

PERIODIC REVIEW OF GEOGRAPHY AND ENVIRONMENTAL SCIENCES

Reviewing programmes delivered by the Department of Geography and Environmental Sciences in the School of Archaeology, Geography and Environmental Sciences

INTRODUCTION

1. An internal review of programmes in Geography and Environmental Sciences was held on 19 and 20 March 2019. The members of the Panel were:
 - Louise Hague, School Director of Teaching and Learning, School of Law (*Chair*)
 - Dr Nick Clarke, Associate Professor in Human Geography and Director of Programmes: University of Southampton (*external member, subject specialist*)
 - Dr Ian Oliver, Lecturer in Environmental Sciences: Keele University (*external member, subject specialist*)
 - Dr Simon Burke, School Director of Teaching and Learning: School of Politics, Economics and International Relations (*internal member*)
 - Rebecca Jerrome, School Director of Teaching and Learning: School of Agriculture, Policy and Development (*internal member*)
 - Rebecca Uffindell, BA Art and English Literature, School of School of Arts and Communication Design (*student member*)
 - Richard Sandford, Senior Quality Support Officer: Centre for Quality Support and Development (*Secretary*)
2. The Panel met the following:
 - Professor Nicholas Branch (Head of School)
 - Dr Steve Musson (Head of Department)
 - Dr Alan Howard (School Director of Teaching and Learning)
 - Prof Maria Shahgedanova (Undergraduate Programme Director)
 - Dr Tom Sizmur (Postgraduate Programme Director)
 - Dr Hilary Geoghegan
 - Dr Hazel McGoff (School Director of Academic Tutoring)
 - Professor Frank Mayle (Examinations Officer)
 - Dr Stuart Black
 - Dr Steve Robinson (NUIST Programme Director)
 - Dr Hong Yang
 - Alex Baker (Placements Co-ordinator)
 - Tania Lyden (Careers Consultant)
3. The Panel met students who represented the following degree programmes:
 - BSc Environmental Science
 - BSc Geography (Human)

- BSc Geography (Human and Physical)
 - BSc Geography (Physical)
 - BSc Geography and Economics (Regional Science)
 - MSc in Environmental Management
 - MSc Environmental Pollution
4. The Panel met recent graduates from the BSc Geography (Human) and BSc Geography (Physical), and employers from transport, infrastructure and engineering, and technical services companies.

GENERAL OBSERVATIONS

5. The Review Panel met with a range of staff from across the Department, and senior leadership from the School. The staff were engaged with the process and made the Panel feel welcome. The review benefitted from a comprehensive and well-organised Blackboard organisation, and any additional information requested by the Panel was quickly supplied by the Department. The Panel found the resources provided invaluable in their review of the Department's activities. The Panel welcomed the opportunity to tour the extensive facilities which were available to all students. The Panel extends its thanks to the Department for its hospitality and engagement with the process.
6. The Panel was pleased to meet and question current undergraduate and postgraduate taught students. They found the students to be passionate about their subject and enthusiastic about the opportunities afforded by the Department, in particular the facilities and field trips. The Panel wishes to express its thanks to these students, and to the students who contributed to the Student Submission, for their valuable input into the Review.
7. The Panel met with recent alumni and found them to be both a credit to, and enthusiastic advocates of, the Department. The Panel wish to thank them for their valuable input. The Panel also met with employers of Geography and Environmental Sciences graduates, who provided insights into the skills they most value in graduates, and to the strength and reputation of the Department's offering. The Panel was grateful for the insights provided during their discussions with alumni and employers and thanks them for their generous engagement with the process.
8. The Panel commended the excellent teaching and learning culture that exists within the Department. The Panel found that staff across the Department, and at all stages of their academic careers, showed a dedication to, and engagement with, the University's teaching and learning agenda **[good practice a]**.
9. The Department's strong student communications, use of shared spaces, study areas (see 58 below) and field trips (see 64 below) have helped develop a strong sense of a shared academic community amongst staff and students **[good practice b]**.

Committee structures

10. Overall the Panel was satisfied that the committee structures in place were appropriate and effective for the quality management and enhancement of the programmes.
11. The Panel were impressed with the ongoing work of the Teaching Enhancement Group (TEG), which seeks to promulgate good practice across the Department. The TEG sits alongside the undergraduate and postgraduate Boards of Studies and provides a space where issues and ideas arising in those groups can be considered, discussed and developed amongst a wider group of staff. TEG meetings provide a forum where all staff involved with teaching can informally discuss

ideas and practices. The Panel found staff to be engaged with this forum and appreciative of the opportunities afforded to learn about and try new approaches to teaching **[good practice c]**.

