The University of Edinburgh

Enhancement-Led Institutional Review

Reflective Analysis 2006

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Background to the Reflective Analysis

This Reflective Analysis was prepared principally by a small writing group comprising the Director of Quality Enhancement, the Dean of Undergraduate Studies in the College of Science and Engineering, an Academic Policy Manager and an Academic Policy Officer from the Policy and Planning Department. Many other members of the University, including representatives of the Students' Association, were consulted or provided initial drafts of sections and were invited to comment on the document at various stages.

In writing the Reflective Analysis, we have aimed to provide a concise, readable and informative account of quality assurance and enhancement at the University of Edinburgh that is consistent with the "Excellence in Education" goal stated in the University's Strategic Plan. To achieve this, given the size and complexity of the University, and its devolved organisational structure, we have focussed on what we see as the key issues, and given detail only where we feel it essential, or to illustrate a more general point. We have also exploited the fact that our last institutional review was held very recently, in autumn 2002. The outcome from this review stated that the reviewers had confidence in our standards and quality assurance procedures. We have therefore taken that confidence as our starting point and have focussed on what has changed in our policies and procedures since that point. In the sections on enhancement we have highlighted some interesting initiatives, but again these are examples of activity that has taken place within the University and are intended to give a flavour of how enhancement is taken forward rather than act as an exhaustive list.

Since the time of the last review, the University has been through three very major changes in the way it operates – probably the most intense period of change it has ever undergone. These three major changes are:

- The University's restructuring. This change was implemented between the two visits of the review team for the last Institutional Review in autumn 2002. All parts of the University, academic areas and support services, were affected, but probably the greatest adjustment has been required in the newly formed College of Humanities and Social Science which was created out of six former faculties. Central administration was reorganised into two new Support Groups (making a total of three University-wide Support Groups in all), respectively headed by the University Secretary and a newly appointed Director of Corporate Affairs. A review of the restructuring was undertaken in 2005 (section 1.2.8).

- The Curriculum Project. This has redesigned the way in which our curriculum is organised and described. In many respects it is the major enhancement initiative that we have undertaken in the last four years, although it has not usually been labelled as such during our discussions.

- The introduction of a new academic year. As of 2004/05, the academic year has been split into two semesters rather than three terms and starts and finishes earlier in the year than previously. It is not however a full conventional "semesterisation". Some courses (i.e. modules) are taught over one semester; some over both. Some courses taught in the first semester are nevertheless examined at the end of the second. This allows for the different requirements of different kinds of courses, e.g. some are reasonably short and can be examined as soon as they are finished; others involve themes that take time to develop and in which students need reflection and revision time before they should be assessed.

Looking ahead, a major University-wide project which will have an enormous impact on the way we work and how we support students is the EUCLID (Edinburgh University Complete Lifecycle Integrated Development) project. It was established in October 2004 and is the most ambitious development of this sort ever undertaken within the University of Edinburgh. The project is intended to deliver radical improvements to the way the University interacts and to modernise our systems and processes supporting academic administration. Staff in Schools, Colleges and Support Services will start to see benefits from the project from autumn 2007 with completion expected by autumn 2009.

In analysing the University in 2006, it is important to understand both the extent to which the three projects have dominated our academic business over the previous four years and to appreciate the wide ranging implications of EUCLID and the impact that all of these projects will have.

1. Introduction

1.1 Overview of the University

1.1.1 The University of Edinburgh (UoE) is one of the largest old universities both in the UK and in Scotland. It has some 24,000 students, of whom about three quarters are undergraduates, and about 7,500 staff. Our commitment to quality in teaching and learning is reflected in our mission statement, which is as follows:

- *The University's mission is the advancement and dissemination of knowledge and understanding. As a leading international centre of academic excellence, the University has as its core mission:*
- *to sustain and develop its position as a research and teaching institution of the highest international quality and to benchmark its performance against world-class standards;*
- *to provide an outstanding educational environment, supporting study across a broad range of academic disciplines and serving the major professions;*
- *to produce graduates equipped for high personal and professional achievement; and*
- *to contribute to society, promoting health, economic and cultural wellbeing.*

As a great civic university, Edinburgh especially values its intellectual and economic relationship with the Scottish community that forms its base and provides the foundation from which it will continue to look to the widest international horizons, enriching both itself and Scotland.

1.1.2 The University offers a very wide variety of courses and programmes. Indeed we believe that we offer among the widest choice of subjects of study of any university in the UK. This breadth is one of our great assets and a characteristic that appeals greatly to potential and current students.

1.1.3 It is also our intention that students, both post- and undergraduate are taught in a way that is illuminated and enhanced by our research activity. Our strong commitment to research is reflected in the results of the last Research Assessment Exercise, which showed that the University's upward movement in the quality of its research was continuing. Some 75% of the 1,365 UoE staff submitted for assessment are now located within centres assessed at Grades 5/5*; the figure rises to 95% for Grades 4 and above.

1.1.4 The University's Home/EU undergraduate population has been more-or-less constant in recent years reflecting the limitations on student numbers imposed by SHEFC (now SFC), although there was a slight overshoot in 2005/06 partly because of particularly successful recruitment in Science and Engineering and improved progression in some areas. The number of overseas undergraduate students has continued to rise, and expansion has continued in postgraduate education (particularly, in the last few years, in taught postgraduate programmes).

1.1.5 Our last institutional review took place in September and October 2002. In their report (published February 2003) the reviewers made a number of points both approving and less so. Our detailed response to these points was sent to QAA in May 2004. The most important action points were encapsulated within the curriculum project (refer section 2.2) which had not yet started at the time of the review, the scrutiny of academic standards and the use of the benchmarks and the SCQF (Scottish Credit and Qualifications Framework). Since then these issues have been addressed by the completion of the curriculum project, work on standardising procedures for degree classification across the university (e.g. the Degree Classification Working Group) and by including relevant issues in our internal review procedures.

1.2 Structure of the University

1.2.1 Since the start of academic year 2002/03 (and parallel with the visit of the last Institutional Review team) the University of Edinburgh has been more extensively devolved than previously. It is now divided into three colleges and three support groups. A review of this restructuring was undertaken in 2005 (see paragraph 1.2.8 below).

1.2.2 The three colleges are: Humanities and Social Science (CHSS), Science and Engineering (CSCE), and Medicine and Veterinary Medicine (CMVM). The Colleges have significantly more independence than the

corresponding units (Faculty Groups) before the restructuring, and have freedom to take decisions and make local arrangements except in areas where the University has explicitly retained its authority. To a much greater degree than previously they are responsible for developing their own academic policy and strategy, though within overall structures and templates prescribed at University level. Each College is headed by a Vice-Principal. The three colleges differ greatly in the number of students (roughly 60% of all students are in CHSS, 12% in CMVM and 28% in CSCE) but as "businesses" are roughly equal in size (principally because of the much greater cost and volume of externally-funded research in science and medicine than in humanities). The colleges are supported by College Support Teams which include professional University administrators and specialists in areas such as finance and human resources.

1.2.3 The colleges are divided into schools (21 in all), which are the core units for teaching and research. Some schools (e.g. Chemistry) cover a single, albeit broad, discipline, whilst others (e.g. Arts, Culture and Environment) bring several disciplines together.

1.2.4 There are now three support service groupings: Student and Academic Services (SAS) which is headed by the University Secretary and includes academic policy and administration (including corporate planning), student services, public relations and development; Corporate Services (led by the Director of Corporate Services) which has responsibility for estates, finance, human resources and management information services; and the Information Services Group (ISG) headed by the Vice-Principal for Knowledge Management and encompassing the Library, Museums and Galleries, Computing Services (EUCS) and the Media and Learning Technology Service (MALTS).

1.2.5 Another particular feature of the University's structure has been the development of Teaching Organisations which provide central management of undergraduate teaching for a whole School. This idea has been adopted in a number of schools especially in the College of Science and Engineering (see box 7, in section 4.2.1). Graduate Schools were also established in the College of Medicine and Veterinary Medicine and in individual Schools in the other colleges following the University restructuring. They vary a good deal in both size and type; although some academic and senior research staff, research and masters students and staff from Associated Institutions may be attached to a particular Graduate School, in many cases the schools act mainly as administrative and organisational units.

Consequences of restructuring

1.2.6 The result of this devolution is that the three colleges have to a considerable extent organised their academic activities in ways that meet their own needs, and reflect their own culture. At the same time, the Colleges subscribe to, and work towards, the University's overall strategic vision. The University remains the degree-awarding body and the same general principles apply in all colleges (for example of quality assurance and of course approval and validation, as well as in some special cases such as the disruption to assessment in spring and summer of 2006). Colleges must each be able to demonstrate to the University centrally (in the form of Court, Senate, the Principal, relevant Vice-Principals, and so on) that they are following the University's general policies and practice. How we achieve this is described in section 2, below.

1.2.7 One notable additional feature of the reorganisation of 2003 was that it vested more power in individuals, particularly heads of school and of college (who, of course, also have the power to delegate that responsibility to other individuals) and less in boards or committees. This change has made much less difference than some colleagues had thought it might, since committees still meet and important work is still done there; the difference is that almost all these committees are now formally advisory rather than executive.

1.2.8 The 2005 Restructuring Review concluded that "that the implementation of a new organisational structure in 2002 had been strategically astute, leading to clear benefits to the institution as a whole. In particular it was obvious that the creation of Colleges and Schools, and the devolution of authority and responsibility to these academic levels of activity, had been the right way to proceed to enable the University to face a number of challenges... [it was] apparent that the overall concept of restructuring was sound and that the structure as it stands is working to the benefit of the University, both its staff and students." The restructuring has enabled us to organise a large university in ways that suit different disciplines and it has delivered much better and more systematic services in an effective way. The substitution of schools for departments that were often very much smaller has met with some opposition, particularly from small departments with a strong local culture, but has

given us a more systematic and better organised approach to many things and improved access to administrative and clerical help. Unsurprisingly however, restructuring has not worked as well as we would have hoped in every respect, and work is currently underway on implementing the recommendations of the review.

1.3 Academic Governance of the University

Court, the Senatus Academicus and main management committees

1.3.1 It is the University's practice to make all standard academic committee agendas, papers and minutes available online for reasons of openness and accountability and in compliance with the provisions of the Freedom of Information and Data Protection Acts. (In many cases agendas, papers and minutes are also available for non-academic committees). A full list of the main University-wide committees, reporting relationships, and links to committee web pages with composition, remit, agendas, minutes and papers is available on the University's website. (The relevant section of the University's publication scheme has further links to College and School level committees throughout the University.)

1.3.2 The governing body of the University is the Court, which has a majority of lay members with some academic and student members, and is chaired by the Rector. The Rector is elected every three years by students and staff and cannot be a student of the University or a member of its staff. Court receives regular reports from Senate (which it is formally required to consult on relevant matters), and will only very exceptionally debate curricular issues.

1.3.3. The supreme academic body is the ***Senatus Academicus***, which is chaired by the Principal, and meets five times per academic year. All professors are members of Senate, together with the vice-principals, heads and other senior officials of colleges, all heads of school, heads of some non-academic units, certain other specific post-holders and members elected from the academic and research staff of each college. There are also student members who can speak but not vote. Senatus has the ultimate responsibility for the academic standards of the University. Typically around fifty people go to Senate, more when there is particularly controversial business such as the restructuring of the University or the structure of the academic year. The way in which Senate devolves its powers to its committees is described below.

