



Application Story

University of Dundee

University of Dundee Chooses WiredRed's e/pop Web & Video Conferencing for Innovative Online Course, Distance Learning & Live Tutorials

The University of Dundee became an independent university in 1967 after a 70-year relationship with the University of St. Andrews - now a key partner. But its origins go back more than one hundred years to 1881 when University College, Dundee was founded with the forward-looking mission of "promoting the education of persons of both sexes."

University of Dundee has approximately 18,000 students across seven faculties. Distance learning is burgeoning across the world and now amounts to 20 percent of its total student population. Medical related courses are especially popular and account for 55 percent of all distance learners. An ambitious project to explore the creation of an international virtual medical school involving all five Scottish medical schools is being led by Dundee.

The University of Dundee has chosen to use Java as the initial programming language for students in the first year of its four-year Applied Computing degree. The curriculum for the degree includes user-centered design and object-oriented programming. The University also enrolls students directly into the second year if they have sufficiently advanced qualifications. However, students entering via this route rarely have prior knowledge of object-oriented programming and therefore experience a steep learning curve at the start of their University studies. There was, therefore, a need to redress this deficit for new students who were otherwise well qualified. A project, Java Online, was set up to consider how to take the existing Java module currently delivered face-to-face to the first year students and deliver it remotely to those applying to join the second year. For example, applicants could study Java Online during their college studies or during the vacation immediately prior to university.

"It is essential that the course is able to teach students as effectively as an offline course, and communication is viewed as an essential aspect of that," explained University of Dundee Learning Technologist, David Walker. "Each lecturer has their own multi-modal style, including talking, drawing on the board, answering questions, involving students in examples and providing written notes. The challenge is to include this 'human dimension' through online learning."

Problem:

- University of Dundee required a method by which to teach a highly technical course remotely yet with a fully interactive, human dimension

Solution:

- e/pop Web Conferencing, a full-featured, affordable, multiparty web and video conferencing software

Business & IT Benefits:

- e/pop enables instructors to teach the Java Online course in the same style as a traditional classroom environment
- After a thorough review of alternative web conferencing options, Dundee found that e/pop was cost-effective, easy to use, secure, and had several features that allowed instructors to use their own multi-modal teaching styles

WiredRed's web conferencing solution, e/pop, is used to provide an interactive weekly hour-long live tutorial incorporating audio, video, instant messaging, interactive whiteboard and document, application and desktop sharing that students can use in a tutorial group. The tutor is able to interact with students utilising methods that relate to different learning styles (read/write, aural, visual, kinesthetic) and allow group involvement and interactivity on tasks. Tasks range from question and answer sessions to group programming activities.

e/pop fills an e-learning void where fully interactive, or live interaction is required in instructor-led sessions. In addition, there were pricing and flexibility considerations.

“We did an intensive options appraisal of a number of different video and web conferencing solutions on the market,” said Walker. “e/pop was the most cost effective, easy to use, most secure and boasted the largest range of features – in short, it was a natural choice.”

e/pop is designed to enhance relations in both education and business to easily communicate complex topics and eliminate unnecessary travel. So, whether just down the corridor or halfway around the world from each other, e/pop enables disparate parties to enhance communications and collaboration. Using voice and IP video, its users can partake in real-time collaboration, sharing information in the form of a document, application or presentation.

Tutorials were designed around existing face-to-face student/tutor activities to provide elements of interaction that would otherwise be missing. This also ensured that technology was not included without good reason and the teaching style could remain constant.

“The tutor's ‘presence’ made the learning experience more collaborative and assisted the students in their time management. Successful management of communication and participation amongst students and their tutor was central to the module being both collaborative and taught rather than simply an online resource for self-paced, autonomous learning,” added Walker.

“e/pop represents a highly cost effective approach when compared to video conferencing solutions and competing web conferencing solutions,” enthused Walker. “The ability to provide instructor led lectures as well as interactive tutorials and conferencing from their own desks is very liberating and makes both the teachers and students life a lot easier.”

In addition to its use for the Applied Computing degree, Walker and his team have been utilizing e/pop in a number of different ways, such as staff development and important research projects. “We are currently involved in an EU-funded research project exploring more effective ways of promoting learning and teaching in primary school science, with colleagues in Belgium, France, Germany and Poland. e/pop has enlivened the meetings and increased productivity exponentially.”

e/pop has also been rolled out to the University's dental school where it is used to maintain links with students while they are out in employment. “This is particularly exciting as this is a great way of maintaining close communication with the students and as such is something that all the other faculties are interested in,” concluded Walker.

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