

# THE ROYAL VETERINARY COLLEGE

## LEARNING, TEACHING AND ASSESSMENT STRATEGY, 2008 - 2013

### 1. Introduction

- 1.1 The College's first explicit statement of its teaching and learning strategy was approved by the Academic Board in 1998/99. A more comprehensive strategy was adopted in 2002.
- 1.2 The College recognises that this Strategy served a useful purpose as a central point of reference for the development of teaching, learning and assessment. However, many of the aspirations expressed by the Strategy of 2002 have now been met or superseded, and new strategic needs have become apparent as the College's course portfolio and student profile have changed. In particular, we need to take account of increasing student numbers; increased diversity in the range of courses that the College offers; an increasingly diverse student body; and the continuing need to develop students as independent learners who are equipped for lifelong learning. The College has experienced an expansion not only in registered student numbers but in all others who use the facilities and educational courses.
- 1.3 The College has also become host to the only veterinary Centre for Excellence in Teaching and Learning (the LIVE CETL). This has provided the College with a depth of expertise in veterinary education that is unparalleled in Europe, and we must take full advantage of this in the next five years, embedding the work of the CETL in the College's practices.
- 1.4 Moreover, other related strategies (e.g. IT, e-Media, Widening Participation, Research) and the College's Strategic Plan have been, or are in the process of being, up-dated, and should be consistent with the Learning, Teaching and Assessment Strategy.
- 1.5 The College's approach to education and its further development is based on sound pedagogical evidence. The desire is to promote "deep" as opposed to "superficial" (Marton and Saljo 1976, 1997), "transformational" as opposed to "reproductive" (Biggs 1976) and "adaptive" as opposed to "adoptive" (Roach et al 2001) learning. A humbling truth for all teachers is the fact that "what the student does is more important in determining what is learned than what the teacher does" (Shuell 1986). Active engagement of students in their learning encourages them to reflect and theorise about their discipline rather than take notes and memorise (Biggs 1999).<sup>1</sup>

<sup>1</sup>Paragraph adapted from the College's successful bid to Higher Education Funding Council for England (HEFCE) for the Lifelong and Independent Veterinary Education (LIVE) Centre for Excellence in Teaching and Learning.

## **2. Aims**

2.1 The key aims of our teaching, learning and assessment strategy over the period 2008-2013 are:

- i. To maximise the quality of learning based on sound pedagogical principles
- ii. To promote independent learning and the skills required for life-long learning, and ensuring that all graduates have acquired a range of both course-specific and generic skills that enhance their employability
- iii. To continue to develop the learning environment, in particular student support arrangements, to suit a more diverse student body and thus both promote equality of opportunity and maximise student potential
- iv. To ensure students learning occurs in a relevant scientific context, so that all graduates have a sound grasp of scientific method
- v. To develop the use of e-learning where this is an appropriate educational approach
- vi. To develop assessment strategies that are valid and reliable, and that promote desired learning outcomes
- vii. To ensure that all staff have the necessary knowledge, skills and support to implement this strategy.

## **3. Context**

3.1 The College's mission is to enhance its global reputation as an outstanding independent veterinary college by:

- Delivering excellent education through the best methods and progressive practice.
- Undertaking research of International quality in focused areas of global significance for animal and human health, to inform clinical practice and government policy.
- Improving animal health and welfare by the provision of outstanding clinical activity across animal species.
- Engaging with the business community and exploiting our novel ideas and unique resources.
- Promoting public health and supporting society through the study of the relationships between people, animals and food.

3.2 This Strategy takes into account the following characteristics of the context in which the College operates:

- i. the advantages which the College derives from being a self-governing institution;
- ii. the need to be flexible in order to address national priorities;
- iii. the College's size, on the one hand as a small college which can aspire to treat each student as an individual, and on the other as the largest UK

- veterinary school, and thus able to command a critical mass of subject-specific resources in support of its strategy;
- iv. the rapid growth in our student numbers, the range of our course portfolio, and the size of our physical estate;
- v. the strengths of the College's academic and support staff, in terms of teaching skills, subject knowledge, research prowess, and clinical expertise;
- vi. the College's sound financial position.

