

University of Glasgow

Academic Standards Committee - Tuesday 16 April 2013

**Periodic Subject Review: Report of the Review of Veterinary
Medicine (Undergraduate provision) held on 4 and 5 December 2012**

Mrs Ruth Cole, Clerk to the Review Panel

Review Panel:

Professor Frank Coton	Vice Principal (Learning and Teaching), Convener
Professor Susan Rhind	University of Edinburgh, External Subject Specialist
Professor Peter van Beukelen	University of Utrecht, External Subject Specialist
Ms Lucy Johnstone	Student member, Students' Representative Council
Professor Vince Bissell	Dental School, member of cognate School
Professor Adrienne Scullion	Senate Assessor on Court
Dr Mary McCulloch	Learning and Teaching Centre
Mrs Ruth Cole	Senate Office (Clerk)

1. Introduction

1.1 Background Information

- 1.1.1 The School of Veterinary Medicine is one of three schools in the College of Medical, Veterinary and Life Sciences. At the time of the review, the School was celebrating the 150th anniversary of the teaching of Veterinary Medicine at the University of Glasgow.
- 1.1.2 The School is located principally at the Garscube campus, situated four miles to the west of the main University campus. In addition to teaching, research and office space, the campus also accommodates the Small Animal Hospital, the Weipers Centre for Equine Welfare and the Scottish Centre for Production Animal Health & Welfare. The Review Panel enjoyed a tour of some of the facilities at the campus and a sub-group of the Panel also visited the Small Animal Hospital.
- 1.1.3 The Periodic Subject Review was required only to consider the undergraduate teaching within the School. The School also delivers one postgraduate taught programme, which was recently reviewed together with other PGT provision in the College.
- 1.1.4 The Bachelor of Veterinary Medicine and Surgery (BVMS), is accredited by the American Veterinary Medical Association, the European Association of Establishments for Veterinary Education and the Royal College of Veterinary Surgeons. At the time of the review visit the School was preparing for an accreditation visit from all three bodies, due to take place in spring 2013.
- 1.1.5 The School was also engaged in a major curriculum review for the BVMS. This was a prominent theme both in the documentation provided for the review and in the discussions that took place with staff and students during the visit.

- 1.1.6 The Self Evaluation Report was an informative document providing an overview of the activities of the School. The Review Panel's view, however, was that it contained only limited critical reflection. It described features of the current BVMS curriculum and also anticipated the introduction of the new curriculum in the coming years.
- 1.1.7 The process of consultation with staff and students in the preparation of the SER had been limited. The Head of School explained that the SER had been drawn from the documentation being prepared for the accreditation visit in 2013, and that recent consultation efforts within the School had been focused on the process of curriculum review.
- 1.1.8 During the one and a half day visit the Review Panel met with: the Head of College (Professor Anna Dominiczak); the Head of School (Professor Ewan Cameron), the Associate Head of School (Learning & Teaching) (Professor Jim Anderson) and the Head of School Administration (Ms Sarah Chiodetto). The Panel also met with 18 other staff including representatives drawn from Graduate Teaching Assistants and probationary staff groups, and a total of 15 undergraduate students (representing both the BVMS and the BSc Veterinary Biosciences). Unfortunately the Review visit coincided with exam week (with one BVMS year group unavailable to meet with the Panel at all). The Panel greatly appreciated the time given up by the students to attend the meetings.

The School has 75 members of academic staff, with a further 18 members of Institute academic staff.

Student numbers for session 2012-13 are as follows:

Students	Headcount
BVMS Level 1	145
BVMS Level 2	135
BVMS Level 3	132
BVMS Level 4	118
BVMS Level 5	115
BSc Level 1	26
BSc Level 2	27
BSc Level 3	20
BSc Level 4	21
MSci Level 5	5
Undergraduate Total	739
Postgraduate Taught*	15
Postgraduate Research*	22

*(for information only – postgraduate taught programmes and research were not covered by the Review)

The Review Panel considered the following range of provision offered by the School:

Bachelor of Veterinary Medicine and Surgery (BVMS)

BSc/BSc Hons/MSci Veterinary Biosciences

Intercalated degree: BSc (VetSci) Hons

2. Overall aims of the School's provision and how it supports the University Strategic Plan

The Review Panel noted that the School's provision supports the University's Strategic Plan (though this was not explicit in the SER). There was also evidence in Learning and Teaching Committee minutes of clear communication of College priorities.

3. An Evaluation of the Student Learning Experience

3.1 Aims

3.1.1 The Review Panel was satisfied that the aims of provision were appropriate. The Bachelor of Veterinary Medicine and Surgery (BVMS) is professionally focused and the Veterinary Bioscience programme is aimed at providing preparation for a career in veterinary research. The BVMS enjoys accreditation in the UK, Europe and North America. The Veterinary Bioscience programme complies with subject benchmarks.

3.1.2 The Review Panel, guided by the views of the External Subject Specialists, confirms that the programmes offered by the School remain current and valid in light of developing knowledge in the discipline, and practice in its application.

3.1.3 The forthcoming accreditation (spring 2013) would be a very significant exercise given that the School had to meet the requirements of all three accrediting bodies. The Royal College of Veterinary Surgeons required detailed information on the proposed new curriculum as well as on the programme currently being delivered. The Head of School noted that much of the documentation for this was in the course of being prepared. The Review Panel hoped that its visit, reflections and recommendations would feed in helpfully to these accreditations.

3.2 Intended Learning Outcomes (ILOs)

3.2.1 Generally ILOs were clear. However, the current Veterinary Biosciences Knowledge ILOs were insufficiently rigorous, particularly at Level 4, and the Review Panel **recommends** that they would benefit from review in consultation with the Learning and Teaching Centre. The revision of the BVMS curriculum provided an opportunity to ensure ILOs represented an overview of learning rather than a checklist of separate items.

MSci Veterinary Biosciences

3.2.2 The Review Panel noted that BSc (Hons) Veterinary Biosciences students who completed a work placement year graduated with an MSci. The content of the four years of academic study at the University was the same for both BSc (Hons) and MSci students. The award of a Masters level degree could, therefore, only be justified if the placement year satisfied the requirements of SCQF Level 11 study, and the Panel concluded from the information provided that this was not currently the case. Staff explained that the structure of the MSci mirrored that of programmes in operation in the School of Life Sciences.

3.2.3 The Panel noted that at the recent PSR in Life Sciences this same issue had been identified as a problem and the School had been required to revise the content of the final taught year of the MSci to ensure that the requirements of the QAA and of the University Calendar in relation to the award of Masters degrees were satisfied. The Review Panel **recommends** that the School urgently address this issue in relation to the MSci Veterinary Biosciences.

