



Use Case

Creating placement-ready clinicians with Virtual Simulation at Sheffield Hallam University

Sheffield Hallam University

OVERVIEW

Providing world-class nursing education and access to real-world experiences is the foundation for confident and competent nurses. Sheffield Hallam University (SHU) traditionally met that need with clinical placements throughout all three years of its nursing programme. As with most universities leveraging clinical placements, they immediately felt the impact of the COVID-19 pandemic. But, unlike some institutions, they saw the challenge before them as a chance to provide more experiential learning opportunities for their learners.

As one of the UK's largest providers of nursing and midwifery education, Sheffield Hallam University's applied learning approach prioritises blending theory and practice. learners of SHU's College of Health, Wellbeing and Life Sciences nursing and midwifery programmes spend half of their time in placement, providing relevant work experience every year of their education. Learners can participate in various clinical settings from day one of their training.







THE PROBLEM

Students entering their third-year training spend almost their entire academic year in placements—this hands-on experience is crucial to ensuring they enter the field well-prepared for practice.

Sheffield Hallam lecturer Leisa Anderton MSc, PGDip, BSc, RNT, RN, QTLS, Cert-Ed and members of the nursing lecture team sought an answer for students entering their final year when clinical placements became unfeasible.

The team at SHU instantly recognised the potential of Oxford Medical Simulation (OMS) to deliver experiential learning—implementing OMS as an immediate solution to satisfy graduating students' need for practical experiences, further enhancing their preplacement learning experiences.

Experience is crucial to ensuring nurses enter the field well-prepared for practice.



THE SOLUTION

Initially, the team set out to provide third-year learners access to the platform, compensating for lost clinical time by giving them a chance to practice their skills in a virtual environment. However, following the initial pilot and the learners' overwhelmingly positive response, faculty realised the potential of providing access to more learners almost immediately. The programme expanded to include learners from first year through to third year.

To begin with, the SHU faculty provided independent access to OMS for third-year students. Utilising OMS on-screen capabilities, learners began with a group introduction via Microsoft Teams and then accessed their accounts for on-screen participation from home. Learners could repeat scenarios whenever they liked, as often as they desired. By tracking the hours in simulation, learners successfully replaced their lost placement hours needed to qualify for graduation.

First- and second-year students also leveraged OMS through on-screen simulation. Again, the team began with a group introduction via Microsoft Teams. Each group then regularly participated in virtual simulation as part of their course curriculum. The groups discussed options and determined the best course of action for the care required. Lecturers, acting as facilitators, performed activities in the virtual scenario as chosen by the group.

For third-year learners, there was the opportunity to prepare for their upcoming qualifications, and a chance to demonstrate their knowledge and put it into practice. Others saw the opportunity for exposure to multiple conditions, getting a feel for care managed across various patients. At the same time, almost every learner found working under pressure and creating the 'muscle memory' for providing exceptional care as the most valuable benefit.

Benefits of Group Scenarios

- Prioritisation of clinical care application of clinical theory
- O Increase in knowledge sharing among learners
- Development of confidence and strong communication skills
- Tangible performance improvement in each series repetition

Virtual simulation allowed learners to put clinical theory into practical application. The faculty also recognised the opportunity to leverage additional teaching opportunities by breaking simulation sessions into simpler components. Learners participated in enhanced fundamental training, reviewing equipment in the clinical environment with integrated practical demonstrations within virtual simulation sessions.



THE OUTCOMES

The learner response to the high-fidelity immersion was incredible. Elements such as the clinical environments, the authentic sounds, and the time pressure all heightened learner investment and drove learners to ask for more sessions in OMS. Not only did OMS enhance existing simulation activities, but lecturers also recognised the potential of leveraging virtual simulation to better prepare learners for upcoming clinical placements.

SHU went from providing virtual simulation for third-year learners to incorporating group simulation across all years and adding further open simulation lab hours. Any learner could

The feedback was really, really good from the learners, and they all saw something slightly different.

join and participate in open simulation hours an opportunity never before afforded through traditional manikin-based simulation. Virtual simulation made it easy to provide multiple, repeated simulation opportunities, meeting the learners' desire to repeat scenarios and improve their overall clinical performance.

Sheffield Hallam University invested in Oxford Medical Simulation to mitigate the loss of practical clinical sessions and to strengthen the learners' robust simulated learning experience. OMS proved to be a great learner experience and included considerable savings in both staff time and university facilities. Each session provided accommodation for almost double the number of learners compared to face-to-face simulation. After nearly 2,000 sessions, SHU realised a 74% reduction in staffing time and estate costs through OMS.





KEY LEARNINGS

Preserving fidelity across lecturers

OMS virtual scenarios allowed several lecturers to facilitate numerous sessions all while preserving fidelity. Learners found the sense of immersion incredible.

As Leisa explains, "Virtual scenario will run exactly the same for every single facilitator; there's going to be no variation. And that's the bit that's missing when you do face-to-face. You can't perform that sort of repetition and 100% guarantee that scenario remains precisely the same for every learner, every lecturer, because there are always the odd bits of nuances that aren't quite the same. But when you do things in virtual simulation, you don't have that variability."

Learner scaffolding can be simplified

With virtual simulation, lecturers found they could focus sessions, narrowing the options for learners across the sea of possibilities.

For each placement year, the scope of the sessions was expanded, slowly removing the scaffolding until third-year learners could enter scenarios confidently and completely independent of faculty interventions. The most

significant benefit identified by lecturers was the discussion among participants; learners questioned everything and learned from each other.

Scaling simulation simply

Each virtual session was able to accommodate multiple learners. Thirty-five individuals could easily participate virtually compared to the average eighteen participants of face-to-face simulation. Although most individuals joined their prescribed group sessions, those who were unable were given the opportunity to join alternative sessions. Additionally, those who wanted to repeat the session could also easily take part again and again.

While adding some additional learners to manikin simulation may be possible, adding several is not. Virtual simulation is not limited in this way, meaning more learners can quickly join the same simulation, with or without notice. As demand for experiential learning grows, virtual simulation provides an easy solution to increase simulation opportunities across the board.



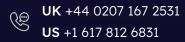




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⊠ education@oxfordmedicalsimulation.com



UK 201 Borough High Street, London, SE1 1JA
US 101 Arch Street, 8th Floor, Boston, MA 02110