Periodic Review of Geography and Environmental Sciences

Introduction

1 An internal review of programmes in Geography and Environmental Sciences was held on Tuesday 21 and Wednesday 22 May 2013. The members of the Panel were:

- Dr Geoff Cook, Reader, School of Construction Management and Engineering (Chair)
- Miss Joanna Coulton, Student Representative
- Ms Kate Findlater, Faculty Support Officer, Faculties of Science and Life Sciences (Secretary)
- Dr Paula Jauregi, Lecturer, School of Chemistry, Food and Pharmacy
- Professor Adrian McDonald, Professor of Environmental Management, University of Leeds
- Dr Lisa Purse, Senior Lecturer, School of Arts, Humanities and Social Sciences

2 The Panel met the following:

- Professor Roberta Gilchrist (Head of School)
- Dr Steve Robinson (Head of Department)
- Dr Alan Howard (Senior Tutor / Senior Lecturer)
- Dr Hazel McGoff (Programme Director BSc Environmental Science)
- Dr Steve Musson (Programme Director BSc Geography)
- Dr Liz Shaw (PD MSc Environmental Management)
- Dr Mary Lewis (School Director Teaching and Learning)
- Mrs Sue Hawthorne (Departmental Administrator)
- Mrs Heather Howarth (Departmental Administrator)
- Mrs Heather Browning (School Manager)
- Dr Sally Lloyd-Evans (Senior Lecturer Human Geography)
- Dr Steve Gurney (Director of Health and Safety / Senior Lecturer)
- Dr Geoffrey Griffiths (UG Admissions Officer / Senior Lecturer)

3 The Panel met students who represented the following degree programmes:

- BSc Environmental Science
- BSc Environmental Science with Professional Experience
- BSc Geography and Economics
- BSc Human Geography
- BSc Human and Physical Geography
- BSc Physical Geography
- MEnvSci Environmental Science
General observations

The Review Panel was impressed by the Self-Assessment Document produced by the Department which it considered to be a comprehensive, constructive and self-critical assessment. This, together with the wide-ranging background papers, greatly facilitated the Review and appropriately set the scene.

The meetings with staff were constructive, forward looking and honest and the Panel was impressed with the efficient and helpful way in which Departmental staff assisted the Periodic Review.

The students and alumni the Panel met were articulate and enthusiastic about their degree programmes. Staff were felt to be friendly and approachable, particularly student support staff in the teaching offices.

As an aside, the Panel recognised the effort the Department had made in trying to ensure participation of two external Panel members and the circumstances which lead to only one being able to participate.

Academic standards of the programmes

Educational aims of the provision and the learning outcomes

The Review Panel were satisfied that the aims and stated learning outcomes of all four programmes in Geography and the two programmes in Environmental Science were appropriate to the discipline. The aims are necessarily broadly similar in framework and draw upon a common set of modules. The aims and outcomes are communicated in part to the students via handbooks and in part through system diagrams developed for Part 1. Although diagrams for later years may exist they were not seen by the Panel nor alluded to in the documentation. There is then an opportunity to develop a further set of structured diagrams for these later years. The Review Panel recommends that the Department develop structured diagrams to illustrate the module content and progression requirements of their degree programmes.

Teaching, learning and assessment strategies are clear and verified by external examiners.

There is a strong, although partial, internationalisation of the curriculum. The Panel noted a particular focus on sub Saharan, southern and equatorial Africa. Although the theoretical geography should be accessible to international students, it was not possible to verify objectively that such internationalisation is integrated through any specific mechanism. Therefore, the Review Panel recommends that the Department take the opportunity to internationalise their existing programmes including the opportunities provided through the recruitment of new staff.

Curricula and assessment

The curricula for the degree programmes are appropriate but are limited in breadth and scope. In particular core modules for Human Geography are the optional modules for Physical Geography and vice versa. In practice if the range of modules is to differ significantly the students have to make choices from the large array of modules available in other departments. This has particular significance for Human Geography in which there is a particularly small staff complement. The Review Panel have made a recommendation in this regard which is shown in Section 12.
There is ample evidence that content and design of programmes are informed by recent developments in the discipline. Geography and Environmental Sciences at Reading recruits good students and the curricula is entirely appropriate to their capacity. The curricula would benefit by an exploration of the breadth of the topics contained and a consideration of how this could be expanded by the new staff. Cultural assumptions and their significance are deeply embedded in the curriculum and global issues form a significant component of the curriculum. It is appreciated that the Department is relatively young and that new priorities and initiatives are emerging, however, it appears to be timely for a more general review of the T&L provision of the Department to be undertaken. Therefore the Review Panel recommend that the Department should undertake a review of all its UG and PG programmes to ensure that the benefits of the integration of the Geography and Environmental Science specialisms are fully realised. This to be used also as a vehicle to encourage the integration of the two former Departments.

