effective* is it in healthcare education?

1. Discuss the catalysts, conflicts and clinical confusion surrounding the pedagogy of simulation.
 2. Share the project findings of: Operation JACKSCREW - The UK's largest interprofessional, university-led high-fidelity simulation
 3. Showcase some key research findings: Developing emotional preparedness and mental resilience through high-fidelity simulation
- Suggest a novel 3-step process for debriefing high-fidelity simulation
 - What's next...?

Clinical Confusion

- Simulation probably means something different to each of us...?
- Simulation is an umbrella term (low/mid/high-fidelity simulation)
- There are many different modalities
- Not everyone 'gets it'!
- Puts many academics outside their comfort zone
- It's not *always* possible for colleagues to see the value of high-fidelity simulation as a teaching and learning tool
- How *should* we support a learner during high-fidelity simulation?
- Requires expert educators to deliver with a high-level of subject expertise in order to avoid confusing junctions



Catalysts

- Technological improvements
- Sub-optimal practice placement experiences (worsened during the pandemic)
- Lack of quality control measures to regulate the progress of trainees out in practice (taking back control)
- Traditional lecturing styles *might* be inadequate - and practical, hands-on learning is more effective and enjoyable
- Prospects of raising aspirations in teaching and learning
- An opportunity to improve NSS results
- Requirement to integrate 300 additional simulation hours into the curriculum
- Simulation might be an effective way of bridging important gaps between theory and practice; and better preparing graduates for the real-world



Conflicts

- High-fidelity simulation is expensive!
- Designing quality events are VERY time consuming...
- They can be difficult to staff effectively
- Acquisitions can be challenging...
- Health/Safety/Risk...
- Cross-faculty programme integration
- Fitting simulation into the confines of credit bearing modules
- Student welfare and debriefing
- Leadership scepticism
- The critics!



Operation JACKSCREW:



Operation JACKSCREW:



- 505 participants
- 7 programmes of undergraduate/postgraduate study
- 4-day event (22.5hrs of LIVE simulation)
- Appeared twice on regional news
- Since hailed as the UK's largest interprofessional university-led simulation





Developing emotional preparedness and mental resilience through high-fidelity simulation...

Major Findings:

- 91%
- 86%
- 89%

Debriefing high-fidelity simulation

- **HOT** Debrief (Learner)
- **COLD** Debrief (Learner and the Organisation)
- **Q&A** (Learner)



HOT DEBRIEFING

T.A.K.E
S.T.O.C.K
HOT DEBRIEF TOOL

Does this event meet the criteria for a hot debrief?
Unexpected death Paediatric Standby Distressing event
Staff request Unexpected Outcome

Take an instruction sheet

Ask “Is everyone OK?”

Know if anyone needs a break

Equipment issues?

Summarise the event

Things that went well

Opportunities to learn

Cold debrief necessary?

Know who is present

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The TAKE STOCK tool is an adaptation of the STOPS model created by Edinburgh EM and the Scottish Centre for Simulation and Clinical Human Factors
<https://www.edinburghem.org.uk/education/stop-model/>
<https://www.scshf.ac.uk/stop-model/>

COLD DEBRIEFING

S.T.O.C.K

T.A.K.E

COLD DEBRIEF TOOL (Simulation)

Does the event meet the criteria for a COLD Debrief?

1. Large-scale major incident or mass-casualty Simulation
2. Staff request
3. Unexpected outcome

S – Summarise the event

T – Things that went well

O – Opportunities to learn and improve

C – Consider future prospects/opportunities

K – Key points to be recorded

T – Tangible achievements (staff/student/institution)

A – Acquisitions gained (by institution)

K – Knowledge gained (teaching and learning)

E – Evaluate sustainability (should we do this again?)

So.....Is high-fidelity simulation a *practicable* teaching and learning too; and if so, how effective is it?

In simple, **YES!**

BUT.....



'Best Practice' Recommendations

- Should not be considered 'Gold Standard'
- Is better suited to more advanced learners
- Exercises should possess parity of experience and be scalable
- Success relies on high-quality theoretical teaching to provide a foundation
- Allow significantly more planning time than you would imagine!

What's next...?

A professional film studio with a green screen, lighting rigs, and crew members. The studio is dimly lit, with the primary light source being the green screen and various studio lights. The floor is polished and reflects the lights. There are several people working in the background, and various pieces of equipment like tripods and stands are visible.

Short Term:

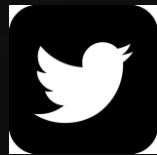
- Teaching and Learning Documentary
- Lots more exercises!

Longer Term:

- Curriculum integration for a wider range of undergraduate and postgraduate programmes
- Increase the scope for programmes to claim NHS Placement Tariff
- Further research to follow the mental welfare of these student cohorts



THE END



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