Online study's second wave

Novel software opens up broad possibilities for online education.
By Melinda Ham.

At several universities across NSW, new technology is transforming traditional distance education into a multisensory experience, allowing students to communicate with each other and their tutors across the state and even internationally.

At the College of Fine Arts at the University of NSW, new software named Omnium, developed in an eight-year project by UNSW academics led by Rick Bennett (pictured seated right), is taking online art education to a new level.

"We are breaking down the boundaries of what universities can teach online," says Bennett, the head of COFA Online. "There's nothing we can't teach. We even do sculpture successfully. You just can't expect the same outcomes as face-to-face [teaching] and students must be more innovative about how they report about their work."

The 700 COFA Online students for the 23 courses offered need to have a digital camera and a scanner so they can take detailed photographs of their work then post them on the internet for comment by other students and lecturers.

The courses involve online lectures, recorded and live group discussions and individual and group projects — where each participant's contribution is documented.

Bennett's online education research has involved more than 5000 students in 40 countries. Interest in his Australian-patented Omnium software, which has potential for online interaction in other areas such as genetics and microbiology, is growing rapidly, he says. The Royal College of Art in Britain and several art colleges in Singapore and the US are using the software.

Meanwhile, at Southern Cross University, new Canadian software called Elluminate enables online business students to share graphs and data with each other and their lecturers and even take control of each other's computers for a limited time to try out a new application.

"It's very exciting and adds a new dimension to the idea of a virtual classroom in real time," says Stephen Rowe, the Elluminate administrator and lecturer in auditing. Students also have simultaneous voice and text dialogue with each other in class discussions.

With the addition of web-cams, in the next few months lecturers in other departments will also be able to do live demonstrations for their online students.

"One of the big problems with distance education has always been that students feel isolated," Rowe says. "For some this isn't an issue, but most want to connect with other students in the same situation. This software lets them do it."

At the University of Technology, Sydney, Anne Bartlett is researching the effectiveness of "blogs", or "web journals" as she calls them, as tools for her students studying units in the bachelor's of education, adult education and arts in organisational learning.

"All my students took to the blogs like ducks to water," she says. "Initially they seemed to be writing to me complaining about certain issues, but then they started to be more reflective and reach out to each other so it became a sophisticated personal management of their learning process."

By publishing what they learn on the internet, Bartlett says her students have become acutely aware of their responsibility to back up their opinions with references and avoid plagiarism.

Blogs are another way to satisfy the social dimension previously lacking from two-dimensional distance learning, she says.

At Macquarie University, the Centre for Flexible Learning has introduced i-Lecture software to one-third of the face-to-face subjects taught across the university.

These lectures are immediately recorded and put on the internet for students to download onto MP3 players and iPods. PowerPoint accompaniments can be added.

The digital i-Lecture audio and video recordings also include questions and discussion from other students in the lecture room.

This system serves the dual purpose of servicing students who missed the lecture or want to hear it again for revision (especially those for whom English is a second language) and also for distance education students, says Andrew Burrell, the centre's director.

More research needs to be done to customise this technology and software for specific subject areas instead of using generic technology that is "clunky" and not user-friendly, Bennett says.