The **Visual Learning Lab** (VLL) is one of the University's two Centres for Excellence in Teaching and Learning (CETL). Over the next few pages VLL members discuss the latest debates and developments in visual learning.

Sharing perspectives on visual learning

Dr Rolf Wiesemes and Sarah Kerr report on a recent national workshop which offered academic and technical staff from CETLs across the country the opportunity to present, discuss and compare their work on visual learning.



he one-day event was hosted by the Visual Learning Lab (VLL) in July. It covered themes ranging from the use of video conferencing in teaching and learning in HE to online exhibition spaces and mobile computing. Attended by colleagues from CETLs in London, Lincoln, Plymouth, Bath Spa, and Brighton, the dual focus of the day was both the nature of technologies being used, and the pedagogical research being carried out around them. It was, said Roger Murphy from the VLL, "a very energising day with lots of exciting ideas and approaches being presented, discussed and exchanged."

Visual Tools for Sustainable Design

Pauline Ridley from the LearnHigher CETL, a partnership of 16 HEIs, showed some examples of funded projects at Brighton, such as "Learning to Look", a photography course for medical students designed to improve observation and visual diagnostic skills and to support students' reflection on their own learning.

The projects were not all about using cutting edge technology however. The Big Draw@ Brighton was a university-wide programme of events to raise awareness of the potential of drawing as a tool for learning and research in every discipline.

Pauline also introduced the (collaborative) 'Visual Assessment' project, looking at staff and student experience of visual assessment formats in different subjects. These included assignments such as posters, video projects or web pages in 'non-visual' subjects, which are increasingly being recommended as 'reasonable alternatives' to

written tasks for some disabled/dyslexic students. They are also seen as a means of varying the overall assessment regime for students, and a great way of developing transferable skills. Pauline said, "It was great to meet other CETL staff engaged in visual learning projects, and to share ideas and experiences. We went back to Brighton bubbling with ideas for future collaboration."

Visual online teaching and learning materials

Heather Wharrad and Brenda Rush from the (collaborative) Reusable Learning Objects (RLO) CETL discussed generative learning objects. These are resources which have an underlying shareable pedagogical design. They can be edited and adapted by local tutors for their own specific teaching and learning purposes.

Videoconferencing

The use of video conferencing has become an integral part of teacher education at the University of Nottingham's School of Education. Leading on from this practice in the School of Education, Brenda Rush and Rolf Wiesemes described new innovations in the use of videoconferencing in teaching sessions at the School of Nursing and the School of Veterinary Medicine and Science. Brenda described the use of video conferencing as a means to link nursing practices and teaching-learning settings via video conferencing.

Technologies for Visual Learning

Dr Gary Priestnall from SPLINT (SPatial Literacy IN Teaching) has been collaborating with colleagues from the School of Geography and the Institute of Engineering Surveying and Space Geodesy (IESSG), pulling together expertise in geographic representation, visualisation, 3D modelling and positioning. Gary talked about ongoing activities in lab-based 3D visualisation. An example application was the use of visualisation in the context of a wind farm placement exercise undertaken by groups of students from Geography and the IESSG.

Dr Brett Bligh, from the Visual Learning Lab delivered the initial findings from research conducted into the use of the Thunder™ electronic flipchart system installed in the Hallward Hub. He discussed preliminary findings from projects undertaken in collaboration with the School of the Built Environment and the School of History. The Thunder system was seen to have particular potential in supporting small group break-out sessions in which groups considered issues privately before displaying their work to the rest of the seminar at a subsequent whole-group discussion. Students and tutors were particularly pleased that the notes from the Thunder system could be saved and emailed round the group, since this reduced the necessity for their own note taking and allowed them greater involvement in the group discussions.

Ollie Furlong from the Creative Learning in Practice (CLIP) CETL looked at a range of technical innovations in the University of Arts London and the London College of Fashion, including: updating classrooms with mobile lecterns, remote cameras and portable

visualisers; developing technology assisted presentation skills spaces; the use of videos as learning support tools to support the development of core skills.

