



CASE STUDY: Using the latest AV technology to provide realistic healthcare training simulations

BACKGROUND

Based in the heart of the capital, London Metropolitan University's School of Human Sciences is a state-of-the-art facility designed to deliver innovative healthcare simulation and training across a series of carefully planned study and simulation-based environments.

Recognised as a top 10 UK university for teaching quality and student experience by The Sunday Times, the University aims to continuously uphold its commitment to delivering superior educational facilities and enriching learning experiences for its students.

When the University made the decision to open the School of Human Sciences, it had an ambitious goal in mind, to create a facility capable of setting an unparalleled standard in healthcare education, not only within the UK, but globally.

As a longstanding partner to London Metropolitan University, Pure AV worked closely with key stakeholders to introduce them to new and emerging technologies, provide technical advice, and ensure any solutions were implemented to the highest standards.



**LONDON
METROPOLITAN
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THE SOLUTION

In the early stages of the project, a series of meetings took place between Pure AV and the University to fully understand the layout of each space, any goals and objectives, available budgets, and timescales for project completion.

Following such discussions, our technical experts initiated conversations with a number of our technology partners to ensure any technologies proposed would fully accommodate the desired specification and expectations.

Upon identifying the right technologies for each respective space, our team facilitated introductions and communication between the University and each technology provider to ensure the University were happy with each recommendation.

Following an in-depth review of our proposed solution and impressed with our approach, the University granted us authorisation to progress with room schematics and liaise directly with the third-party contractor responsible for the building fit-out.

Given the size of this project, Pure AV recognised the need for a dedicated Project Manager to supervise key stages such as first and second fixes, system programming, commissioning and installation of all AV systems being deployed.

Medical Simulation Shaping the Next Generation of Healthcare Leaders

Medical simulation plays a vital role in London Metropolitan University's healthcare training and educational strategy. A space designed to offer an array of simulated environments and imitate true to life clinical settings, students have a mechanism to take part in hyper realistic learning scenarios.

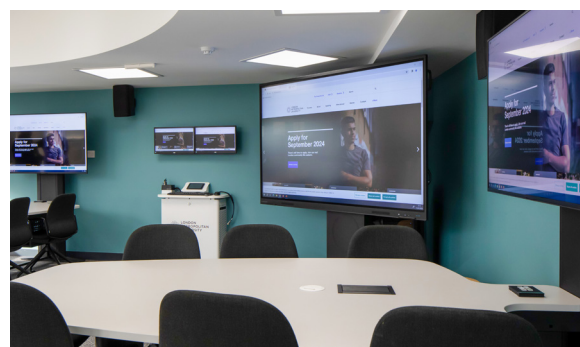
Within the space, a large-format 86" Clevertouch display is situated at front of the room to provide interactivity in the space. Enhanced connectivity and an AMX control panel has also been incorporated to allow for quick and easy content sharing while allowing all AV in the room to be controlled from an easy to use interface.

At the heart of this space is SMOTS, a bespoke system specifically tailored for medical observation and training recording.

A network of discreet cameras, speakers, and scenario control allows the University to capture video footage, audio recordings, and critical vitals readings from within the environment.

These recordings can then be used by lecturers to review the content with students.

All content from the SMOTS system is reviewed within the Telehealth environment, a carefully designed area to promote both individual and group learning and discussion.



Flexible Telehealth Space for Simulation Review

Designed to facilitate both individual and group learning, the Telehealth room is a sophisticated space consisting of a series of technologies.

A fully-integrated lectern is located at the front of the space with custom AMX control to provide effortless management of the room systems from a single station.

Ceiling-mounted Aver cameras, in conjunction with QSC pendant speakers and Sennheiser TeamConnect Ceiling 2 microphones ensures extensive room coverage and superior audio quality, allowing for every detail to be captured clearly.

A series of Sony displays are strategically positioned throughout the entire area to guarantee optimal visibility for all participants, whether they are learning within the room or from a remote location.

The adaptability of the room stands as a principal feature in this space, designed to function either as an expansive area suitable for teaching and learning or, alternatively, divided into smaller sections specifically configured for group collaboration.

The incorporation of two TOP-TEC Synergy desks facilitates these collaborative zones, providing comprehensive access to the room's audio visual system and all associated displays.

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To ensure everyone has access to the same high quality training, the Telehealth room includes the Sennheiser Mobile Connect system, an innovative solution designed to improve the experience for people with hearing impairments.

Individuals can access the audio system by simply scanning a QR code available in the room to download an app. From here, users are able to link directly to the live audio feed. This feed is transmitted through their personal mobile device and may be connected to their hearing aids via Bluetooth.

Enhanced Learning Through Advanced Skills Areas

Skills spaces 2A and 2B are strategically located at the centre of the newly renovated floor. These areas feature a double-door partition that enables seamless room division to suit a number of use cases.

The flexibility of these spaces is emphasised by the ability to link rooms and all technology located within each space.

Both spaces are equipped with 85 inch Sony displays and an 85 inch Clevertouch interactive display for high quality visuals.



Pure AV fully understand the University's requirements. They have been working closely with us for a number of years and bring a wealth of experience to ensure seamless collaboration.

MARK BARDOUILLE
HEAD OF IT OPERATIONS, LONDON METROPOLITAN UNIVERSITY



Additionally, each space is equipped with a fully integrated front of house lectern, Beyerdynamic ceiling microphones, and wall-mounted Aver cameras to accommodate a number of diverse teaching and learning styles.

All audio is provided by QSC ceiling and wall-mounted speakers, while the Sennheiser Mobile Connect system enhances accessibility and inclusivity within the space.

Embracing The Future of Immersive Learning

The incorporation of Igloo Vision at the University is transforming the educational landscape, enhancing the student learning experience through heightened realism and presence.

Through sophisticated projection mapping technology, Igloo Vision offers an immersive 360-degree environment that allows students to engage actively with a variety of content types, including photographs, videos, and hyper-realistic training scenarios.

This advanced technology facilitates simulations ranging from roadside emergencies to hospital ward explorations, effectively transporting students into realistic and dynamic settings.

These interactive environments significantly improve student comprehension and engagement, ultimately enriching their educational journey and bringing a truly unique experience to London Metropolitan University.



As healthcare transitions to a more digital landscape, it's important that our students have access to cuttingedge equipment and resources. Establishing a simulation skills centre, with high quality AV, ensures that we can provide our students with the very best in preparation for the evolving digital world of nursing.

FAYE BROWN,
HEAD OF NURSING, LONDON METROPOLITAN UNIVERSITY



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