1.3.4. The Principal's Strategy Group is composed of the highest-level budget holders (in particular the three heads of college and the heads of support groups) plus the Principal and the Senior Vice-Principal. It has no statutory functions but is formally advisory to the Principal. It meets regularly to discuss major issues of principle and strategy. Its full minutes are not released except to members and a few other senior officers, but a summary is made available to Court and Central Management Group and published on the University's committees' webpage.

1.3.5 In contrast, although the Central Management Group (CMG) is advisory to the Principal, it also reports to Court, comments to Senate (via Academic Policy Committee) on matters affecting academic policy, and receives reports from a number of other University committees itself. Its members include all the major budget holders in the University and all Vice-Principals. It is responsible for integrating the academic, physical and financial aspects of University planning and for monitoring performance. It has few direct academic responsibilities.

Committees of the *Senatus Academicus*

1.3.6 Senate has several committees working to it, of which five are particularly relevant to this document. Historically, these committees prepared business for Senate, which engaged substantially with the areas of activity that were delegated to committees. In recent years, the committees have operated with a much higher degree of autonomy. Serious debate in Senate on issues that have been addressed by the committees is now relatively rare (though, for example, there were major debates on some of the proposals of the Curriculum Project and of the group that designed the common Honours classification scheme). All have student representatives as full members of the committee.

1.3.7 Academic Policy Committee (APC) has representatives from all colleges and schools together with a number of individuals with responsibilities that extend across the whole University. Its function is to be the forum where matters affecting development of teaching and research in the University are given detailed consideration, taking into account the perspectives of all schools and colleges and the major academic services. The restructuring review highlighted that there was dissatisfaction with the operation of APC amongst its

membership and others within the University. The restructuring report recommended that a different mechanism be explored to deliver the strategic role which had been envisaged for APC. Consequently during 2005/06 APC considered various different proposals for either modifying its role or abolishing itself in its present format. As yet agreement has not been reached and work on this topic will continue next session, with APC meantime continuing in its present form but somewhat widening the range of areas that it will consider.

1.3.8 Senatus Undergraduate Studies Committee (SUGSC) is responsible for monitoring and maintaining consistency of practice and of standards in undergraduate studies across the University. This includes undergraduate programme approval, changes to degree and assessment regulations and considering good practice in regard to undergraduate learning, teaching and assessment. It reports regularly to Senate, through the Academic Policy Committee and its membership comprises representatives from each of the colleges and representatives from central administrative services such as Registry, Policy and Planning, Centre for Teaching, Learning and Assessment (TLA) and Student Recruitment and Admissions (SRA).

1.3.9 Senatus Postgraduate Studies Committee (SPGSC) operates on a more strategic level than SUGSC although a number of its specific functions broadly mirror the SUGSC roles in respect of postgraduate programmes and students. In addition to their policy making role, SUGSC and SPGSC also provide a forum for discussion between representatives of the Colleges, the vice-principals with responsibility for these areas, and student representatives. This is reflected in the membership of SPGSC which comprises the three College Postgraduate Deans, the three College Postgraduate Administrative Officers, the University's Academic Policy Manager (Postgraduate) and student representatives.

1.3.10 The Senatus Quality Assurance and Enhancement Committee (SQAEC) is the committee which develops, operates and monitors policy on quality assurance procedures throughout the University, and promotes the spread of good practice. Since 2004/05 its remit has expanded to include consideration of annual reports from University support services which directly impact on the student experience. The membership of SQAEC includes the Conveners of the College Quality Assurance Committees and an external representative from within the Scottish University system.

1.3.11 The Recruitment and Admissions Strategy Committee (RASC) oversees the University's strategy on undergraduate recruitment, admission and student retention with particular regard to widening participation, equality and diversity. It receives annual reports from Colleges on their recruitment and related activities and reports to the Academic Policy Committee on the development of University policy. Its membership includes representatives from the further and secondary education sectors.

College Committee Structure

1.3.12 Each college has its own committee structure, structured in a way that best suits the needs of that college but which all include the following (though the titles of these committees may vary from college to college):

- College Planning and Resources Committee
- College Academic Forum
- College Quality Assurance Committee
- College Undergraduate Studies Committee
- College Postgraduate Studies Committee
- Boards of Studies

1.3.13 Responsibility for Quality Enhancement within college committee structures varies. In CHSS and in CMVM it is vested in the QA committee. In Science and Engineering the remits of the College Undergraduate Studies Committee (CUGSC), College Postgraduate Studies Committee (SPGSC) and College Quality Assurance Committee (CQAC) all refer to quality enhancement.

1.3.14 At present, responsibility for taught programmes is split between SUGSC and SPGSC. Arguably, this division of responsibility makes it more difficult to manage and support our teaching in an integrated way. We are considering changing the division of responsibilities between these committees (and therefore between their conveners, the respective Vice-Principals) so that a single Senate committee is responsible for taught courses at both undergraduate and masters level, while another deals with postgraduate research (PGR) programmes

(at both masters and doctoral level). SQAEC would then be more able to be actively responsible for the QA of postgraduate taught (PGT) programmes. This proposal would require administrative changes, and changes in the committee structure, and in executive responsibility, in the Colleges and therefore is a decision which will require further consideration of its implications, potential benefits and drawbacks.

1.4 Overview of the University's approach to its strategies for Quality Enhancement and Learning and Teaching

1.4.1 The University has always been committed to the enhancement of learning and teaching and the student experience. Until recently our approach to quality enhancement has not been articulated in a written strategy and consequently remained less formally defined than that of some other institutions. Over the last two years we have sought to clarify and formalise our strategic approach to both quality enhancement and, closely related to that, our strategic approach to learning and teaching. The University does now have a Quality Enhancement Strategy and work on this is ongoing.

1.4.2 One of our primary considerations when drawing up our quality enhancement and learning and teaching strategies is that these documents should be meaningful, truly useful and relevant. Consequently, we considered long and hard whether or not it would be useful for us to have a formal, detailed University learning and teaching strategy. We consulted plans of other universities, and paid particular heed to the work of Professor Graham Gibbs at the University of Oxford, who has shown among other things that such plans are mere collections of platitudes unless they are linked to funding and to action. At Edinburgh, the place for such linking is at the college level. Consequently all colleges now either have or are preparing their own strategic plans for learning and teaching that meet their needs but are consistent with the University's overall approach to learning and teaching, as stated in the University's Strategic Plan (see Box 1, overleaf). There is more about them in section 4.1.

1.4.3 The development of strategy at the College level is complemented by the University's Quality Enhancement Strategy, which is designed to help the University achieve relatively short-term aims in specific areas. This approach and an evaluation of our progress to date are discussed further in section 3.3.

Aim

To be a leading international provider of undergraduate and postgraduate education that meets high academic standards and enables all who can benefit to realise their full potential.

Objectives

In pursuing excellence in education we will:

- continue to enhance the quality of, and maintain breadth in, our educational provision
- ensure fair access and progression for all who can benefit whilst maintaining the high quality of our student intake and graduate output
- produce graduates equipped for both personal and professional achievement at the highest levels
- provide programmes that are relevant to the needs of students and society
- increase the proportion of postgraduate students
- increase opportunities for, and participation in, lifelong learning

Strategies

Our strategies for achieving our objectives include:

- responding to recommendations identified through quality enhancement activities
- developing the professional capability of all those involved in the delivery of teaching and learning
- ensuring that all those with the potential to study with us are not deterred from applying
- improving support for more vulnerable students
- developing new and more flexible ways of learning, teaching and assessing and exploiting new technologies
- ensuring our research and scholarship feeds directly into the learning experience
- providing flexible and better informed curriculum choice
- making course administrative processes more efficient and cost-effective both for students and for those who teach them
- working with employers and professional bodies to develop new programmes, keep current programmes up-to-date and provide more opportunities for placements
- stimulating creativity and entrepreneurialism in our students and ensuring they acquire and develop transferable skills
- expanding access to postgraduate and CPD provision through e-distance courses

Box 1. Core strategic goal: Excellence in education. From the Strategic Plan

2. Internal monitoring: the University's arrangements for its quality and standards and public information

2.1 General Principles

2.1.1 Although our quality assurance mechanisms continue to evolve and mature, our underlying principles remain constant. It is understood that every member of staff involved in learning and teaching has a role to play in ensuring teaching quality. We believe that monitoring and review should take place as close as possible to delivery. Assurance that this monitoring and review is comprehensive and that consequent appropriate action is taken should be undertaken at the next closest level. Monitoring and review should add value and should not simply be ritualistic. All quality assurance matters fall within the remit of SQAEC, but inevitably there is some overlap with activities undertaken by SUGSC and SPGSC which also carry out functions which are quality assurance related (for instance programme and course approval).

2.1.2 Formal responsibility for matters affecting teaching quality at the University of Edinburgh is largely devolved to the colleges. This autonomy is reflected in the slightly different approaches taken by colleges and schools to their quality assurance arrangements, while operating within the University's framework for QA and QE.

2.1.3 Much of the responsibility for the QA of postgraduate taught courses is in practice delegated to the Senatus Postgraduate Studies Committee and the College Postgraduate Studies Committees. SQAEC ensures that these committees are doing their job properly, and receives an annual report, but does not normally get directly involved. This works well in general, but is not entirely satisfactory. It is more difficult for good practice to be shared between undergraduate and taught postgraduate and less easy to introduce standard approaches across the board to QA (as well as teaching and assessment) when in fact there is little reason for there to be any divergence. This would be in part resolved by making SQAEC more actively responsible for the QA of taught postgraduate degree programmes. The current Senatus Postgraduate Studies Committee would then deal solely with QA matters related to research degrees to which different principles apply.

2.2 Curriculum Project

2.2.1 The Curriculum Project was announced around the time of the last institutional review, but had not then been started. It was designed as an integral part of the restructuring into schools and colleges – a time very suitable for what is probably the University's first fundamental rethink about the way in which its programmes are organised since the mid-1960s. The project was managed by a small committee chaired by the Senior Vice-Principal, who has unique authority in the University by virtue of his wide experience of it and the fact that he has occupied a very senior position for many years. Its work, which had the approval and backing of the Principal and of the Vice-Principals, was initially reported through Academic Policy Committee and Senate for implementation.

2.2.2 The purpose of the Project was to rationalise the way in which a degree programme is composed of individual courses. There had previously been no general rules (apart from adhering to the Scottish Credit and Qualification Framework); different programmes in different old faculties and departments had grown up in different ways and were often incompatible with each other. Thus, not only was it difficult for many students to chose courses from different areas, but time and (in practice very importantly) space were wasted because courses were taught according to different timetables and to meet different ends. It would take too long here to describe all its work (which is fully presented at its web site), but the main points are as follows:

1. All courses must now be worth 10, 20 or 40 points. (Some exceptions are allowed for honours dissertations, in postgraduate work, and in programmes such as Medicine which neither give students to nor receive them from any other programme.) This means that a student can compile a 120-point year from a variety of different sources. It has made a particularly big difference in some disciplines, especially in science which had previously had 120-point courses in honours years, allowing very little sharing of material or student choice.