Support from IS

Suzanne Wright from the University of Nottingham's Information Services Learning Team showcased IS teaching and learning support across the University of Nottingham during lunch when the visual flipchart system, Thunder™ was also available for delegates to explore with the support of the VLL core team.

Success

Overall, there was a lot of positivity about the degree and quality of collaboration between CETLs nationally. "There is a strong element of visual learning work going on in several CETLs and this event gave us all a chance to catch up on the leading developments in this area. The Visual Learning Lab is the only CETL with an exclusive focus on this area of work and this event gave us a unique opportunity to share our latest developments with others doing pioneering work in this exciting area," said Roger Murphy from the VLL.

Brenda Rush concurred: "I found the day inspiring. It was really helpful to share ideas and most interesting to find that despite the presentations relating to disciplines very different from my own, there was a lot of common ground, so ideas from one area could be adapted and transferred to another. There was a real sense of positive collaboration." The second Visual CETLs Day will be held in 2009.

For a full list of participants and detail on presentations please visit the VLL webpages at www.visuallearninglab.ac.uk

Student champions for the Visual Learning Lab

The appointment of seven student interns is explored by Dr Rolf Wiesemes and Sarah Kerr.

he Visual Learning Lab (VLL) has recently appointed seven student interns to work with it at the interface between its pioneering open access visual technologies and the student body. From the beginning of academic year 2008-2009, the interns will be out and about across all of the UK campuses introducing staff and students to new visual technologies and promoting the use of visual learning facilities within the University. They will also be in touch with students at the overseas campuses through videoconferencing links with Malaysia and China.

Practical help for staff and students

Their remit will be broad and will encompass; raising awareness of available facilities through taster sessions; training (both for staff and students) on video-editing equipment and virtual flipchart technology; running workshops for staff and students interested in visual learning and VLL activities. The interns will also supplement library tours in order to raise awareness of the variety and potential of visual learning facilities available for student use.

The VLL has also contacted Heads of Schools to offer the services of the interns at School level to encourage uptake of and confidence with the available classroom visual technologies. The interns could be involved in auditing the use of visual learning facilities, demonstrating things that are unfamiliar to some students/staff, helping staff members to develop visually based teaching materials, helping students/staff to access video production/videoediting/video conferencing/interactive whiteboards, Thunder electronic flipcharts, or other visual learning related activities relevant to the needs of individual Schools or Units.

The interns will begin their work with the VLL by having a presence at the Freshers' Fair to let students know who they are and what they can offer.

In addition to improving the profile of the VLL within the University, the interns will be tasked with presenting their activities at external workshops and conferences, and through informal contacts with fellow students and friends.

Who's who

The interns have been selected to be as representative as possible of the student body, and include undergraduates, postgraduates, home and international students. Some of the interns will have a particular focus related to their demographic or area of expertise. Ana Maria Anghelea, for example, is currently working towards a PhD in the School of Politics and International Relations and as a VLL intern she will be working closely with postgraduate taught and research students.

"As the future generation of academics," she said, "they will be able to disseminate and promote new learning technologies amongst other students and staff."

Adele Cushing is undertaking a part-time MA in ICT in the School of Education. Her day job as E-Learning Coordinator at South Nottingham College involves communicating good practice in the application of technology. She teaches the use of various hardware and software systems and will be using this experience to help her widen and enhance use of technologies such as interactive whiteboards, video, mobile learning devices and the ThunderTM Wall.

Ellie-Louise Stone is a second year student studying for a BA in History. She is working as a VLL intern because she believes that, "the new equipment the VLL is offering is not only exciting but also has great potential to improve the education that we, as students here at Nottingham are already enjoying."



Sparsh Chandan is currently working towards a BSc in Psychology. He has been studying the impact of visual aids on learning and believes their use will have a positive affect on the overall experience of students. Part of his goal as a VLL intern is to assist students in any way with information or training on the technologies available.