Programme design

12. The Panel determined that programmes were of suitable breadth and scope, and that they provide excellent opportunities for knowledge acquisition and skills development. As noted by the External Examiners, the content delivered by the programmes is in line with the QAA subject benchmark statements for Geography¹ and Environmental Sciences².
13. The Panel noted that the undergraduate programmes benefit from a wide range of modules, and that clear guidance is provided to students to help them make their choices. Students expressed their appreciation for the breadth of optional modules available to them, and a number noted that this had been one of the primary factors in them opting to study at Reading. The Panel recommends that in any future developments of programme structure the Department remains mindful of the student preference for flexibility within the programme **[advisable recommendation a(i)]**.
14. The Panel noted that the wide range of optional modules raises questions about the coherence of the programmes and how to balance flexibility and student choice against coherence and distinctiveness. Additionally, the range of optional modules poses certain logistical problems affecting the delivery of the programmes (especially in terms of timetabling).
15. The Panel recommends that the Department considers grouping modules into defined streams/pathways at Parts 2 and 3. The Panel noted that this approach would provide further benefits to students in terms of module selection guidance. It would also allow the Department to provide information on the categorising of skills and knowledge development opportunities, and to plot a career path trajectory. The pathways are another mechanism through which skills developments can be mapped and matched against the achievement of learning objectives and programme goals. The pathways could be clearly communicated to students through Programme Handbooks and related course documentation. Noting the student preference for flexibility of choice outlined above, the Panel counsels the Department to consider a 'preferred routes' model to the module structure at Parts 2 and 3 **[advisable recommendation a(ii)]**.
16. The Panel noted that all undergraduate programmes offer a study abroad option in Part 3. The Department is currently considering whether to offer this option at Part 2, which students might consider "less risky". This issue deserves consideration, noting possible disadvantages (i.e. that students might miss core research training at Part 2) as well as the possible increased engagement if it were brought earlier in the programme. The Panel was pleased to note that the Department has already started to consider this issue.
17. The Panel was impressed by the range of fieldwork options available to students (local and residential), which provide opportunities to apply knowledge and skills in the field.
18. The Panel noted that further opportunities for the internationalisation of the curriculum would be presented by the programmes delivered in conjunction with the Nanjing University of Information Science and Technology (NUIST). These programmes with NUIST bring many benefits to the School and to the University more widely, but it will also create some programme issues that will need careful ongoing management. The introduction of approximately 40 students from NUIST at Part 3 may create an imbalance in some modules, particularly those where this represents an effective doubling of the total number of students. This could change the dynamic of some modules and have implications for assessments based on group reports

¹ www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/sbs-geography-14.pdf

² www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/sbs-earth-sciences-14.pdf (Subject Benchmark Statement for Earth Sciences, Environmental Sciences and Environmental Studies)

and presentations. Additionally, there may be implications for the student experience that could be compounded with the future projections of growing numbers NUIST students (i.e. up to 70 per cohort has been forecast).

19. The NUIST programmes may also have wider implications if the incoming Part 3 students have not already completed the field and laboratory work required for their dissertations in China. This could impact laboratory space requirements and availability of field equipment for all Part 3 students, as well as increase the demand on staff time. This Panel recommends that these issues should be monitored (see also 60 below).
20. The Panel felt that the postgraduate programmes were well conceived and deliver on their intended aims. They offer opportunities for skills development, covering field and laboratory skills, data analysis and interpretation, and reporting and communication. The programmes compare well with postgraduate programmes offered elsewhere.
21. The Panel wondered whether the Department could give some further consideration to the timing of the research project in the postgraduate programmes, noting that an earlier start might give students an opportunity to progress with data collection and analysis at an earlier stage. Additionally, the Panel wondered whether there might be scope to increase the range of projects available more generally – an earlier start would allow seasonal aspects to be incorporated more meaningfully in the case of field-work based projects. The Panel was pleased to note that the programme team is already considering the position of the research project within the programme structure.
22. The Panel determined that the programme aims and learning outcomes are aligned with the University's Teaching and Learning Strategy – especially in the areas of Technology Enhanced Learning (see 83 below), supporting participation across the diverse student body (through the wide variety of teaching and assessment modes used across the programmes, and support offered to students), and equipping students to become employable graduates.
23. The Panel noted that employability and student readiness for employment have been considered by staff and integrated into the programmes. The introduction and expansion of student work placements is proving successful, both for students and for local employers. Efforts should be made to keep momentum going on the development and support of student work placements (see 78 below).
24. The Panel noted that much of the work on employability had been conducted without reference to employers. As such, the Department should consult with employers and the Careers service to identify the skills and attributes that are expected in the workplace and how these can be embedded in the curriculum **[advisable recommendation a(iii)]** (see also 76 below).
25. The Panel noted that one such set of skills may be in the fields of programming and coding. The Panel felt that the Department could find ways to increase student exposure to coding and programming opportunities within the programme **[advisable recommendation a(iv)]** (see also 77 below).
26. The Panel was satisfied that the programmes are designed in such a way as to effectively support the development of the University's graduate attributes as identified in the Curriculum Framework. This is most obvious in the case for 'mastery of the discipline', 'skills in research and enquiry', and 'global engagement and multi-cultural awareness' (the joint programmes with NUIST are relevant here, as are the study abroad options and the overseas field courses to Iceland, China, and elsewhere).

