The challenge

Matt Softly, IT Manager at the University of Essex's Southend Campus, was contacted by members of the School of Health and Human Science who presented him with a challenge. Their student nurses complete a pre-registration nursing degree programme using a Nursing Skills Lab – an interactive educational environment in which simulations of both medical emergencies and routine procedures can be played out in a safe, measured and controlled manner. These simulations need to be recorded so that the nursing students can watch their reactions back and receive feedback on ways to improve from their instructors. However, demand for these recordings had started to outstrip the School’s ability to deliver them effectively. The team had already reached capacity with their existing camera recording system, but with the new addition of an upgraded seven bed Skills Lab and the creation of three more consultation rooms, they needed a solution that could cope with all of the extra recordings they wanted to make in these new spaces.

The recording system they had been using up until this point operated in a similar way to CCTV – recording in one continuous stream. This required administrative staff to watch the video back to create clips for specific students to review. Staff at the School had initially looked into simply expanding the existing system, but the costs were prohibitive. The School was looking to the IT team to find an alternative that would deliver everything they wanted in a more cost-effective way.

The solution for the Nursing Skills Lab

The IT team’s first reaction was to suggest using Panopto, and they began actively consulting with the nursing staff to ascertain whether the University’s lecture capture platform could be repurposed for this project. Early conversations established that the recording solution would have to capture both video and audio from the simulation bays, integrate with various other systems and allow for the live streaming of a tutorial. It was also important that, as far as possible, any recording or broadcasting issues that arose could be addressed without disturbing the class.

Choosing Panopto to deliver this innovative solution for our nursing staff and students both saved money and increased the functionality we could offer compared to our previous system.

— Matt Softly, IT Manager, University of Essex
Using these requirements to inform development, Mike Rosevear, Learning Environments Development Team Leader, established a test-rig using two IP based cameras, a microphone and Panopto, recording the two camera streams whilst synchronising the audio. The test recording was presented to academics involved in the project, who agreed that it met all of their needs.

The team then scaled the solution up to cover all 10 recording positions, designing a technical set-up that enabled them to fine-tune the audio and visual inputs away from the Lab – minimising disruption to the class. Hardware was chosen that could be managed and reset remotely, wherever possible.

The outcome
Panopto has enabled the University to deliver a multi-camera recording solution for the Skills Lab with enhanced control over both the recording of sessions and user rights management – all at a reduced cost compared to the original set-up. Crucially, the new approach can also be scaled-up in a similarly low-cost way, meaning that it will continue to be fit for purpose even as demand grows.

Panopto has also provided increased functionality to both academic and administrative staff (saving them time), and has created new learning, assessment and review opportunities for students. The new facility – including its leading-edge approach to recording simulations – has attracted considerable attention within the wider nursing community and has been featured in the Nursing Times.

Next steps with Panopto
Following the success of this project, it is expected that the University will replace all of its remaining legacy recording systems with Panopto, as well as expanding the system to similar facilities on their Colchester campus. In addition, the University plans to monitor, assess and enhance the deployed solution, using feedback from staff and students to make improvements. Finally, they aim to use what they have learned to share best practice across the sector.

“With Panopto, we are able to deliver individual recordings of each student directly to them. This encourages both self- and peer-review, and allows teaching staff to effectively give both formative and summative feedback on every student’s performance, improving the overall learning experience.” — Natasha Morrison, Lecturer in BSc Nursing, University of Essex