Facilitated discussion notes

Notes from the facilitated discussion at the Centre event "Final Year Projects: Maximising the Learning", held at Newcastle University on the 13th May 2010.

Questions for consideration:
1. Real research – real for whom?
2. How do we avoid the issue of alternative projects being seen as second class?
3. How do we avoid selection making alternative projects feel like a second class option?
4. Are there any advantages to group projects? Could group projects be seen as a viable alternative?
5. How do we ensure comparability in terms of access to academic staff?
6. Is it important that assessment / mark allocation is similar between "traditional" and alternative final year projects or is it OK to assess alternative projects in a different way?
7. Is the skills development in final year projects appropriate to students' aspirations? I.e. a biochemistry project will develop students' biochemistry skills – is that what they want?

Real research
How do you make it real for the student?
Involvement in design (not just a practical exercise)
- Alternative projects may be more "real" than lab projects – more open in terms of the area of work
- Lab projects may be constrained by the environment and expensive
- Alternative projects may be more realistic – experiencing the type of work and constraints the students are likely to meet in work

Journal worthy projects may be little more than "pressing a button"; the student has little involvement in the design of the project
- Research techniques may be difficult to master in the short time available
- Are the students doing "real" experiments or background housekeeping?
- Labs can give students the research experience – being part of a lab, working with Post grads and Post docs, going to lab meetings etc
- Time spent supervising students can be a real limiting factor
- Preparation time – there is only a limited time to undertake final year projects
- In the lab – get to see 'new' research / cutting edge research even if you're not taking part

Project students need to be viewed as students, not as a way for the supervisor to do extra research
Education should be the main purpose of projects
Limitations include staff and student numbers
Alternative projects may offer better research opportunities and mistakes cost less
Lab based projects are a gamble and emphasis should be on research skills to take forward rather than ground breaking research
Projects should be question and observation driven research
Should the outcome of the research be unknown to the student or the student and the supervisor?
Is the project about the research or about educating students to achieve set aims / skills?
Is a school/survey project real research-what is hypothesis?
External examiner pressures

Selection of students

Are students comparable as well as projects?

Ranking – higher achieving students get to do X, others Y. How do you keep Y from being considered 2nd Class?

Some highly academic students are not very good at the practical aspects and may not do that well in the lab.

"selling" the alternative to students and colleagues-labelling sets it apart. A project should just be a project no matter how it's done. Are students disadvantaged with alternatives?

Does a cut-off mark result in '2 tribes' of project students? Does it make it more competitive or should students 'shop' for choice.

Allow students to choose – students who don't want to carry on in practical research don't perceive alternative projects to be second class

Enable all students to apply for all lab projects; however the higher achieving students are more likely to get their 1st choice of project

Practical experience:

- Problems of student selection for PhDs, no practical lab experience may mean they are automatically not considered for a PhD
- A project can change minds and turn students on to research.
- Weaker students – literature project may put them off completely
- The rest of a course is very different to a final year project – how do we know how well students will do in their lab project?
- Students may home in on the friendly faces they know from lectures when choosing a supervisor / project – not unknown research staff who can offer a wider range of projects

Different strategies for project selection / allocation:

- Newcastle - Selection by students – students choose a project based on a research area, they write a short synopsis of the research they may want to undertake and their career aspirations, and this is then used to allocate projects. Students below a cut-off point in 2nd yr marks (<55%) go through to do a group project or a 'dry' project (DB)
- Bristol - Selection by students – students are given the project titles, they pick six projects and for each write 100 words on why they want to do the project, supervisors can then select or interview students for the projects based on these summaries.
- Manchester - Students could apply to supervisors to do a project with them before potential research topics are released, project and supervisor formalised before main project allocation
- Leicester – Selection by students - students are given the project titles, they pick five projects.

How many project students do academics supervise each year?

Assessment of projects

Assessment comparability similar reports for both lab and alternative projects – assessment criteria may need to be broadened

If staff assess different types of project this can help to ensure comparability

Is the assessment of the process of doing the project or the outcome of the project? This will depend on the project if production of a resource is the aim of the project then assessment will focus on the outcome of the project.

Assessment of the process can be subjective – assessment by the supervisor or others e.g. demonstrators.

Important to consider if the project meets the objectives originally set out for it

There could be confusion among markers and second markers if marking different types of project

Differences between an "off the peg" project and one a student has designed

Flexible criteria are needed

Project tariff – should projects come with a complexity / difficulty score?

Group projects

This might involve undertaking work on a project as a pair / three and then writing up alone

Students may:

- Share results
- Ask fewer "daft" questions of the supervisor

Would a strong student be dragged down by a weak student? E.g. by not doing or messing up experiments. Interpretation and analysis is the key to project work; if these are done individually it shouldn't be a problem

Working in a group – miss out on some of the "lab experience"

Would friends pair up?

Need clear assessment criteria and points to demonstrate and show both individual and group contributions

Group projects enhance teamwork (a sought after skill) but this is not assessed only the individual is assessed.

Bioinformatics projects

If this is a core part of the research emphasis in the group or institute then this is seen as OK by students.

Generally students prefer to experience real data collection and not just the analysis of the data

Timing of the project-data collection may be better facilitated during the summer vacation and then analyses undertaken back at university. This throws up supervision issues especially if data is collected abroad-hopefully resolved by using Skype etc. Alternative scheduling spreads workload for student and supervisor.