BVMS

3.2.4 The question of the level of final award was also under discussion in relation to the professional degree. There were some who favoured the award being made at Masters level, possibly by the addition of a research project. The Review Panel was aware of similar discussions throughout the sector in relation to a number of different professional degrees. (One context in which the issue had arisen was in relation to the level of award that was appropriate where overseas students were being granted a visa to study for five years.) Currently there had been no indication from the RCVS that it favoured a move towards a Masters level award, and the School was proceeding with the Bachelors degree while watching continuing developments.

3.3 *Assessment, Feedback and Achievement*

3.3.1 The SER described a wide range of formative and summative assessments in use on the two undergraduate programmes, some of which made innovative use of Moodle. The SER referred to transparency in assessment and the fact that 'criteria used in assessments are clearly described and made available for scrutiny by external examiners' (3.3, p.12). Students meeting with the Review Panel stated that they were not always clear on what the criteria were, though they also acknowledged that they were not necessarily familiar with the information provided in the course information document. They confirmed that they understood the formats of the different assessments that were to be used, as this was explained at the beginning of a course and immediately before exams, and they knew that the information was also set out in course handbooks and on Moodle. The students appeared to be less comfortable with the concept of learning outcomes than with an understanding of the materials on which they were likely to be assessed.

3.3.2 The Panel **recommends** that the School considers how best to engage students in an understanding of assessment criteria applying to the demonstration of ILOs, whether through clearer dissemination of information or through the structuring of the instruments of assessment themselves.

3.3.3 One group of students highlighted Peerwise and Aropa as particularly helpful formative assessment tools involving peer assessment. The students referred to the exercise of being given a marking scheme and then having to mark three sample answers. They had found this very useful as a means of understanding what constituted a good answer. The School was also taking part in the trial of Moodle 2 on the BSc Veterinary Biosciences programme which, it was hoped, would offer further enhancements in assessing and providing feedback on assessment. The Panel **commends** the School on its broad range of forms of assessment, particularly interactive formative assessment which made innovative use of technology.

Feedback on assessment

3.3.4 NSS scores for feedback on assessment were poor. This was acknowledged in the SER and it was observed that the School's efforts (which had been on-going for some years) to understand and address the issue had yet to result in an improvement in the scores. Staff who met with the Review Panel were clearly aware of the risk that poor NSS scores in this area could deter applicants.

3.3.5 Students told the Review Panel that their experience of feedback on assessment was variable, depending on the individual lecturer's approach. They also commented on the fact that feedback appeared to be focused on students who had failed assessments. Those who had passed were keen to receive feedback that would help them learn how they could have achieved even better marks and to identify areas of weakness in their performance. They said that, while students who had failed were specifically invited to approach staff for feedback or to attend remedial sessions, those who had passed felt that they were left to make individual approaches to staff if they wished to. That said,

the students noted that if they did approach staff they found them very willing to help. Students who had failed assessments spoke about the strong support that was offered over the summer in preparation for the repeat diet.

- 3.3.6 In discussions with staff the Review Panel heard that all courses ran focus groups and this was an opportunity for exploring with students the issues surrounding feedback. Staff noted the frustration of finding that students continued not to recognise feedback in all the variety of forms that it was provided. Staff were aware that students valued individual tailored feedback but it was not always possible to provide this and staff believed that more generic feedback could often be very valuable. There was usually a tight turnaround schedule for marking and this did not lend itself to the inclusion of detailed comments on scripts. Following class exams lecturers would generally review the paper in class and this was felt to be the most practicable way of providing feedback. Students told the Panel that they knew they could make arrangements to see their marked exam scripts but noted that by the time the scripts were available they could not recall much about the exam and they found the exercise of limited value. Students had the opportunity to meet with course leaders on an individual basis, but not many took this up.
- 3.3.7 The Panel **recommends** that the School considers how best to ensure that feedback on assessment is available for all students – those who perform well in assessments as well as for those who do less well – and considers how to ensure that students recognize and make best use of that feedback, thus supporting them in their wish to further strengthen their performance and respond effectively to areas of weakness, and also promoting an across-the-board culture of continuing development, which is essential in the context of professional training.

Assessment of OSCEs

- 3.3.8 Students who met with the Review Panel discussed their experience of Objective Structured Clinical Examinations (OSCEs) on the BVMS. They were prepared for these by participation in practical sessions within courses (though some students felt that they were more or less well prepared depending on when during the session their allocated practical sessions were timetabled) and materials were available on Moodle demonstrating practical skills. Again, there was a view that unless a particular concern arose from an OSCE, students were unlikely to receive feedback on their performance. Even on receiving a grade for their performance in OSCEs, students were not aware of which, if any, stations they had failed. The School's position was that for most OSCEs, whether formative or summative, students received feedback and grades, but staff acknowledged that providing students with more information on their performance would be desirable from the point of view of professional development.

Assessment on clinical rotations

- 3.3.9 In the final year on the BVMS students completed a number of different clinical rotations, each of which was currently assessed formatively. Students meeting with the Review Panel said that the amount of feedback they received on their performance was very variable. The best experience was where a clinician gave pointers throughout the rotation, perhaps suggesting further reading that a student should do in relation to issues arising on that placement. The students on the whole believed that if a clinician had a serious concern about their performance they would indicate this to the student during the rotation. Once the rotation was complete, in most cases they received something in writing which tended to include minimal personal evaluation and the view was that many students appeared to receive very similar comments.
- 3.3.10 The students stated their preference for being able to discuss their performance in person, even if this were a brief meeting. This would give them the chance to ensure

that they had understood the feedback. One comment was from a student who had been told that their performance had been good but they were aware of mistakes that they had made, and came away from the rotation lacking in confidence in their own performance, and in the assessment of it. Interestingly, at the meeting with key staff, it was noted that students tended to be harsh in criticism of their own performance.

- 3.3.11 In Panel discussion with probationary staff, the informal nature of the requirements of clinical rotations were noted, though attempts were now being made to adopt a more structured approach. Key staff described how all the feedback from clinical rotations contributed to the 'spiral' of experience in the final year of the BVMS. Students were undertaking rotations in a different order, therefore, it was difficult to assess their performance in an equivalent way. However, it was acknowledged that currently no information was passed from one clinical rotation to the next: if there had been problems on a previous rotation, this would not necessarily be known to staff on the new rotation. Where there were any particular concerns staff expected that the student would be asked to meet with the course leader and this might lead to staff on a later rotation being alerted in order to focus on particular areas needing development. The Panel recognised the challenges of providing formal feedback from rotations but wished to encourage as much informal feedback during the course of rotations as possible as well as passing on relevant information to subsequent rotations.
- 3.3.12 While the nature of assessment of performance would be changing in the new curriculum, the Panel **recommends** that the School considers how best to feedback to students on their progress throughout the full programme of clinical rotations.

