

# Finalist's case study

## University of Edinburgh Courses and Learning Geoscience Outreach: A sustainable course for sustainable learning and enterprise

### Section 1 About the project

#### Summary

Final year honours Geoscience students are 'para-professionals' in their subjects. They develop expertise in science engagement, learning and teaching, enterprise, communication, project and time management through working with external clients in schools, museums, visitor and science centres, museums and community groups to develop and deliver a project to an agreed brief. The course has been recognised by Scottish Universities and Government as an example of good practice.

#### Project partners

Most projects are carried out with clients in Edinburgh and Lothians. Some students also undertake projects elsewhere in the UK. Recent projects have involved schools in Brazil and Malawi.

### Section 2 The results

#### The problem

Within the context of a sector-wide move towards increasing community engagement, and with public engagement prominent within the research agenda, a new University of Edinburgh (UoE) learning and teaching strategy is re-considering how degree programmes should be constructed to give students opportunity to create their own self-directed learning beyond traditional knowledge-centred courses.

#### The approach

Students design, develop and deliver resources and materials for science and community engagement. Interdisciplinary learning and working is promoted through development of partnerships within education, across the University, and with diverse external clients, client organisations and communities. The course provides students with a setting outwith the classroom to practically apply the skills and knowledge they have learnt whilst at the University, through a problem solving approach. This goes beyond traditional methods of teaching. The resources developed raise awareness amongst young learners, teachers and community organisations of the sustainability of global resources and environments. Enterprise has also been promoted, through the development of a student-led, financially sustainable non-profit co-operative, which acts as a hub for swap and re-use of materials on campus and in the local community.



THE UNIVERSITY  
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#### Profile

- HEI
- Over 31,000 students and 10,000 staff
- Six campus locations spread across Edinburgh
- Ranked 17th best university in the world

## Our goals

The focus is on multiple learning styles and learning for life in which students become researcher/practitioners. The Geoscience Outreach course is a leading example of points-earning self-directed learning courses within this strategy.

## Obstacles and solutions

Applying the 'Living Lab' concept	Projects regularly support and communicate sustainability themes both within the University (Estates and Buildings, Sustainability Office), in schools, in local communities and through development of web materials. This has been a great way to get operational staff involved.
Raising awareness	Through work with other University Schools and Departments, and allowing students from a wider range of degree programmes to join, the course model is being disseminated and adapted.

## Performance and results

Abundant evidence of impact, both unsolicited (informal comments and feedback) and researched, has been gathered from students, 'clients' and audiences over the period 2012 to 2014. Feedback reflects impacts on (inter alia) learning and personal development, employment, career paths and wider impact of the course model. Examples of unsolicited feedback:

**Students;** I can't believe what the course has taught me. It has really increased my skills base, Probably the best course run by Edinburgh University; there should be more courses like this, The outreach course has been one of the most fruitful and enjoyable courses I have done at university and I now feel inspired and capable to pursue a career in science communication, The most relevant course I have taken in my studies, I definitely feel more confident about life after graduating with the skills I have learnt.

**Clients;** The student has done a wonderful job and we now have a resource that we can use for years to come, The student is a credit to Geosciences, the University and herself; she has done a marvelous job with the class, The quality of the final document is outstanding; the drawings are amazing and show that she has good artistic talents as well as scientific knowledge.

**Careers;** Without my experience with ...the geoscience outreach course I doubt I would be doing what I would now. Basically it is my dream job, I have landed my dream job in Northumberland as a result of doing the outreach course, I got a far better job than I thought I would; they were really interested in the outreach course at interview.

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## Section 3 The future

### Lessons learned

- 1 Projects increasingly support widening participation in higher education in schools in areas of educational disadvantage by increasing awareness and acting as young role models.
- 2 Through work with other University Schools and Departments, the course model is being disseminated and adapted.
- 3 Students increasingly wanting opportunities to apply their skills and knowledge in a practical setting.

### Sharing our project

UoE has invested in dissemination, replication and development of the course model through a funded project in which an experienced team member is researching and evaluating the model, aided by student feedback and analysis, to identify key replicable and generic elements. He is also meeting with key individuals across UoE to gather evidence of good practice, encourage adoption of the model, identify challenges and explore and encourage interdisciplinary working (a key element of the model).

### What has it meant to your institution to be a Green Gown Award finalist?

The University of Edinburgh is committed to being a world-leading socially responsible and sustainable university. We value working with other institutions as we support our staff and students in improving our own practices. Public recognition gives us an opportunity to celebrate and reward their enthusiasm and hard work.

**Professor Mary Bownes, Senior Vice-Principal – External Engagement**

### Further information

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