There is an appropriate diversity in the methods of assessment. Where required the Department uses blind second marking and procedures are in place to resolve any mark differences that arise. External examiners have been broadly supportive of all procedures and the Department has responded to all issues raised. The final classifications and the criteria are correctly stated for the discipline at this level. Statistical trends and comparative assessment statistics are available to highlight departures from norms. Many of the modules are 10 credit modules and so there are 12 different groups of assessment if a student only chooses 10 credit modules. There is asserted to be a marked preference in the student body for 20 credit modules to reduce the perceived and to some extent real, assessment load. If this is to be addressed further this assertion would have to be validated with a larger body of students. It is recognised that a move to 20 credit modules would have an impact on student choice.

Use of student management information

7 The Panel were satisfied that the Department had mechanisms in place for the collecting and analysing of statistical data, external examiners’ reports, internal and external staff surveys and student evaluations. The Review Panel noted the part IAMS plays in the module assessment, feedback and evaluation process and acknowledges the University-wide adoption of Blackboard Learn for these processes. However, the Review Panel recommends that the Department work with others to ensure that the highly regarded functionality of the IAMS Assessment and Feedback system, as developed by the Department, is retained within the new Blackboard system.

The review panel recognised as an example of good practice that students are actively engaged with the design of new programmes and the development of existing ones through the SSLC and participation within the various Boards of Studies.

Quality of learning opportunities offered by the programmes

Teaching and learning

8 The Panel considered the Teaching Enhancement Groups to be a valuable mechanism for teaching and learning enhancement, and this was indicative of a proactive approach also demonstrated by recent and forthcoming workshops on areas including feedback and assessment and internationalisation. The Panel found that an appropriate range of assessments was evident across GES, but noted that this range was not always mirrored across all programmes. The panel would encourage GES to consider this in its on-going review of provision, as recommended in Section 6, particularly in the light of the increasing diversity of its students.
The Panel recognised the excellent practice in effective feedback discernible in areas of the Department, and the attention being directed towards assessment and feedback in recent and forthcoming Department workshops. The Review Panel would encourage GES to develop a strategy for the review of assessment and feedback issues in order to address student perceptions in this area, including scheduling of assessment deadlines, consistency of assessment and feedback and timeliness of feedback return. The Review Panel recommends that the Department take steps to ensure that the isolated examples of good practice in assessment and feedback are widely disseminated across the Department. The University-wide priority in the areas of assessment and feedback has been clearly defined. Therefore it was of concern that delays in feedback from module assessments delivered by the School of Agriculture had occurred. The Review Panel noted that this was unacceptable, may be influencing NSS scores and recommended that this be addressed.

The GES personal tutorial system is a clear example of good practice, and is integral to the process of module selection throughout each programme. In general there is clear evidence of a thoughtful approach to communication with students in relation to the demands and decisions of their programmes. Nevertheless some students did not appear to have a full picture of certain processes and activities, such as field work, dissertations, and options. Therefore we encourage GES to check that information to students is consistently timely, explicit, targeted, and reinforced, and in a manner that is auditable. The Review Panel recommends that the Department ensure that explicit information is given in a timely manner regarding the detailed requirements of:

- Field courses
- Field trips
- Optional modules
- Industrial placements
- Dissertations

and that this is reinforced with follow-up material.

With the merger of two Departments, the arrival of a significant number of new staff, and the utilisation of staff on service modules, it is paramount that appropriate procedures are in place for induction into all teaching and administrative processes, as well as for ensuring consistency of approach in curriculum delivery. The Panel noted the very positive and proactive steps GES has taken already or is putting in place through its Staff Wellbeing Committee, and sees this as an example of good practice, but encourages GES to consider other sustainable measures for monitoring consistency of practice going forward.

