

DURHAM UNIVERSITY ENHANCES STUDENT LEARNING WITH CCTV

Durham University has used CCTV as part of its state-of-the-art Techno-Café to help ensure students are experiencing the most effective and rewarding environment for studying.

The University has over 15,000 students along with over 3,000 staff and is organised into three academic faculties with 25 departments or schools. The Computer Science department leads England's only Centre for Excellence in Teaching and Learning for computing subjects, called Active Learning in Computing. The centre seeks to facilitate a shift towards far higher levels of active student engagement, where knowledge is obtained by sharing, problem-solving and creating, rather than by passive listening. Providing novel facilities and encouraging new ways of working is a central focus.

To this end, the Techno-Café has been designed to provide an innovative approach to practical and lab work in Computer Science. It offers a change in teaching style and environment to improve significantly over the traditional design of IT labs. The Techno-café has 10 pods each seating six to eight students and each providing tablet PCs, laptops and communication tools such as Skype and videoconferencing and an interactive whiteboard.

Communication equipment for the Techno-Café was originally limited to audio, allowing the lecturer to communicate with the individual booths and vice versa. The university made the decision to install CCTV to allow for visual feedback at any time. "It was a matter of adding more value to the space, allowing it to be used for instruction as well as a group interaction environment," explains Dr Hatch, of the Technology Enhanced Learning research group.

Axis 216 cameras have been installed in each of the booths. The cameras are vandal resistant, secure and discreet, so don't distract the students during the classes. "We've used these cameras a number of the times in the past so know we can rely on them both in terms of picture quality and reliability," says Robin Price, Managing Director of installers KBR.

Each camera is linked via cat5 cabling to a screen on the lectern. Power over Ethernet (PoE) has been used to provide power to the network via the same cable as used for the network connection. "Because we've managed to keep cabling to a minimum, we've kept the clean, minimal feel of the space," says Dr Hatch. From the lectern, the instructor simply needs to click on the web browser to see visuals of an individual or a group of pods. The system also allows instructors to check on students' progress, and determine if any questions need answering.



"Using Norbain as the supplier in this and other projects we've worked on has given us a real advantage," explains Mr Price. "Because of their depth of knowledge and the breadth of the product range they offer, we know we can get the best equipment for the job along with any advice we may need."

Durham University has a long-standing relationship with KBR who has worked with them on a number of other projects over the years. "KBR are flexible in their approach and have a very good understanding of the way the University operates," says Dr Hatch. "Because of this, they can handle all aspects of each project, without us needing to bring in additional contractors."

An interesting possibility for the CCTV cameras in the future that the University is considering is to use them to analyse how students use the space. "This wouldn't be monitoring them for any security reasons, but rather to see how they are studying," says Dr Hatch. "We're looking at using time lapse software to determine if they're using the monitors, pens and paper or other means to study. This will allow us to provide the most effective resources for them and help us meet their study needs more effectively."

The Techno-Café is such a success that it has been shortlisted for the prestigious "outstanding ICT (Information and Communications Technology) initiative of the year award". The award, one of the Times Higher's 2007 Awards, will recognise and reward an institutional ICT initiative which has demonstrated an innovative and strategic use of ICT in support of the goals of that institution.

About KBR

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