Promoting enquiry and active learning through project work

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Agenda:

1. Educational philosophy
2. The website
3. Types of projects
4. Logistics, timetabling and assessment
5. Evaluation

The Biosciences Project Inventory

- http://sbsweb2.bio.ed.ac.uk/group_projects/node/24
- Or Google: Biosciences, project, inventory

Types of projects:

- Field and lab-based

- "Find-out-about"

Topics of projects

- Biodiversity, conservation and management
- Environmental effects of anthropogenic activities
- Human nutrition, food supplements and hygiene
- Agriculture and animal welfare
- Medical and social issues

Each project entry includes:

- Project Description
- Research Guidance
- Starter References
- Additional information
    - Safety issues
    - Contact details
    - Gallery links

Logistics of the exercise

- About 30 of the listed projects are offered each year.
- Students are divided into groups of 4-6.
- Each group submits a shortlist of 4 choices from the list.
- Topics are allocated.
- Each student works independently to produce Outline Proposal and Literature Review – in which they must ask questions and suggest ways of researching them. They have 10 working days for this.
- Group Research (4 weeks)
- Oral Presentation
- Final Report

Group chooses project short-list (weeks 1 and 2)

Topic decided (week 3)

Individual submissions (week 5)

OPLR **OPLR** **OPLR** **OPLR** **OPLR**

And….Group Research
(Weeks 5 -9)

Group Oral presentation (Weeks 9 and 10) → **Group final report (Week 11)**

Oral presentation

- A staged debate

- A theatrical presentation
- Group effort: every one says their bit

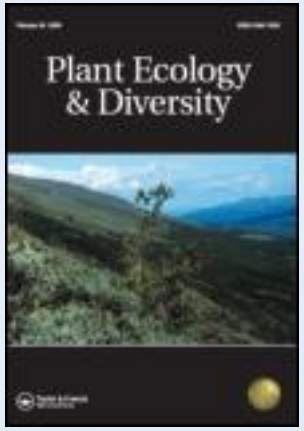
Refreshments are served!

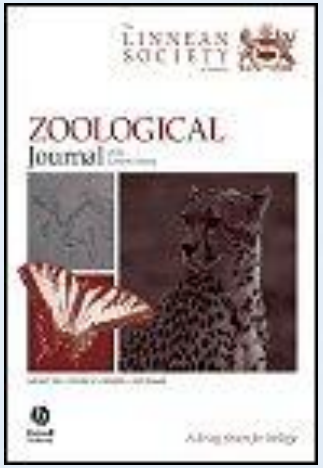
Final report (one per group) to be modelled on:

Parliamentary Office of Science and Technology

postnote

OR



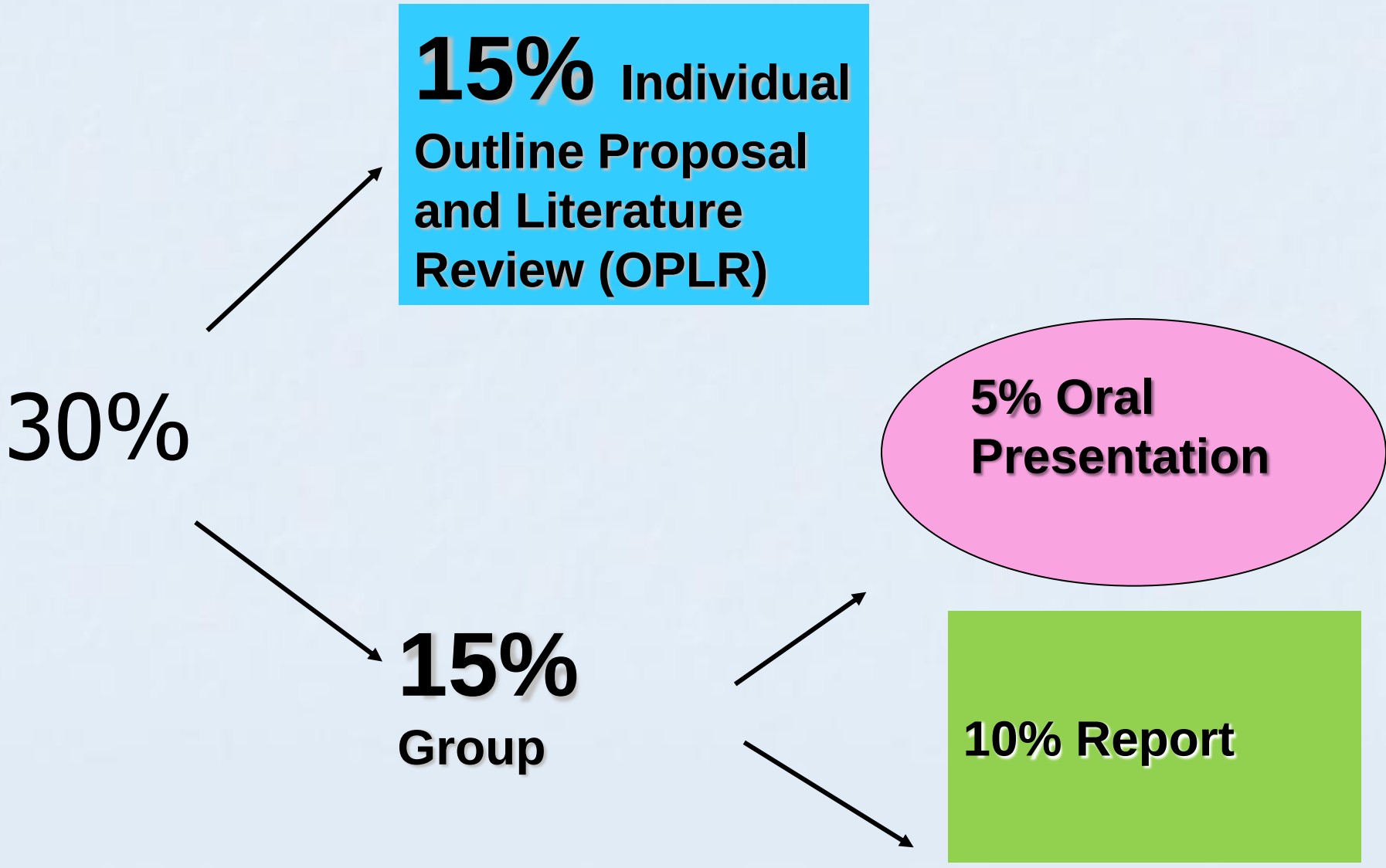


etc……

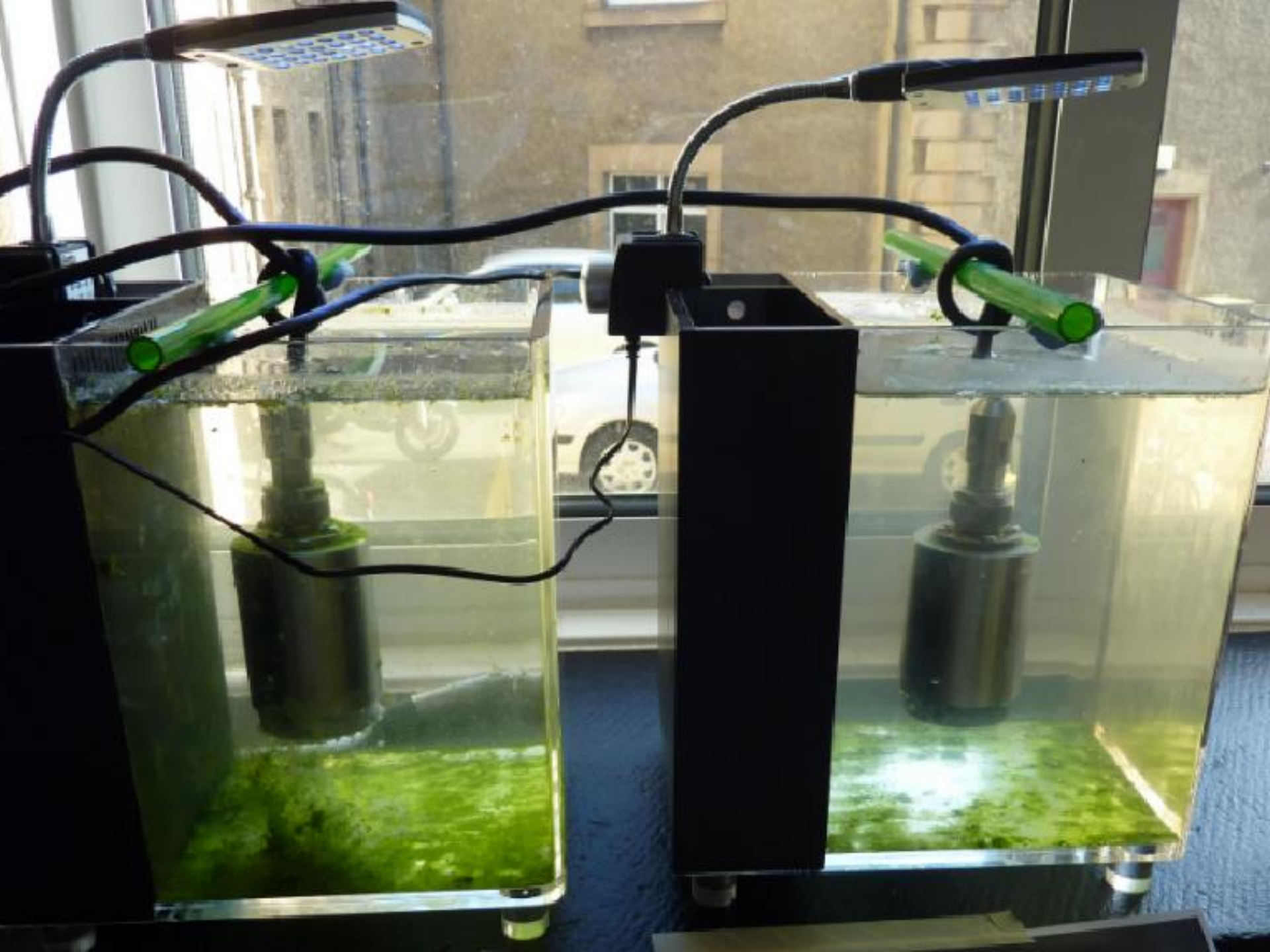
Parliamentary Post Notes

- http://www.parliament.uk/documents/post/postpn_376-natural-capital-accounting.pdf

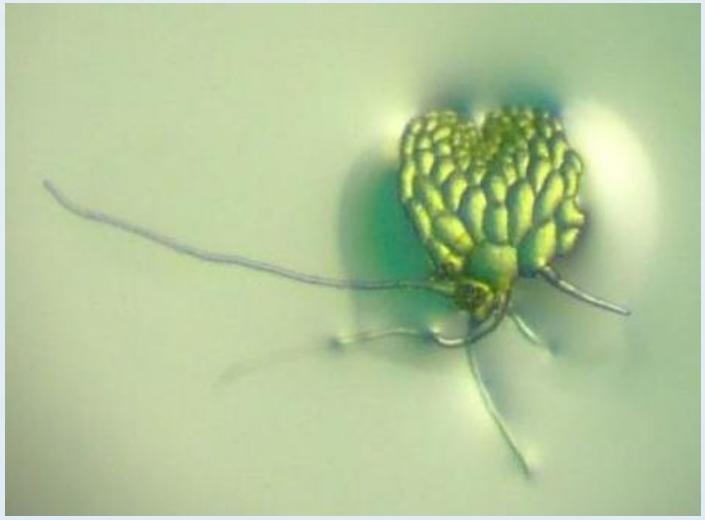
Assessment

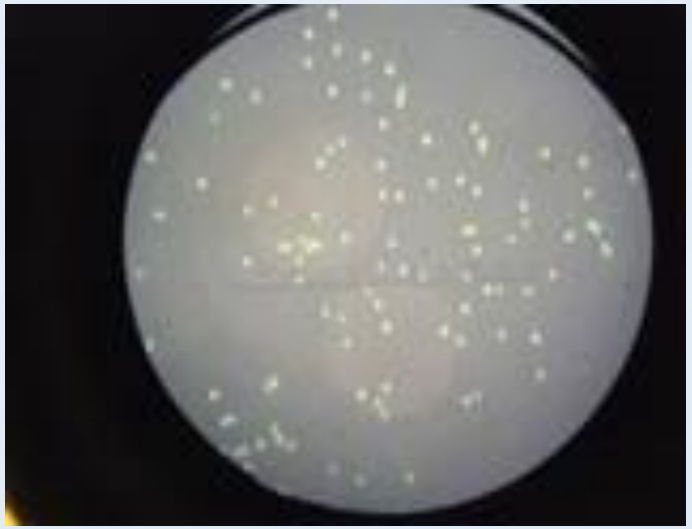

15% Individual
Outline Proposal and Literature Review (OPLR)
30%
5% Oral Presentation
15%
Group
10% Report

feast
REAL
SuperDry



Fern sporebank at RBGE





Visit to a chicken rearing farm

Questions, not just answers

What employers want….

A degree on its own is not usually enough to get a job. Employers want students to demonstrate that, in addition to formal qualifications, they have the skills and qualities that they are seeking.

These skills would include

- self awareness
- taking initiative
- team working
- oral presentation skills
- interpersonal skills
- business acumen
- computer literacy

http://www.uwe.ac.uk/careers/students/skills/skills_index.shtml

Some quotes:

- *"The group project was very interesting and it allowed us to bond with different people with similar interests and find out information for ourselves."*
- *"The group project was a great way of gathering together ideas and allowing students to express themselves or use their skills in a novel situation."*
- *" The best thing was the hands-on approach to learning through project work."*

….and some quotes from the contacts:

- *"We were very impressed by your students and particularly their level of knowledge and questions."*
- *"It was lovely to see you and your students today. They were such an impressive bunch! I had no idea we had been out so long."*
- *"Wow! They asked such searching questions!"*

Was the group investigative project educationally valuable?

Year	It was an excellent experience	Very much so	Fairly	A little	Not very	Total
2007	4	17	1	1	1	24
2008	31	14	2	1	1	49
2009	23	25	2	0	1	51
2010	22	39	8	1	1	71
2011	8	14	5	4	0	31
Total	88	109	18	7	4	226

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Acknowledgements

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