2. The introduction of the new degree 2+2 (pre-Honours and Honours) structure for Honours degree programmes for all four year programmes. The final degree class is calculated throughout the University giving equal weight to both the honours years.

3. The timetable itself was reorganised to allow only a limited number of slots and to prohibit courses from using awkward periods of time that kept teaching spaces booked for much longer than they were needed. Lecture times, which used to be on the hour, were adjusted slightly so that there should be enough time for students to travel from one site to another (normally this would not be more than 10 minutes walk).

4. A system was introduced whereby the time of the first meeting of a course automatically sets the time at which the exam will be held. This not only allows any exam timetable to be published much earlier than previously, but also means that students taking courses that are not taught at the same time (as they, of course, must) can be assured that they will also not be examined at the same time. In practice, this matrix has produced a few problems, some of which were soluble and due as much to the new academic year as to the curriculum project (often confused in the minds of both staff and students). It may also be a little over-rigid (for instance it has proved a complicating factor in making examination arrangements for some disabled students) and it has been argued that we have given too much priority to the need to publishing a programme well in advance. New proposals from Registry were discussed at Academic Policy Committee and Senate in May and June 2006, and are likely to be introduced in 2006/07.

5. The criteria for admission from second year into honours have been standardised throughout the University and artificial barriers (such as those based on numerical quotas) have been removed on the grounds that a student should be entitled to enter honours if he or she has passed the prerequisites. A number of other issues such as moving towards allowing students to see their exam scripts have also been considered.

6. The old University "Calendar" which described the programme regulations and the programmes and courses that were available was difficult to use except for experts. There were differences between faculty practices that were explainable only by history. The regulations have been completely rewritten and the programmes are now described in much simpler and standardised "degree programme tables" that explain the credit points and level of each course and the prerequisites for a degree. All of this material is now presented in a new form, the "Degree Regulations and Programmes of Study" (DRPS) which in its first two years was available on the web as well as printed, but will from 2006/07 onwards be available only on the web (although there are arrangements for those who want to print out particular parts). It should be the first port of call for students and staff. It is also available to prospective students and indeed to anyone who wishes to see it, but we accept that more work needs to be done to make it more easily understood by those not familiar with the system.

Edinburgh University Students Association (EUSA) perspective on the student experience of recent institutional change

The University has undergone two key changes in recent years, semesterisation, closely followed by the implementation of the Curriculum Project. These developments are seen as complementary to each other. In both cases student involvement and consultation have been key in ensuring adequate consideration of the student experience. EUSA sabbaticals were members of both working groups, and they in turn carried out wider consultations with the student body through Students' Representative Council (SRC) structures and class representatives. It has been important throughout the implementation process to ensure opportunities for student experiences of the changes to be fed back to the University and taken into account. The Students' Association has acted as a conduit for this information and welcomed the fact that the Curriculum Project also took on the work of dealing with the practicalities arising from semesterisation once the Structure of the Academic Year working group stopped meeting. Whilst it was apparent that the new arrangements needed time to bed in and for people to become used to the new systems, once it became apparent that there were difficulties in some areas both staff and students were keen for revisions to be made. Whilst having argued for a mid-semester break when semesterisation was being introduced, the fact that many students were being asked to take exams at the end of semester one with no revision period after the end of teaching led to EUSA eventually supporting the abolition of the mid-semester break on the basis that this would free up more time for teaching in weeks one to ten and allow week eleven to be used for revision sessions only, alleviating the pressure on many students. There is also concern over whether all those courses examining at the end of Semester one are doing so for sensible pedagogical reasons. Students welcome the opportunity for time to consolidate their learning, allowing their ideas to mature and develop. The ability to consider the material from their courses in relation to each other, making links and allowing a range of perspectives to inform each other could be seen as one of the features of 'graduateness'. Examining quickly after the end of teaching impedes this.

This issue contrasts with the situation at the end of semester two with students having relatively little interaction with the University after March, except for exams. This has implications for student engagement with University life in general after this time, despite the fact that students are still in Edinburgh. Certainly EUSA reports that it is difficult to maintain the usual levels of engagement from student reps, and attendance at EUSA events or society activities tends to decline around this period.

The Curriculum Project has resulted in more possibilities for students to experiment with outside courses, although this is still limited despite various initiatives with the timetable to try and allow students to travel between campuses in between class times. In some cases the new class times have not been correctly interpreted and despite widespread communication it has taken time for these new arrangements to be properly implemented across the University, resulting in frustration amongst students. This has improved as time as gone on however. Wider student choice means more care is needed to ensure that students choose a viable curriculum that gives them options should their original programme choice not be possible due to failure to meet progression criteria. The role of the Director of Studies is crucial here, both in protecting the student's options, but also in having enough knowledge to be able to suggest interesting and challenging outside options.

Box 2

2.3 Consistency of Academic Standards

2.3.1 Since our last Institutional Review, we have addressed the issue of the consistency of Honours Degree classifications across the University. Particularly because we have so many programmes and so many students who do joint honours programmes, sometimes arranged specifically for them, it seemed important to ensure that the class of the degree awarded to all students would not depend on differences in practice between different parts of the University. There had been some suggestion that cases did arise occasionally where anomalies might have lead to injustice, although we know of no occasions when they actually did. A Degree Classification Working Group was set up in 2003/04 and made various recommendations, of which the most important was that "the degree class should be assigned by calculating the [weighted] means of the marks of the individual courses". A subsequent Implementation Group put flesh on those bones, and also addressed the difficulty that always arises with such schemes in disciplines where, as is common throughout the UK, examiners are reluctant to give marks much above 75% (where 70% is the minimum for a first), so making a first hard to achieve for anyone who gets marks even in the low 60s (still a 2.i) in some courses. We have modified the University's common marking scheme to introduce a scale of marks within the A band (70 to 100%) and encourage examiners to use higher marks. This will be carefully monitored by examination boards and within schools and colleges to see if it is working.

2.3.2 Many of these difficult problems would disappear if honours degrees were no longer classified in the traditional way and students simply given a transcript. Since 2001, Senate has consistently agreed that the future of classification system should be reviewed, and has supported the UK-wide Burgess Committee (of which the Vice-Principal (Learning and Teaching) is a member) in its work. (Refer to the University's response to the Burgess Report.)

2.4 Programme creation and approval

2.4.1 Proposals for new degree programmes usually feature in the annual plans of colleges and schools. Proposals often begin with groups of teachers within a school. Once the proposals are developed, all new programmes must be approved at school level by the Board of Studies (or equivalent); at College level by the College Undergraduate or Postgraduate Studies Committee[1]; and at the University level by the Senatus Undergraduate or Postgraduate Studies Committee. Proposals have recently been approved by Senate to delegate its powers of approval to colleges except in particular cases, for example where the norms of the curriculum project are not followed or where there are major inter-college issues.

2.4.2 All new degree programmes proposals are accompanied by a programme specification. The University now has a set of standard programme specifications and most of these follow the University's template closely. In the few cases that do not, it is a requirement that the programme specification still describes the aims and learning outcomes, methods of assessment, accreditation and structure of the degree programme.

2.4.3 Separate programme specifications are not produced for every combined degree offered by the University. We took the decision that whilst for some combined honours programmes it was necessary to produce separate specifications to indicate their particular coherence, for many others (especially in the case of degree programmes from which there are few graduating students) it is sufficient to rely on programme specifications for the constituent subjects.

2.4.4 Degree programmes may be closed by following a process through the committee cycle similar to that which new programme proposals follow (and this is likely to occur when the discipline area decides that the programme no longer reflects the currency of the academic discipline). In practice when such proposals have arisen recently, the decision to close has been made at a managerial level, usually for resource reasons and often as a result of the closure of a specific discipline area. The academic decision-making process has concentrated on the effect of closure on the rest of the University (as well, of course, as the need to allow students currently on the degree programme or formally admitted to it to follow it through to the end).

1 In CMVM, the flow of responsibility for programme (and course) approval is different. There is a single Board of Studies, three undergraduate studies committees (one for Medicine, one for Veterinary Medicine, and one for Biomedical Sciences), and one postgraduate studies committee. The CMVM undergraduate studies committees and its postgraduate studies committees both report to the CMVM Board of Studies.

2.5 Course creation and approval

2.5.1 The procedure for course creation and approval mirrors that for programme creation and approval in so far as proposals normally arise at discipline level and progress through the formal committee cycle to Senatus Undergraduate or Postgraduate Committee level. SUGSC and SPGSC have delegated authority from Senate to approve course proposals, but as before Senate has now agreed in principle to devolve these powers to colleges in most cases. The Teaching Quality Handbook has detailed guidance on course creation and approval including guidance on deciding whether changes to an existing course result in the creation of a new course and how to deal with continuing and professional education courses.

2.5.2 A notable development in the last 3 years has been the creation of CCAMS (Course Creation and Maintenance System). This is an online system for the creation, approval and maintenance of information on courses. The first phase of the project was implemented in 2003 and allowed Course Organisers to create courses online via the Web Interface to Student, Admissions and Related Data (WISARD), including recording a substantial range of data relating to the teaching of each course and for the courses to be then electronically passed through the approval committee structure until final approval by the Convener of SUGSC/SPGSC (or his/her representative). In 2004, all existing courses were brought into the system and consequently CCAMS now holds information for all undergraduate and postgraduate taught courses delivered within the University. The obvious benefit of CCAMS is that it has provided an efficient means of approving courses and of clearly recording that approval route.

2.6 Course monitoring and quality assurance

2.6.1 Some Colleges are more prescriptive in how course monitoring should be undertaken (for instance the College of Humanities and Social Science has a set of College wide course monitoring forms) and all Schools have developed their own internal processes. But it is our basic philosophy that it is those close to the delivery of courses who are in the best position to design a monitoring system that is effective and which can deliver information that might be truly useful in strengthening individual courses or sets of courses.

2.6.2 We outline in the Teaching Quality Handbook our expectations of what course monitoring should include and also state our basic quality assurances principles in this regard. It is the immediate duty of each Course Organiser to monitor the course for which s/he is responsible. We do not lay down centrally how this must be done and the University does not have a standard student questionnaire to elicit student feedback. Our basic QA principles for course monitoring are as follows:

- There must be a stage above the Course Organiser where there is responsibility for a whole programme or group of programmes.
- There must then be a stage at which people distinct from those responsible for the delivery of the course yet adequately informed about it are able to comment on the quality assurance procedures and on their outcome. At each stage, there must be a link with the external examiners' reports.
- There must be a procedure for ensuring that action is taken following any issues that arise from quality assurance (including from reports from the QAA and from Professional, Statutory and Regulatory Bodies). Such action may involve parts of the University other than those directly concerned.
- A report on major issues and action taken must ultimately be made to Senate, which has the right to take any appropriate further action.

2.6.3 An overview of the issues arising (positive and negative) from the course monitoring process is then included as part of the School's annual quality assurance report which is considered by the College Quality Assurance Committee (CQAC). The three CQACs in turn report to SQAEC in April of each year. The job of each stage is to review what has been done at lower levels. Thus, SQAEC does not itself conduct quality assurance of courses (or programmes), but rather considers reports from the college committees about how those committees have ensured that the work is done at school level and about what results there have been and what action has been taken. It took some time to persuade some of the academic staff at Edinburgh that formal procedures for quality assurance are important but a realisation of its importance has spread and is now recognised and widely accepted as a normal part of the culture of academic teaching. Course monitoring is no doubt still more thorough in some areas than others, and in general terms it is more robust at undergraduate than postgraduate taught level. This is one area that we anticipate would be improved by bringing together the management of all taught courses.