Assessment in the new BVMS curriculum

- 3.3.13 The SER referred to a new assessment strategy, nearing completion, for use on the revised BVMS. The Head of School noted that this had been developing over the past couple of years, with careful consideration being given to which assessment methods could most usefully be employed in assessing each of the range of ILOs. The School acknowledged that the most challenging was the assessment of the demonstration of professional attributes and it was anticipated that the portfolio would take on a crucial role in this. (Assessment of the professional portfolio would become summative in year 4.) In the meeting with key staff the Review Panel heard about the new emphasis on integrated assessments which would arise from the new curriculum with students being required to work through cases from a number of different angles, in the process addressing a number of different ILOs. Staff acknowledged that they had limited experience of devising and administering such assessments but were taking advice from other institutions that were already using a similar approach.
- 3.3.14 Staff were aware that assessment of performance in the new curriculum would be more resource intensive, and trials of Direct Observation of Procedural Skills (DOPS) were currently underway with final year students with a view to identifying the management and administrative issues that could arise. Probationary staff raised concerns about the demands of performance assessment in the new curriculum, noting that if staff were very busy with clinical demands there might not be the time to carry out the scheduled assessments. Equally there could be difficulties if situations amenable to assessment did not arise within the time available. The Head of School noted that the new final year was going to offer more elective options and this could help relieve some of the pressure on staff in carrying out assessment, for instance at the Small Animal Hospital.

3.4 Curriculum Design, Development and Content

- 3.4.1 Curriculum development had been in recent years, and was continuing to be, one of the most prominent features of the life of the School. The Veterinary Biosciences programme was newly established and the BVMS had for some time been undergoing

revision (e.g. the introduction of the Veterinary Professional and Clinical Skills course into BVMS 1 – 3). The School was now in the process of a major restructuring of the full BVMS curriculum, which had been initiated in 2009. The Associate Head of School (Learning & Teaching) described to the Review Panel the comprehensive benchmarking exercise that had been undertaken by an external consultant in 2010. This had provided the impetus for the major review. For such a significant programme of change the School had recognised that it was vital to have a clear evidenced case for proceeding, not least in order to bring staff and students ‘on board’.

- 3.4.2 The new curriculum broadly described the programme in three phases (years 1-2 Foundation, years 3-4 Clinical, and year 5 Professional). The SER noted some of the drivers for the change and outlined the new structure, but the Review Panel would have welcomed more information on the timetable for implementation and more detail of the delivery of the new phases. During the course of the review visit it became evident that there was an increasing intensity of activity, geared towards introduction of the new BVMS5 in June 2013 and BVMS1 in autumn 2013 and staff told the Panel that very significant progress had been made in just the last couple of months, with individuals now being allocated the responsibility for particular units of teaching. The Head of School explained to the Panel that the timetable for years 1 and 2 was well developed and that the first three months of 2013 would see much of the remaining detail being put in place. The structure for all five years had been through, or was in the process of going through, the Senate programme approval process.
- 3.4.3 The new curriculum saw a strong emphasis on integration of the different disciplines, and introduced the clinical perspective at an earlier stage. Other institutions were making similar shifts but the Head of School’s view was that the School was in a strong position. In the Foundation Phase each section of the curriculum would focus on a specific system and clinical scenario, and this would be further developed at the Clinical Phase. This was characterised as a spiral of learning through the different phases. Each new unit would last for a four-week period, with teaching delivered in weeks one to three, leaving week four clear for consolidation. The expectation was that there should be a maximum of 12 hours (though ideally ten) of lectures per week. The aim was to move away from such heavy reliance on lectures and to incorporate more problems to which the students (either in small groups or on their own) would be expected, with appropriate support, to seek answers themselves. This would promote deeper learning and independence. The Review Panel **commends** this approach.
- 3.4.4 Evidence-based practice was an increasingly prominent theme in the profession, and the new curriculum would reflect this. There would be more of an emphasis on students differentiating between what was custom and practice, and what was evidence-based practice. While there was strong emphasis on research in the Veterinary Bioscience programme, BVMS students said that they did not have much awareness of on-going research within the School. The BVMS students noted that it was possible to undertake an eight-week summer research project.
- 3.4.5 The Head of School noted that BVMS students showed a relative lack of interest in research, perhaps unsurprisingly given the heavy study load. In the past any lectures that were not directly relevant to the programme were not well attended. The plan in the new curriculum was to introduce ‘boundaries of knowledge’ lectures at the end of each block, particularly emphasising the cutting-edge research going on at the University in the related Research Institutes. Teaching staff would also be encouraged to discuss with the students areas of research which were of interest to them, highlighting the most up to date publications.

Knowledge of the changes

- 3.4.6 The students who met with the Review Panel were aware of the curriculum review and had a broad understanding of the nature of the planned changes to the BVMS, though

interestingly they had their own concerns about how this would be achieved (e.g. they expressed scepticism about the possibility of reducing the number of lectures and still covering the necessary material). More generally they reported that through various mechanisms (e.g. SSLC, student representation on the School Learning & Teaching Committee) they were kept in touch with matters relating to the curriculum. If they had suggestions of their own they felt they could generally raise these directly with the relevant staff. The probationary staff who met with the Panel had attended staff briefing meetings to discuss the curriculum change, and they said that opportunities had been offered for them to take responsibility for sections of the new curriculum if they were able to accommodate this within their workload.

