

# **Using Augmented Reality To Enhance the Values of Nursing**

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## Who?

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**Robin Gissing** - Technology Enhanced Learning Advisor for the Faculty of Health & Wellbeing

**Mandy Brailsford, Debbie Clark & Kathryn Warren**  
Senior Lecturers within the Nursing and Midwifery department of HWB.

## What?

We've been using Augmented Reality (AR) overlays of patient actors onto manikins.

Augmented Reality is a technology which allows the addition of text, video or graphics to be overlaid onto the real world via a computer based device.

## What?

For example, using a tablet with its inbuilt camera functions:



Video Footage

Why?

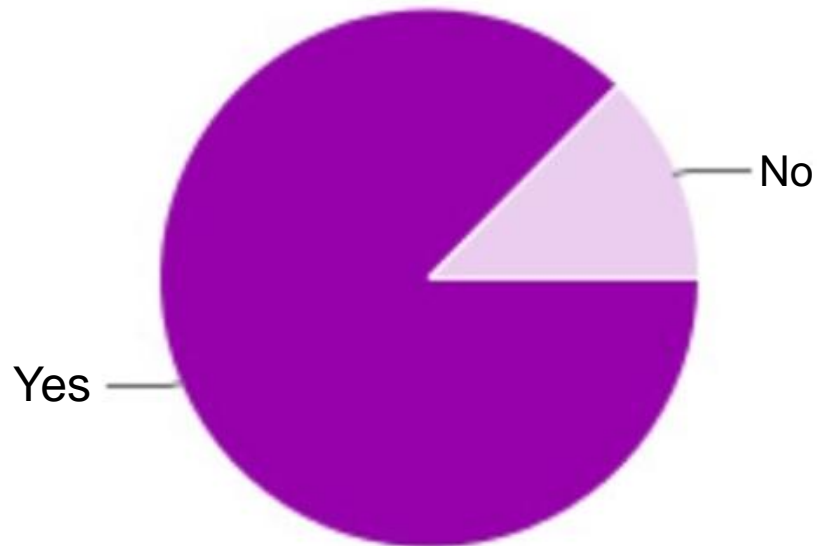


## How?



Did you prefer this learning experience to a lecturer read out (traditional) experience?

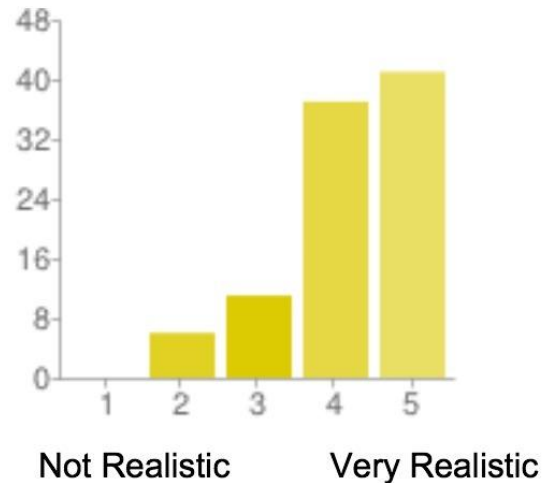
Data collected from 127 Students (91 Nursing & 36 Medical)





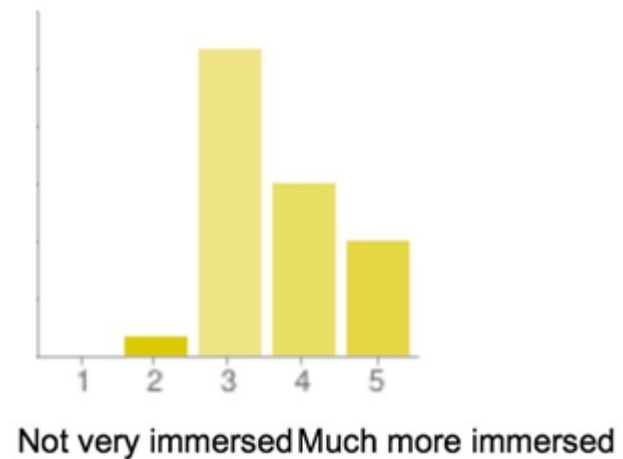
## Comparison of learning experience between using AR and not using AR?

Did you feel using this AR technology was more authentic /immersive when using the Manikin?



n=98

Did you feel immersed using the Manikin when using the traditional lecturer read out scenario.



n=33

## Anecdotal evidence collected from the sessions:

Students appeared to interact with the manikin more after using the AR. Students remembered the patient name during the scenario more often.