2.7 Internal programme review

2.7.1 At present we have two systems for internal programme review: Teaching Programme Review (TPR) is the prime means by which the University reviews its undergraduate teaching regularly and systematically. Quinquennial Review (QQR) is the equivalent system for postgraduate programmes and each review considers all of the postgraduate provision (both taught and research) within a specific graduate school.

2.7.2 At present we do not have a system for time-limited approval or re-approval of degree programmes. We consider that this is done implicitly within TPR and Quinquennial review.

Teaching Programme Review

2.7.3 We benefited from being later than many other universities in instigating a University scheme for the review of undergraduate programmes in that when TPR was devised and launched (in 1999), it was possible to incorporate good practice established elsewhere. When SHEFC introduced guidelines for internal review, we found it necessary to make only relatively few minor changes. Nevertheless, we have kept the system under review and as the first cycle of TPRs will be completed by the end of academic year 2005/06, SQAEC decided that a major review of the process should be undertaken. For more on this, see 2.7.9, below.

2.7.4 Formally reviews are conducted of teaching programmes rather than of schools or individual disciplines, since it is the outcome for the student that is important rather than the way in which it is delivered. Since restructuring, TPRs rarely stretch beyond a single School although in the case of the TPR of Biology, four different schools were involved. In 2004, we also undertook a TPR of joint honours provision. This review took an overview of the University's joint degree provision. It investigated whether or not our joint degrees offered a meaningful educational experience and recommended some improvements in the structure and organisation of the programmes.

2.7.5 We have detailed guidance notes outlining the TPR process which are provided to all areas undergoing review and to the members of the review team. From the outset we published all TPR reports and the response to these reports on our website.

2.7.6 We consider that our system of TPR has many strengths. Its fundamental principle is that it is a co-operative and collegial procedure in which review of the students' learning experience in a given subject is done by people whom the teachers trust and to an agenda with which they agree; it has therefore been widely accepted by schools and disciplines, which have generally found it valuable. Schools/discipline areas are invited to contribute to the subject specific remit which is drawn up for each TPR and supplements the standard TPR remit. This means that areas of particular interest to the discipline can be focused on during the review. Although the Director of Quality Enhancement formally chooses the members of the review team, in reality the Schools recommend the external members and the Director's role is to ensure that they are suitable. This means that the external members are people whose opinion the discipline respects and takes seriously. In a small number of cases (for instance Music and Informatics), the discipline has requested that an overseas representative be included in the team. Similarly, two disciplines (Informatics and Medicine) requested that the TPR team be expanded to include four external members. We consider these reviews to be amongst our most successful and this is to the credit of those disciplines which were willing to seek critical input from different sources and from leading academics who were perhaps less likely to be unduly respectful because of the University's status and more inclined to measure our learning and teaching within an international context.

2.7.7 The College of Humanities and Social Science also has regular (one per semester) reviews of all aspects of each of its schools. The review teams include external members and use TPR and quinquennial reviews as part of their evidence. This provides an additional check that all the periodic reviews of teaching and of research are considered together.

2.7.8 Perhaps the most disappointing aspect of our TPR system to date is that we have failed as an institution to capitalise greatly on using its outcomes for enhancement purposes. Undoubtedly, the individual discipline areas and Schools, and to an extent Colleges, have been able directly to improve learning, teaching and assessment, and the student experience as a result of recommendations and observations arising from the TPR reviewers. Similarly, particular features of good practice identified by TPRs have been promoted locally. But we recognise that the University as a whole has yet to identify a mechanism by which to learn

systematically from the outcomes of TPR. We do compile a database of commendations and recommendations arising from TPRs so that any comments that occur frequently can be noted and acted on. A report to SQAEC in April 2004 analysed these and identified common themes. Although, interestingly, the report did not lead to any specific University level action being taken as the areas of concern were either already under consideration or were limited to one or two particular disciplines.

2.7.9 In summer 2005, the Director of Quality Enhancement, who has formal responsibility for overseeing the process of TPR, invited Professor J Ansell, then Convener of the College of Humanities and Social Science Quality Assurance and Enhancement Committee, to chair a review of the TPR process. SQAEC agreed the review group's remit and the group subsequently reported to the Director of Quality Enhancement through SQAEC in April 2006. The main proposals were to speed up the process by which TPRs are considered after they have been completed, to change the remit in some ways, and to experiment with having student reviewers in some TPRs.

Quinquennial Review

2.7.10 Prior to 2002 the University had a system of QQR for its taught postgraduate programmes. From October 2002 the University introduced a system of QQR for departmental postgraduate research degree provision and these two QQR systems were merged during 2003/04 to create a system of QQR of Graduate School postgraduate degree provision. This system was formally introduced with effect from the academic year 2004/05 and remains in place today.

2.7.11 We have detailed guidance notes outlining the QQR process which are provided to all areas undergoing review and to the members of the review team. As with TPR from the outset we published all QQR reports and the response to these reports on our website.

2.7.12 QQR is directly comparable, and thus very similar, to TPR and as such shares many of its strengths and weaknesses. The recent review of TPR has provided a welcome opportunity to consider variations between TPR and QQR; QQR procedures and documentation are in the process of being revised as a result.

2.8 Quality Assurance Committees

2.8.1 All Schools have a committee with responsibility for quality assurance. It is this committee's responsibility to take an overview of QA issues within the School and to report annually to the College Quality Assurance Committee. Many Schools have now appointed a member of staff as School Director of Quality Assurance (or similar).

2.8.2 The three colleges each have a committee that is responsible for quality assurance of all teaching, both undergraduate and postgraduate, within their college, although differences in the size and nature of colleges means that there are also differences in their remit. The College of Medicine and Veterinary Medicine, for example, although large, has essentially only two undergraduate programmes (three from 2006/2007 onwards), while the College of Humanities and Social Science has over three hundred. The role of these College Quality Assurance Committees (CQACs) is to ensure that quality assurance is properly carried out throughout their colleges. They do this in various ways by monitoring the output from course organisers, the reports of external examiners, teaching programme review reports, progression and examination data and so on. They function under the scrutiny of the Senatus Quality Assurance and Enhancement Committee (SQAEC) to whom they report every year (and thence to Senate).

2.8.3 The Senatus Quality Assurance and Enhancement Committee (SQAEC) operates on behalf of Senate on relevant matters and reports to it annually or more regularly if there are specific issues which it is invited to address. It is convened by the Director of Quality Enhancement. The three conveners of the each of the CQACs are members of SQAEC as are the Academic Registrar or his representative, a representative of the convener of the Senatus Postgraduate Studies Committee and of the Centre for Teaching Learning and Assessment, two nominees appointed by Senate, a student representative, and a senior member of another university with experience of Quality Assurance, chosen by the committee. The external member plays a valuable role bringing a different perspective and knowledge of good practice amongst other institutions to the committee.

2.8.4 SQAEC has proved a useful body. Its expertise and its small size mean that it can scrutinise documents in a way that Senate could not. It allowed us to move to a system in which there is a degree of uniformity about the University's principles and practice in quality assurance, while there remains variation between schools and colleges that meet their specific needs. The challenge now is for SQAEC to keep maturing and developing its role so that it remains genuinely useful. Formally, enhancement was given more prominence in SQAEC's role from academic year 2004/05 onwards and the committee's name was altered to reflect this (previously it had been simply the Senatus Quality Assurance Committee). In reality quality enhancement has been part of SQAEC's remit for a considerable length of time. At present it fulfils its enhancement role by noting and recording what comes to it, and using that as a tool for informing the rest of the University, and in particular for referring issues to other committees such as SUGSC. Recent examples of this have included the increased emphasis on peer observation of teaching, and a request for clarification of the role of external examiners in deciding the results of borderline candidates. However, we do believe that SQAEC could be more proactive in initiating and promoting good practice. How to do this is something that SQAEC itself must consider but it is likely it will look to draw more from the findings of TPRs and Quinquennial reviews.

2.8.5 Since 2004, SQAEC has also considered the annual reports of the various student services, including, for example, the Counselling Service, Library and Disability Service in relation to their provision for the student population and how they support the student learning experience. Although some of this is not a quality assurance function in its primary meaning, giving this function to SQAEC has proved successful in that the reports are discussed by a group of well-informed people throughout the University that are able not only to comment effectively, but also to recommend action and to promote good practice. Experience in refining QA and QE processes in regard to academic matters is helpful in identifying how these student services might also review their provision and improve their service. This is in sharp contrast to the old system in which they were discussed by a now-defunct student affairs committee and conclusions essentially never got out of that committee.

2.9 Role of Director of Quality Enhancement

2.9.1 The current Director of Quality Enhancement was appointed in 1998 (as Director of Quality Assurance), the first such appointment at Edinburgh. He has general responsibility reporting directly to the Principal, for all academic quality assurance and enhancement matters within the University, postgraduate and undergraduate, internal and external. He works closely with an Academic Policy Manager in the Policy and Planning section of the University administration, for whom this work is about a half-time job. He also holds the office of Vice-Principal for Learning and Teaching. This is not a necessary combination, but does deliver certain advantages in that it enables him to synchronise the discussion of related issues at SQAEC and at SUGSC (which is also convened by him as Vice-Principal for Learning and Teaching) and have greater overall insight into the impact of the University's policies and procedures. There is a danger in particular with QA matters, that policies made without awareness or reference to what is actually happening within the University are at best ineffectual and at worst, a hindrance.

2.10 QA of Research Degree Programmes

2.10.1 Research degrees are quite different, and there are therefore differences between the QA arrangements for these programmes and those for taught degrees. In particular there will be issues and problems which will arise during the course of the individual student monitoring and assessment processes and those which arise as part of the structured general QA arrangements.

2.10.2 The most important way of monitoring individual doctoral students is the routine meetings which they have with their supervisor; action is then taken if all is not well. Almost all students also make presentations at least annually on progress to their research group, discipline area or school. The resulting annual progress reports which are required from the supervisors are considered by the College Postgraduate Studies Committee and actions taken as appropriate. The CPGSC also considers any issues as raised by student's examiners and takes action as appropriate. During 2006/07 there will be a review of current progress monitoring procedures with a view to making them more student-centric and in order to embed issues relating to transferable and generic research skills training more effectively.

2.10.3 In order to consider procedures more generally, the University has recently introduced an annual report for research degree provision which asks schools to comment on relevant areas, including the extent to which they are compliant with some of the specific elements of the University's Code of Practice for Supervisors and Research Students.

2.10.4 Research degree provision is also considered in depth during Quinquennial reviews and there is also a standard machine-readable questionnaire form for students to report on their experiences. The postgraduate questionnaires (one for taught postgraduates and one for research postgraduates) were introduced during 2001/02 in order to enable the University to collect information and comment from postgraduate students on a wide range of issues associated with their studies at the University. The main benefit of the questionnaires is that they help the University to identify general and specific issues which are of concern to postgraduate students. These issues are then taken forward either by specific individuals (e.g. Heads of School or Support Service) or by relevant University, College or School Committees. The questionnaire also supports the decision making processes of the University where these relate to postgraduate students by providing supporting statistics which can be used to support specific proposals or decisions. During 2006/07 the University intends to build upon the questionnaire activities by putting in place more robust procedures for the monitoring of school and support school specific issues which are identified and the actions taken as a result.