- 3.4.7 Staff and students commented favourably on the anticipated changes: the current approach appeared at times simply to present a series of 'disjointed' hurdles to be overcome or large volumes of knowledge to be absorbed without an understanding of the clinical relevance (particularly highlighted in relation to BVMS3). The students spoke about how being given the opportunity at an early stage to learn even the most basic practical skills such as suturing gave them a feeling of 'being on the way' towards their ultimate goal of veterinary practice.
- 3.4.8 At the meeting with key staff a clear vision was expressed of more integrated teaching leading to students being better prepared for the clinical experience. The Review Panel questioned whether this approach meant that more of the basic sciences would have to be taught at a later stage in the programme and whether the heavy volume of paraclinical sciences in year 3 could still be accommodated. Staff expected that the latter would be redistributed across the Foundation and Clinical Phases. There was a discussion about the need to remove some of the material currently delivered in order to accommodate the new focus on professional development and a strengthening of public health. The process of curriculum review had also identified areas where there was currently duplication of material delivered at different stages of the programme.
- 3.4.9 Clinical staff were very positive about the prospect of contributing to the development of the curriculum and to providing the clinical perspective to students at an earlier point in their studies. However, they were concerned about the additional workload that this might represent for staff. The students expressed enthusiasm for the structure of the new curriculum as they understood it, relishing the prospect of embedding their learning in a clinical perspective, and were keen for this to be implemented as soon as possible. During the meeting with key staff it transpired that there had been discussions about the possibility of introducing the new BVMS3 curriculum also in 2013, though it was clear that these were very recent and tentative discussions. It was acknowledged that the new BVMS3 was predicated on students having taken the new BVMS1 and 2, and that to introduce BVMS3 to current students would mean significant adjustments in the teaching, particularly in order to bring students up to the required knowledge in the paraclinical sciences.

Day 1 competencies

- 3.4.10 One of the key requirements of the new BVMS curriculum was the delivery of day 1 competencies. These were set by the accrediting bodies and while these were fairly generic – which permitted a degree of flexibility – they had dictated one of the major shifts in the structure of the programme. During their fifth year students would be treated as if they were junior members of staff, and they would be assessed in relation to the relevant professional behaviours and responsibilities. It had to be clear that day 1 competencies were delivered within the programme rather than through extra mural studies (see para 3.7.5 below).
- 3.4.11 Staff explained to the Review Panel that the current final year exit OSCE was already blue-printed against the day 1 competencies and while the students appeared to lack confidence in whether without EMS they would have been able to satisfy the

competencies, staff believed that the programme did cover the necessary ground. Summative assessment of the professional portfolio would encourage the development of independent learners with the ability to reflect on their own development. Staff explained that the detail of assessment of the portfolio was still being developed. The final year would be scaffolded through the preceding years of the programme, with professional development taught in its own right as well as being a theme within courses. The School had noted that professional development for graduates was an increasingly prominent theme of the accrediting bodies, and the work that students would be doing as part of the BVMS would be good preparation for the anticipated requirements in relation to lifelong learning in the profession.

- 3.4.12 The Review Panel shared the School's enthusiasm for the vision behind the proposed changes to the curriculum. It was clear that there was a good case for the changes. Staff and students who met with the Panel appeared to be well informed about the process of curriculum review, though the Panel could not be sure that this understanding was common throughout the School and the Head of School acknowledged that some members of staff had been less ready to embrace the scale and nature of the changes than others.
- 3.4.13 The Panel found that the SER was weak in the extent to which it explained the rationale for curriculum change, and in relation to the timetable for implementation. By the end of the visit the Panel had formed the view that the SER undersold the extent of consultations that had taken place in connection with the proposals; these in fact appeared to the Panel to have been thorough and methodical. The Panel **recommends** that the School ensures that the documentation prepared in connection with the forthcoming accreditation visit clearly communicates the rationale for BVMS curriculum change and reflects the careful process of consultation undertaken as well as giving detailed information on the timetable for implementation and on the process of trialling new features of the curriculum.
- 3.4.14 The Panel was concerned at the schedule for implementation particularly in view of the demanding accreditation exercise that would be taking place in the intervening period. The Head of School spoke persuasively about the need to press ahead with implementation once changes had been in the planning stage for a certain time. Staff expressed confidence that the timetable for years 1 and 2 was well developed, though the detail was not evident to the Panel. The position in relation to year 3 seemed much less certain and the Panel had great reservations about the suggested introduction of BVMS3 in 2013.
- 3.4.15 At the meeting with the Head of College and the Head of School, the Review Panel expressed these concerns. The Panel **recommends** that before a decision is taken to accelerate the implementation of BVMS3, the School reflects very carefully on the risks attendant on effecting too much change at one time, particularly given that BVMS3 students will not have taken the revised form of BVMS1 and 2. (See also the reference to the high burden of work carried by staff, in particular support staff, in the School at para 3.8.1 below.)

3.5 *Student Recruitment*

Admissions

- 3.5.1 The SER described the admissions process for the BVMS, with all applicants who met the basic requirements being offered an interview. This was a resource intensive process, particularly as interviews also took place in North America and the Far East. The Review Panel explored with the Head of School the effectiveness of this process. The Head of School noted that demand by well qualified applicants far outstripped the number of places available. The School did not wish to further increase the academic requirements for entrance but were looking for effective ways of identifying in

candidates evidence of motivation and an understanding of the profession. There was some doubt as to whether the conventional interview was a good predictor of long-term success in the profession. To this end the School was considering the introduction of multiple mini-interviews. It was noted that it would also be desirable to increase the involvement of current students in the selection process, but staff were aware of the time pressures already faced by current students and were reluctant to add to these.

International students

3.5.2 There was a strong international dimension to the student population, with a particularly high proportion of students coming from North America. One student group who met with the Review Panel discussed the fact that those from North America tended to be mature students whose outlooks were different from those of students who had come straight from school. Initially their experience had been that there were effectively two separate groups but by the third year these groups had become integrated, and the fact that students were from different backgrounds with different outlooks was considered, by the students themselves, to be beneficial. This mix of student population was a significant feature in presenting the School and its programmes to prospective students.

3.6 *Student Progression, Retention and Support*

Student progression

3.6.1 Student achievement was high and progression rates were good. The SER referred to recent work within the School to tighten up the role of the Progress Committee, particularly in determining when repeat opportunities were in students' best interests.

Support

3.6.2 Students who met with the Review Panel spoke of the School being a 'good place to be', where staff-student relationships were strong and the general atmosphere was supportive and positive. Staff confirmed to the Panel that there was an open-door policy and that students were encouraged to approach any member of staff as required, though they were informed that the first point of reference in relation to academic problems should be the course leader. It was interesting to note the maturity of students who recognised the heavy staff workloads, and they appreciated the time that staff made available to them to offer help and advice.

3.6.3 The SER referred to the stressful nature of a career in veterinary medicine and the alarming rate of suicides in the profession. It was also acknowledged that students in the School faced a heavy workload and there was therefore great value in students learning how to deal with work pressures at an early stage. The Head of School spoke to the Review Panel about how these issues had taken on a particular prominence in curriculum review, contributing to the vertical theme of professional development. This was also addressed through the provision of peer support and in attempts to strengthen the mentoring system (discussed at para 3.6.5 below) and in promoting the ability of students to understand and express their concerns. Intervention training had been introduced and this appeared to have been well received by the students. The School's view was that it needed to offer a range of support mechanisms so that each individual could make use of whatever suited him or her best.