#### **4. Curriculum**

- 4.1 The College is working towards the following objectives, which are applicable, to a greater or lesser extent, to all our courses:
  - i. integration of teaching across disciplines
  - ii. increased depth of study in selected topics
  - iii. increased student choice of study options
- 4.2 The opportunity to choose study options, and to specialise in particular aspects of their chosen discipline, should become the norm rather than the exception in all our courses. Introduction of more modular curricula will facilitate this.
- 4.3 Our curricula must continue to aim to develop the student's mind, rather than simply developing the competence to perform a list of vocationally-relevant tasks.
- 4.4 One of the challenges which the College continues to face is that of developing our students, in whatever discipline (science, veterinary medicine or para-veterinary), as professionals. In recent years the research literature on professional education has grown enormously. During the lifetime of this strategy the College will tap into this knowledge, and its own research, with the goal of enhancing the "professional" outcomes of all its courses.

#### **5. Learning and Teaching**

- 5.1 A primary objective of this Strategy is to optimise the quality of teaching and learning. The College is proud of the quality of the education which it provides (as evidenced by our success in assessments by the Quality Assurance Agency (QAA), the American Veterinary Medical Association (AVMA), the European Association of Establishments for Veterinary Education (EAEVE) and the Royal College of Veterinary Surgeons (RCVS)), and intends to maintain this. Equally, the College sets demanding academic standards, which are essential if the College's awards are to continue to have international currency, and if the College itself is to achieve its own degree awarding powers.
- 5.2 The College is committed to employing the range of teaching, learning and assessment techniques which most effectively achieves its objectives. However, we are not complacent about any of these, and recognise that our

primary focus must be upon learning: teaching and assessment are important to the extent that they promote learning and enable us to measure it.

- 5.3 Over the lifetime of this Strategy we will continue to develop teaching practices in ways that promote independent learning and the skills required for life-long learning. The College has become increasingly concerned that the preparation which our students receive in secondary school has made them “dependent” learners and handicaps their ability to benefit from Higher Education. Students should spend more time learning and less time being taught. We will continue to adapt our curricula and teaching methods to create the space and the opportunities that will enable all students to develop the capacity to learn independently and at a distance, whilst maintaining an appropriate level of support and guidance that reduces as students move through their programmes. This involves:
- i. continuing to move from the traditional reliance on didactic teaching to a problem-solving approach in which the learning process is student-centred rather than teacher-centred;
  - ii. a reduction in the numbers of lectures in all programmes, and increased use of small group, independent, peer assisted learning and e-learning;
  - iii. further expansion of induction programmes in generic skills, including study skills, and integration throughout the rest of the curriculum;
  - iv. investigation of methods of pre-course guidance, with the aim of introducing this in some form during the lifetime of this strategy;
  - v. reviewing feedback methods, with a view to ensuring that all staff give feedback effectively, and students make the most of all the different forms of feedback they receive. This is essential if they are to become effective life-long learners, which they must do if they are to be adaptable and enjoy continuing personal and professional success in a rapidly changing world.
- 5.4 We accept that the traditional lecture continues to have a role as a source of factual knowledge, and as a forum in which the teacher can bring together the whole class to inspire them and emphasise key aspects of the subject. However, by further reducing formal lecture time, to embrace only these “keynote” addresses, we will increase the time available for students to learn independently, through the Library, e-learning, audio-visual and other sources, at a distance as well as on campus.
- 5.5 We will continue to develop the use of e-learning where this is the most appropriate educational approach. Using the expertise of the College’s e-media unit and our academic staff, we will use e-learning to free staff from excessive contact time used simply to convey information; to facilitate flexibility in student learning; to improve feedback to students on their progress; and to develop more flexible and efficient assessment. In this context, the teacher’s role will include teaching materials development just as much as formal class contact and student assessment.
- 5.6 We will renew our efforts to use classroom based small group learning effectively. We have invested heavily in this but the returns in terms of student acceptance, quality of learning and reliability of assessment are uncertain. Following a thorough appraisal of small group teaching carried out

by an external consultant during the life of the previous Strategy, we are developing a Directed Learning tool kit to aid staff with the delivery of small group teaching. This tool kit will be made available to staff during the lifetime of this strategy.