2.11 Student involvement in QA and QE

2.11.1 Students are involved at all stages of the QA and QE processes. The students on each undergraduate programme elect class representatives, most commonly by year of programme. These representatives participate in Student-Staff Liaison Committees, which is the principal forum for consultation with the student body at a programme level.

2.11.2 Since the restructuring of the University into schools EUSA has introduced a new system in which two undergraduate student representatives for each school are elected at EUSA's annual elections. The school representatives are responsible for liaising with the academic management of the school. Each school has a school council, chaired by the school representatives, on which the class representatives sit, and which are also open to any interested student within the school. In practice, this has yet to bed down properly in all schools; in some it has worked well, in others not at all. In practice, there is often not yet a lot of engagement by ordinary students with the school councils, but class representatives do attend meetings regularly in some areas (e.g. Engineering and Electronics). Ongoing support and initial training is provided by EUSA staff, and this year this has been largely focussed on how to encourage school representatives to establish themselves within their school. They have been operating effectively in some areas by liaising directly with school management (Literatures, Languages and Culture is a good example), and using other methods of contact with their students, for example email, which is sometimes more effective than asking people to attend meetings. In some schools, e.g. Social and Political Studies, the school representatives sit and indeed take an active role on school teaching/undergraduate studies committees, although this is not yet as widespread as would be desirable.

2.11.3 The University's policy on postgraduate student representation was approved during 2003/04 and as with the Undergraduate system of representation has its strengths and weaknesses. One of the main issues is in finding postgraduate students who are willing to take part in appropriate Committees (see below, section 2.11.10).

2.11.4 In common with all Scottish institutions, we were invited by SPARQS (Student Participation in Quality Scotland) to participate in a mapping exercise project. The project we decided would be most helpful is *Effective engagement of postgraduates, particularly research postgraduates, in institutional systems*. We hope to learn and gain much from this during the project's duration in 2006/07.

2.11.5 Students participate in all the committees dealing with academic issues at both College and University level. Within CHSS and CSCE, student representatives participate in CUGSC, CPGSC, and CQAC. At the University level, sabbatical officers are members of SUGSC, SPGSC, APC and Senate. Students also participate in working groups addressing particular issues, such as those developing the College Learning and Teaching Strategies in CHSS and CSCE, and at the University level in, for example, the Curriculum Project Steering Group (CPSG).

2.11.6 In CMVM the situation is slightly different. There are spaces for two students from Medicine two from Veterinary Medicine on the Students' Representative Council, but in addition to this there are well established independent and separately-elected Student Councils in both of these areas. Medicine pioneered online voting before it was available elsewhere. Both of these have been in existence for a long time and operate fairly independently, but they have always approached EUSA if there was a specific need (for example the closure of the separate medical library, issues relating to the teaching of anatomy, and the transport of veterinary students to sites outside the city centre) and they also receive funding from EUSA. The independence of the Veterinary Student Council from EUSA is also related to the fact that they are members of the Association of Veterinary Students nationally, although this affiliation is paid for by EUSA. Postgraduate representation in the College is arranged through EUSA in the normal way.

2.11.7 EUSA provides training for School and Class representatives, as well as for sabbatical officers. In addition, EUSA staff provide briefings before meetings and continuing support for representatives on both College and University committees.

2.11.8 The impact of student representation is, taken together, substantial. Locally, the situation is almost inevitably somewhat variable. Student representation tends to be effective where the staff responsible for particular areas value the input of students, and take steps to integrate the student reps into committee work and informal discussions. At College level this is beginning to work more effectively. It has become clear that many key decisions are being made at this level and EUSA has adapted to this by ensuring that all the available spaces for students on college committee are filled, and that EUSA staff provide briefings for representatives before meetings. EUSA is also planning specific training for these representatives in conjunction with SPARQS.

2.11.9 Student input is often most effective within working groups, as their focus, small size, and short duration are more in tune with the perspective and experience of the student participants. It is nevertheless true that student input in large, long and rather diffuse activities such as the Curriculum Project, has been extremely valuable.

2.11.10 Postgraduate representatives are elected in the cross-campus EUSA general and by-elections, but by postgraduates only. They all deal with university-wide rather than subject specific issues. Both taught and research postgraduates can get involved in representation, although EUSA's experience is that taught students are reluctant or unable to take time out of a very intensive course to become involved in university representation at a central level. However, this does not mean that their representation necessarily suffers; many research students have had the experience of a Masters degree. EUSA's postgraduate subcommittee does not always have representatives from each College, which can be problematic as much of the University's decision making is devolved to a College level. Postgraduates are also elected and participate at a school level in various school committees. EUSA would like more academic staff to be aware of the importance of postgraduate student representation at this local level, the way it generally does with undergraduates. EUSA encourages graduate school offices to provide contact details for school representatives so that EUSA reps can liaise with them, consult over specific issues, and provide EUSA with a larger information base to ensure better postgraduate representation.

2.11.11 The generally highly effective engagement of the students in QA and QE, and in academic governance, is due to the very high degree of professionalism displayed by the EUSA staff and the student representatives (see section 6.4).

2.12 Collaborative partners

2.12.1 We have relatively few formal direct collaborations with other universities in the sense of shared provision of teaching. All are in the UK, and nearly all are postgraduate. They include, for example, the Master of Chinese Studies taught with the University of Glasgow, the Scottish Graduate Programme in Economics (which involves seven other Scottish universities), the Institute for System Level Integration, shared between Edinburgh, Glasgow, Heriot-Watt and Strathclyde Universities, and several MScs partly taught by the Scottish Agricultural College, which has a branch at the University's King's Buildings Campus. We also have an e-based MSc in Pain Management which is a collaboration with the University of Sydney and a joint PhD programme which involves a number of French Universities. In all these cases, it is clear which institution is primarily responsible for the degree and makes the award; in only relatively few cases is this Edinburgh, in which case we have responsibility for standards and for quality assurance arrangements, if necessary by satisfying ourselves about

those of other institution(s). The academic content of a collaborative degree programme has to be approved through the normal University mechanisms. Thus an undergraduate programme would have to be approved via the normal Board of Studies/School Committee, relevant College committees and Senatus Undergraduate Studies Committee route and be confirmed by APC and Senate. Normally Central Management Group will also have to approve the overall package. For those postgraduate programmes where Edinburgh is the lead institution the normal QA (including annual and periodic monitoring) procedures are applied.

2.12.2 The University's major collaborative involvement is its agreement with Edinburgh College of Art (ECA). The University and the College have had a joint programme in fine art for at least fifty years, but had little other cooperation until recently. ECA is an independent institution, which since 2004-05 has been an accredited institution of the University of Edinburgh (previously it was accredited by Heriot Watt University) offering programmes of study validated by the University, and which comply with the relevant conditions, regulations and ordinances pertaining to the awards of the University. (The term "accreditation" applies to the overall process of approval of the whole institution and its quality and standards. The term "validation" applies to the process of ensuring the quality of individual programmes or suites of programmes). The University set up an ECA Accreditation Committee to consider the content, delivery and performance of all ECA programmes leading to awards of the University delivered wholly or jointly by ECA. In February 2006, Senate received the first annual report from the ECA Accreditation Committee. This report indicates that the agreement between the institutions is working well, though as expected there remain a few issues which require further refinement of clarification but overall Senate was impressed by the success of the agreement in its first year of operation.

2.13 External Reference Points

External examiners

2.13.1 External examiners play a crucial role in monitoring and maintaining standards of all our awards, both at first degree and at postgraduate level. All courses are subject to the scrutiny of an external examiner, though the nature of the attention given to the course depends in part on the level and in part on student numbers. Examiners in the final year are also encouraged to comment on the whole programme as well as the individual courses, and to be involved in course development. The procedures of appointment, to the receipt and consideration of reports, and to documentation of action on reports are given in the Code of Practice for External Examiners.

2.13.2 Every external examiner is asked to address the question of standards (as well as to comment on the programmes in general and any changes that are planned) and to relate his or her view of our students' performance to that in institutions with which he or she is familiar. For this reason the University tends to seek external examiners from universities which teach from a research background comparable to that of Edinburgh. The responsibilities of external examiners are set out clearly in documentation sent to them by the Head of College at the time of their appointment. The external examiner's visit and interaction with the Board of Examiners, course organisers or teaching organisation form the major contribution that he or she makes to maintenance of standards and spread of good practice, but often little of this is demonstrable through documentation. Sometimes external examiners' formal reports can be disappointingly brief on the question of standards but we believe that the issue of standards is thoroughly addressed even when little is said about teaching methods. External examiner report forms are designed to try to ensure that the reports are appropriately systematic and searching. Similar, but separate, forms are used for postgraduate programmes.

2.13.3 Heads of School are obliged to respond in writing to substantive points made by external examiners. College Offices are responsible for ensuring that this is done. 'Respond to' does not mean 'agree with': it is essential to consider, and if appropriate address, these points, but not necessarily to act on all of them; not all such points could feasibly be implemented within the available resources or are compatible with other principles. Examiners normally send their forms to the Head of College but are invited, if they wish, to send their reports directly to the Director of Quality Enhancement or even to the Principal if they feel they are raising issues that need to be addressed at this level. Very few take advantage of this. In each college the Head has nominated another senior member of staff who reads them all and takes appropriate action before passing them to the school concerned. The Director of QE is always informed when serious issues arise and he ensures that an appropriate response is made. College Quality Assurance Committees are responsible for overseeing the external reports and drawing any appropriate general conclusions; they report on this to the Senatus committee as part of the College annual quality assurance report.

Professional, Statutory or Regulatory Bodies

2.13.4 Altogether we have about 120 degree programmes which are subject to external accreditation by professional, statutory or regulatory bodies (PSRBs). A summary report on PSRB accreditation and approval visits is included in the annual College QA report to the Senatus Quality Assurance and Enhancement Committee. A number of our degree programmes also have international or overseas accreditation (e.g. the Bachelor of Veterinary Medicine and Surgery is accredited by the American Veterinary Medical Association and the Management School has full EQUIS (European Quality Improvement System) recognition.)

2.13.5 Accreditation of our programmes by PSRBs is another important mechanism for assuring the external comparability of the quality and standards of our degree programmes. Not only do these professional bodies scrutinise our programmes of study, but a substantial number of our academic staff belong to PSRBs and many act as reviewers on behalf of these organisations too. Our links with PSRBs help ensure that these programmes remain current and relevant and help promote the employability of our students graduating from them.

QAA Academic Framework (SCQF, Benchmarks and Code of Practice)

2.13.6 It is the responsibility of colleges to ensure that the benchmarks, codes of practice and qualification frameworks have been taken into account when their courses and programmes are designed and approved. Teaching Programme Review teams are invited to check this as a standard part of their remit.

2.13.7 Several members of the University were involved with the original preparation of the benchmark statements and others have been involved with their revision and updating. Opinions within the University differ as to the value and applicability of the benchmarks and in practice they are more commonly referred to in some discipline areas than in others.