In the light of these significant changes and the need to sustain a strategic focus on teaching and learning provision in what is an increasingly competitive marketplace, there is an opportunity for GES to consider a teaching and learning leadership role at Department level to mirror the previously established Director of Research role. The Review Panel recommends that the Department consider the appointment of a Department Director of Teaching and Learning (DDTL) to provide T&L leadership across the Geography and Environmental Science topics and to parallel the strength of the research leadership in the Department.

**Student admission and progression**

The Panel noted the drop in recruitment in to Environmental Science in relation to 2011 though there was some improvement in conversions rates. Conversion rates for Geography programmes appear to be low for the 2012 entry but may be related to the issues caused by the slow processing of UCAS application by the central Admissions department. The Panel agreed that there was an impact on the recruitment to the Department in 2012/13 due to the operation of the central admissions process and recommended that this be addressed. The Panel was otherwise satisfied with the arrangements for admissions by the department.
The Department has been very active in reviewing and organising outreach activities to improve recruitment. For example, by updating the website, providing applicants with news about the department and the more effective use of social media. There were some areas where this could be enhanced. The Review Panel **recommends** that the Department adapt the web-site and other promotional material to ensure the prominence of the industrial placement and Erasmus opportunities they provide.

The Department has identified recruitment opportunities in Postgraduate programmes and particularly in the recruitment of overseas students. In addition the Department has started taking some steps towards internationalisation with a recent workshop to discuss the range of opportunities. A summer school for overseas students has been planned but it was unclear to the Review Panel how this would be moved forward. The Panel considers it beneficial for the Department to put a plan in place for overseas recruitment which should include the identification of strategic target countries aligned with current research contacts and the associated Departmental support for the integration of international students at a pastoral and academic level. Therefore, the Review Panel **recommends** that the Department develop in detail a planned strategy regarding recruitment in general and of overseas students in particular and establish management structures to ensure its delivery.

Skills provided in each module are being reviewed with a view to identifying any lack of training provision. The Department is already developing some modules to help students gain navigation and writing skills. The Department is being particularly proactive in developing modules to help students to develop career related skills. An example of this is the newly developed GG2CDS module where students are given training on career skills and are provided with work experience via three-week placements. These elements are also embedded in the ES214 module, which provides Environmental Science students with the opportunity to develop career and fieldwork skills.

The Panel were satisfied that student progression was appropriate to the stated aims and consistent with the attainment of the intended learning outcomes.

**Learning resources**

- **The investment in the refurbishment and relocation programme, which will see the creation of a single base for GES in the Russell building, is welcomed. The move should prove positive in terms of furthering the integration of GES, and of the experience of students and academic and support staff. The Review Panel noted that the pressure on laboratory space is dependent on student numbers but also the take-up of particular types of project work, and would invite GES to continue to reflect on ways in which they might actively manage this provision.**

- There is generally sufficient breadth and depth in academic staff expertise, appropriate to the curriculum. Of the academic staff in Geography there are only three experts in Human Geography, so here the coverage of the quantitative human geography curriculum is necessarily quite narrow. We note that the expertise of the seven new appointments does not actively redress this. See Section 12.

- The support staff clearly make a crucial and effective contribution to the smooth running of the Department, and are praised by students and academic staff alike. The panel encourages GES to pursue the acquisition of additional support resources to sustain the effective management of its placement provision. See Section 11.

- As recognised elsewhere in this report, GES is proactive in its use of traditional and more recent learning technologies. The Review Panel highlights as good practice the recent developments such as the digitisation of Geology materials, the use of YouTube videos and podcasting in learning delivery which together represent inclusive resources for a diverse student cohort.
Employer engagement

The Department is putting a lot of effort in providing students with career/employability skills and work experience. In a new initiative which began in 2012-13, students can take a placement as part of their Part 2 careers modules, GG2CDS and ES214, in addition to the Extra Curricular Project Placements offered by the Department. Postgraduate students also have the opportunity to undertake work experience. Overall an interesting and varied range of projects and placements were offered to students across a wide range of employers.