- 5.7 The College recognises the essential role of clinical education in the BVetMed, BSc and FdSc in Veterinary Nursing, in postgraduate courses such as the MScs in Wild Animal Health and Veterinary Physiotherapy, MVetMed and in the Clinical Training Scholar programme. Clinical exposure should be structured to maximise their learning potential and include clearly defined learning objectives. Students should be an integral part of the clinical team, so that they participate throughout the progress of a case. We must be explicit and realistic about the aims of clinical rotations, which should be structured to maximise their learning potential and include clearly defined learning outcomes.
- 5.8 Laboratory placements are integral to developing a mature understanding of the processes of science on the part of our students, as well as their practical skills at the bench. We will continue to improve the learning experience gained from laboratory placements by ensuring that supervisors and mentors are fully prepared for their responsibilities; student projects are adequately resourced; and students become a part of the scientific teams in which they are placed. In particular, we intend that students play an active role in the work of their host laboratories, especially the projects for which they have responsibility.
- 5.9 If our students are to become more effective learners, we must encourage them to understand and reflect upon their own learning styles. We will continue to deliver this during the undergraduate induction programmes and throughout their courses, in the context of the development of study skills and Personal Development Planning (PDP). We are committed to carrying PDP forward to another level during the lifetime of this Strategy, linking it more closely to course learning outcomes, Day One Skills or their equivalent, and course content. The value of the PDP system will be enhanced by integration with other electronic systems such as rotation records and examination results.
- 5.10 We will continue to make use of the results of research on teaching and learning to assess which methods to employ, and our strategy will be informed by inputs from external experts, peer reviewed literature, attendance at education conferences and workshops, and through engagement in organisations such as Veterinary Education Worldwide (ViEW), the Higher Education Academy, the Staff and Educational Development Association, Association for Medical Education in Europe (AMEE), Association for the Study of Medical Education (ASME) and the Society for Research into Higher Education.

## **6. Skills Development**

- 6.1 We aim to ensure that all graduates have acquired a range of both course-specific and generic skills. We will continue to expand the generic skills

development work which we have commenced in the last decade, and we will continue to strengthen the subject-specific skills development in all our courses. They will also be assessed to encourage greater student commitment to skills.

- 6.2 In the context of increased student numbers, we will adopt flexible approaches to skills development. Alongside the use of the clinical skills centre, we will assess how students could make more use of audio-visual, streaming video and e-learning in developing their skills. In the BSc Bioveterinary Science, we are developing a programme of placements to develop skills and increase employability.
- 6.3 Since the Strategy of 2002 a comprehensive PDP scheme has been introduced across our undergraduate courses. As part of this, students are encouraged to reflect on their skill acquisition, identify gaps, and adopt measures which will allow them to develop the skills they cannot yet perform to the required level. In the BVetMed, there has been a great staff investment in tutorials to continue the PDP and expand the scope of group tutorials.

## **7. Assessment Practices**

- 7.1 The objectives of the College's Student Assessment Policy are:
- i. to enhance student learning;
  - ii. to provide feedback to students so that they can build upon their achievements and learn from their mistakes;
  - iii. to determine whether students have satisfied specified learning objectives to the standard required.
- 7.2 The College has a collective responsibility to ensure that the assessment processes employed in all its courses are reliable and valid, rigorous and fair, and that they guarantee the standards of the awards to which they lead.
- 7.3 We recognise that assessment is a crucial driver of student learning, and assessment strategy is therefore an integral part of the overall learning and teaching strategy. Although the College has moved some way towards this since adopting an assessment policy in 1999, some assessment practices continue to encourage and reward surface approaches to learning (e.g. memorising lists of facts that can be forgotten after the relevant examination). We will continue to evaluate our assessment methods to make them more appropriate.
- 7.4 The College uses methods designed to assess whether students are meeting the learning objectives specified for their courses. Whilst it is impossible to test every learning outcome, assessment processes are designed such that a representative sample of objectives is normally tested, so that students will be motivated to learn material across the full breadth of the curriculum. In addition, knowledge or skills which are judged essential are invariably assessed.