3.6.4 The students who met with the Review Panel were appreciative of the efforts of the School to prepare them for the pressures of their professional lives and also referred to the very real stresses of their studies and particularly the end of session assessment diets. They mentioned various support mechanisms such as the 'Big Vet/Wee Vet' scheme where more senior students were available to provide assistance to earlier year peers (which seemed to be particularly used by overseas students), as well as their own facebook groups.

Mentoring

- 3.6.5 One of the support mechanisms available to the students was the mentoring scheme. Through this scheme each BVMS student had a member of School staff who acted as a mentor throughout their period of studies, providing support and focusing particularly on personal and professional development. At the Review Panel's meeting with the Head of School and Associate Head, there was a discussion about this scheme and the fact that a number of different versions of it had been used, with the present one introduced in 2008 emphasising personal development using the portfolio as a focus. It was acknowledged that the School was still learning about how best to facilitate students' own reflection on their progress, and the students themselves expressed the view that they needed guidance on this.
- 3.6.6 The Review Panel heard from students that their experience of the mentoring scheme was mixed. Some students were very positive about the on-going support that they received. Some said that meetings could be as brief as five minutes while others had enjoyed much longer sessions in which they were asked to reflect on their progress. Some noted that they – or students they knew of – had not met with their mentors for more than a year. The students described mentoring meetings as mandatory but went on to note that there appeared not to be any consequences if meetings did not take place. Staff who met with the Panel shared their own reflections on the variable nature of mentoring meetings, noting that some students failed to submit their portfolios in advance of meetings and that while efforts were made to chase students who failed to engage, ultimately there was no penalty that could be applied. The students also commented on the fact that rather than always approaching their mentors, their first 'port of call' on a variety of practical and pastoral matters were the front-line administrative staff who they found to be accessible and very willing to help.
- 3.6.7 The Review Panel concluded that for many students the mentoring scheme appeared to offer valued support. In the context of the increasing importance of the professional portfolio on the BVMS, the Panel **recommends** that the School carefully considers the future operation of the mentoring system, so that, firstly, its purpose and, secondly, the respective responsibilities of both staff and students, are clearly articulated and properly implemented. This may involve training and personal development for staff acting as mentors.

Careers, employability

- 3.6.8 The employment rate of recent graduates was high. The SER described some of the ways in which the School supported students in finding employment. The Review Panel was pleased to note how the introduction of Veterinary Professional and Clinical Skills into the curriculum was contributing to this. Extra Mural Studies (for BVMS students) and the work placement year (MSci) meant that the School had on-going relationships with a range of different workplaces. However, many of the employers were very busy small businesses which limited their ability to engage with the School. The Head of School acknowledged that monitoring the progress of former students was challenging and the School was largely reliant on information from the former students themselves. While the School had strong links with veterinary practices in the west of Scotland, many students went further afield after graduation.

3.7 *The Quality of Learning Opportunities*

BSc/MSci Veterinary Biosciences

- 3.7.1 In session 2011-12 the first cohort of BSc (Hons) Veterinary Biosciences students had graduated. The Review Panel explored the various issues presented by the introduction of the new degree. In discussion, the Head of School reflected on the challenge of introducing a completely new programme. From the outset there had been the clear aim of fully integrating BSc students into the life of the School (for instance,

changing the constitution of the Glasgow University Veterinary Medical Association to open its membership to BSc students) while also creating a programme of study that was distinct. As the direction of the BVMS curriculum review emerged, it became clear that the BSc had to be delivered through its own classes. The School was aware that at other institutions such a programme was often seen as a route to entry into the professional programme, but the School was pleased to find that its students appeared to have a high level of commitment to the programme in its own right and the fact that teaching was not shared with the BVMS probably played a part in this. The Panel noted that student feedback in the documentation and face to face was very positive. It was reported that staff provided lots of opportunities for students to contribute their views (e.g. regular focus groups) and that staff had been responsive to the various 'teething problems' that had arisen. The Panel **commends** the School for the successful introduction of this new programme of study and the integration of its students into the life of the School.

BVMS

- 3.7.2 BVMS students who met with the Review Panel were positive and enthusiastic about their learning experience. The more senior students spoke about the 'hump' of third year, of the very large volume of material that had to be learned and how veterinary practice had seemed remote at this time. In the final years the students felt that they returned to the 'bigger picture' and understood then how the earlier learning was relevant. The students also reflected on their awareness of on-going changes being made to the programme, with more senior students observing to more junior students that problems they had encountered in earlier years had now been addressed.

Intercalated degrees

- 3.7.3 The School offers intercalated Bachelors degrees which can be taken after successful completion of the third year of the BVMS. Uptake was generally low with half a dozen or fewer students following this route every year. Students told the Review Panel that they were given information about the intercalated degrees including talks from outside speakers who suggested what the career benefits might be, but the BVMS students expressed their reluctance to incur the expense of another year of study and to lose their place within their year group, and they were not persuaded that the benefits of an intercalated degree outweighed these considerations.

Organisation

- 3.7.4 The Review Panel heard from students that their programmes were well organised with very few lecture cancellations, and classes that had to be re-scheduled were notified well in advance. While the Panel was pleased to hear this feedback, the SER had highlighted the heavy administrative burden carried by support staff, and the fact that anticipated developments in technology (such as automated timetabling) had not progressed as hoped.

EMS

- 3.7.5 Students spoke to the Review Panel about the value of the extra mural studies (EMS) component of the programme. Although this was not assessed, the students recognised that EMS offered opportunities for experiencing at first hand a wide range of veterinary settings, some of which were overseas. They expressed the view that EMS provided invaluable preparation for entering practice at the end of their studies. While the Small Animal Hospital, for instance, gave them the chance to experience specialist areas, EMS provided the opportunity to become familiar with more routine procedures. While students stated that they did not experience any problems in arranging suitable placements, they felt that more could be done to make information available to students about the experience of those who had been on particular placements in the past.

3.7.6. Staff explained to the Review Panel that EMS was not currently a requirement of the BVMS Programme, but an RCVS requirement for graduation as the degree gave automatic right to membership of the RCVS. Traditionally EMS had operated on a 'favour' basis, with practices recognising its importance in training the future generation of vets. Given this background it was impossible for the School to impose significant administrative burdens on the EMS placement providers, such as formal quality assurance procedures. The trend in veterinary practice was increasingly for the rise of corporate practices, and there was some uncertainty as to how this might affect the future of EMS in the coming years. However, EMS would form a substantive part of the summatively assessed Portfolio in the 2013 curriculum.