2.13.8 Our adherence to the Code of Practice was extensively monitored as part of the preparation for the Institutional Review in 2002. Since then, it has been the responsibility of SQAEC, in liaison with other committees (such as the CQACs, SUGSC and RASC) and support services to ensure that any changes to the Code are considered. We are aware that the QAA stresses that the Code of Practice does not require compliance by institutions but is a document that provides reference to widely agreed approaches to accepted academic practice, and therefore we need to take steps to be fully aware where our practices diverge from it and be able to defend our approach. Meetings of SUGSC, SPGSC and other committees in 2005/06 considered in detail the new sections of the code, e.g. on assessment and recruitment and admissions and made only minor observations requiring change to local practice.

2.13.9 All courses in the University are assigned Scottish Credit and Qualification Framework (SCQF) credit points and levels and this assignment is monitored through the usual approval and review processes. Similarly the requirements for degrees as laid down in the Degree Regulations and Programmes of Study are compatible with the Framework.

2.13.10 Nevertheless, the University is anxious that its degrees retain breadth and flexibility, and that degree programmes are not constrained more than is essential by external requirements. In particular, it wants to preserve the freedom of students to take a variety of courses in the same year, sometimes drawn from different levels, especially for example from either of the first two or the second two years. Such flexibility will be increasingly important as students begin to enter the University with a wider spectrum of qualifications than in the past, and sometimes wishing to take at least part of their programme part-time. The University has therefore taken a relatively relaxed view about strict interpretation of levels, and has not, for example, drawn up its own level descriptors (although those given in the Framework and by SQCF have been widely circulated). It is important to ensure that students graduating have reached the appropriate level, and that there is evidence for progression throughout the programme. But since the overwhelming majority graduate with Honours (except where not available, e.g. in Medicine), we have given lower priority to becoming highly prescriptive about the level of all intermediate courses. We introduced a recommended practice that courses in the first two years of a conventional four-year programme normally be at level 8, while those in the second two (honours) be at level 10. This practice has been adopted more strongly in some areas than others and the College of Science and Engineering in particular has concluded that many of its first-year courses are of level 7 standard. But we do believe that where our first and third year courses are at levels 8 and 10, they do indeed

have learning outcomes compatible with the SCQF definition of those levels. The report of the 2002 review did criticise this practice and we have considered that criticism, but have not made any major changes in consequence.

QAA Enhancement Themes

2.13.11 We welcomed the introduction of the Enhancement Themes approach in 2003 as an innovative way in which to engage members of university staff at all levels in sector-wide debate about issues that are of interest to all institutions. During the first year of this approach Edinburgh was particularly involved as the Director of Quality Enhancement chaired the steering group for the Assessment theme and a senior administrator acted as an interviewer for the Responding to Student Needs theme. In the second year, Dr Graeme Trousdale, School of Philosophy, Psychology and Language Sciences, and Ms Sarah Nicholson, EUSA Vice President (Academic Affairs) (2003/04) were members of the Steering Committee for the Employability theme. Tim Cobbett, EUSA Vice President (Academic Affairs) (2005/06) is a member of the Steering Committee for The First Year theme and of the SHEEC (Scottish Higher Education Enhancement Committee). Overall we think that it is still too early to assess the impact of the Enhancement Themes and whether they have had a positive affect on individual members of staff within the University and on our overall institutional approach to quality enhancement. We believe that this is a view shared by other Scottish institutions.

2.14 Provision of Information to the Public

2.14.1 A large university like Edinburgh puts a great deal of information into the public domain. Some of this is essentially publicity (press releases and so on), but more important, at least in the context of this review, is information given to current and prospective students, employers and other stakeholders. Responsibility for the University's public face is given to Communications and Marketing (CAM), which edits and publishes the relevant documents.

2.14.2 Information for current students, however, is mostly provided by handbooks produced within individual schools or disciplines, for whose accuracy they have responsibility. Postgraduate Codes of Practice are University-wide. Information about details of courses and programmes is published in the "Degree Regulations and Programmes of Study" (DRPS) described in section 2.2.2.

2.14.3 The prospectuses are also produced by CAM with help, guidance, and significant input from Student Recruitment and Admissions, the International Office and the Postgraduate Office. Information supplied by colleges and schools is edited, and sent back to them for checking before publication.

2.14.4 The Web is a major source of information, both for staff and students within the University, and also for prospective students, especially for people overseas. Recruitment material corresponding to prospectuses, general information about the University, committee papers and minutes, school sites covering teaching and research, and teaching material relating to individual courses are all accessible – although in some cases, where confidentiality is important, only to those within the Edinburgh domain or a subset of it.

2.14.5 The University was an early adopter of web technology. Its web presence has evolved organically, with millions of pages spanning hundreds of sub-sites. Clear chains of editorial responsibility are maintained within the University's central corporate web site. However, publishing practices, editorial controls, corporate branding and navigational structures do vary over such a large distributed-publishing network.

2.14.6 The University is, therefore, now beginning a Web Development Project, intended to unify the University's existing web publishing into a single cohesive entity, designed from the outset with the needs of its end users in mind. Agreed workflows and editorial controls will ensure quality of presentation, authority of content and consistency of navigation. As the project progresses it will support and enhance web publishing throughout the University.

Freedom of Information

2.14.7 The University has made its central academic committee agendas, minutes and papers openly available on its website for a number of years and in general has taken the approach to make information openly available. This helped in our preparations for the introduction of the Freedom of Information (Scotland) Act and in line with the legislation we now have a comprehensive publication scheme, setting out the information that the University makes available on a proactive basis. The publication scheme includes sections on governance (of which committees is a subset), teaching quality, student administration and support, and support for disabled people. Drawing together a publication scheme for such a large institution was a considerable task and it was extremely gratifying that the University received the Records Management Society Award 2005 for its work in preparing for the implementation of the Scottish Freedom of Information Act.

Information published by the University's Planning Section

2.14.8 We have a large repository of information on our Planning Section's website. The primary function of this website is to provide University staff engaged in planning-based activities with a range of relevant materials and links. (The site is based on four restricted University intranets set up for the benefit of a range of University audiences and which provide shared access to working documents as well as publication of reference materials). But, as a by-product of this internal activity, many pages have been made publicly available given that the facts, figures, analyses and links they contain are of general interest and can assist with speedy responses to requests for information from the public.

2.14.9 Some of the pages most frequently used by those outwith the University are as follows:

1. The University Factsheet provides overview summary figures relating to key aspects of University business and is updated at both the mid-session and end-session points in each year. An archive of Factsheets from previous years is also available from this link.
2. The Student Statistics Home Page presents a wide range of summary figures relating to the University student population. It is updated on a monthly basis throughout the main portion of the academic session. Comparative figures are also included on this page and these are updated annually and/or when such analysis is required as part of ongoing Planning Section business.
3. The University Entrants Equal Opportunities reports has links to the Equal Opportunities Technical Advisory Group's (EOTAG) comprehensive statistical reports on the position of the University, providing a time series reference document, covering all entrants from 1995/96 analysed by level of study and by gender, disability, ethnicity, age and previous institution and including analysis of subsequent outcomes.
4. The Balanced Scorecard is a performance management tool which has been developed with the aim of helping senior management ensure the University's strategic goals and mission are met and confirming to government and the public that the University is meeting, if not exceeding, their expectations. See also section 3.2.1, below.
5. We have analyses and commentaries on the annual newspaper league tables produced by various newspapers, with a focus on the University of Edinburgh.
6. Analysis and commentary on the annual performance indicators produced for each higher education institution by the Higher Education Funding Council for England (HEFCE), again with a focus on the University of Edinburgh.
7. Results and analysis of the outcome of Research Assessment Exercise 2001.

National Student Survey

2.14.10 We have chosen to participate in the National Student Survey (NSS) from 2006 onwards. Edinburgh is amongst the first institutions in Scotland to take part and opted to do this because we decided that it was important that information about Edinburgh was available to prospective students from the UK and overseas on a comparable basis. The survey will also be a helpful for us to learn more about the views of our final year students and how they assess the time they have spent studying at the University of Edinburgh.

3 The University's approach to improving the quality of learning and teaching

3.1 Quality Enhancement

3.1.1 The University's approach to Quality Enhancement is broadly outlined in section 1.4. Our approach also reflects our organisational structure, in that in many respects primary responsibility lies with the three Colleges. The approach taken by the individual Colleges in turn reflects the different and varying demands of their degree programmes and their distinct academic cultures.

3.1.2 Nevertheless it is important that in terms of Quality Enhancement (as with other matters) the University[2] provides leadership and ensures a cohesive (but not necessarily identical) approach to QE across the institution. The role of the University is therefore to:

1. set the framework in which developments in learning and teaching take place, via the University's Strategic Plan; and to monitor the progress of the Colleges in implementing the Plan;
2. take initiatives that have an impact on learning and teaching across the University;
3. provide support for developments at the College level;
4. provide forums in which developments in learning and teaching that raise issues for the University as a whole can be discussed; and
5. decide those elements of academic policy that are most appropriately handled at the University level.

3.2 Learning and teaching and the Strategic Plan

3.2.1 The University's Strategic Plan 2004-2008 has six core strategic goals. One of these goals "excellence in education" (see Box 1) has as its aim: 'To be a leading international provider of undergraduate and postgraduate education that meets high academic standards and enables all who can benefit to realise their full potential'. We use the Strategic Plan to guide our planning and resource allocation at all levels: within the Colleges and their constituent Schools, and within Support Groups; it also drives the strategies that cut across the University's organisational hierarchy, such as the Quality Enhancement Strategy below. We monitor progress towards the goals of the Strategic Plan by the preparation of a report which is drawn up annually in October, and sent to the Funding Council following approval by Court. We also use a "balanced scorecard", available publicly on the University's website, as an instrument to monitor performance against a range of indicators. A number of the performance indicators within the balanced scorecard relate to learning and teaching in either specific or broad terms (e.g. flexibility of curriculum, headcount of staff development attendees).

3.3 The University's Quality Enhancement Strategy

3.3.1 The function of the University's Quality Enhancement Strategy (see Box 3, overleaf) is to address those issues that can only be effectively handled at the University level. (Developments in learning and teaching in individual Colleges are guided by College Learning and Teaching Strategies – see Section 4.1.) It is deliberately short and succinct, and focussed on five areas. The strategy was drawn up by a small working group following discussions with colleagues elsewhere in the University. As there are resourcing issues tied in with several of the strategy's strands, agreement of the Principal's Strategy Group was also sought and obtained at an early stage. The Strategy was discussed in SQAEC and other committees, but was not presented to Senate until May 2006 because of the cancellation of a meeting of APC in November 2005 and subsequent oversight.

3.3.2 Although responsibility for progress with each of the five strands lies with one or more departments or support services within the University, SQAEC will take an annual overview of our overall progress in achieving the outcomes that we have set ourselves within the quality enhancement strategy.

2 "University" is in this section shorthand for the senior management of the University, central administration and the various regulatory and discussion forums that operate across the University.

Quality Enhancement Strategy

This central strategy for the University identifies a number of target areas on which it can focus in the short to medium term and expect to achieve success. It supports the achievement of the University's mission and the goals of the Strategic Plan. The three colleges are preparing their own more detailed Learning and Teaching Strategies.

