Rethinking Final Year Projects and Dissertations

How Innovative Approaches Can Enhance Undergraduate Research

Laura Lannin, Research Assistant, University of Gloucestershire, UK
Mick Healey, HE Consultant and Researcher, Emeritus Professor University of Gloucestershire, UK
www.michealey.co.uk; mhealey@glos.ac.uk

“new models of curriculum ... should all ... incorporate research-based study for undergraduates” (Ramsden, 2008:10-11)

“Real world learning ... comprises those elements across the whole curriculum and co-curricula which enable students to experience and understand the relevance of their learning to their work and lives” (QUT, 2010)

Argument
The traditional UK dissertation provides an excellent apprenticeship for students wishing to undertake research degrees, but with increasing student diversity and growth of professional disciplines, there is need also to consider innovative approaches to designing a wider range of final year projects and dissertations.

The project
The aim of the project is to ensure that the needs of students from different backgrounds, different subjects and different kinds of institution are met, in the design of Final Year Projects and Dissertations (FYPD). The project collected over 60 case studies, some of which have an emphasis on engaging students in employment and community-related projects.

The project is funded by the Higher Education Funding Council for England in the UK from 2010-2012 and aspires to help transform institutional practices and assessment strategies by opening up the debate on how best to design FYPD.

The project demonstrates how redesigning FYPD can broaden their scope and encourage a diversity as to how undergraduate research is conducted and presented. The case studies demonstrate examples of innovative practice in regard to designing undergraduate FYPD, with the focus remaining on undergraduate research and inquiry. FYPD should extend independent learning and critical thinking, whilst enhancing students' employability and capability as lifelong-learners.

Nature of final year projects and dissertations
Final Year Projects and Dissertations are projects which students undertake towards the end of their undergraduate degree; usually in their final or senior year. Students are required to engage in a significant amount of independent research or inquiry. Projects are sometimes employment or community related and help bring about transformational learning to enhance students' knowledge, skills, capabilities and confidence.

“i cannot think of anything more unfair than ... to treat all students as if they are the same, when they so manifestly are not” (Elton 2000: 1)

Key characteristics of final year projects and dissertations
As with all characterisations, not every Final Year Project and Dissertation (FYPD) can be expected to exhibit all of the characteristics. Some are generally applicable, but some are more relevant to particular disciplines than others and some are aspirational rather than being a strict requirement. Whatever form a FYPD takes, characteristics such as the following make it a FYPD:

1. It needs to be an extended piece of work
2. It needs to be research or inquiry based
3. It needs to be relevant to a discipline or take an interdisciplinary approach
4. It needs to be underpinned by a range of relevant sources
5. It needs to be contextualised and show recognition of the provisional nature of knowledge
6. It needs an element of critical thinking and evaluation
7. It needs to be clear what it is contributing
8. It needs a clearly defined and justified methodology
9. It needs to build up to its conclusions and where appropriate have an element of reflective commentary, including recommendations
10. It needs to communicate the research outcomes appropriately and effectively

Alternative final year projects in the biosciences at the University of Leeds, UK
Final year students within the Biomedical Sciences have the opportunity to undertake one of seven types of research project (individual laboratory project, group laboratory projects, computer simulation project, critical review projects, survey projects, science and society projects, and educational development projects). Students are provided with a list of projects, with project descriptors, in March of the year preceding their final year and invited to choose, in rank order, 10 projects they would like to be considered for. The assessments for all project types are similar. Students are required to write a 25-30 page dissertation and deliver an oral presentation. Students undertaking critical review projects also have to submit a 5 page grant proposal linked to their review. There is also a supervisor allocated “productivity” mark.

Service-learning program, Faculty of Education, Queensland University of Technology, Australia
The QUT Service-learning program has engaged fourth-year primary and secondary Bachelor of Education students in transformational learning experiences that cultivate their ability to question, deconstruct and then reconstruct knowledge to inform their role as teachers. The Service-learning program complements the teacher practicum by requiring pre-service teachers to complete 20 hours of non-paid service with partner organisations prior to engaging in their final practicum and their internship. Reciprocal relationships are established with the organisations so that the service reinforces and strengthens academic learning and the academic learning reinforces and strengthens service in the organisations. The program of learning is transformational because it requires the students to participate in critical reflection through, for example, classroom discussions, role plays, presentations, and scaffolded reflective writing about their experiences and learning while participating in the Service-learning program.

Involving students in interdisciplinary interactive media consultancy projects at Miami University, Ohio, US
This interdisciplinary program brings together students and faculty to investigate how interactive media informs and transforms their disciplinary perspective. The program uses problem-based learning and team-oriented projects to help students learn how to apply their theoretical knowledge to innovative digital solutions for a paying client. The students, who work in groups of up to 20, are typically in class four hours a week, but spend many more hours, for example visiting clients, undertaking research or doing user testing. They make a presentation to their client at the end of the project. The clients typically end up with something that far exceeds their expectations.

Download the case studies at: http://insight.glos.ac.uk/tli/activities/int/creativ hops/examples/Pages/default.aspx