Assessment and feedback

27. The Panel (and External Examiners) found that the assessment strategy at both undergraduate and postgraduate level was varied, appropriate, and in some cases highly innovative. The Panel was particularly impressed by the range of assessment modes employed by the Department **[good practice d]**.
28. The Panel noted that students expressed some concerns about how they might ensure good performance when undertaking unfamiliar assessment modes, e.g. briefing reports. The Department should take care to ensure that appropriate guidance is provided to students in the assignment briefs, by the module convenor and in module information more generally.
29. The Panel found the marking of postgraduate to be fair and that the moderation process was rigorous and transparent. There were some incidences where international students were found to be at the lower mark boundaries, and this was deemed to be due to issues around English language competency. The Department has made provision to support such students via formative assessments and signposting support services including the University's Study Advice team.
30. The Panel found that there were some inconsistencies with the provision of feedback and rigour of moderation for undergraduate work. This sentiment was echoed by External Examiners who indicated that they had not found sufficient evidence for some marks awarded and that some work lacked sufficient constructive feedback to support student progression. Students reported to the Panel that they felt that feedback could be inconsistent and did not provide guidance on how to improve marks. The Panel recommends that, as part of the Curriculum Review, the Department identifies how additional support can be provided to Module Convenors in order to ensure that there is greater consistency of feedback. Additionally, work should be undertaken to ensure alignment with the University's marking criteria for levels 4-6 and 7, and to develop a shared understanding of the "language of feedback" amongst staff and students (for instance with regard to grade descriptors) **[advisable recommendations b(i) & b(ii)]**.
31. The Panel noted that an External Examiners had reported concerns to the University about some undergraduate module cohorts receiving marks in the upper second and first class ranges in high numbers. The External Examiners felt that the marking criteria had been fairly applied, but expressed concerns that the mode of assessment (particularly group work) did not sufficiently differentiate between the ability of the students. The External Examiners couched their concerns in terms of a "danger of grade inflation". The Panel recommends that the Department address this issue through the more consistent use of rubrics/marketing criteria and support for staff in their application. Additionally, the adoption of a programme-led approach to assessment design will help mitigate the issues identified by the External Examiners. The Panel recommends that the Department uses the Curriculum Framework Review to continue to address the issues around the higher proportion of marks awarded in some modules. This will include consideration of how assessments are marked (and the appropriate and rigorous use of grade descriptors) and the role and placement of certain assessment modes in the programme **[advisable recommendation c]**.
32. The Panel noted that the Department is considering assessment design as part of their Curriculum Review. As noted above, the Panel recommends that the Department give consideration to the use of group work assignments at Part 3 and explores ways to either minimise its use or incorporate elements in such assignments that allow for individual and/or peer review. Additionally, the Panel counsels that the Department consider reviewing the marking and second marking process for the dissertation module in order to ensure that awarded marks are transparent and rigorous and that students receive appropriate levels of feedback.

33. The Panel noted that the Department has put in place a number of lead roles relating to assessment and feedback to support the work of the Programme Directors and the School Director of Teaching and Learning. The Panel felt that there is a good level of leadership with regard to assessment and feedback, with the Examinations Officer providing general oversight in this area and the recent appointment of a Deputy Assessment and Feedback Officer. The Panel noted that the Deputy Assessment and Feedback Officer will have a particular focus on the arrival of students from NUIST and the assessment and feedback challenges that may arise with that development.
34. The Panel noted that one of the obstacles to the Department's delivery of a more rigorous assessment and feedback strategy was the constraints of the University's policy on the 15 day turnaround time for feedback. The problem was keenly felt in the Department owing to the high numbers of students on certain modules. National Student Survey results show that the timely return of feedback is a key area where the Department could make improvements (especially on the Geography programmes). The Department should take steps to improve communications around the return of feedback to students, advising when there might be a delay and the reasons for any such delay **[advisable recommendation b(iii)]**.
35. The Panel noted that one of the factors in the Department's poor performance in meeting the 15 day feedback target was the increase in undergraduate student numbers since 2013. The Panel recognised the pressures of teaching large cohorts, especially with regard to the timely delivery of fulsome feedback to students on some popular modules. The Panel was unsure whether the University had given due consideration to the issues around providing timely feedback to large cohorts and asks that the University consider the negative impacts, both on staff well-being and the student experience, of the 15 day turnaround policy when dealing with unusually large cohorts **[advisable recommendation (University) i]**.
36. The Panel found that the Department makes consistent use of assessment briefs. In the management of student expectations around the 15 day turnaround of feedback they might wish to consider including the expected feedback return date on those documents. This would also help ensure greater transparency around the assessment and feedback process. The Panel noted that the Department includes 'quality of feedback' in the moderation process, and has an exemplary peer review of moderation policy, however, this needs to be monitored carefully in order to ensure that where inadequacies are found they are fully investigated and resolved. Additionally, the Department should strive to ensure that when using PhD students to mark work they are supported to deliver high quality marking and feedback.
37. The Panel noted that, as EMA Early Adopters, the Department benefitted from good engagement with online marking and feedback by all staff. The Panel also found that the Department makes good use of its coursework submission calendar and their 'Principles of Fair Assessment' guide.
38. The Panel noted that the External Examiners had verified that the standards achieved by students met the minimum expectations for awards, as measured against the relevant Subject Benchmark Statements and the Framework for Higher Education Qualifications.

