

Dr Brett Bligh explains the use of interactive flipchart technology to enhance student learning

Using Thunder to support innovative student presentations

A joint project between the Visual Learning Lab CETL and the School of the Built Environment has made innovative use of a new interactive flipchart technology to enhance student learning through critical presentations.

Critical presentations, or 'crits', a long-established and demanding feature of architectural education, involve small groups of students presenting posters and physical scale models of proposed work in front of a design jury composed of tutors, peers and external professionals.

The posters are annotated by the students during their presentations to emphasise key points of the design, as well as in response to comments from the jury. The effectiveness of the crit as a holistic learning medium means that it remains popular with tutors, but the lead time and cost of producing the posters has meant that crit sessions have increasingly migrated to Microsoft PowerPoint in recent years.

The PolyVision Thunder system was conceived in the corporate environment as an interactive flipchart, effectively the 'next generation' of interactive whiteboard. Interaction is possible by using a digital pen to draw or write on a large screen called the 'easel', while

multiple pages are displayed on the wall simultaneously. Copies of the Thunder sessions can be saved in PDF format, ensuring that the results of interactions are persistent.

Envisaged by the VLL as an innovative tool for small student group collaboration, tutors from the SBE saw Thunder's potential for use in their crits when the system was demonstrated at a VLL dissemination event.

Student posters were displayed within the system as pages in the flipchart. Student groups used the electronic highlighter pens for the reinforcement and augmentation of information on the slides, to illustrate the points they made verbally, to expand upon information in a slide and to creatively draw in response to jury intervention. In these ways, the system was able to facilitate spontaneous interactions between the participants. Additionally, Thunder's system of allowing its users to organise slides on the wall using a simple drag-and-drop mechanism meant that the presentations were non-linear and more responsive in nature than a formal PowerPoint presentation.

In a survey, 88% of student respondents were either enthusiastic or very enthusiastic about the potential of the Thunder system in crits,

In a survey, 88% of student respondents were either enthusiastic or very enthusiastic about the potential of the Thunder system in crits, while a similar number believed that the system allowed tutors to convey information in the session in interesting ways.

while a similar number believed that the system allowed tutors to convey information in the session in interesting ways. Analysis of the use of Thunder within the module is now underway, with the prospect of the system being rolled out and used not only in further modules within the SBE but with other groups of students from the Learning Sciences Research Institute and the School of History. Thunder's ability to support distance learning using a computer client program connected over the internet is important and timely and currently under scrutiny. This has potential for use across the university campus as well as across our international campuses. A second Thunder system has been purchased by the VLL to support 'walk up and use' small group work for students, located in the new Hallward Library open access centre.

Members of the VLL who conducted this study will be presenting their work to the University at an LSRI seminar, which focuses on an analysis of the interaction of both students and lecturers with the student-generated materials during the sessions. The seminar will be held at 4:30pm on April 22 in the Flexible Learning Room, Floor B, Exchange Building, Jubilee Campus.



The PolyVision Thunder system in operation