

Enquiry Based Learning - Developing and Embedding Effective Practice

(Faculty of Arts, Computing, Engineering and Science)

Aim: To enhance student learner autonomy through the use of enquiry based learning (EBL)

Objectives

- embedding EBL concepts within the curriculum of new and existing courses
- providing a bank of resources and support to encourage staff to introduce EBL
- developing staff in their LTA practice
- disseminating best practice

Expected learning

- Enhanced knowledge by staff of EBL approaches
- Heightened understanding of learner autonomy by staff and students
- A greater understanding of support needs for staff development

Rationale

A strong resonance exists between the characteristics and benefits of EBL and the development of student learner autonomy. This project should improve retention, employability and achievement. EBL will also improve the attractiveness and marketability of faculty courses.

Characteristics of EBL:

- Learning is student-centred; individual and group participation
- Lecturers are facilitators: moderating, guiding, advising, encouraging, motivating
- Students formulate their own lines of enquiry to achieve given learning outcomes
- Students tackle real-world problems

Benefits of EBL are the following:

- Students take more ownership, are more enthusiastic and engaged
- EBL allows students to develop a more flexible approach to their studies
- Students develop team leadership and time management skills
- Self-directed learning develops research skills
- Forces staff to reflect on the learning process and the changing needs of students

Expected impact on conceptions and practice

- Introduction of student centred learning approaches across a wider range of modules
- Enhanced learning opportunities for students
- Significant LTA engagement for module leaders and course leaders
- Closer alignment of academic and central (LITS) services
- Staff development opportunities
- New curriculum developments
- Cross faculty collaboration and dissemination

Dissemination

- Ongoing within Faculty, through LTA committee, Programme Leadership Group
- Ongoing within institution, through the LTI and CETL
- Ongoing external, dissemination through relevant HEA subject centres and HEA conferences

What's happening this year?

- **Creative Media Practice:** EBL project work is already embedded in the four new degree courses in this area (BA Animation, BA Games Design, BA Film and Visual Effects, BA Digital Media Production). We are exploring student managerial roles via digital media practice students commissioning media students to develop a faculty TV channel. Journalism students are also developing a faculty newspaper using an EBL approach. **Staff:** Jeff Baggott, Alan Robinson, Sue Featherstone
- **Sustainability:** The Faculty plans to make available to all courses across the University option modules in sustainability. EBL will be a key approach in delivery. The Faculty's ECO House is also being used as a focus for the development of EBL project work involving both engineering and design students. **Staff:** Andy Young
- **Foundation-Year courses:** A significant number of students enter the Faculty at Level 3 on Foundation-Year courses. Funding is being used to embed EBL activities on these courses across engineering and art & design in order to help students improve their learner autonomy skills and thereby to improve retention. **Staff:** Frank Burgin

What's happening this year.....continued

- **Databases/IT:** Second year students often find the study of databases difficult. Electronic resources and "self reflection on learning achieved" packages are being devised by final year students adopting an EBL approach to support these students and to help them make good any initial poor performance. **Staff:** Matthew Love
- **Mentoring in Mathematics:** Students on the BSc Mathematics programme undertake a small group project as part of one of their first year modules. They choose and research a topic and deliver a group presentation and poster at the end of Semester 1. Final year students - the Peer Assisted Learning leaders - act as facilitators for this EBL activity, working either singly or in pairs. In this way they develop further skills in teamwork, research and communication. **Staff:** Jeff Waldock
- **Staff Handbook:** The development of a handbook to encourage and assist staff who wish to use an EBL approach has been produced. The handbook is available for peer review. It includes many of the resources available via the CPLA CETL website. **Staff:** Justin Lewis and Allan Norcliffe

Staff development support offered

In consultation and collaboration with the CPLA CETL, the Faculty of ACES will work closely with the Faculty of Development and Society to design and offer a series of professional development programmes for relevant staff. It is anticipated that external expertise will be sought and invited to advise on this programme of activity. A one day short course run by Faculty staff entitled 'Management using Myers-Briggs business psychology' is available via the Training Foundry within ACES.

How is the ACES Project to be evaluated?

- Continuous evaluation by Project Manager - Operational
- Strategic evaluation by Steering Group including student reps
- Student Module feedback
- How best to evaluate the Project's overall aim of enhancing student learner autonomy is currently the subject of research and debate in the wider University

Emerging issues

- Working across different courses and programmes imposes timetabling constraints
- Modifying existing courses is not always straightforward
- Assessment of group work is always difficult
- Measuring the acquisition of learner autonomy is still the subject of debate
- Freeing up staff time to engage in LTA activities is not easy