Inquiry-based Learning Development Case

Learning in practice at Level 3

1. Where I/we started from and wanted to achieve

This project sought to extend inquiry-based learning provision in the Level 3 Archaeology curriculum across six modules, impacting upon 42 students in total. The overarching aim of the project was to improve the learning experience of Archaeology students by delivering material in more active ways and by engaging students in an independent learning process. Building upon existing excellence in IBL at Level 3, the project aimed to develop a portfolio of practical examples of IBL exercises and projects, of varying size and scope. These were to focus primarily on information literacy and were to be deliverable through networked resources. The focus was principally on ideas suitable for application in non-lab-based archaeology modules. Further specific aims were to increase engagement with the departmental research culture, and to encourage students to more readily appreciate the open ended nature of research, the contentious nature of evidence, and the range of procedures available to assess lines of reasoning relevant to particular areas of inquiry. Additionally, the innovations sought to introduce greater diversity into the assessment of Level 3 modules to encourage critical engagement across the breadth of Level 3 subject content.

These developments were designed to specifically address three issues at Level 3:

- the tendency for modules of this type to follow a standard pattern of lectures plus essays;

- the need to encourage students to make full and effective use of the information resources available to them;

- and the need to encourage more effective use of seminars (both by staff and students).

2. What happened

Six lecture-based modules comprised the 'Learning in Practice' project. These modules were developed and a portfolio of practical examples of IBL exercises and projects, of varying size and scope, was created in the process. New assessment methods have also been developed to replace the standard essay format previously used for lecture-based modules.

IBL was incorporated into the modules in a variety of ways, from the holistic reworking of lecture-based modules (*Human Evolution and the Hominid Fossil Record*; *Environmental Archaeology)* or the weekly use of smaller problem-based components (*Death and Burial in Anglo-Saxon and Medieval England*; *Mediterranean Landscapes*), to the incorporation of discrete IBL sessions into largely lecture-based modules (*Material Life and Culture in the Medieval and Early Modern World*; *Athens, Empire and the Classical Greek World*).

Diverse learning strategies (such as the use of discussion boards in the virtual learning environment) were developed and linked to assessment in order to engage students in the full subject content of the module. Resource lists and course packs had previously been introduced for all modules. These facilitate students' access to a greater breadth of learning resources, but it was subsequently necessary to encourage them to conduct independent research beyond this, for example to explore a particular topic in depth using self-identified and -evaluated, learning resources. Seminars were further developed as an enquiry-based vehicle for learning through participation.

3. What worked

The Level 3 project modules have all been unanimously rated as good/very good for their usefulness and interest. All but one of these modules were also unanimously rated as good/very good for delivery, and for the module overall (for the other module, 90% of responses were positive).

Outcomes

The project has had significant impacts on the delivery of teaching and the process of learning in the project modules. The primary outcomes are as follows:

- Through the setting of assignments that model the research process opportunities have been created for students to engage with research questions and primary data. Students thus more readily appreciate the open ended nature of research, the contentious nature of evidence, and the range of procedures available to assess lines of reasoning relevant to particular areas of inquiry. Discussion sessions, group work, the use of on-line databases and exercises modelling the research process have all contributed to this. Student feedback via course evaluation is extremely favourable on the impact of these techniques. At Level 3, students have the opportunity to write a 'fossil assessment report' which models the process of research as information about a fossil is released incrementally over a period of four weeks; to apply environmental methodologies to research case studies in Turkey and UK; and to produce a briefing document setting out the rationale for adding a landscape history component to a regional survey project. These represent a significant shift from previous departmental practice, which privileged essays and exams. Greater diversity has been introduced into the assessment of Level 3 modules – the range of assessment methods has been significantly extended and staff have commented favourably on the quality of work produced.

- The project modules have created more opportunities for students to think critically and express their opinions. The IBL remit has encouraged the breaking of the lecturer/audience dynamic and created room for discussion and debate to drive the learning process, in particular through developing the notion of contested knowledge and by encouraging students to engage in intellectual debate. Many modules used the virtual learning environment to facilitate this process, by asking students to post a response to a set reading, image or discussion document or by using discussion boards.