1. There have been many major changes in the University's arrangements for learning and teaching in the last few years, particularly following the restructuring into school and colleges and the work of the Curriculum Project. The University should therefore now have a period of consolidation in which as few demands for change are made upon its staff and its students as are consistent with good practice. (This was a recommendation of the review of restructuring in 2005.)
2. Good work in learning and teaching by staff in all categories should be recognised. In particular, leadership in this area should be appropriately rewarded as part of the new pay and reward modernisation arrangements, and the way in which this is done should be transparent, reflecting appropriate expectations at the various levels of role. Staff whose roles become strongly focussed in this area should be able to see a properly rewarded path in front of them.
3. Good practice in the undergraduate and taught postgraduate areas will be further integrated to the benefit of both. The pastoral support and care of postgraduate students should be improved so that it is always clear to them where they can go for help outside their own immediate supervisors and teachers. The education of research postgraduate students in generic and core skills that has been pioneered in some areas will be rolled out university-wide.
4. The quality, value, and accessibility of the University's data about its students need to be improved so that better decisions can be made both about individuals and about the success of programmes and initiatives. This will be accomplished through the EUCLID project.
5. The work of the Centre for Teaching Learning and Assessment will be better propagated throughout the University, which will take more advantage both of it skills and of other work being done in the sector outside Edinburgh. In particular, the TLA Centre's "reviewing assessment" project will enable the University to review the assessment methods it uses and to spread good practice in modern assessment more widely. Some of this work will draw on relevant Scottish Enhancement Themes.

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Box 3

3.3.3 The first strand of the QE strategy is unusual in being more philosophical than action oriented. We believe this is justified. Its purpose is to act as an institutional reminder that we have been through a period of rapid change in recent years, and that it is for the overall benefit of the institution that we now have a period of stability and reflection. The restructuring of the University (2002) was followed by the curriculum project (2003-2005) and the introduction of semesters (2004/05). The cultural impact of these combined activities has been enormous. They also had a huge impact on many colleagues' workloads. But it is equally important that we do not allow this aspect of the QE strategy to be used as a reason for not making changes on a smaller scale when these are obviously desirable or necessary. So for instance, we do intend to begin investigations about the realignment of the management of teaching of postgraduate taught programmes of study with that of undergraduate teaching (see Section 1.3.14).

3.4 The Curriculum Project, policy making and enhancement of learning and teaching

3.4.1 Over the last three years, the University has been implementing changes in the structure of the curriculum; the "Curriculum Project", as discussed in section 2.2, was overseen by the Curriculum Project Steering Group (CPSG) which took policy decisions relating to the new curriculum structure. Ordinarily much of the discussion and decision-making undertaken by CPSG would have taken place at SUGSC and SPGSC. But in tackling such a wholesale revisiting of how we manage and organise our curriculum it was more logical for one body to take an overview for both undergraduate and postgraduate learning and teaching and to make

recommendations for formal approval to SUGSC and SPGSC or on occasion directly to APC. The CPSG met for the last time in December 2005, and the handling of remaining issues connected with the Curriculum Project (e.g. approval of "opt-outs" for curricula which do not conform to the standard model) has now reverted to being handled by SUGSC and SPGSC.

3.4.2 Whilst the Curriculum Project was never overtly promoted within the University as an enhancement-led initiative (and started before the widespread use of the words in the Scottish sector), enhancement of learning and teaching and the student experience was undoubtedly its main purpose and its main outcome. This was clear from the first memo on the matter from the Senior Vice-Principal to Heads of Colleges and Schools in November 2002. This memo cites guidance from Court and Senate requesting that there be a *"fundamental review of the University's undergraduate and taught postgraduate curricula, structures and processes, with a view to bringing forward to Academic Policy Committee and Senatus a thorough simplification of these arrangements into a more standard set of structures and processes where possible, while retaining and indeed encouraging a significant measure of curriculum flexibility and particularly the ability of students to take subjects within another college in ways which would broaden their understanding across 'the two/three cultures."*

3.4.3 The Curriculum Project clarified the framework within which our Colleges must operate. It ensures that there is a definable "Edinburghness" to all our degrees and that the majority of students can expect certain similarities in their experience regardless of their degree programme, School or College.

3.4.4 The QE role of SUGSC and SPGSC is to focus on issues that are best handled at a University level. An example of such activity by SUGSC is the introduction of a standardised approach to dealing with students who have failed a study year abroad and a standardised ruling on the allocation and weighting of credit for study abroad. An example of the QE activity undertaken by SPGSC is the development of further formal guidance for the regulatory and curricula framework within which Masters by research degree programmes are offered. This ensures that applicants, students and staff are clearly and unambiguously informed about degree structures and progression requirements. Initiatives which lead to the creation of new University-wide policy are also on occasion fed upwards to SUGSC/SPGSC from Colleges. For instance our use of Special Circumstances Committees before the meetings of Boards of Examiners (which ensure that there is now more consistent treatment of students whose performance in assessment is affected by illness or other unforeseen events) was originally an initiative within the College of Humanities and Social Science. But we acknowledge that the QE aspect of SUGSC's and SPGSC's work is not as strong as we would like. To an extent over the past two years both committees have been overshadowed by the Curriculum Project and both also have a tendency to become overloaded with a diverse range of issues thus leaving less time to take a more strategic approach to quality enhancement. This is a matter which will be reflected upon in discussing the merits of our current committee structure including the possible creation of a single University level committee to oversee all taught degree programmes.

3.5 Learning Technology and Quality Enhancement

3.5.1 As an institution, we believe that the appropriate use of information and communication technology (ICT) is one of the keys to a modern university education. The University has an e-learning strategy which supports our core objective of 'Excellence in Education' within the Strategic Plan. To deliver this e-learning strategy, the University's central services (mainly the Media & Learning Technology Service (MALTS), the Library and the Computing Service) work closely with Colleges and Schools to support teaching developments. They do this always with the understanding that e-learning is not a stand-alone activity but simply one way by which we can enhance learning and teaching. Use of the central e-learning systems is widespread within the University. For example, over a thousand courses are active in WebCT, not through compulsion but because the course teams consider that it will add value to their work. Support for staff is provided from MALTS on an individual basis, as group training and via self-help web pages.

3.5.2 The core e-learning systems that we provide in addition to WebCT as the virtual learning environment are QuestionMark Perception (as the main computer-aided assessment system) and Open Source Portfolio (as the basis for the e-portfolio system we are currently developing). WebCT is accessed by students and staff via our MyEd portal and is linked directly to the Library's on-line catalogue, Athens digital resources and other resources. We have put substantial effort into this technology to ensure that it provides a consistent quality of service and that it gives our students the quality of experience that they have told us they wish to receive.

3.5.3 The Principal's e-Learning Fund (PELF) which was set up in 2003 with a total budget over the period of £2.2 million has been one way in which we have supported these developments. To date (April 2006) PELF has funded over 40 projects, ranging from £20k course enhancements to £200k Masters courses delivered by online distance education. Each year, there is a one-day conference at which the projects showcase their work in addition to featuring invited speakers, presentations and demonstrations. In March 2006 the theme for the conference was 'evaluation'. Over the last two years of the Fund (2006/07 and 2007/08) an evaluation of the impact of the PELF on the student experience will be carried out by staff from the Centre for Teaching, Learning and Assessment.

3.5.4 Some element of e-learning is used by all 21 Schools of the University and is a substantial component of about 50% of our major undergraduate courses. In Divinity it provides access to digitised ancient manuscripts. In European Languages a virtual community hub is being developed to enable year abroad students to share experiences and insights. The Biology Teaching Organisation is using WebCT to systematise and standardise the e-learning experience for all biology students. Physics has used appropriate e-learning technology to support a radical change in student learning (see, for example, the case studies at the end of this Analysis). Some areas have their own local support for e-learning in addition to that provided by MALTS. The most sizeable is the Learning Technology Section of the College of Medicine and Veterinary Medicine. The College recently won the prestigious Queen's Anniversary Prize for the Edinburgh Electronic Medical Curriculum and is now in the process of developing the "Virtual Farm" as described in another of our case studies. There is a gallery of interesting e-learning projects available.

E-Assessment

The steady rise in the use of e-learning in learning and teaching has raised questions for all universities about how we might modify the ways in which we assess our students' work. Two approaches to the use of ICT in assessment are open to us – to bring technology into existing assessment procedures and to revise the ways in which we assess. Both are being supported University-wide through the Principal's e-Learning Fund.

For the first approach, a team from the University, including the then EUSA Vice President (Academic Affairs), took part in a Higher Education Academy 'Change Academy' in 2004 to plan how we might reconsider the format of traditional essay examinations to take advantage of laptops and tablet PCs, and more broadly review our use of ICT in examinations. As a consequence we have now established a group within the University to take the work forward. We have identified software that is capable of carrying out secure examinations and have also carried out pilots with student volunteers to assess the acceptability and feasibility of laptop or tablet PC exams. In general our student volunteers and EUSA are positive about these developments and we will continue with careful piloting over the coming year. In addition we are planning the modification of Adam House, a major examination venue, for power and wireless network. This will also enable us to hold some examinations away from the student computer labs, as restricting the student use of these labs during revision periods has been an unwelcome side-effect of the move to online examinations by some large courses.

The second approach has been to consider how to revise the ways in which assessment can be carried out, and in particular to explore the use of portfolios, including e-portfolios, to encourage students to take a more reflective and holistic view of their work. Several courses are now using this method either on paper or electronically (e.g. BA Childhood Studies, BVMS). The Learning and Teaching Strategies of the three Colleges emphasise the value of this reflective approach to learning. To provide an electronic portfolio, we have introduced the Open Source Portfolio (OSP) software, made it accessible via our EASE authentication system and hence able to link to WebCT for those students whose courses use both WebCT and OSP. The use of the reflective approach is also being taken up by the central services which support students in their development of generic skills and literacies, by using OSP to provide a mechanism to bring self-assessment, self-training and support opportunities together into one location. This approach is part of our provision of Personal Development Planning (PDP).

Box 4

3.5.5 As part of our search for the best ways to blend traditional and digital education methods, we are reviewing our teaching and learning spaces with a view to making them fit for the next decades. The Main Library refurbishment is part of this process, but there is also a University-wide seminar on innovation in learning spaces scheduled to take place in autumn 2006 (in which students will play a key part), the development of some experimental science teaching spaces in the refurbishment of Appleton Tower and a rapid rise in the number of teaching and learning rooms which are fully equipped with digital audiovisual equipment.

4 Quality enhancement and the Colleges

4.1 Learning and Teaching Strategy in the Colleges

4.1.1 We believe that the purpose of producing a learning and teaching strategy at College level is to address issues that are specific to the particular College, and reflect the nature of the subjects taught within the College, along with other factors such as employability, and the College's position in the undergraduate market. Until recently, the development of learning and teaching in the Colleges (and their predecessor faculties) tended to be guided by an implicit understanding of the nature of our scholarly community, rather than explicit strategy. This understanding, shared by both students and staff, was probably typical of a research-led Scottish university at the turn of the twenty-first century and was broadly similar to our then overall approach to QE (as outlined in section 1.4.1). Though difficult to define, this understanding includes such elements as: teaching within a research focus (particularly in later years), valuing breadth as well as depth (especially in earlier years), the role of the academic as mentor as well as teacher, and a commitment to a supportive learning environment. We have recently felt that this shared understanding – our academic culture – does not in itself provide a sufficient framework for improving the learning experience of our students, and that explicit statements of strategy, and a programme for its implementation, are required. Consequently each of the Colleges has undertaken to develop its own learning and teaching strategy.