3.8 *Resources for Learning and Teaching*

Staffing

3.8.1 The Head of School spoke to the Review Panel about the School's aspirations to deliver high quality provision and acknowledged the demands that this placed on staff, particularly support staff. In the clinical setting the University's standard approach for determining the level of support staff was not appropriate; the School had identified the possibility of further involving nursing staff in clinical training. To maintain the programmes at their current high standard was demanding but the radical overhaul of the BVMS was bringing additional pressures. It was noted that, with all the other activities in the School, the work associated with preparing for the PSR had fallen on the shoulders of a small number of staff. The Review Panel **commends** the evident commitment and hard work of staff, reflected not only in their high aspirations but in the achievements of the School and in the positive reflections of the students.

Probationary staff

3.8.2 Probationary staff spoke positively about working at the School. They had initially shadowed other members of staff and had received induction briefing materials. There was a view that a broader induction to the life of the School would have been useful. While the probationers all had staff mentors the emphasis of this support was on their clinical work, and they felt that support and guidance in relation to undertaking research was lacking (see further under Small Animal Hospital, para 3.8.9). The current focus of mentoring was on satisfying the probationary criteria rather than on looking further ahead in their careers.

3.8.3 Probationary staff had some teaching responsibilities and were asked to contribute to assessment materials (e.g. suggestions for OSCEs and exam questions). Those who met with the Review Panel were at different stages of completion of the Postgraduate Certificate in Academic Practice (PG CAP). They found it useful though not all lectures had been relevant to their work and the view was expressed that having more than one session of teaching observation would have been beneficial. There was a comment about the value of the PG CAP for enabling staff to make contacts outwith the School, and one member of staff told the Panel about a collaborative research project which had arisen from such a contact.

Garscube campus

3.8.4 In a number of different meetings the Review Panel received comments regarding the impact of being at some distance from the Gilmorehill campus. The BSc Veterinary Biosciences students were required to travel between Garscube and Gilmorehill for classes and labs. This had initially caused severe logistical problems requiring rearrangement of the timetable. Probationary staff referred to PG CAP sessions being held at Gilmorehill, and while attending a University-wide event had many benefits, fitting in the additional transport time to an otherwise already pressured schedule was difficult. The same comment was made in relation to training events for GTAs.

- 3.8.5 There was a lack of convenient public transport serving Garscube, particularly as the local bus service had recently been cut back. Students raised with the Review Panel the question of whether the campus could be included on the SRC bus route. The Panel concluded that the lack of convenient transport between Garscube and Gilmorehill was a significant issue for both staff and students, which risked inhibiting the extent to which the School was fully integrated into the broader life of the University, including in respect of research development and network building.
- 3.8.6 The Panel **recommends** that, in discussion with areas such as the Learning and Teaching Centre and Human Resources, the School considers how best to promote the hosting of training, development and networking events for staff at the Garscube campus.
- 3.8.7 The Panel **recommends** that consideration be given to how transport between Garscube and Gilmorehill campuses can be improved, including possible approaches to the local bus operator and the SRC.¹

Small Animal Hospital

- 3.8.9 The current Small Animal Hospital was opened in 2009 and undertakes referral work as well as offering out of hours services. The facility offered students the opportunity to gain experience of a wide range of specialist procedures using state-of-the-art facilities, as well as some first opinion work. All who spoke about the Hospital – staff and students – praised the facilities and the work carried out there.
- 3.8.10 Staff working in the Hospital were also looking forward to becoming more involved in the delivery of the BVMS, under the new curriculum. However, they also expressed their concern at how this commitment would add to their already very heavy workload. They suggested that there was a lack of clarity in relation to the purpose of the Hospital. It was a teaching hospital which offered excellent experience to students, but it was also a busy clinic with demanding financial targets, and staff carried the stress of juggling these demands. Probationary staff highlighted the fact that clinical research was lacking from their work and they found it difficult to identify any scope for addressing this – particularly as there appeared to be a dearth of funding for research and no strong expectation that they would seek such funding – and they believed this could have negative implications for their future career development.
- 3.8.11 When these points were raised at the meeting with key staff it was stated that the income generated by the Hospital enabled the School to deliver first class teaching, especially in the early years, and that it also had a crucial role in delivery of day 1 competencies. But the business model was not fully established and the growth of business and the provision of new services was not always matched effectively with the required resources. (Currently a case was being put together for the recruitment of seven nurses.) There was an acknowledgement that the University's structure for career advancement did not adequately address this situation and that there perhaps needed to be greater clarity about each member of staff's priorities. It was also accepted that under the current arrangements at the Hospital clinical research would remain less prominent.
- 3.8.12 The balance between clinical work, teaching and research in the School as a whole was discussed, and over the years the challenge of achieving a balance had become more difficult; teaching staff did not all have the same job description. Some had more of a clinical role, and some were more focussed on research. The Head of School felt

¹ Subsequent to the Review visit, the Panel learned that an inter-campus travel demand analysis was being carried out under the Action Plan of the University's Strategic Travel Plan, and that this would be followed by a detailed investigation into the options for addressing the demand (e.g. introduction of a shuttle bus or subsidising existing bus services). The inclusion of the recommendation in this report reflects the issues raised during the Review visit and will ensure that there is an opportunity to consider the outcome of the study specifically in relation to the School of Veterinary Medicine.

that the School did have responsibility towards those who had aspirations for research, and believed that there should be the potential for matching staff with partners in the RIs who had common interests.

3.8.13 The Review Panel raised these issues at the meeting with the Head of School and Head of College. The Head of School set the Hospital in the context of there being no equivalent of the NHS in veterinary medicine, and the need to subsidise teaching (government funding falling short of the true cost). There was a very clear vision in the School and the College of the hospital providing an excellent teaching experience and a high quality service to clients and patients, but there was no escaping the commercial realities of the situation, leaving a delicate balance between the educational and financial drivers.

3.8.14 The Small Animal Hospital is an outstanding facility. At present, however, there is not a consistent view of what the role of the Hospital is that is shared by staff in the School. There is a need to establish a clarity of vision for the future of the Hospital so that teaching activity, clinical research and income generation targets are appropriately balanced. The Panel **recommends** that the College and School develops a future vision for the Small Animal Hospital that recognises its role in teaching, clinical research and income generation that is shared and understood by all staff in the School.