- Information literacy is naturally incorporated within an IBL approach. At Level 3, modules stress source criticism and the use of electronic resources. For example, students give a presentation assessing the value of both archaeological evidence and ancient historical accounts of the same monument, or search online museum databases, and deploy appropriate resources for answering specific research questions.

- While students often bring great enthusiasm to an archaeology degree, it is difficult to get them to see connections between the archaeological past and the present we inhabit. The incorporation of IBL into the project modules has created opportunities for students to recognise these 'real world' links. For example, they reflect on the exclusivity of democracy, ancient and modern, by remodelling the University along the lines of Athenian 'radical democracy,' or consider museums as curators and purveyors of information about the past, their role as a public resource and their accessibility.

- Critical engagement across the breadth of the Level 3 subject content has been encouraged and both staff and student feedback indicate that students taking the IBL modules are more actively engaged in the learning process.

Impact

- **Improving the student learning experience**

    o **Students given more opportunities to be active learners**. Students feel they have benefited from the greater emphasis on student-based information acquisition and discussion of contested knowledge; for example, one stated that "greater emphasis on discussion made

involvement with the material and understanding a lot easier", while another welcomed "the responsibility on the individual to participate through shared learning." Such student engagement has extended to high levels of achievement in IBL-based assessments: "A presentation assessment analysing sources of primary data resulted in some of the best undergraduate research I have ever seen" (staff feedback).

- o **Students engaging more in learning process and with subject material**. Both staff and students have commented on the high level of student engagement generated by opportunities for student-centred learning. Evaluation comments such as "Very exciting module" speak volumes, as do consistently high levels of attendance (91-98% in Semester 1 project modules) whereas, previously, numbers tended to tail off as the semester progressed. Students were inspired to "engage and discuss the material in a way we would not normally" and found they were "reading around the subject instead of only focussing on the subjects of the essays" (student evaluations). Staff members have commented that "class discussion was often lively and the students produced some very high quality work" and that "the sense of pride and ownership the students clearly had for their individual projects" was rewarding.

- o **Creation of a student learning community**. As nearly all undergraduates are involved in project modules, a sense of community and awareness of being engaged in a learning environment developed amongst students. There is strong evidence to suggest that students value this enhanced interaction: "It has been useful to hear other people's perspectives and issues have been raised that I may not necessarily have thought of" (student evaluation). A project team member noted that students "worked in small groups and talked to each other between classes about the reading and tasks they were assigned." The virtual learning environment has been very helpful in facilitating student communication and has created a productive dialogue between staff and students.

- **Fostering a receptive departmental environment**

  - o **Interest in learning and teaching innovation**. A 'Showcase' was held in November 2006. This was a forum for sharing IBL good practice with the whole department, and was very well-received, providing "ample scope for dissemination of good and innovative practice," as one staff member stated. Another commented "As a young academic I found working with the CILASS project very useful to reflect on my teaching practice and theory in other modules."

  - o **Informal collaboration**. Informal collaboration amongst departmental colleagues (project and non-project) has been an (unpredicted) outcome of our project. The common challenges IBL presented often prompted productive discussions in the hallways or over coffee. As one team member stated: "Informal conversations with other team members have often developed into thought-provoking discussions about teaching and learning within the department."

  - o **Departmental commitment to IBL**. The department as a whole has shown commitment to the project throughout, and IBL principles are now firmly embedded into the Departmental Learning, Teaching and Assessment Strategy, as "providing the foundational pedagogic principles of the undergraduate degree", closely linked with a commitment to information literacy skills and supporting student learning through the virtual learning environment. The approaches piloted in the project serve as models for the introduction of IBL into other modules and, because they involve different levels of engagement with IBL, provide a range of alternative opportunities.

4. What I/we learned and how it will be taken forward

Development primarily concerns assessment. Modules that kept the extended essay final assessment are now moving towards alternative methods that better reflect student learning, and are responsive to student comments, which are "overwhelmingly in favour of extending the presentation time limit and having more chance for questions." We have become aware from student feedback, however, that continuous assessment can lead to increased workload, highlighting the need to monitor this carefully.

5. Any other comments