

Developing Personal and Professional Skills in Geology

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A 10-credit stage 3 module which focuses on the workplace, has been in operation for 7 years, was developed via an Enterprise in Higher Education project. After some initial antipathy from some students, and staff, the module, entitled Personal and Professional Development, is now accepted as a valid and appropriate part of the geology programme at the University of Plymouth. The focus on workplace skills is a deliberate strategy which places careers indirectly, but clearly, on the students' agenda at the start of their final year in a way that is relevant to all students, including those who wish to pursue further study/research or to travel before starting professional work. This article describes the module, which could easily be adapted for geography and environmental sciences degree programmes.

The Personal and Professional Development module aims to help students to acquire, develop and practise skills and attitudes identified by employers, and the Dearing Report (NCIHE, 1997), as essential or desirable. Students are also encouraged to develop a self-critical or self-reflective approach to their work and inter-personal behaviour. The objectives of the module are:

- to prepare for the workplace in terms of professional skills, attitudes and behaviour;
- to receive guidance in applying for employment;
- to gain practice in interviews;
- to acquire networking and negotiation skills and to be aware of their importance in the workplace;
- to establish basic concepts of project control and cost management;
- to enhance team building and team work skills;
- to develop professional levels of reporting;
- to produce a professional work portfolio and acquire a self-reflective approach to work;
- to receive guidance and support in the process of recognition of personal strengths, weaknesses, and skills with a view to setting targets, planning personal development and a career path.

The module comprises a series of 3-hour sessions in the Autumn semester of Stage 3:

- Module introduction and briefing, personal skills audit, SWOT (strengths, weaknesses, opportunities and threats) analysis;
- Stress and time management, networking and negotiation;
- Team building, project management. Plymouth Science Trail Team Project: introduction;
- Interviews: techniques, psychometric testing, role play;
- Industrial game: oil exploration exercise;
- Team Project: independent work, optional surgery; (4 weeks)
- Plymouth Science Trail Team Project: Trade Fair;
- Self-perception analysis. Debrief on teamwork;
- Critical Review: analysis, presentation and feedback.

Sessions utilise an interactive style of delivery with staff more often acting as facilitators rather than lecturers. Staff involved with the module have worked professionally outside academia and their experience brings both perspective and credibility to the sessions.

The module is assessed by coursework and comprises 2 elements:

- Personal Portfolio: individual mark (60%);
- Plymouth Science Trail Project: team mark (40%).

The *Personal Portfolio* is not simply an assessment task but an opportunity for personal development and those who invest time and effort find that the rewards are substantial. The precise format depends on personal preference, initiative, imagination and effort but each portfolio is expected to include:

- A log or diary in which the following is recorded for each session:
 - i) summary of the session;
 - ii) evaluation of personal performance/contribution/effort;
 - iii) personal reflections arising from the evaluations;
 - iv) consequent personal action plan.
- Collation of work done during the weekly sessions;
- Examples of work/job applications showing the use of skills/techniques used on the module;
- Notes/reflections on books or articles read in connection with the module.

The *Plymouth Science Trail Project* requires the students, in staff-selected teams of 4 or 5, to devise, produce and present a guided trail for Plymouth, specifically involving some facet of science knowledge transfer.

Team performance is assessed in 4 elements:

- Rationale for the Project/Record of Team Business (15%);
- Town Trail Leaflet (30%);
- Booklet (40%);
- Presentation at Trade Fair (15%).

The climax of the project involves teams preparing exhibits for a Trade Fair at which all other Geology teams are present together with teams from the Earth Sciences programme. Here, they present their projects as products to guests and University staff who act as 'customers'. Some teams have liaised with local schools, charities and tourist enterprises; the quality of both outcomes and presentations is invariably high and the students report a sense of team and personal achievement.

Each year, nonetheless, a significant number of students are negative, even hostile, to a compulsory module which is "not geology". By the end of the module, however, most, but not all, detractors realise that the module is, indeed, relevant and valuable to them. Constructive criticism of the module is encouraged and has been used to inform change and development of the module.

Overall, student feedback has been strongly positive with many students reporting that the skills and experience materially affected their capacity to get jobs and to work effectively and confidently once employed. A student who had been a staunch critic of the module reported, a year after graduating, that knowing about Gantt charts, in project management, actually helped her to stand out in a group interview which later led to her "getting the job". For more information on this module, please contact any one of the authors below.



Tamar Valley Trail

The team devised their trail for tourists by linking heritage sites and other tourist information with commentary on the local geology and its links with scenery and the history of mining in the area. Their trail booklet is distinctive in highlighting the Tamar Valley as an attraction location in its own right. The Valley actually straddles the county boundary and most of the current tourist guides link the attractions to either Devon or Cornwall.



Plymouth Science Trail for the Partially Sighted

This was a highly innovative effort that involved the team in consultation with a local organisation for the partially sighted. The trail was supported by an audio tape and booklet designed for the partially sighted. Guidance was presented on how to recognise features of building stones in the city by touch.

References

NCIHE (National Committee Of Inquiry Into Higher Education) (1997) *Higher Education in the Learning Society*, London, HMSO.

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PRICEWATERHOUSECOOPERS 

'It's not what you study, it's how you benefit from your study that interests us'

Andrew Bottomley PricewaterhouseCoopers

This article provides a brief overview of the PricewaterhouseCoopers (PwC) recruitment ethos and demonstrates how students in the Geography, Earth and Environmental Sciences (GEES) disciplines are well equipped with the types of key skills that PwC seek.

The PwC selection process tests the candidate's ability to relate study, work and extra curricular experiences to the business world, expecting clear articulation of the reflective learning that has led to career choice.

Introduction

PricewaterhouseCoopers (PwC) is established as the world leader in business finance consulting, which includes assurance, tax and legal services, risk management, financial consulting, IT, e-business and actuarial consultancy. The firm is structured along various service lines, each addressing its own aspect of the professional services industry. PwC has a workforce of over 150,000 globally, and each year recruits 1,200 new graduates from any academic discipline, for opportunities in the UK (as such, the firm is the largest recruiter of graduates in the UK).

From the first day that new recruits arrive, they are expected to undergo professional training. Depending on the entry point chosen, the firm offers training towards 32 different professional qualifications. Thus, study does not end at university! In addition, new recruits will be expected to meet with clients within the first few weeks of their job, (including senior management and directors), being expected to work independently as well as in teams, and mix with people from different academic backgrounds and cultures. Thus, the PwC environment is challenging, demanding, but also rewarding.

Articulation of Key Skills and Reflective Learning

Graduates from the GEES disciplines practise and acquire a whole range of key skills during their various programmes of formal and fieldwork study while at university. The skills of numeracy, data interpretation, planning, adaptability, time allocation, interpretation, project management, presenting, report-writing, self-motivation, team-working, information sifting, challenging ideas, creativity and innovation are just some of these skills, and there are many more. These skills, coupled with business skills, professional skills and professional ethics are vitally important in the workplace and help to make the transition to the world of work considerably smoother.

However, despite most GEES graduates being equipped with a whole variety of key transferable skills, it is the articulation and marketing of these skills that is important if the graduate is to be successful in being offered a post with PwC.

What underpins this success is the notion of reflective learning. This itself is underpinned by the 'RAP' theory, that is, 'reflecting' on ones experiences to date, 'appraising' ones strengths and weaknesses, and