QUALITY OF LEARNING OPPORTUNITIES OFFERED BY THE PROGRAMMES

Teaching and learning

39. The Panel noted that the quality of teaching and learning is maintained and enhanced in the Department through a number of mechanisms. The Panel was particularly impressed with the

Department's Peer Review activities and the fact that staff are paired with colleagues from the other Department in the School and that a review of Blackboard sites is included in the process **[good practice e]**.

40. The Panel noted that staff in the Department regularly draw upon their research in order to inform their teaching. The Panel felt that the research activity within the Department and the use of research outputs in teaching was an important contributor to the overall learning environment. Students are encouraged to engage in research and enquiry throughout the programme and the Department has mapped an 'Undergraduate Research Training Pathway' to highlight how key skills are acquired at each Part of the programme. The Panel felt that research is truly embedded within the curriculum **[good practice f]**.
41. The Panel highlighted innovative modules such as Geographies of Enthusiasm (GV3ENT), Loddon Catchment Consultancy (GV2LCC) and research projects like the Loddon Observatory and Whitley Big Local as examples of how to engage students in the current research interests of staff, develop their own research skills, and help foster a sense of civic engagement amongst the student body **[good practice g]**.
42. The Panel met students who spoke highly of the flexibility of the programmes and the educational opportunities, such as field trips, offered by the Department. However, the Panel noted that the structure of the joint programmes can prohibit student engagement with field trips and other learning opportunities. As such, the Department should monitor the possible negative impact of the structure of the joint programmes **[advisable recommendation d]**.
43. The Panel noted that the Department employs a diverse range of teaching delivery methods, including a combination of lectures, practical classes, field work, and small group tutorials/seminars. These are supported by the Department's engagement with a number of Teaching and Learning enhancement initiatives (including being EMA early adopters). Individual members of staff have also been active in advancing new pedagogical initiatives (some receiving recognition via the University Teaching and Learning Development Fund); with flipped learning being employed in practical sessions and online screencasts developed to support lecture content or in the delivery of feedback.
44. The Panel noted that a Teaching Enhancement Group is used to help share best practice and encourage colleagues to try different approaches to teaching and learning.

Student admission, retention, progression and attainment

45. The Panel confirmed that the Department employs appropriate and effective arrangements for admissions in accordance with the University Admissions Policy. Additionally, there are effective arrangement for the induction of new students into higher education during Welcome Week which give students an introduction to teaching and learning at the University. Students are encouraged to engage with the University 'Study Smart' Programme to aid transition to higher education. Students engage with a range of Welcome Week activities, including social activities, offered by the Department. Staff are present at Welcome Week activities, which helps to foster a sense of community.
46. The Panel noted the very positive feedback received from students and graduates about the visit days hosted by the Department. Students appreciated the opportunity to meet staff and students and gained a strong sense of what the Department had to offer in terms of the outstanding learning opportunities available to Reading students **[good practice h]**.
47. The Panel noted the positive impact of the University's Academic Excellence Programme on undergraduate recruitment (with c.20% of students entering via that route, having received an unconditional offer) and the positive impact those students have on the cohort. However, the Panel also noted that the Department has been encouraged to recruit as many students as

possible, some with lower entry tariffs, in order to ensure that the University's overall recruitment targets are met. The Panel felt that the Department is able to support these students effectively and that they are not at an academic disadvantage.

