

This one-day event provided a further opportunity for the non-technical/ e-learning novice and those with more experience of e-Learning to discuss effective practice and share ideas on e-Learning within the biosciences. The day included presentations illustrating effective support of learning through the use of web 2.0 technologies and selected e-Learning mini-projects funded by the Centre. There was also a choice of two hands-on and demonstration sessions and a general swapshop session with individuals highlighting their experiences of e-Learning in the biosciences.

An interesting, diverse and useful day. A good introduction to both the theory and practical use of e-learning technologies

Very positive experience. I came away with some (a lot) of new ideas – and found the thoughts of colleagues very useful.

Invaluable update on new technologies and student expectations of us

#### **E-learning in the biosciences: where are we now?**

Alan Cann, University of Leicester

Alan set the scene for the day and introduced the broad context of e-learning and the opportunities for using web 2.0 technologies to promote learning. He contrasted VLEs and personalised learning environments (PLEs), and then went on to highlight the potential such technology may create for moving towards PLEs for students.

#### **The wonderful world of wikis**

Viv Rolfe, De Montfort University

Viv reported on a study in which she investigated the extent to which students were using Wikipedia as a resource, what their perceptions were, and whether they should be using it. She found about a third of first year students cited Wikipedia as a scientific resource and there was a lack of understanding of what constitutes good scientific evidence. Viv outlined an exercise she had used successfully to address this issue, while capitalising on students' enthusiasm for using Wikipedia.

## **Podcasts: examples of practice**

Tim Barry, University of Cumbria

Tim presented findings from a project he had undertaken to evaluate the effectiveness of podcasting for supporting exercise physiology teaching at first year undergraduate level within a sports science course at the University of Cumbria. Students provided with podcasts showed enhanced performance in a formative exam, but performed no better than students provided with the same material in written form. Students believed the podcasts offered variety in their learning, in particular for revision. However, they would want them to remain an additional resource rather than a replacement for traditional face-to-face teaching methods. Tim emphasised the time commitment for producing podcasts needs to be taken into account, as a 5-10 minute podcast can take 3-4 hours to record, edit and submit. He went on to suggest the real benefit to learning may lie in students creating podcasts, which allows for collaboration, team building and dialogue amongst learners.

Bill Ashraf, University of Bradford (withdrew from the event).

## **Personal response (clicker) systems and learning**

Jo Badge, University of Leicester

Jo began by highlighting evidence of the benefits of interactivity and using questions to engage students in class. She gave some examples of available voting systems before demonstrating and allowing people to try out the system in use at the University of Leicester. Jo presented details of how the clickers are being used in the School of Biological Sciences, along with feedback received from both students and staff. She suggested a range of uses for clickers including: breaks in lectures; MCQs (for concepts, understanding, recall); Redirection (alternate lecture paths); Formal assessment; Discussion (e.g. ethics); Attendance monitoring; and instant feedback on lectures! Someone in the audience suggested they could also be useful in practicals.

## **Parallel workshops**

### **1) Web 2.0 technologies**

Alan Cann (University of Leicester) encouraged individuals to explore a range of web 2.0 services with the intention of enabling participants to set up a PLE (Personal Learning Environment) or plan a web 2.0 course.

### **2) Producing your own e-learning resources to meet your students' needs**

Stephen Gomez (University of the West of England) provided a candid account of his experiences as an early-adopter of e-learning. He highlighted a range of tools he makes use of in his teaching, such as PointCast for combining slides and voiceover. Students can view but not download the presentations – they are expected to take notes and bring them to lectures where they form the basis for discussion and clarification. This has proved very popular with students; as have podcasts documenting complex experimental procedures – students can follow them at their own rate and work through the practical at their own pace. The group then split, and got to grips with how to use Audacity or PointCast.

### **Swapshop – experiences of e-learning**

The swapshop was chaired by Julie Peacock from the Centre, and gave contributors an opportunity to share practice, ideas and experience on e-learning.

***Student perspectives on the use of audio and video pod files to support their learning*** - Holger Andersson and Chris Lush (University of the West of England) outlined their experiences of audio and video pod files.

***Undergraduate use of PDAs for collection of field data*** - Glenn Baggott (Birkbeck, University of London) outlined how the use of PDAs had enabled students to capture and process a large amount of data, freeing-up precious lab time which can now be spent on evaluation and discussion of changes in plant community structure. Use of technology has created time for learning!

***Aquatic Ecosystem simulator: bringing community dynamics to life*** - Peter Randerson (Cardiff University) spoke about the Aquatic Ecosystem Simulator (AES) resource he has developed with funding support from the Centre for Bioscience. The software, which is available to members of the bioscience community, simulates the physico-chemical and trophic dynamics of freshwater systems containing functional groups (guilds) of organisms forming planktonic and benthic food webs. The AES provides a flexible learning aid for experimental study of community function and dynamics separate from the process of mathematical modelling.

***ENGAGE in research: an interactive website*** – Julian Park (CETL-AURS, University of Reading) highlighted this new website aimed at life science undergraduates. Julian provided a quick overview of some of the main sections of the website and encouraged individuals to bring the site to the attention of their students. Postcards and posters are available to staff/departments wishing to advertise this resource to their students, email your request to: [engageinresearch@reading.ac.uk](mailto:engageinresearch@reading.ac.uk)



***Reflections on the day*** – Terry McAndrew (Centre for Bioscience and University of Leeds)

Terry recapped on the day's presentations and then went on to highlight the Centre's current e-learning work, including a project to evaluate mobile assessment and calls for further case studies. He also encouraged attendees to think about using social networking tools to share information on aspects of learning and teaching and e-learning in particular.