The Panel noted the recent success of the SHES Placements Team in winning a University Award for Outstanding Contributions to Teaching and Learning. Placement advice was supported by external input from the University Careers and Placement Centre but most of the work was being done in-house. If placements are to develop further it is clear that further resources and administrative support will be needed. The Review Panel recommends that the Department provide additional resources to develop their industrial placement activities and the subsequent employability of graduates.

The earlier establishment of the BSc Environmental Science with Professional Experience has reinforced the initiatives of the Placements Team and allowed links with companies to develop. This approach could be more widely applied and the Review Panel recommends the Department consider the development of a BSc Geography with Professional Experience programme.

The Panel felt that although there was some engagement of employers that more could be done to involve potential employers in discussions about programme content and skills development. This link with employers would, in addition to informing the Department about the work-skills required of their graduates, enable the opportunities associated with a ‘Chartered’ designation to be explored. The Review Panel recommends that the Department explore the requirements necessary for the Institute of Environmental Management and Assessment to accredit programmes for the title ‘Chartered Environmentalist’ as well as the requirements for the title ‘Chartered Geographer’, as offered by the Royal Geographical Society, and that these two ‘Chartered’ titles to be more readily linked to the delivered programmes.

Enhancement of quality and academic provision

It was apparent that the Department had fully engaged with the Pathfinder process and this had helped the Department to focus on particular aspects of the quality of its degree programmes and their delivery. The process had identified the effective adoption of some of the student views, as expressed through the Staff-Student Liaison Committees and in other ways, and those of external examiners. Following the establishment of the Department in 2010 the drawing together of the disciplines of Geography and Environmental science has moved forward. This has begun to establish a culture of programme development to which the pathfinder process was able to provide fresh impetus. This was, in particular, centred around an analysis of specialist modules to identify overlaps and omissions. It is anticipated that the outcome of this analysis will allow for any changes to enable the wider integration of modules across the School. See Section 6.

The Teaching and Learning Plan expressed in the Self-Evaluation Document has been developed from the outcomes of the Pathfinder process. The priority themes of Feedback, Programme Development and Skills Training have been identified. The Feedback theme has a fully developed set of action points and is anticipatory of the University-wide adoption of the 15 working day turn-around time. The panel were keen to ensure that the feed-forward/feedback functionality of the IAMS system was retained in the new Blackboard system. The ability of this system to enhance staff communications should also be examined. See Section 7. This themed approach is enhanced through the use of the SHES Staff Wellbeing Committee developing new induction material for new staff so that they are made aware at an
early stage of the important role that Assessment and Feedback makes to the student experience. There are within GES examples of good practice in feedback and the Panel encourages the wider dissemination of this across the School. See Section 8.

The programme development is substantial. In particular GES will be engaged with the new programmes of International Development and Environmental Physics. The opportunities around and within the academic space between Geography and Environmental Science has been recognised and GES are looking to examine the viability of a Geography and Environmental Management UG programme in 2013/14 with SAPD and SBS. Over the same time-frame they are also looking at a Geography and Planning UG programme to be delivered jointly with REP. This development will need to be carefully planned to ensure that the workload and growth in student numbers do not overburden the staff resources available in the Department. In particular the panel were concerned at the paucity of quantitative Human Geographers within the Department. There has been a recent influx of new staff and whilst this is supported by the Review Panel, there is a clear need to re-balance the staff profile. The Review Panel recommends that the Department strengthen the staff provision in the area of Human Geography to offer subject resilience and enhance support for Dissertations.

The panel noted that GES and the School are planning to engage students in the programme development process. The Teaching Enhancement Groups offer a forum for curriculum development and a review of current delivery. The Panel are keen to encourage their operation and for them to provide a more strategic view of T&L aligned with the School 3year Plan.

In the area of Skills training the example shown in the placement module, where students are exposed to a range of skills required to enhance employability, is exemplary. The engagement with Careers staff is a particular strength. The more detailed skills associated with learning outcomes, particularly in the Environmental Science modules, are under review and should allow for learning outcomes and skills outcomes to be more carefully aligned.

It was apparent to the Panel that the students valued the opportunity to be involved with the Department and generally felt that their opinions mattered. This added to their sense of belonging to GES. However, there was some concern around the Geography – Economics differences, where students were easily able to assess the differences in process and procedures. The Review Panel recommended that the Department strengthen the existing dialogue with Economics to ensure consistencies in process and procedure.

