Using ICT for Problem-Based Learning

- A range of learning technologies may be used within problem-based learning to enhance the scalability of the approach.
- Developing effective online tools and processes for PBL enables us to open up Sustainable Development Education (ESD) to larger numbers of students across more disciplines.
- Several techniques are being trialled, evaluated and developed during the Hybrid PBL project in a series of action research cycles which rely heavily on student input and evaluation.
- Some of the novel features of the Hybrid PBL project and technologies being developed include:

Hybrid Approach to PBL
- A mixture of tradtional lectures + PBL sessions; individual + group work; face-to-face (F-2-F) + online group learning.

Sustainable Development Problem Scenarios
- Some scenarios are real life 'true' PBL scenarios, e.g. greening campus projects; some are 'constructed' PBL scenarios, e.g. organizing humanitarian aid for an earthquake disaster zone.

Formulating Group Learning Objectives + Discussing Problems
- Can be done either F-2-F or online via: email, group discussion boards (synchronous + asynchronous), wiki's, Skype, Facebook, Google docs, file sharing, etc. Each group has their own space to meet up, discuss ideas and share research online.

Group Facilitation
- Module facilitators may monitor groups and provide incremental facilitation as groups progress through problems during F-2-F sessions and through online group discussions. An online 'PBL Helpdesk 'facility is useful.

Group Assignments
- Group assignments can be completed and submitted online without groups having to meet F-2-F, again through the use of wiki's, discussion boards, Skype, Facebook, Google docs, file sharing, etc. This bypasses timetabling conflicts of students.

Feedback
- Online feedback is easily accessible for students and convenient for lecturers.

For more information about the Hybrid PBL project please contact:
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