

The Reinvention Centre

For Undergraduate Research

Dr Helen Walkington Academic fellowship project report

Reinventing the taught curriculum – embedding research opportunities for Year 2 undergraduates in the geography curriculum at a consortium of 4 UK Universities.

Keywords

Undergraduate research publication, GEOverse, embedding, geography

Summary

The project team (from Oxford Brookes University, University of Reading, University of Gloucestershire, Queen Mary, University of London) is embedding research opportunities in the curricula at their institutions in order to support students in carrying out personal and collaborative research in Geography for academic credit. The project is focussed on developing the curriculum at each institution and exploring the ways in which differing institutions can enhance undergraduate (esp. year 2) research opportunities. The project team has been working together since September 2006 on piloting a national undergraduate research journal for geography called Geoverse. This e-journal provides the means for students to disseminate the research work they have undertaken in Year 2. This journal is now up and running and has several published articles and more going through review. Curriculum development is the progression which is enabling students to write research articles for the e-journal. Curriculum development at Oxford Brookes is now complete with an undergraduate research pathway in place.

Activities

Approximately 1,000 students are involved in this project, either directly or indirectly, as the target student readership of the journal. Students in geography departments across the 4 institutions can submit articles to the journal, it is for all undergraduate geography students in those institutions, although rigorous quality standards mean that the journal will accept and publish only work of a particularly high standard. Students are supported by constructive peer review feedback from the team of trained postgraduates and the editorial board who provide guidance and exemplars on the work submitted over and above what would be given by a standard peer reviewed journal. The editorial advisory board of 16 postgraduate students have been given financial support for their time and are mentored and guided by the editorial board of 8 academics.

Curriculum embedding has been operating differently at the four institutions. Oxford Brookes has had the benefit of a university wide commitment to developing undergraduate research pathways and in the geography department this has been completed.

In 2007/8 first year students wrote up the findings of a one day group fieldwork project as a journal article in the module 'Techniques in Physical Geography.' Early in Year 2 as

part of the Environmental Management module they presented team based field or laboratory research projects in an end of term 'conference.' At the end of their second year all geography students were required to undertake field based research as part of compulsory residential courses. The primary data collected during this module was then used in a follow up module in year 3 called 'Geography: Research and Practice' which involves writing an individual journal article based on the data collected in the field. Students worked independently but received tutorial support in writing up their research articles from academic supervisors. The articles were written to the conventions of two linked electronic publications. While the submission requirements (author guidelines, referencing conventions, etc.) were identical, the aims and expected standard of each journal was different.

Geoversity is a departmental journal with an undergraduate editor and aims to showcase the range of research work being carried out by Geography students at Oxford Brookes. The journal was set up with a strong pedagogic rationale and aimed to get students to write individually or collaboratively using the journal wiki and to gain feedback from a team of trained postgraduate reviewers from within the department.

In contrast, the e-journal GEOverse is a collaborative publication between the four project Universities (lead by Oxford Brookes) and is still being piloted as a national level journal of undergraduate research in Geography. The journal publishes "the very best of original undergraduate research and scholarship in physical and human geography" (Walkington, 2008).

A Brookes Student Learning Experience Strategy (BSLES) funded departmental undergraduate research conference, based around informal poster sessions, provided many students with the confidence to submit their work for publication to these journals. This highlights the importance of scaffolding the research dissemination experience for students.

The scaffolding of course, departmental, faculty, institutional and national environments for undergraduate research dissemination which are encouraging and constructive, allows groups and individuals to publish their work in a way that supports them appropriately as they progress as researchers.

At **Reading** the GG2TP 'Team Projects' module is open to all Year 2 Geography students and gives students the opportunity to conduct a team exercise based on researching a 'green space' within the Reading Borough Council area. The green spaces include parks (e.g. Palmer Park), gardens (e.g. Forbury Gardens) and other non-urban areas within the urban matrix (e.g. Kings Meadow). At present the module is assessed via a final report. In future, it is hoped that the assessment will be a paper submitted to 'Geoverse'. Similarly at **Queen Mary**, a year 2 module is currently under development to start in 2007/8 to take students to Iceland to carry out research projects which can be written up for the journal. At **Gloucestershire**, a group research and writing project in EL224 Environmental Hazards (a level two undergraduate module) was used as a substitute for the previous examination-based assessment.

Outcomes

Embedding journal article writing in the curriculum has been effective at Oxford Brookes where students have reported a sense of achievement, a development of their understanding and a sense of their knowledge 'coming together', they appreciated the creative process and being able to report genuinely new findings. A different attitude to reading matter was noted (less emphasis on website, more emphasis on top quality

journals) and a more critical approach to the material being read was also reported by student authors.

Qualitative data analysis of the Student learning experience has already begun. Module evaluations of U21180 were undertaken in 2007/8. These formed the basis of conference presentations and published journal articles (see below).

Publications:

- Walkington, H. and Jenkins, A. Embedding Undergraduate research publication in the student Learning experience: ten suggested strategies *Brookes e-Journal of Learning and Teaching (minor amendments being made)*
- Walkington, H. (2008) Reflecting on the Undergraduate Research Scholarship Scheme *Teaching News 2 (2)*, 7-8.
- Walkington, H and Rushton, E. (2008) Undergraduate Research Conference. A first for the department of Anthropology and Geography. *Teaching News 2 (2)*, 11-12.
- Walkington, H. (2008). Geoverse: piloting a National e-journal of undergraduate research in Geography. *PLANET*. 20, 41-46.
- Walkington, H. (2008) Quality enhancement of the student experience through undergraduate research opportunities - the impact of undergraduate research journals. Accessed at :

http://www.heacademy.ac.uk/resources/detail/events/conference/Ann_conf_2008_Helen_Walkington

Conferences:

- Walkington, H. (2008). Enhancing Student Engagement through Writing for Publication. May 15th 2008 at the Brookes Student Learning Experience Conference, Oxford Brookes University.
- Walkington, H. (2008). Quality enhancement of the student experience through undergraduate research opportunities - the impact of undergraduate research journals. July 3rd 2008 at the Higher Education Academy Annual conference.

Implications

- Developing literacy through undergraduate publishing in their discipline.
- Creating modules and resources which support academic writing and literacy for undergraduates.
- Creating support for student reviewers, beyond written guidelines, e.g. practice workshops.
- I have written an article with Alan Jenkins (see outcomes above), on the strategies for mainstreaming undergraduate research publication, but each of these would require evaluation. This is an area of research need.

References to related work

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