IT

3.8.15 In meetings with the Review Panel, staff and students both raised issues relating to the provision of IT and IT support. It was reported that a large number of the computers that were available for student use did not work. This was an issue that had been raised at a number of SSLC meetings. The students expressed their frustration at an apparent lack of progress with this, though noted that if a broken machine was reported it did tend to be fixed. It appeared that broken machines were not being reported, and the reasons for this were not clear to the Panel. Other problems seemed to be experienced frequently such as computers not having the required software, or the printers not working or not having ink.

3.8.16 At the meeting with key staff the Review Panel heard that University restructuring had resulted in IT support having been reduced in the School, leaving less than 1 FTE to support staff and students and this was inadequate. An anticipated improvement in the wireless environment had also not been delivered. At the meeting with the Head of College, this was identified as an issue that had a significant negative impact on the student experience. The Head of College noted that the Research Institute of Biodiversity, Animal Health and Comparative Medicine which was partly based at Garscube faced similar issues.

3.8.17 Noting the strong negative impact of inadequate IT on the student experience, the Panel **recommends** that the College undertakes a review of IT and IT support within the School, to identify: the range of difficulties being encountered by staff and students; possible process improvements for the use of current IT resources and the realistic level of staffing required to support these; and any possible further efficiencies to be achieved in the use of the resources shared by the School and Research Institute at Garscube.

Facilities at Garscube

3.8.18 The review visit came at a time when there was a significant amount of building work on the Garscube campus. This brought with it an inevitable level of disruption to day to day life for staff and students. The students referred to the recent demolition of a previously well used social space. Following representations, arrangements had been made for alternative social space to be made available. The students spoke about the planned new Garscube Learning and Social Space (GLaSS) Building and noted that

they had been involved in the project planning and were very excited about the outcome. The students spoke positively about the range of sports facilities available at the campus. They said that the Garscube Library had convenient opening hours and they found it a more spacious and pleasant atmosphere than the University Library at Gilmorehill. While there were sometimes difficulties locating books, core texts were kept behind the desk. The fact that facilities at the campus were generally seen to be good appeared to contribute to the close-knit community described by the students. Staff and students both reported persistent problems with temperature control in the Ilay and Jarrett lecture theatres, with the rooms being either extremely cold or extremely hot. The Review Panel **recommends** that action be taken to address the temperature control problems experienced in the Ilay and Jarrett Lecture Theatres which result in an environment which is not conducive to effective learning and teaching.

- 3.8.19 The Review Panel noted that there had been a recent redesigning of an old operating theatre complex to create a clinical skills facility, which was now supported by a full-time member of staff. This represented a very welcome enhancement of teaching facilities and was **commended** by the Panel.

4. Maintaining the Standards of Awards

- 4.1 The Review Panel was satisfied that the processes in place for the maintenance and enhancement of standards and awards were appropriate. External Examiner reports indicated a subject area of good standing nationally and internationally. The Panel **commends** the School on this marker of positive esteem.
- 4.2 As noted elsewhere in the report the School carefully observes the requirements of the accrediting bodies and subject benchmarking.

5. Assuring and Enhancing the Quality of the Students' Learning Experience

- 5.1 The comprehensive documentation provided for the review reflected the various feedback mechanisms and QA procedures within the School which, on the whole, appeared to be operating effectively. A small number of incomplete annual monitoring returns prompted the Review Panel to enquire about what use was made of completed returns. Staff indicated that this was an area that had received less of a focus recently because of the intensive work on other activities. However, lecturers were expected to reflect on the feedback from their courses and refer to this as part of the annual PDR process.
- 5.2 The Review Panel heard from the students that there was good communication of issues considered at the staff-student liaison committee meetings, with e-mail and facebook being used effectively. Reps were well known to the other students, reflecting the close-knit nature of the year groups. Comments from students also highlighted the important role of focus groups within the School. It was clear to the Panel that the students felt that their views were listened to and taken into account. Staff confirmed that they valued the immediate nature of feedback from focus groups. The Panel **commends** the School's use of these groups.
- 5.3 The Review Panel explored with the Head of School what mechanisms were in place to promote the sharing of good practice within the School. He considered that in the past this had perhaps not been a particularly strong feature of the School but the process of curriculum review and the increasing use of the VLE had meant that there was now much more awareness of what colleagues were doing and an environment encouraging the promotion of good practice. A view expressed by staff was that being based at Garscube made it more difficult to participate in cross-University events promoting good practice which were delivered at Gilmorehill, and that it would be

appreciated if some events could be hosted at Garscube. (Discussed also at para 3.8.6.)

- 5.4 The Review Panel considered that one particular strength of the School was its innovative use of Moodle and other software but was concerned that the lack of adequate IT support would jeopardise continuing developments in this area. (See para 3.8.17.)

6. Summary of Perceived Strengths and Areas for Improvement in Learning and Teaching

Key Strengths

- Highly committed and aspiring staff who offer a positive and supportive learning environment for students
- Enthusiastic and high achieving students with strong cohort identities
- A nationally and internationally esteemed professional programme
- Innovative use of technology particularly in formative assessment tools

Areas for Improvement

- A Masters award that does not currently satisfy the relevant SCQF requirements
- IT provision and IT support in the School
- Inconsistent mentoring support

Conclusion

The members of the Review Panel very much enjoyed their engagement with the School of Veterinary Medicine. The students demonstrated enthusiasm for their studies and for their learning environment. This enthusiasm was the more impressive for coming at a time when School staff were juggling many demands in preparing for the new curriculum and accreditation, and when the campus was experiencing significant disruption from building works and student social space had recently been demolished. The Review came at an exciting time for the School as it was building for the future on its past and present success, in response to external drivers. The commitment and hard work of staff was evident to the Panel and was strongly praised by the Head of School. The Panel commends the School for its provision of a dynamic and positive learning environment where innovative methods of teaching and assessment are employed.

Commendations

The following commendations are highlighted in the report.

Commendation 1

The Review Panel **commends** the School on its broad range of forms of assessment, particularly interactive formative assessment which made innovative use of technology.

[*paragraph 3.3.3*]

Commendation 2

In the new BVMS curriculum each new unit would last for a four-week period, with teaching delivered in weeks one to three, leaving week four clear for consolidation. The aim was to move away from such heavy reliance on lectures and to incorporate more problems to which the students (either in small groups or on their own) would be

expected, with appropriate support, to seek answers themselves, promoting deeper learning and independence. The Review Panel **commends** this approach.

