

KING EDWARD VII - CASE STUDY

King Edward VII is an upper school with 1,450 students aged from 14 to 19, including nearly 500 in the sixth form. To support students fully during their time at school, and prepare them for further study and/or the world of work, the school believes access to the latest technologies, and training in how to use them, is essential. Since the school became a technology college in September 1997, Information and Communications technology has become central to the work of the students and staff, with the school committing to the provision of state-of-the-art computer and other technology facilities. This includes videoconferencing, adding an extra learning resource for the students and a new dimension to teaching.

King Edward VII's ILIAD (Independent Learning Information and Design) Centre is available exclusively for post-16 students during the school day, giving access to an ever-expanding range of independent learning resources. It houses an information and communication technology centre, an Eco centre, a Maths workshop, and a videoconferencing suite for distance learning. Continuing the Information Communications Technology (ICT) theme is a self-contained ICT Training Centre, the school's latest addition. The centre offers the very latest technology, including a room-based videoconferencing system from VTEL. Students, members of the community and local businesses are free to take advantage of the resource, running their own conferences to contact people abroad and across the country. In fact, the school is hoping to develop the centre further by creating a programme with the Open University enabling students to use the videoconferencing facility for weekly tutorials with their tutors.

EMPHASIS ON COMMUNICATIONS NOT TECHNOLOGY

It was Ken Walsh, Head Teacher of King Edward VII, who saw the potential for the school to become an ICT focused technology college: "It had to happen to bring students into the real world. Videoconferencing along with other IT led programmes at the school, produces life-long learning skills and prepares the students for life after school, whether in work or further education. Videoconferencing brings another level to learning, allowing our students to enhance their education by contacting other students in different environments and understanding different cultures, ways of thinking and learning without leaving the classroom."

VIRTUAL PRESENCE THROUGH VIDEOCONFERENCING

Ken investigated all the available videoconferencing systems, from PC based single camera units to large group systems. "We needed a conferencing system that could support a large group, up to 25 people, so the single camera units were not appropriate for this project. It was also imperative that the system was PC based, so we could share documents, use the Internet and run videos during the sessions, common tools used during traditional classroom based lessons. VTEL provided a system that fulfilled all our criteria," says Walsh.

The school now has two VTEL TC 2000 twin-screen systems, one based at the ILIAD Centre and one in the newly opened ICT centre. “The quality of the sound and picture experience with the VTEL system is excellent and better than any other system we sampled. Importantly, as the movement and sound is completely synchronised, the systems provide a completely natural communication between parties. Videoconferencing is like an extension to the classroom and is as close as you can get to being somewhere when you’re not.” Conferences do not always take place between two VTEL systems but because the VTEL systems adhere to all the internationally recognised standards, they can conference with any other system. “Videoconferencing is an invaluable resource for the school and is used at least once a day on average, throughout the week”, adds Ken.

Ken explains how the school first became involved in videoconferencing: “It started with environmental science A-level students studying local area water pollution. We held a videoconference with students in Betzdorf, Germany, who were engaged in similar research. They exchanged work via email and had a face-to-face conference to discuss differences and similarities in their results.”

The project was such a success that other departments became interested in the possibilities of videoconferencing to enrich the learning process. “Humanities took advantage of the technology to set up a link with the same school in Betzdorf and discuss the Holocaust and its cultural impact. The link was then made a permanent fixture as A-level German language students spoke to Betzdorf students on a regular basis, alternating between speaking English and German.” The VTEL systems are now used regularly for a variety of different projects including, language learning, humanities studies, vocational studies, courses in ICT and teacher training; where expertise and ideas are exchanged over the videoconference, particularly in science. Videoconferencing has also been utilised as a management tool for schools and colleges, and the technical support required for a conference has gradually diminished as teacher expertise and confidence has improved with usage.

INTERACTION

Videoconferencing offers an experience that cannot be produced in a traditional classroom environment. It gives endless possibilities for students to interact with the outside world and become active participants in their education. Students are able to take on board the ideas and learning experiences of other students in different countries. This is only possible because successful videoconferencing is both immediate and interactive. Ken explains, “Students develop strong organisational skills using videoconferencing. They are allotted a slot of time for the conference and have to make best use of it. Confidence is another element that videoconferencing encourages, as speaking to students in a different country via a video-link can be intimidating the first time it takes place. Students develop keen listening, communication and interactive skills, which they would not necessarily develop independently, and at such a rate, in a traditional classroom environment.”

STUDENTS LEARN FASTER THAN TEACHERS...

Managing a videoconferencing session offers a sense of responsibility and group problem solving skills. Students at King Edward VII are so confident using the system that three Post 16 students are regularly conferencing with the school in Betzdorf, Germany. "They have set their own agenda, agreed a protocol for the content of the conference, and, after some initial technical help, have set up the videolink themselves. In particular, the students use the conference to discuss current affairs and to improve in the use of grammar," says Ken.

The user-friendly system means that after only half a day of VTEL training, the teachers are able to train the pupils without any need for external resource. "The VTEL systems are so easy to use. The minute the ISDN lines were connected we were up and running!" adds Ken. "One of the greatest parts of the project was the amazing support we had from VTEL all the way through," notes Ken. "In fact it was through VTEL Texas that we began our collaboration with 3 schools in Rhode Island, USA." Russ Colbert, based at VTEL, Texas, engineered the link between the US schools where two projects are currently running. Design students from both countries are creating play areas and comparing and discussing their designs by virtual meeting, with the same concept being adopted by students from both countries on Young Enterprise courses.

LEARNING ANYWHERE, ANYTIME...

King Edward VII is one of only 28 educational establishments in the UK to have pioneered the Microsoft Anytime Anywhere Learning pilot project. This academic year, a group of Year 10 students has embarked on an exciting new learning programme. The aim of the scheme is to raise student achievement by providing access to the latest learning technologies and resources 24 hours a day from wherever the student finds him or herself. Not unnaturally, this includes videoconferencing technology.

Videoconferencing has proved to be so successful at King Edward VII that Ken and his staff are considering extending its use to primary schools.