Main characteristics of the programmes under review
13 The programmes are clearly positioned and aligned to the appropriate subject benchmark statements. There is fitting variation in teaching and learning methods. The programmes offer considerable breadth and flexibility to allow students to focus on their interests as they progress. The Department makes use of innovative technology in its teaching, and engages actively with both University-wide and national initiatives.

Conclusions on innovation and good practice
14 The Panel commends the Department on the following examples of good practice:

- The overall standard and effectiveness of the personal tutoring within the Department
- The approachability and student engagement by all the Staff including support Staff
- The operation of SSC and the Department-wide engagement of students in the QA process committees and the development of new and existing programmes
- The Teaching Enhancement Groups (TEG’s)
Examples of technology enhanced learning

- The award-winning industrial placements scheme and supporting module
- The establishment of a SHES Staff Wellbeing Committee to ensure consistency of practice.

Conclusions on quality and standards

15 The Panel agreed that the degree programmes offered by the Department, both at undergraduate and postgraduate level, met the stated aims and objectives, and were of appropriate standard and quality and that the programme specifications are appropriate.

Conclusions on new degree programme proposals [where appropriate]

16 N/A

Recommendations

17 The Panel recommends to the Joint Faculty Board for Teaching and Learning in Science and Life Sciences that the following degree programmes be re-approved to run for a further six years:

- BSc Environmental Science
- BSc Environmental Science with Professional Experience
- BSc Geography and Economics
- BSc Human Geography
- BSc Human and Physical Geography
- BSc Physical Geography
- MEnvSci Environmental Science
- MEnvSci Environmental Science with Professional Experience

18 The Panel recommends that the following issues should be addressed by the Department:

Advisable

(a) The Department should undertake a review of all its UG and PG programmes to ensure that the benefits of the integration of the Geography and Environmental Science specialisms are fully realised. This to be used also as a vehicle to encourage the integration of the two former Departments.

(b) The Department consider the development of a BSc Geography with Professional Experience programme to build on the success of the Industrial Placements within the Department.

(c) The Department explore the requirements necessary for the Institute of Environmental Management and Assessment to accredit programmes for the title ‘Chartered Environmentalist’ and thereby supplement the existing accreditation by the Institution of Environmental Sciences.

(d) The Department explore the requirements necessary for the title ‘Chartered Geographer’ to be more readily linked to the delivered programmes.
(e) The Department ensure that explicit information is given in a timely manner regarding the detailed requirements of:

- Field courses/trips
- Optional modules
- Industrial placements and
- Dissertations and

that this is reinforced with follow-up material.

(f) The Department develop in detail a planned strategy regarding recruitment in general and of overseas students in particular and establish management structures to ensure its delivery.

(g) The Department take the opportunity to internationalise their existing programmes including the opportunities provided though the recruitment of new staff (see 18(i))

(h) The Department take steps to ensure that the isolated examples of good practice in assessment and feedback are widely disseminated across the Department.

(i) The Department strengthen the staff provision in the area of Human Geography to offer subject resilience and enhance support for Dissertations.

(j) The Department provide additional resources to develop their industrial placement activities and the subsequent employability of graduates.

(k) The Department consider the appointment of a Department Director of Teaching and Learning (DDTL) to provide leadership across the Geography and Environmental Science topics and to parallel the strength of the research leadership in the department.

(l) The Department adapt the web-site and other promotional material to ensure the prominence of the industrial placement and Erasmus opportunities they provide.

(m) The Department develop structured diagrams to illustrate the module content and progression requirements of their degree programmes

**Desirable**

(a) The Department work with others to ensure that the highly regarded functionality of the IAMS Assessment and Feedback system, as developed by the Department, is retained within the new Blackboard system.

(b) The Department strengthen the existing dialogue with Economics to ensure consistencies in process and procedure.

19 The Panel does not have a recommendation to the Joint Faculty Board for Teaching and Learning as to whether any proposal(s) for new degree programmes should be approved as this is not applicable.

**University-wide Issues**

20 The Panel recommends that the following are University-wide issues:

(a) The Panel agreed that there was an impact on the recruitment to the Department in 2012/13 due to the operation of the central admissions process.

(b) The panel acknowledged that the delay in Feedback from module assessments delivered by the School of Agriculture was unacceptable, may be influencing NSS scores and must be addressed.