



SUMMARY

The University of Surrey has gained a worldwide reputation for excellence in teaching and research. It now offers over 50 subjects at undergraduate level with over 14,000 students and 2,300 members of staff. The University prides itself on its inventive and forward thinking approach so it is no surprise that the University boasts an E-Learning Department whose focus is to promote the use of appropriate technology to improve pedagogy at the University. There is a significant body of evidence that greater interaction in face-to-face teaching situations results in increased understanding of complex subject matter, and greater enthusiasm amongst students for learning. The E-Learning Department decided to investigate how to achieve these goals through the use of electronic voting systems.

SOLUTION

The E-Learning Department first introduced electronic voting systems to the University through a pilot. The lessons learnt from this initial pilot helped to outline parameters for the procurement of a new, large scale implementation for use across the entire University. The suppliers of the four systems with the highest scores were invited to demonstrate their respective systems in front of twenty-one academic, academic-related and technical staff.

The Turning Technologies TurningPoint software and keypads were chosen as the preferred system for its functionality, portability and ease-of-use. Paul Burt from the E-Learning Department at the University of Surrey comments, "Our rigorous selection process ensured that each voting system was evaluated in a consistent and fair manner. The TurningPoint system impressed us the most, meeting all of our key criteria and was therefore selected as our system of choice."

Implementation of the initial 1,000 keypads was an opportunity for the University to take a fresh look at the function of the traditional lecture format, which can often be a very passive experience for students. In large lectures it can be difficult to engage students or accurately gauge their understanding of a topic. Vicki Simpson, Head of E-Learning notes that, "The introduction of the TurningPoint system was an opportunity to facilitate a shift to student-centred instruction, with lecture theatres becoming spaces for students to think, engage and learn."

Vicki and Paul produced a training course that lecturers are invited to attend before being allowed to use the handsets. Paul explains, "Our objective was to encourage a more pedagogically-sound use of the technology to encourage greater student engagement and support active learning. The training courses involve a blend of presentation, discussion and hands-on activity." Vicki and Paul ensure that best practice is maintained by attending lectures of new users and offering advice to lecturers based on their initial use of the system.

OUTCOMES

The results have been impressive. Vicki comments, "The TurningPoint system has become part of the University culture. Training on how to use system is now included as part of the induction process for new lecturers. TurningPoint has enhanced teaching capability and student engagement."

Osama Khan, Lecturer in Accounting & Finance from the Faculty of Management & Law, uses TurningPoint to promote peer discussion in finance modules. Osama comments, "I notice the students are really engaging with the session. As soon as they see a question displayed, they start discussing among their peers, doing calculations and are really involved in answering the question. There is a sense of learning all the time. In a typical lecture, you observe your students listening to you, whereas using TurningPoint, the role is reversed and they were asking me questions."

Dr Goran Mashanovich, Lecturer within the Faculty of Engineering & Physical Sciences, uses TurningPoint for peer assessment. Students are encouraged to discuss why they have chosen their response, and Goran adds in new ideas to facilitate discussion. This style enables students to gain a more in-depth understanding on a topic. When repolling the same question, the number of correct answers received will often improve dramatically. Professor Nick Emler, Dean at the Faculty of Arts & Human Sciences, is also a keen advocate of the system. He notes, "Having started with a sceptical attitude, I find myself a great enthusiast. This has the potential to be a great boon to the way we teach. It's simple to use. For the students, it offers them more involvement and you get much more feedback from them."

The initial implementation has been such a success that the University adopted a further 1,000 handsets to meet demand. The handsets are available on a self-issued basis to students from the library. Paul summarises, "The use of TurningPoint has proved that it is a powerful tool to enliven the traditional lecture format and deepen the learning that takes place."