Students using the AR scenario tended to use different speech patterns when addressing the patient (clearly delivered) and when talking to colleagues (hushed, but respectful)

The students touched the patient in a reassuring way more often after experiencing the AR scenario.

Students tended to remember the case notes to help them more when using the AR as they remembered details like "bit of blood pressure" and "arthritis" which they considered when making judgements about the patients' need.

## Some student quotes collected from the sessions:

*"Oh my god! I thought she was going to be sick on me!"*

(One of the scenarios the actress begins to heave on screen. A sick bowl was placed on the manikin, the student grabbed the bowl and moved it to the mouth, then realised what they had done.)

*"Gosh, its very realistic"*

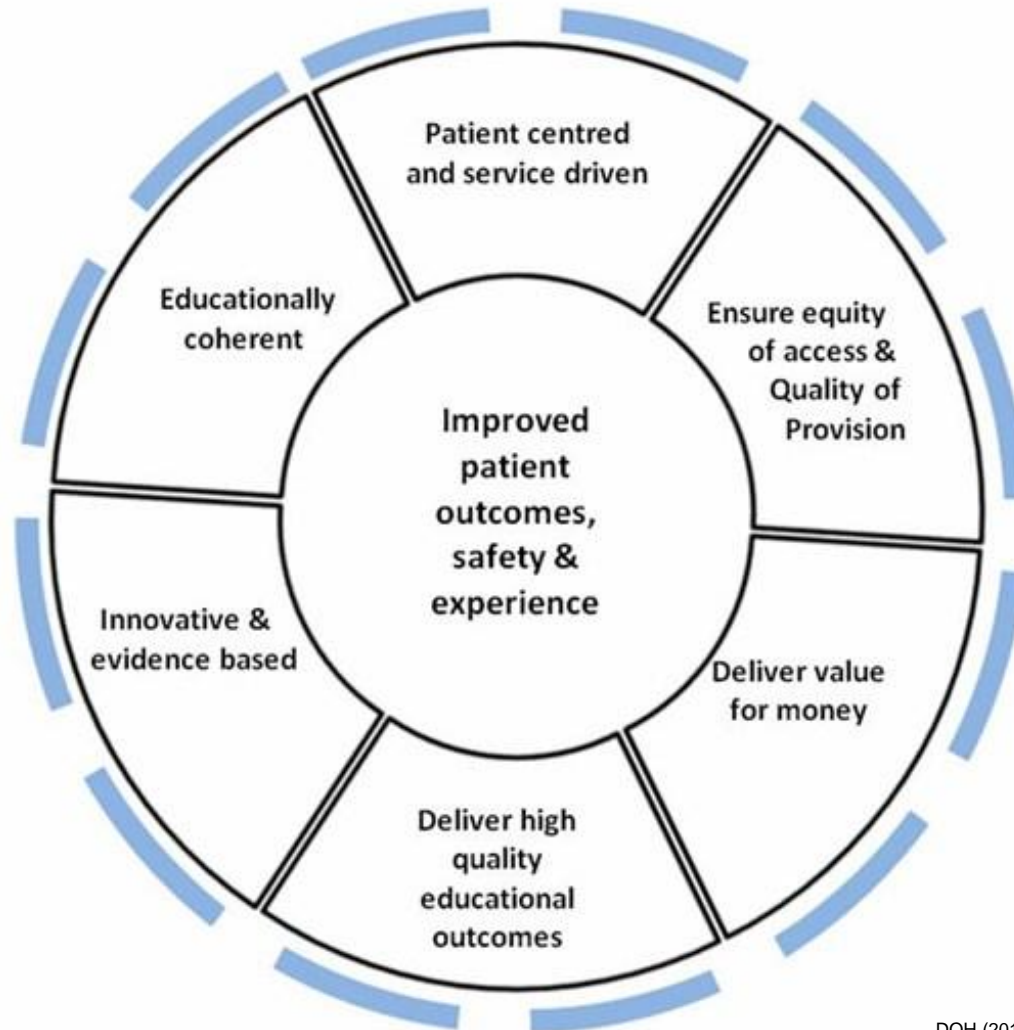
*"Oh my god, this is amazing"*

*"I thought she was going to throw up!"*

*"This makes it feel so real to me"*

*"This takes our learning to the next level, its about as close to being in practice as you're going to be able to do in class"*

## Expert Performance



## Current Research

### *Principle Research Objective*

To compare the use of Augmented Reality and traditional simulated learning approaches in terms of the level of student engagement with a Human Patient Simulator (HPS).

### *Secondary Research Objective*

Explore student perceptions of their experience of both Augmented Reality and traditional simulated learning approaches in terms of how they interact with a HPS.

Any Questions?