48. The Panel noted that a high number of applications for postgraduate programmes are received from international students who also apply for highly competitive scholarships. The Panel notes that this results in a lower acceptance rates from these students. The Department has commented that since the introduction of the requirement of a deposit from international students acceptances for places offered has dropped. The Panel noted the University requirement of first degree at 2:2 or higher and an IELTS score of 6.5 overall. Although the Department has confirmed that Academic English support is included in the module 'Skills for Independent Learning' it is unclear how international students engage with that support.
49. The Panel found that the Department has been supported by, and engaged with, the Marketing, Communications and Engagement Team in terms of recruitment materials and the open and visit days. Students commented positively about their experience and why they choose to apply to the University of Reading.
50. The Panel found that the Department's student retention and progression are generally very good and this is evidenced in the datasets for the Department. The Panel notes that concerns about possible grade inflation in relation to degree programmes has been considered by the University Board of Teaching, Learning and Student Experience (UBTLSE) as a consequence of concerns raised by External Examiners. It is recognised that the Department is taking action to resolve this issue and will report back to UBTLSE in due course (see also 31 above).
51. The Panel noted that the students who apply to the Department come from a narrow demographic band and that this has an impact on the overall student experience, including exposure to alternative or challenging viewpoints. The Panel considered the profile of both undergraduate and postgraduate students in the Department and noted the low BAME representation in the undergraduate degree programmes (10.7%) and would encourage the Department to consider exploring ways of increasing student applications and enrolments of students from under-represented groups.
52. The Panel heard that the Department will welcome the first cohort of students from NUIST in September 2019 who will join Part 3 students in Reading. The Panel noted concerns about the possible impact of large NUIST cohorts joining Part 3 of the degree programme on the student satisfaction, progress and attainment of the home Reading students. The Panel noted that recruitment to the NUIST programme is predicted to increase in future years and that this could affect the balance within the cohort. The Panel asks that the University considers what institution-wide mechanisms will be employed to monitor the impact on student satisfaction of the large NUIST cohorts in part 3 **[advisable recommendation (University) j]**.

Learning environment and student support

53. The Panel noted that support is well signposted to students. This is achieved through the Programme Handbooks and supportive staff. Students remarked that staff were readily accessible at all times. The Panel found that the staff-student rapport is very good and indicates that the staff have made efforts to be friendly and approachable and to create an inclusive learning environment for their students.
54. The Panel found that students were very happy with the content of the programmes and with the general environment of the School/Department. The Panel noted some anecdotal evidence that some international students do not feel fully integrated into the Department and activities within the wider School. The international cohort is rather small, and the Panel felt that this sense of isolation and disenfranchisement could be further compounded with the introduction of

students from NUIST Academy – with the international students finding themselves lost between two sizable cohorts (i.e. Chinese and home students) who might create their own communities and further marginalise other international students. The School should be mindful of this situation and the potential for it to worsen and should give due consideration to how they might ensure the full integration of all student groups.

55. The Panel found that the Department has the staff expertise and physical resources required to support the effective teaching and delivery of their programmes. The Panel found that the laboratory equipment available for student training and for use in dissertation projects is very good and provides a range of opportunities for skills development within the environmental science field. Additionally, the space available for laboratory activities is substantial and appropriate for the classes delivered.
56. The diverse nature of degree programmes that are offered by the Department means that a wide range of learning activities are offered and the Panel was particularly impressed with the diversity of field trip opportunities offered across all parts of the programmes **[good practice i]**.
57. The Panel commends the enthusiasm of the staff and technicians in their teaching and learning practice and interaction with students, which are key elements in the developing sense of academic community within the Department. Of particular note was the support for practical activities based in science and computer laboratories **[good practice j]**.
58. The Panel commends the creation of the dedicated independent student study area, The Rob Potter Room, which receives very positive feedback from both undergraduate and postgraduate students. The Panel felt that the study area had played a key role in helping the Department develop a strong sense of academic community **[good practice k]**.
59. The Panel highlighted the importance of maintaining and enhancing the academic community that has been created. The Department is asked to consider how best to manage the integration of increasing numbers of NUIST students joining in Part 3, and international students more generally. The Panel recommends that the role of an 'International Support Tutor' role be considered for the Department **[advisable recommendations e(i) & e(ii)]**.
60. The role of 'International Support Tutor' would also be key in monitoring the impact of increasing number of NUIST students. The Department should put in place mechanisms to monitor (and respond to) impacts of increased numbers of students entering at Part 3 **[advisable recommendation e(iii)]**.
61. In making arrangements for the arrival of students from NUIST the Department should also consider how to support these students. The Panel recommends that the Department liaises with the Department of Chemistry to identify and share best practice around laboratory Health and Safety protocols and how these can be effectively communicated to NUIST students **[advisable recommendation e(iv)]**.
62. The learning of NUIST students might also be supported through the sharing of online materials and learning capture. The Department is advised to investigate how learning capture might be utilised in the support of these (and other) students **[advisable recommendation e(v)]**.
63. The Panel recognises that the NUIST Student Ambassadors from Reading will have a key role to play in supporting the incoming students and helping with their integration into the wider academic community. The Panel recommends that the University help support these Ambassadors through the creation of a University-wide NUIST Student Ambassador Network where they can share their experiences and identify proven methods for supporting the NUIST students **[advisable recommendation (University) k]**.
64. The Panel commends the fact that the Department has embedded study skills early in the curriculum for Part 1 students. The use of a UK field trip early in the Autumn Term helps the

students to integrate and become part of the community. These activities help support the early development of both the practical and analytical skills required by students to support their studies.