- 7.5 We will use a variety of assessment methods, as appropriate to the knowledge and skills being developed by each course. These will include traditional methods such as essays, short notes, multiple choice questions, and in-course projects and reports. These familiar formats will be extended further to include EMQs (Extended Matching Questions), open book exams, and peer assessment. Additionally, innovative approaches will be taken to the assessment of clinical competence through performance in clinical rotations, practical examinations, OSCEs (Objective Structured Clinical Examinations) and simulations.
- 7.6 Computer-aided assessment is particularly valuable in helping to identify areas of student difficulty; and can free staff time from marking to enable more discussion with students.
- 7.7 The College employs a combination of formative and summative assessments in each of its courses. Formative assessment is designed to encourage learning, to identify students with difficulties and to familiarise students with novel exam formats. The provision of timely and informative feedback to students is an essential element of formative assessment; attendance at formative assessments may be a summative criterion.
- 7.8 Summative assessment is designed to test whether students have achieved the learning outcomes set for the preceding periods of teaching before progressing to the next. Final Examinations are designed to test that students have met the course objectives by integrating and synthesising material learnt throughout the whole period of their studies.
- 7.9 The College recognises the great importance of the concepts of validity, reliability and standards in shaping an appropriate assessment scheme. Validity is ensured through mapping assessment methods against specified learning objectives. Reliability can be assured only by ensuring a sufficiency of test items (determined by assessment type) and analysing assessment data systematically and taking remedial action where this is indicated. The setting of standards allows for accountability and transparency both for internal and external quality assurance purposes.. The College, through Boards of Examiners, is committed to monitoring and improving the validity, reliability and standards of its assessment processes.
- 7.10 We will seek to minimise, as far as possible, the load which assessment imposes on both staff and students. This is difficult to achieve given the range of knowledge and skills which the College seeks to assess, and the positive correlation between the time devoted to assessment and its reliability.
- 7.11 Examinations are organised to maximise students opportunities to consolidate their learning which will usually involve a period of study leave.
- 7.12 Assessment schemes should demonstrate retention and progression. As students move through their programme of study, they should be expected to demonstrate achievement of higher order learning objectives, and to build upon learning from earlier stages of their studies.

- 7.13 Assessment processes will be transparent. There will be clear guidelines and criteria for assessment; students will be given sufficient notice of what is required of them; and both staff and students will have ready access to assessment regulations and related information.
- 7.14 During the lifetime of this Strategy we will audit the appropriateness (in terms of validity, reliability, cost, and acceptability to staff and students) of our assessment methods, and adapt or abandon those which do not meet our standards. There are a number of more innovative and potentially more appropriate assessment tools, such as open book examinations, which have been debated at length and which might prove more effective in promoting a deep approach to learning.

## **8. The Learning Environment**

- 8.1 The College will continue to develop the learning environment, in particular student support arrangements, to suit a more diverse student body. The college is committed to providing, as far as possible, comprehensive and accessible student support services. Learning support, counselling and disability services continue to be expanded, alongside a new post of Student Services and Support Manager to coordinate the delivery and development of appropriate services for students. Enhanced pre-course guidance is an area which will be developed during the lifetime of this strategy. There is also a need for further support with English Language and English for Academic Purposes. Means of broadening the current support in these areas are under review and will be developed during the lifetime of this strategy.
- 8.2 As we continue to widen participation, we are determined to maintain academic standards and our high retention and completion rates. We will seek to ensure that tutorial and study skills support for all students (including those with disabilities) is sufficiently comprehensive to give them an equal opportunity of completing their courses successfully, supported through and coordinated by Academic Progress Committees (APRICOT). We will aim to ensure that the individual nature of each student's experience, possible because of the College's collegiate culture, is not lost but, where possible, enhanced.
- 8.3 We recognise that students need an adequately resourced learning environment which is adapted to the teaching and learning methods employed. We will continue to develop:
- libraries through which students may access comprehensive paper and electronic information sources
  - resources which facilitate learning and assessment
  - audio-visual resources which enhance teaching effectiveness
  - classrooms well adapted to the styles of teaching and learning employed
  - adequate facilities for private study
  - social learning space



