Problem-based Learning Cycle: Designing for staff development (using LAMS for inquiry-based learning)

1. The students and the curriculum

These activity sequences were developed by the CILASS DeSILA team as part of a staff development and awareness-raising initiative aimed at encouraging engagement with LAMS.

2. The teaching and learning aims

The main design challenge inherent in all the training sequences was situated with the intention to not only showcase the tool, but more specifically, to emphasise how it could be used for inquiry-based learning. At the time the design process began, few other sequences were available from a higher education background, and there had been no attempt as yet to design specifically for inquiry-based learning. As the tool was to be used with this remit as part of the project, training sequences had to illustrate its suitability for inquiry-based learning wherever possible. As tutors’ ideas of inquiry-based learning also differed with regards to scale and innovativeness, the training sequences were intended to show inquiry-based learning in as open a manner as possible.

The learning outcomes for the sequences were that staff should:

- develop an understanding of the various tools available in LAMS, and how these might be used for inquiry-based learning;
- explore the idea of sequencing learning activities and begin to view this from their own discipline’s perspective;
- identify ways in which LAMS might or might not be integrated in their own teaching.

3. The inquiry/ inquiries

The DeSILA team ran a number of workshops and presentations aimed at introducing members of staff to LAMS as a tool for learning design. These sessions were normally held in a computer lab, and consisted of an introduction to the project and a demonstration of LAMS, followed by time for staff to explore the tool for themselves by working through a sequence, looking at other sequences in the university’s pool, or adapting/designing a sequence of their own. Pedagogical and technical support staff members were on hand during this time to assist with this process where necessary.

This sequence began life as a theoretical thought process, when staff wondered just to what extent LAMS might be used for IBL. The activity pre-existed in face-to-face format, and thus further illustrates a way in which existing material may be adapted for online use.

4. What happened (the process)

The following sequence was developed:

1) **Notice Board**: Students were welcomed to the task and shown an image of the problem-based learning cycle, linked to the question: “What can the university do to lessen its impact on the environment?” Following the four steps inherent to the cycle (What do we know that might connect? What do we need to find out? What do we want to focus on? What are we doing next?), students were
invited to use the Notebook feature accompanying LAMS to write down their initial thoughts, ready to share with others.

(2) **Notebook**: Individually, students were asked to note down their initial thoughts.

(3) **Share Resources**: Students were asked to go through a PowerPoint presentation which gave some statistical information about the university and showed pictures intended to kick-start further discussion.

(4) **Forum**: Students were invited to share their thoughts and begin discussions in order to arrive at common interests and foci.

(5) **Grouping Tool**: Students were asked to pick one of four areas of interest (Water, Electricity, Recycling and 'Other').

(6) **Chat + Scribe**: This tool incorporated steps three and four of the problem-based learning cycle, with groups discussing what they wanted to focus on and developing an action plan for the group. The scribe was to note down these plans, ready to share with the other groups.

(7) **Submit Files**: The scribe of each group was to upload the group’s report – this was then intended to feed back into a face-to-face discussion.

5. Reflections

This activity was only ever show-cased to members of staff in face-to-face meetings, as its creation was later than the major recruitment sessions. In these meetings, however, the sequence served to stretch the imagination in order to potentially combine face-to-face and online materials within the same sequence.

6. Any other comments

Produced by CILASS (the Centre for Inquiry-based Learning in the Arts and Social Sciences). University of Sheffield, 2005-2010.