65. The Panel noted that the Department's administrative support has changed since the last periodic review as a result of the Professional and Administrative Services (PAS) review but the Panel notes that the Department feels it is well supported by the centrally run administration via their Support Centre.
66. The Panel noted that since the last Periodic Review the use of the IAMS system for booking staff-student appointments has become standard practice across the Department. The Panel felt that this reduced an administrative burden and facilitated timely and regular meetings between staff and students **[good practice l]**.
67. The Panel heard that the Department has obtained funding to refurbish and develop teaching and research facilities. However, the Panel recognises the concerns of staff in relation to undergraduate teaching spaces and the challenges faced in accommodating larger student cohorts.

Employability

68. The Panel found that the Department offers a wide range of employability opportunities to their Students. The Panel heard that students, alumni and employers valued these opportunities.
69. However, the Panel found evidence that current students are unsure of their career paths, showing little interest in work experience or engagement with the Careers Service. In part, this lack of direction is reflected in employment outcomes. For example, the proportion of graduates classed as unemployed decreased year-on-year between 2012-13 and 2015-16, but increased in 2016-17 (almost back to the starting point in 2012-13 at over 8%). However, students are starting to engage with the THRIVE career mentoring scheme in greater numbers (27 students in 2018-19) **[good practice m]**.
70. The Panel heard that the Curriculum Review has made suggestions to address this issue, including more Week 6 activities and more 'meet the professionals' visits. The Panel noted that much careers-related activity is currently placed near the end of the undergraduate programme and that colleagues in the Careers Centre would like to see it foregrounded much earlier in the students journey (especially at Part 1). The Panel felt that it would be helpful for students to be exposed to careers events throughout their time at Reading and that the Department could work with the Careers Service to better highlight and promote events to students **[desirable recommendation f(i)]**.
71. The Panel found that employability skills were firmly embedded in a number of modules, most notably the GV2LCC: Loddon Catchment Consultancy (undergraduate) and GVMENVC: Environmental Consultancy (postgraduate) modules. However, there was some concern that cumulative acquisition of employability skills and knowledge was not adequately supported throughout the programme (see 79 below).
72. In addition to the consultancy modules, the Panel found that students have a number of opportunities to engage in workplace learning. All undergraduate programmes offer a "...with Professional Experience" variant (either as direct-entry or internal transfer) and eight students took up a year-long placement in the 2018/19 academic session. Other opportunities for exposure to workplace learning include placement modules, UROP placements, the 'Development of Transferable Skills through a School Placement' (run by the Institute of Education), and the Research and Enterprise Micro-Placements (for postgraduate students).

73. The Panel noted that staff contact students during the first couple of weeks of their placement and meet with the students and their line manager (separately and together). The Panel noted that placement activities are celebrated by the Department, with a 'Prosecco and Strawberry' session held for students about to embark on a placement, and students being invited to return to the Department (alongside their employer) mid-way through their placement in order to share their experiences with their peers **[good practice n]**.
74. The Panel was pleased to note that the programmes prepare students for the global workplace by a variety of means, including the provision of overseas field courses and opportunities for placements in 'global' firms/organisations.
75. The Panel noted that the curricula receive regular external scrutiny, especially with regards to employability. The Department has sought some feedback from employers and alumni about the design of the programmes and how they prepare students for the workplace. The BSc Environmental Science programmes are accredited by the Institute of Environmental Sciences, with plans being made to seek accreditation for the postgraduate environmental science programmes from the same body. All of the BSc Geography programmes are eligible for accreditation by the Royal Geographical Society, but the Department has yet to secure this recognition. These accreditations should help make the graduates from these programmes more attractive to employers.
76. The Panel heard that the Department are seeking ways to improve employer and alumni engagement and that there is a proposal for an employer & alumni advisory group currently under consideration. A formal advisory group may lead to a more systematic engagement with alumni and potential employers. In this connection, the Panel noted that employers currently involved with the Department's programmes tend to be involved because of individual relationships with current staff members, as opposed to any more systematic programme of external engagement. The Panel felt that the Department could work with the Careers Service to make better use of the links with alumni in industry in identifying and securing placement and career opportunities for current students **[desirable recommendation f(ii)]**.
77. The Panel spoke with students, alumni and employers about exposure to coding and programming activities in the programmes, and which software is being used (i.e. whether they are using open source or proprietary products). The Panel had the impression that opportunities to engage with coding and programming were limited, but input from an employer advisory group would give a better indication as to whether the levels of exposure were appropriate.
78. The Panel noted that the Department has an academic member of staff with oversight of Careers and Placements activities and also benefits from dedicated support from a Placements Officer employed by the Careers Service. The Panel heard that the contract for the Placements Officer is due to end in summer 2019 and that subsequent support is uncertain. The Panel felt that the implications of this will need careful consideration and mitigation as appropriate (with retention of this officer being one option). The Panel noted that placements are a burgeoning activity within the Department and that the University should consider how to best support and encourage its growth **[advisable recommendation (University) I]**.
79. The Panel noted that undergraduate students are introduced to the Careers Service in Part 1 via the module 'Techniques in Geography and Environmental Science'. The Department has access to a Careers Consultant who is used for delivery of careers-related teaching sessions. The Panel felt that this resource could be better utilised in helping develop an overarching careers and employability strategy within the Department (especially as it relates to programme and curriculum design). The Panel noted that the Department has developed a Research Training Pathway (see 40 above) highlighting how students build those skills throughout their programme, it was felt that a similar exercise to delineate an Employability Training Pathway would support

both staff and students in delivering and accessing a robust set of employability skills **[desirable recommendation f(iii)]**.