- teaching hospitals carrying a caseload which is varied in terms of both condition and species
- active research laboratories with appropriate support for student learning
- archived specimens, case material and case records to support self-directed enquiry

## 9. Links to other Strategies

This Teaching and Learning Strategy is vital to the development of other College strategies including:

### *Human Resources Strategy*

Elements of the HR Strategy which support this one include:

- a programme of training and development for academic and support staff, including training needs analysis
- active encouragement of academic staff to achieve Fellowship of the Higher Education Academy
- recruitment initiatives to ensure there are sufficient numbers of staff with the right qualifications, skills and experience to implement this strategy
- an appraisal scheme that monitors and encourages the development of staff skills in teaching and assessment
- promotion criteria that reward staff who engage effectively in enhancing the quality of student learning

### *IT Strategy*

Our IT Strategy supports this Strategy through:

- maintenance of a robust College-wide network for the distribution of teaching materials of all types
- continual expansion in the provision of networked PCs for student use, loaned laptops and WiFi enablement
- provision of an up-to-date suite of software that supports modern learning methods

### *Information Strategy*

Our Information Strategy embodies a vision of College-wide gathering, cataloguing and sharing of information of all descriptions, much of which will support teaching and learning.

### *Research Strategy*

The Research Strategy supports teaching and learning through the development of opportunities to enhance the scientific core of our courses through experience of authentic scientific research and also to provide the labs necessary for student projects. All our internal degree programmes include at least one individual student project, wherever appropriate, in which students are engaged in the laboratories of research-active staff. The College is seeking to increase such opportunities through encouraging more students to intercalate for a science degree, and the provision of vacation studentships.

### *E-learning Strategy*

The E-Learning Strategy will support teaching and learning by:

- Increasing student engagement in the learning process by encouraging interactivity, problem -based and self-directed learning and student production of learning materials;
- Supporting staff in their effective adoption and utilisation of new e-learning techniques through training and advice;
- Helping to embed learning materials into clearly defined areas of the curriculum by integrating them into core curriculum objectives;
- Improving the process of self-assessment and feedback by the use of computer aided assessment tools for both formative and summative assessment;
- Establishing a meta data system for digital describing and indexing learning objects, multimedia and computer aided assessment questions;
- Creating a managed learning environment which will provide structured access to all learning resources for RVC undergraduates and staff both on and off campus;

### *Student Support and Guidance Strategy*

This strategy's objectives will support teaching and learning by providing a framework of support which will help students to fulfil their personal and academic potential but not undermine the student's development to become independent and professional with insight to recognise their own learning needs. This will be achieved through academic support in tutorials, taught programmes and APRICOT; pastoral and welfare services and engaging student participation and service priorities that reflect the demands of the College's provision and the needs of its students.

### *Estates Strategy*

This strategy is currently being drafted but will also have a major role in supporting teaching and learning.

## **10. Quality Enhancement Initiatives**

- 10.1 The primary means of quality enhancement which the College will employ in the immediate future are:
- i. staff development programmes for both academic and non-academic staff
  - ii. peer observation of teaching
  - iii. the "mentor" scheme for all new staff
  - iv. Educator Prizes
  - v. LIVE (Lifelong Independent Veterinary Education)
- 10.2 All staff must have the necessary knowledge, skills and support to implement this strategy. In harmony with our HR strategy, we will ensure that staff have a clear incentive to promote excellence in teaching and learning, and to pursue teaching strategies which are grounded in research.