[*paragraph 3.4.3*]

Commendation 3

The Review Panel **commends** the School for the successful introduction of the new programme of study, the BSc/MSci Veterinary Biosciences, and the integration of its students into the life of the School.

[*paragraph 3.7.1*]

Commendation 4

The Review Panel **commends** the evident commitment and hard work of staff, reflected not only in their high aspirations but in the achievements of the School and in the positive reflections of the students.

[*paragraph 3.8.1*]

Commendation 5

The Review Panel noted that there had been a recent redesigning of an old operating theatre complex to create a clinical skills facility, which was now supported by a full-time member of staff. This represented a very welcome enhancement of teaching facilities and was **commended** by the Panel.

[*paragraph 3.8.19*]

Commendation 6

External Examiner reports indicated a subject area of good standing nationally and internationally. The Review Panel **commends** the School on this marker of positive esteem.

[*paragraph 4.1*]

Commendation 7

Comments from students highlighted the important role of focus groups within the School. It was clear to the Review Panel that the students felt that their views were listened to and taken into account. Staff confirmed that they valued the immediate nature of feedback from focus groups. The Panel **commends** the School's use of these groups.

[*paragraph 5.2*]

Recommendations

The recommendations interspersed in the preceding report are summarised below. They have been cross referenced to the paragraphs to which they refer in the text of the report. The first three recommendations have highest priority and the remaining recommendations are listed in the order in which they appear in the report.

Recommendation 1

The Review Panel noted that BSc (Hons) Veterinary Biosciences students who completed a work placement year graduated with an MSci. The content of the four years of academic study at the University was the same for both BSc (Hons) and MSci students. The award of a Masters level degree could, therefore, only be justified if the placement year satisfied the requirements of SCQF Level 11 study, and the Panel concluded from the information provided that this was not currently the case. The Panel

recommends that, as a matter of urgency, the School revises the content of the final taught year of the MSci to ensure that the requirements of the QAA and of the University Calendar in relation to the award of Masters degrees are satisfied.

[Paragraph 3.2.3].

For the attention of: **Head of School**

Recommendation 2

The Panel **recommends** that the School ensures that the documentation prepared in connection with the forthcoming accreditation visit clearly communicates the rationale for BVMS curriculum change and reflects the careful process of consultation undertaken as well as giving detailed information on the timetable for implementation and on the process of trialling new features of the curriculum.

[Paragraph 3.4.13].

For the attention of: **Head of School**

Recommendation 3

The Panel **recommends** that before a decision is taken to accelerate the implementation of BVMS3, the School reflects very carefully on the risks attendant on effecting too much change at one time, particularly given that BVMS3 students will not have taken the revised form of BVMS1 and 2.

[Paragraph 3.4.15].

For the attention of: **Head of School**

Recommendation 4

The Review Panel's view was that the current Veterinary Biosciences Knowledge ILOs were insufficiently rigorous, particularly at Level 4, and **recommends** that they would benefit from review in consultation with the Learning and Teaching Centre.

[Paragraph 3.2.1].

For the attention of: **Head of School**

Recommendation 5

The Panel **recommends** that the School considers how best to engage students in an understanding of assessment criteria applying to the demonstration of ILOs, whether through clearer dissemination of information or through the structuring of the instruments of assessment themselves.

[Paragraph 3.3.2].

For the attention of: **Head of School**

Recommendation 6

The Panel **recommends** that the School considers how best to ensure that feedback on assessment is available for all students – those who perform well in assessments as well as for those who do less well – and considers how to ensure that students recognize and make best use of that feedback, thus supporting them in their wish to further strengthen their performance and respond effectively to areas of weakness, and also promoting an across-the-board culture of continuing development, which is essential in the context of professional training.

[Paragraph 3.3.7].

For the attention of: **Head of School**

Recommendation 7

While the nature of assessment of performance would be changing in the new

curriculum, the Panel **recommends** that the School considers how best to feedback to students on their progress throughout the full programme of clinical rotations.

[Paragraph 3.3.12].

For the attention of: **Head of School**

Recommendation 8

In the context of the increasing importance of the professional portfolio on the BVMS, the Panel **recommends** that the School carefully considers the future operation of the mentoring system, so that, firstly, its purpose and, secondly, the respective responsibilities of both staff and students, are clearly articulated and properly implemented. This may involve training and personal development for staff acting as mentors.

[Paragraph 3.6.7].

For the attention of: **Head of School**

Recommendation 9

The Panel **recommends** that, in discussion with areas such as the Learning and Teaching Centre and Human Resources, the School considers how best to promote the hosting of training, development and networking events for staff at the Garscube campus.

[Paragraph 3.8.6].

For the attention of: **Head of School**

Recommendation 10

The Panel **recommends** that consideration be given to how transport between Garscube and Gilmorehill campuses can be improved, including possible approaches to the local bus operator and the SRC.²

[Paragraph 3.8.7].

For the attention of: **Secretary of Court**

For information: **Head of School**

Recommendation 11

The Panel **recommends** that the College and School develops a future vision for the Small Animal Hospital that recognises its role in teaching, clinical research and income generation and that is shared and understood by all staff in the School.

[Paragraph 3.8.14].

For the attention of: **Head of School**

For information: **Head of College**

Recommendation 12

Noting the strong negative impact of inadequate IT on the student experience, the Panel **recommends** that the College undertakes a review of IT and IT support within the School, to identify: the range of difficulties being encountered by staff and students; possible process improvements for the use of current IT resources and the realistic level of staffing required to support these; and any possible further efficiencies to be

² Subsequent to the Review visit, the Panel learned that an inter-campus travel demand analysis was being carried out under the Action Plan of the University's Strategic Travel Plan, and that this would be followed by a detailed investigation into the options for addressing the demand (e.g. introduction of a shuttle bus or subsidising existing bus services). The inclusion of the recommendation in this report reflects the issues raised during the Review visit and will ensure that there is an opportunity to consider the outcome of the study specifically in relation to the School of Veterinary Medicine.

achieved in the use of the resources shared by the School and Research Institute at Garscube.

[Paragraph 3.8.17].

For the attention of: **Head of College**

For information: **Head of School**

Recommendation 13

The Review Panel **recommends** that action be taken to address the temperature control problems experienced in the Ilay and Jarrett Lecture Theatres which result in an environment which is not conducive to effective learning and teaching.

[Paragraph 3.8.18].

For the attention of: **Vice Principal (Learning and Teaching)**

For information: **Director of Estates and Buildings**