80. The Panel noted the Department's success in engaging with the local community, alumni and employers and would further encourage these opportunities to be explored with a view to developing additional collaborative activities **[desirable recommendation h]**.

ENHANCEMENT OF QUALITY AND ACADEMIC PROVISION

81. The Panel was happy with the quality of teaching provision and academic expertise. The Panel saw evidence of the Department's ongoing engagement with University projects related to T&L. The Panel found that the Department is excellent at working with students as partners, to review curricula, including actively closing the feedback loop for issues raised via the mechanisms for student feedback, such as module evaluation and student staff committees and fora.
82. The Panel found that the Department has sound T&L leadership and supporting committee structures. A number of roles have been created in the Department to support assessment and feedback improvement, and this is also regularly explored via the Teaching Enhancement Group, where good practice is shared. Additionally, the Panel found that the Department had a reasoned and wholly appropriate Assessment and Feedback Action Plan.
83. The Panel found that the Department had actively engaged with a number of University led projects around the enhancement of student experience, including as an Early Adopter of the EMA and more recently, the screen capture technology pilot.
84. The Panel was pleased to note the Department's ongoing engagement with its student body, through the undergraduate and postgraduate Student-Staff Liaison Committees. The Panel noted that matters arising from the SSLCs are tracked using a traffic light system, and that separate meetings are held which focus on issues relating to smaller programmes. Additionally, the Department uses their student newsletter, *The Russeller*, to help close the feedback loop, by informing the wider student body what actions had been taken in response to their feedback and queries **[good practice o]**.
85. The Panel commended the Department on their efforts for engaging students in their submission for the Teaching Excellence Framework pilot project.
86. The Panel noted that the External Examiners reports highly commended the Department in terms of its T&L practices. Where External Examiners offered advice the Panel found that the Department gave due consideration to feedback and suggestions and acted accordingly.
87. The Panel noted that the Department had started a review of its undergraduate curricula, and had developed a sensible implementation plan for embedding early outcomes **[good practice p]**.
88. The Panel noted that approximately 70% of staff in the Department hold a recognised teaching qualification, with a further six members of staff due to achieve recognition via the taught and CPD routes. The Panel felt that the Department could do more to encourage staff to complete the Flair CPD route and suggests providing staff with a set timeframe in which they should aim to complete it **[desirable recommendation g]**.
89. The Panel heard that the Department regularly celebrates the achievements of its staff and students, through articles in *The Russeller*, Teaching and Learning meetings (e.g. the Teaching Enhancement Group, SSLCs, BoSs) and other informal events **[good practice q]**.

MAIN CHARACTERISTICS OF THE PROGRAMMES UNDER REVIEW

90. The Panel found the Department to be student-centred with good staff-student relationships. The Department offers a suite of programmes that provide a good breadth of scope and content across the subject areas.
91. The Department's extensive facilities and equipment provide excellent support for students' learning. Students benefit from a broad range of field trip opportunities and the programmes are richly informed by current and cutting-edge research. Students are afforded opportunities to engage with research activities and hands-on practical applications, which equip them very well for their studies and the world of work.
92. The Panel saw a Department with a dedicated faculty who endeavour to provide the best outcomes for their students. The Department faces a number of challenges (large cohorts, poor employment outcomes, integration of incoming NUIST cohorts etc.) but is rising to meet them.

CONCLUSIONS ON INNOVATION AND GOOD PRACTICE

93. The Panel identified the following as representing particularly good practice:
 - a. Staff engagement, at all levels, with the T&L agenda. [§8]
 - b. Sense of academic community amongst staff and students. [§9]
 - c. The work of the Teaching and Learning Enhancement Group in identifying, highlighting and sharing best practice. [§11]
 - d. The range of assessments employed by the Department. [§27]
 - e. The use of inter-Departmental mentors and the review of Blackboard sites as part of the Peer Mentoring process. [§39]
 - f. The extent to which research is truly embedded in the curriculum. [§40]
 - g. Innovative modules which foster a sense of civic engagement (e.g. Loddon Whitley and Geographies of Enthusiasm). [§41]
 - h. The effectiveness of visit days as a recruitment tool; the opportunity afforded to prospective students to have detailed and meaningful interactions with staff. [§46]
 - i. The wide range of field trip opportunities available to students across all three parts of the programmes. [§56]
 - j. Role of technicians and (wider) support for practical sessions (both lab and computer based). [§57]
 - k. The use of the Rob Potter room as a dedicated student study area and communal space. [§58]
 - l. The staff online booking system for arranging meetings between staff and students (a component of the Interactive Assessment Management System (IAMS)). [§66]
 - m. Engagement with THRIVE mentor scheme. [§69]
 - n. The use of mid-placement returner sessions, where students and employers are invited back to the Department to discuss their experience with other students. [§73]