- 10.3 We will continue to support staff development activities which both equip individual academics with the “tools of their trade”, and give staff the knowledge and skills required to implement the more novel aspects of this strategy. We will continue to require new staff to attend an induction course in teaching, and will develop and implement a comprehensive framework of Continuing Professional Development (CPD) for academic staff. As part of this framework, we will identify annually a programme of topics for workshops led by both internal and external specialists. This annual programme will focus on priority areas identified in this Strategy. A further opportunity will be in the development of an MSc VetEd, on which we will encourage staff to enrol, and we will continue our links with Kings Institute for Learning and Teaching with staff taking the PGCertEd, which can lead to an MSc in Education.
- 10.4 The “mentor” scheme has been built into the induction procedures for all new staff of the College. The reasons for this are a) to assist in allowing individuals to assume responsibility at an early stage for their own development and learning and b) to help locate the work of the individual within the overall aims and objectives of the department and of the College. It is recognised that the provision of a formal mentoring network would be of great benefit to new members of staff at the College and to the College itself. Follow up work is necessary to monitor the effectiveness of this scheme.
- 10.5 The Educator Prize scheme recognises and rewards excellence in teaching and excellence in pastoral care. It will continue to be reviewed annually, with a view to ensuring that it fulfils its potential for encouraging good practice across all sectors of College staff. The scheme also promotes teaching innovation through projects associated with the team prizes.
- 10.6 Peer observation and the Educator Prize scheme both have the potential for identifying, developing and disseminating good practice, and are complemented by the informal sharing of advice and experience which characterise educational institutions. The Teaching Quality Committee is aware that it is gathering a considerable quantity of data through which it could identify successful practice which could be disseminated more widely, and it will consider how this might be done.
- 10.7 We will disseminate good and innovative practice in support of high quality learning and teaching. Internally, this will continue to happen primarily through informal contacts, supplemented by team teaching, the module review process, and internal staff contributions to staff development workshops. We will also investigate ways to share good practice among our teaching staff. Externally, the Subject Centre for Medicine, Dentistry and Veterinary Medicine plays an active role in disseminating good practice, and the College participates fully in this.
- 10.8 The LIVE centre was established at the College in 2005. LIVE (Lifelong and Independent Veterinary Education) is the Centre for Excellence in Teaching and Learning (CETL) established to ensure that veterinary education meets the needs of capable committed, independent learners, from entry to retirement.

The LIVE Centre will play a central role in enhancing the quality of learning, teaching and assessment during the lifetime of this Strategy. LIVE has two main, complementary themes:

- The development of independent learning skills in veterinary professionals to equip them for lifelong learning
- The enhancement of learning derived from the work-based components of clinical undergraduate programmes

## **11. Monitoring and Evaluation**

11.1 We will gather feedback on the effectiveness of our learning, teaching and assessment strategy and inform our quality enhancement processes through our:

- External Examiners
- course and staff evaluation questionnaires
- Course Management Committees
- graduates and employers
- practitioners providing practice placements
- College staff providing peer feedback on teaching
- module reviews

11.2 An annual report will be made to the Learning, Teaching and Assessment Committee, and thence to the Academic Board, detailing the progress made towards meeting the targets in the Strategy.

### References:

Biggs, J (1976) Dimensions of Study Behaviour: Another Look at ATI. *British Journal of Educational Psychology* 22, 287-297

Biggs, J (1999) *Teaching for Quality Learning at University*. Society for Research into Higher Education. Open University Press. P.65

Marton, F and Saljo, R (1976) On Qualitative Differences in Learning: I: Outcome and Process. *British Journal of Educational Psychology* 46, 4-11

Marton, F and Saljo, R (1997) *Approaches to Learning*. In: F Marton, D J Hounsell and N J Entwistle (eds), *The Experience of Learning* (2nd edn). Scottish Academic Press, Edinburgh Roach, M

Blackmore, P and Dempster, J A (2001) Supporting High-Level Learning through Research-Based Methods: A Framework for Course Development. *Innovations in Education and Teaching International*, 38.4, 369-381

Shnell, T J (1986) Cognitive Conceptions of Learning. *Review of Educational Research* 56, 411-436