Accessing the student voice

Alongside their ambassador and training work, the interns will be facilitating student focus groups. These groups will help to ensure that the VLL is able to access and respond to the student voice as near to its source as possible. The data from this feedback will be used for VLL research projects and will also provide the all important information about what the students find valuable, irritating and inspiring about visual technologies. This information will help to shape the future of visual technology provision at the University.

A great work-based learning experience

In addition to increasing the capacity and profile of the Visual Learning Lab, the internships also offer an extremely valuable work-based learning experience for the students involved. "The scope that we face as VLL Interns is huge and everchanging and that is what makes it such an exciting project to be involved with," said Ellie-Louise.

The VLL team is currently working with the interns to develop a plan of activities for academic year 2008-2009. For further information about this VLL initiative, please contact vll@nottingham.ac.uk. Profiles of all the VLL interns can be found at www.visuallearning lab.ac.uk/interns.php.

Different projects with common aims

Dr Brett Bligh reflects on the recent Visual Learning Lab Projects Day.

een to promote links between its associated practitioners from disciplines across the University, the VLL organised a Projects Day in June 2008, held in Level 1 of the Hallward Library. Here, innovators using a variety of methods to improve their teaching visually could meet, discuss their experiences, forge links and exchange ideas.

Some projects have already had an impact across multiple disciplines. Michèle Clarke from Geography, for example, reported on the use of video editing suites for visual assessment. Students work in small groups to prepare short videos for a visual assessment, an approach which has been so successful that it is now replicated within Nursing and Film and TV Studies courses. Motivated by the professionalism of the products they are able to produce, students often expend more effort on the video assessment than the more traditional paper-based essay which it replaced. On a related note, Gianluca Sergi of the Institute of Film and Television Studies discussed his experiences in constructing a Virtual Film Making Lab.

Other projects demonstrated how ideas which originate within one subject discipline are often relevant within others. Sarah Freeman and Roger Murphy reported on the use of a range of visual technologies across the Vet School, with a major component of the work based on the theoretical underpinnings of the iTLO project, developed within the School of Education. The iTLO project was one of the original projects on which the VLL was founded. The BUDGY project demonstrated by Ed Lester originated from the School of Chemical and Environmental & Mining Engineering, but clearly had at its heart issues of teamwork and group communication which are relevant across a host of disciplines. The BUDGY vehicle, a supermarket ride fitted with computer screens and communications equipment, garnered much attention from delegates on the day.

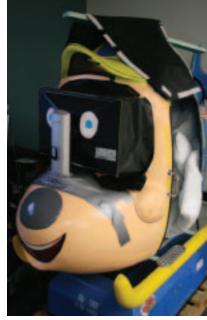
Elsewhere, it was clear that common ideas can be implemented in different ways, dependent upon the subject matter which needs to be taught. For example, Gary Priestnall of Geography, Matthew Boyd and Colin Melia of Pharmacy and Fergus Doherty of Medicine all demonstrated systems which presented data to students in novel yet useful ways based upon

computerised visualisation.

Finally, methods of supporting students in their use of technology through visual means were considered. Rolf Wiesemes outlined the VLL's plans for a team of interns, while Cathy Gibbons of the Graduate School presented her experiences of supporting postgraduate students through the provision of personal mobile devices. Sarah Hyde and Rebecca Robinson from

Information
Services
described the
facilities
available within
the Hallward
Library to
support those
with visual
impairment.

The VLL
Projects Day
showcased a
wide variety of
innovative
technologies to
support teaching
and learning.
However, it was
clear that what
the delegates
valued most was
the opportunity



to discuss their ideas with their peers and to see how existing ideas might be applied in new contexts, bringing a wealth of benefits to both teachers and learners in a natural manner appropriate to the setting, based around a grounded pedagogy of use rather than mere hype. Roger Murphy, the Director of the Visual Learning Lab commented, "We are delighted that our VLL projects have funded such interesting work in a wide array of disciplines and this day was a fantastic celebration of what has been achieved. It also stimulated some very interesting debates and ideas for further research and development activities in the months ahead."

(above) BUDGY! A novel way of encouraging student teamwork and communication