NCS helped a top Singapore university go wireless

THE Singapore Management University (SMU) is the first local university to introduce American-style tertiary education in Singapore. SMU’s unique interactive teaching style involves small classes of about 45 students per class and emphasises active class participation and debate with professors as well as project presentations and group discussions.

This is a deliberate shift from the traditional structure of having large lectures and tutorial classes. This intense interaction between teachers and students requires the right technological infrastructure and support.

With its own IT initiatives, SMU has become one of the first educational institutions in Singapore and the region to have comprehensive wireless connectivity on campus, supporting activities from total classroom interaction to overall office administration.

**Wireless education**

Virtual Canvas is a specially created learning application that frees lecturers and students from too many wires and equipment. It integrates all the conventional audio-visual and computer technologies into one seamless, wireless connection inside the classroom.

To enable a participative learning environment, each SMU classroom is installed with two screens and projectors. These allow students and professors to compare notes simultaneously without disrupting the flow of the lessons. During lectures, students and lecturers bring in their own Tablet/Notebook PCs and make connections to the projectors once they enter the classroom. Any individual at any desk in the room can directly ‘take over’ a projector in order to transmit the material from his or her own PC for a presentation.

As a result, there are no more of the fumbling and wasted minutes of connecting and disconnecting individual Tablet/Notebook PC to a projector during individual student presentation.

**Monitoring facilities and equipment**

Complementing the Virtual Canvas is the Teaching Facility Management Support System (TMSS), an application that enables support staff to monitor the teaching facilities anywhere, anytime on campus. TMSS also alerts them to any fault or breakdown, resulting in quick response time, proactive maintenance and availability of equipment.

TMSS allows support personnel to have full information on the current status of equipment. With this critical information at hand, the support personnel can decide and plan the necessary response even before users report a problem. This cuts down response time significantly. It gives the support team the capability to ensure the availability of classroom equipment and ultimately minimising any disruption to learning in SMU.

The system is an evolving application. Future capabilities being planned include live camera monitoring so that support personnel can remotely view classroom activity and schedule video recordings.

By integrating technology and modern equipment with its system of teaching, SMU is adding value in terms of students’ learning experience. Students learn better and the school saves on cost. This is a concrete fulfillment of one of the university’s goals of committing to an interactive, participative and technologically-enabled learning experience.

SMU’s Director for Communications and IT, Mr Foo Yin Kee, said: "In SMU, our unique pedagogy drives the design of the classrooms, including technology implementation. To meet this challenge, we often have to innovate. NCS appreciates and shares our philosophy. This is a natural partnership."