Professional Development Programme

Making the Most of Final Year Projects

Tuesday 8th February, 2005

University of Durham

This, the third meeting in collaboration with the Special Interest Group on Final Year Projects was attended by twenty-five delegates. The content of the day was as follows:

- Why offer final year projects? Ed Wood
- Practice within UK Institutions Richard Cowie
- From final year project to employment (the student perspective) Daniel Halliday
- Group session facilitated by Richard Cowie
- Scientific Enterprise and Enhancing the Student Learning Experience Stefan Przyborski
- Bioethics: a suitable case for (project) treatment John Bryant

Why offer final year projects?
Professor Ed Wood, Centre for Bioscience

Ed opened the day by outlining the reasons for offering final year projects. He started with practical projects and highlighted what students can potentially learn from such projects and how these should represent the culmination of scientific training. To help focus thoughts for the remainder of the day Ed then noted the downside of offering practical projects and raised a number of questions including 'what to offer students who do not wish to continue with a career in science?'.

View Ed's 'Why offer final year projects?' slides

Practice within UK institutions
Dr Richard Cowie, Co-ordinator of the Final Year Projects Special Interest Group

In July 2003 a questionnaire was sent out to university Bioscience departments asking for information on their policies and procedures regarding all aspects of final year projects. Richard has subsequently analysed the data and his presentation was an interesting overview of what he found.

View Richard's 'Practice within UK institutions' slides

A Snapshot of Final Year Project Practice in UK Bioscience Departments (as pdf)

From Final year project to employment (the student perspective)
Daniel Halliday, University of Reading

Daniel is a recent graduate from the University of Reading. He gave a talk on how he chose, ran and analysed the data from his final year project. He outlined the skills he learnt by undertaking his project and how he has used these in his current employment. His talk was an interesting insight into how students view final year projects and how final year projects can aid employability.

View Daniel's 'From final year project to employment' slides

Group Activity
Facilitated by Dr Richard Cowie

Delegates were split into groups and asked to discuss the following questions in relation to practical or literature projects:

- How do students benefit from undertaking projects?
- Which of these benefits (learning outcomes) should we try to assess?
- How should we assess them?

View a summary of the discussion points raised

Scientific enterprise and enhancing the student learning experience
Dr Stefan Przyborski, University of Durham

The University of Durham offer an 'Enterprise Elective' as an alternative to the traditional, lab-based, final year project. In his talk Stefan explained how the enterprise module was managed, run and assessed by staff from both the School of Biology and Biomedical Sciences as well as the Business School. Stefan gave some examples of the projects that previous students had completed and illustrated the skills that students develop as a result of undertaking this module.

View Stefan's 'Scientific Enterprise and Enhancing the Student Learning Experience' slides

Bioethics: a suitable case for (project) treatment
Professor John Bryant, University of Exeter

John is convenor of the Special Interest Group on Teaching Ethics to Bioscience Students. In this presentation John made the case that the area of bioethics can provide suitable material for a 'dry' project in a bioscience honours degree. He defined the components of a practical final year project and showed how a bioethics project also fits the bill and can be mapped onto each of these components.

View John's 'Bioethics: a suitable case for (project) treatment' slides

View reports from related events

Making the Most of Final Year Projects
Cardiff University 2004

Alternative Final Year Projects -
There's more than one way to skin a cat!

Event outline: The event is primarily concerned with making the most (from both a staff and student point of view) of final year project work. You will have the opportunity to discuss the educational reasons behind offering a final year project to students and how to ensure academic rigour in all types. Further findings from the Special Interest Group's recent survey into Final Year Projects will also be highlighted. As always there will be opportunities for you to comment on pertinent issues.

Draft Programme	
10.00	*Coffee and Registration*
10.20	**Welcome and Introduction to the day** Centre for Bioscience
10.30	**Keynote presentation: What can students learn from final year projects?** Prof Ed Wood, Director, Centre for Bioscience
11.00	**Practice within UK Institutions** Dr Richard Cowie, Co-ordinator of the Final Year Projects Special Interest Group **Discussion**
11.55	**From final year project to employment (the student perspective)** Daniel Halliday Dan Halliday graduated from the University of Reading with an honours degree in agriculture. He completed a final year dissertation considering the impacts of the volume of surface straw on the subsequent establishment of winter wheat. In his presentation he will briefly outline the process by which he selected this subject of study, give a brief outline of the research objectives and the work undertaken before focussing on the knowledge and skills gained during the research project and how these were useful in subsequent employment. He will also comment on the overall positive and negative aspects of the undertaking of a research dissertation at the University of Reading.
12.30	*Lunch*
1.15	**Group session**
2.15	*Refreshments (~15 minutes)*
2.30	**Scientific Enterprise and Enhancing the Student Learning Experience** Dr Stefan Przyborski, University of Durham Biology Enterprise is a new collaborative venture between Durham Business School and the School of Biological and Biomedical Sciences. This elective module for final year undergraduate students in the School of Biological and Biomedical Sciences aims to introduce science students to the key processes of business start-up and enhance their enterprising skills and behaviours. The module is project-orientated with self-selecting groups of students who generate an idea for a business opportunity that is based on a scientific discovery. Students use their knowledge and

	understanding of science to develop and research their idea into a technology that can be readily commercialised. In parallel, the Business School teaches students the necessary skills and knowledge required to develop their idea into a successful business. This offers an alternative and new approach to the teaching of research led science as well as enhancing the student's entrepreneurial spirit. Importantly, the Elective is unique in that it provides science students with the opportunity to learn and develop new skills such as working in a team, leadership roles, management, organisation and presentation skills that support the student's personal development planning. Moreover, this course offers science undergraduates an alternative to the traditional laboratory-based project and is also particularly useful for those not wishing to pursue a career in scientific research but choose to move more into business and commerce after they graduate.
3.00	**Bioethics: a suitable case for (project) treatment** Prof John Bryant, University of Exeter It has been suggested that 'dry' projects are not appropriate for honours degree programmes in Biology. In this talk it will be argued that in fact, bioethics is a very suitable area for project work, embodying all that would be expected in an honours-level project: Defining a research problem, Selection of appropriate methods, Collection of data, Analysis of data, Discussion and presentation of data.
3.30	**Final year projects, employability and the real world** Dr Annie Worsley, Edge Hill College Much has been written about the benefits of undergraduate research projects particularly those conducted during the final year. There is no doubt that they encourage deeper learning and add significantly to student's personal development and most would agree about the value of a dissertation. This paper reports how student projects carried out within a final year module can go even further by embedding the research within a professional experience and by engaging with external agents (prospective employers) during the course of the work. Group research projects culminate in the dissemination of findings by oral presentation at a professional style one-day conference. The students give 'papers' alongside professional guest speakers to a mixed student/external/staff audience. The result is a win:win:win situation for all. Student output is considerably enhanced and they get experience of post-graduate/professional work; prospective employers gain insight into Higher Education and new subject knowledge; staff generate significant links with other professionals. Most importantly, the final year projects are given a real-world context and the students themselves feel that both they and their work is of value to the wider community.
4.00	**Plenary -** finish by **4.00 pm**