- o. The use of 'traffic lights' in SSLC minutes and the student newsletter, *The Russeller*, to support activities to close the feedback loop. [§84]
- p. Engagement with the Curriculum Framework Review. [§87]
- q. Celebrating staff and student successes. [§89]

CONCLUSIONS ON QUALITY AND STANDARDS

94. The Panel has concluded that the quality and standards of the programmes reviewed are appropriate.

CONCLUSIONS ON NEW DEGREE PROGRAMME

95. The Panel received no submissions with regards to new programme proposals.

RECOMMENDATIONS

96. The Panel recommends to the University Programmes Board that the following degree programmes taught by the Department of Geography and Environmental Science are re-approved to run for a further six years:
- BSc Geography (Human)
 - BSc Geography (Human) with Professional Experience
 - BSc Geography (Physical)
 - BSc Geography (Physical) with Professional Experience
 - BSc Geography (Human and Physical)
 - BSc Geography (Human and Physical) with Professional Experience
 - BSc Geography and Economics
 - BSc Geography and Economics with Professional Experience
 - BSc Environmental Science
 - BSc Environmental Science with Professional Experience
 - MEnvSci Environmental Science
 - MEnvSci Environmental Science with Professional Experience
 - MSc Environmental Management
 - MSc Environmental Pollution
97. The report will categorise any issues as follows, in order of priority:
- Those areas where the Review Team believes it is **necessary** for action to be taken urgently to safeguard the standard of provision;
 - Those areas where it is **advisable** that the issues be addressed as soon as possible.
 - Those areas where it is **desirable** that the issue be addressed over a longer time span.
98. The Panel has made the following recommendations which must be addressed as a condition of re-approval:

The Panel makes the following recommendations to the Department:

Necessary

There were no necessary recommendations.

Advisable

- a. In developing the programme structure and design, as part of the Curriculum Framework Review, the Department should:
 - i. Remain mindful of the student preference for flexibility within the programme; [§13]
 - ii. Consider a 'preferred routes' model, especially in Parts 2 & 3; [§15]
 - iii. Engage with employers and Careers regarding the skills a graduate should have and how these could be inculcated through the curriculum; [§24] and
 - iv. Find ways to increase student exposure to 'coding/programming' opportunities. [§25]
- b. Work to improve on the existing good practice in the area of assessment and feedback, including:
 - i. Ensuring greater consistency of feedback given on work; [§30]
 - ii. Developing a shared understanding amongst staff and students about the 'language of feedback' (e.g. grade descriptors); [§30] and
 - iii. Improving communications around 15 day turnaround times. [§34]
- c. Use the Curriculum Framework Review to continue to address the issues around the high proportion of high marks awarded, considering: [§31]
 - i. The marking of assessments (including appropriate and rigorous use of grade descriptors);
 - ii. The role and use of certain assessment modes; and
 - iii. Where those assessments are placed within the programme.
- d. Monitor the impacts of the structure of the joint programmes and how they impact student engagement with field trips and other learning opportunities. [§42]
- e. In making preparations for the arrival of students from the Nanjing University of Information Science and Technology (NUIST):
 - i. Consider formalising, or employing, the role of 'International Tutor' (which will also improve the experience of international students more widely); [§59]
 - ii. Give further consideration to the integration of NUIST students (and international students more generally); [§59]
 - iii. Consider and monitor the impact of increasing numbers of NUIST students; [§60]
 - iv. Discuss laboratory Health and Safety protocols with colleagues in Chemistry; [§61] and
 - v. Investigate how learning capture can be employed to support NUIST students. [§62]

Desirable

- f. Work with the Careers Service to:
 - i. Find ways to highlight and promote events to students throughout their time at Reading; [§70]
 - ii. Explore how to better engage alumni in sourcing careers/placements opportunities; [§76] and
 - iii. Design and articulate an Employability Training Pathway (akin to the Research Training Pathway). [§79]

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- g. Where staff have started the Flair CPD route encourage them to complete it within a set timeframe. [§88]
- h. Further explore opportunities with the local community, employers and alumni for collaborative activities. [§80]

The Panel makes the following recommendations to the University:

Advisable

- i. Consider the negative impact on student experience of staff being unable to meet the 15 day turnaround for feedback. [§35]
- j. Consider what institution-wide mechanisms will be employed to monitor the impact on student satisfaction of the large NUIST cohorts joining in Part 3. [§52]
- k. Create a University-wide NUIST Student Ambassador network. [§63]
- l. Consider how best to support Placements provision in a Department where this activity is becoming increasingly popular. [§78]