4.1.2 The College officers responsible for leading the development of undergraduate and postgraduate strategy in CSCE and CHSS are the Deans of Undergraduate Studies and Postgraduate Studies respectively. They sit on the committee that advises the Head of College on strategic and policy issues.[3] Responsibility for the development of learning and teaching strategy is distributed more broadly in CMVM, which has four Directorates: Undergraduate Learning and Teaching, Postgraduate Studies and International Affairs, Quality Assurance, and Research. The Directors of the first three of these have input into the learning and teaching strategy for the College, and sit on the College Strategy Committee.

4.1.3 The Learning and Teaching Strategy of the College of Science and Engineering (CSCE) was developed during academic year 2004-5 (see Box 5, overleaf). This strategy applies to both UG and PGT programmes. The College has begun the implementation of the strategy, with the objective of achieving the first impact on student learning in the academic year 2007-8, in the areas of (i) assessment, (ii) personal learning, and (iii) flexible learning. The first stage of the implementation involves "vanguard courses" from five Schools. Each of the vanguard courses will be taught in a way that encourages a higher degree of responsible learning by the students. This will involve giving them a feeling of responsibility for their own learning, supported but not monitored by staff, and exploiting opportunities for self-assessment and (where possible) alternative routes to learning. This will be supported by parallel developments in the estate and in e-learning.

3 Called the College Planning and Resources Committee in CHSS and the College Strategy and Management Committee in CSCE.

CSCE Learning and Teaching Strategy

The College of Science and Engineering adheres to the following Principles.

1. The Scholarship of Teaching and Learning

We are committed to the scholarship of teaching and learning. As academics, we will learn how to develop our teaching approaches in order to achieve better learning by our students, and to help them to develop as effective and independent learners.

2. Learning with Enquiry

We are a scholarly community based on enquiry, and on generating knowledge. Students will be made familiar with the scientific method from the beginning of their studies; there will be a strong strand of learning with enquiry (learning to ask the right questions) at all levels, integrated where possible with our research activities.

3. Personal Learning

Our learning environment, and the requirements and expectations that we communicate to students, will be designed to ensure that they are given, and feel, a genuine responsibility for their own learning, seeing rewards and benefits from effectively managing their activities, and negative consequences from failing to do so.

4. Collaborative Learning

Collaborative learning of an informal nature will be encouraged and study-support measures will be designed with that in mind. Where possible, our degree programmes will contain significant elements of formal collaborative learning, supported by academic staff and by flexible computer-based interactions.

5. Flexibility of Learning Styles

Wherever possible, learning opportunities will respond to the variety of students' circumstances, experience and aptitudes.

6. Assessment for Learning

In pre-honours years, preparedness to progress to the next level and excellence will be assessed by separate elements of summative assessment. The extent of formal summative assessment will be the minimum required for these purposes. Students will monitor their own learning by self-assessment.

In honours years, summative assessment will be the minimum required to assess the students' achievement. Students will monitor their own learning by self-assessment.

All assessment should be formative, in the sense that students receive feedback on (or can self-assess) their performance.

Box 5

4.1.4 In autumn 2005, the College of Humanities and Social Science appointed a new Associate Dean (Learning and Teaching Innovation), the first such position. He was charged with taking a college-wide lead in the development and promotion of new policy on learning, teaching, and assessment. The new Dean set up a working group (including staff, a student, and a representative of the Centre for Teaching Learning and Assessment) to help his first priority, which was to prepare a College Learning and Teaching Strategy. After consulting widely throughout the College, the group completed in June 2006 a strategy document, which applies to both undergraduate and postgraduate students. It stresses the importance in a research-intensive institution of maintaining a close linkage between teaching and research, of assisting students to develop an active, reflective and critical approach to learning, and of supporting teachers to be reflective and to introduce beneficial innovations in learning and teaching. It also addresses issues of employability, induction, the value of giving students the opportunity to study across a wide range of disciplines and subject areas, and the use of learning and teaching space. It recommends some particular areas for short-term action. After suitable further consultation, the College expects formal approval for the strategy by the end of 2006.

4.1.5 The College of Medicine and Veterinary Medicine has been developing its strategy over the past year and has agreed six basic principles under the headings: Educational Experience, Student Centred, Learning through Enquiry in a Research-Rich Environment, Learning Styles, Achieving Professional Accreditation, and Learning and Teaching Staff. These will be developed within its undergraduate and postgraduate programmes, each of which is being asked to use the principles to formulate their own brief strategies and an operational plan.

4.2 College and School Level QE processes

QE processes in a College

Within the College of Humanities and Social Science, primary responsibility for enhancement is vested in the College Quality Assurance and Enhancement Committee (CQAEC) which has a representative from each of the ten schools and includes external members. CQAEC has begun to sponsor staff development activities (in 2005/06 on Teachability and on employability). However, the identification of opportunities to enhance the student learning experience arises across the bodies which include in their remit reflection on learning and teaching. Initiatives may arise from subject areas through the Board of Studies. They may also arise from the activities of School QAE committees, acting either reactively – to feedback from students, teachers, external examiners and peer reviewers from other Schools, or proactively – both through the promotion and further development of good practice identified through QA procedures, and through active engagement with initiatives originating in the College Quality Assurance and Enhancement Committee (CQAEC) or (via activities promoted by CQAEC) in sources external to the University, including for example Teachability and certain QA Enhancement themes.

Initiatives may also be generated within College Undergraduate Studies Committee (CUGSC). While the agenda of this committee was dominated over two years by implementation of the Curriculum Project, its role has developed to include compilation of information on the diverse learning and teaching needs of the ten schools represented and, on the basis of this information, to reflect on practice with enhancement in mind. The enhancement process thus involves complex interactions. CQAEC may initiate but will not implement. Boards of Studies will plan the detail of enhancements to the curriculum bearing in mind precepts determined by CUGSC (or by higher University committees). These enhancements will be reviewed at CUGSC and may be reported to the Senate Undergraduate Studies Committee either for formal approval, or simply for noting at University level of a significant initiative. CUGSC may identify issues and requirements affecting all programmes and may instigate enhancement, but detailed measures are implemented through the Board of Studies.

Informal meetings bringing together the Deans and Associate Deans are being introduced to ensure a further measure of co-ordination and cross-fertilisation in the context of emerging strategy.

A recent undergraduate development which illustrates the synergies released by University restructuring and the enhancement potential of the Curriculum Project is the Honours programme in Mind and Language developed by the School of Philosophy, Psychology and Language Sciences. The programme illustrates the flexible, research-led and cross-disciplinary character of undergraduate learning at Edinburgh and exploits and reinforces the strengths of the constituent elements of the School by releasing the intellectual potential of their convergence. In parallel with the MA in Mind and Language, the School of Informatics has developed the MA in Cognitive Science. Care has been taken to coordinate the structure of the two programmes. In this way the groundwork has been done and the structures are in place for further collaboration and development.

Box 6

4.2.1 In CSCE, each School has a Director of Teaching, with management responsibility for undergraduate programmes within the School, often encompassing several subject areas. The Director of Teaching is advised by a Teaching Policy Committee on issues of academic policy and strategy. In CHSS, the Director of Teaching (or equivalent) has an essentially coordinating role, and the primary initiative for QE lies with the heads of individual subject areas. The difference in practice between CSCE and CHSS is partly because all but one of the Schools in CSCE existed before the restructuring in 2002, whereas most of the Schools in CHSS were formed as part of the reorganisation. Furthermore, many of the schools in CHSS cover different areas that have none of their teaching in common (e.g. Philosophy, Psychology, and Language Sciences). This more

distributed management of the learning and teaching in CHSS is reflected in the different arrangements for administrative support. The Schools in CSCE have Teaching Organisations (TO), providing single points of contact for both academics and students (see Box 7, below). Practice varies in CHSS and although there are some TOs in existence, in many of the Schools (especially those which contain a number of very distinct disciplines) administrative or clerical teaching support is not centrally provided by the School. The College of Medicine and Veterinary Medicine has three TOs. The Veterinary and Biomedical TOs operate like most of those in the other college, but the Medical TO is a curricular development unit and a focus for research in medical education: administrative support for teaching comes from the College office.

The Engineering and Electronics Teaching Organisation

The aim of the Engineering and Electronics Teaching Organisation (EETO) is to handle all administrative tasks that relate to undergraduate recruitment, admissions and student learning within the School. It was set up when the four separate engineering departments came together as one School in August 2002. The Teaching Organisation comprises the Director of Teaching (a member of academic staff), an administrator, and six clerical staff with very clearly defined roles. The Admissions and Recruitment Officer deals with undergraduate recruitment and admissions, including sending letters and invitations to all UCAS applicants, publicity material and University open days. The Database and Web Support Officer deals with web support and the development of a dedicated database (developed in conjunction with IT support), which is now used to record marks and submissions across all years, as well as generating all examination board paperwork required for each of the engineering disciplines (including return of marks to Registry). The remaining clerical staff are Teaching Support Officers, and have been allocated specific years to look after, across all disciplines; that is, one person deals with all 1st year matters, one 2nd, one 3rd, and one for both 4th and 5th years. The idea of having one person covering four separate engineering disciplines is to streamline best practice from the different methods of working developed by each discipline, and to give the students a consistent experience, no matter what they are studying.

The EETO has developed in the last three years by increasingly handling administrative tasks that were previously done by academics. After initial reluctance on the part of some academic staff to hand over responsibilities, this is now working extremely well, with EETO staff ensuring the smooth running of all day-to-day student activities. The EETO staff work very closely with course organisers to take as much of the administrative burden from them as possible. Examples include timetabling, all room bookings, allocation of lab and tutorial groups, checking student progression, warning letters, examinations procedures, electronic logging of submissions (and automatic email receipts to students), and making information available to students via MyEd and WebCT. Much work has focused on the areas of quality assurance and check procedures for marking and exam administration, and this is much more tightly controlled than in the past. All of these processes have been clearly documented and published on the School website. Future developments will include the integration of taught postgraduate masters programmes within the EETO, again pulling together areas that are common to both, and making use of expertise developed within the Organisation. The EETO is now the first point of contact on all administrative matters relating to UG programmes, for both staff and students.

Box 7

4.2.2 Management responsibility for PGT programmes varies from School to School. In some Schools, PGT programmes are the responsibility of the Director of Teaching, and are administered by the TO. In others, the Graduate School is responsible for both PGT and PGR programmes. Among the factors affecting the choice of model are the strength of the connection between PGT programmes and the School's research degrees, the size and disciplinary complexity of the school and the extent to which courses are shared between the UG and PGT programmes (which is substantial in some areas, e.g. Informatics).

4.2.3 The Board of Studies for each School has formal responsibility for curricular developments in that School's undergraduate and PGT programmes. The Board of Studies consists of all the academic staff in the School, plus a number of outsiders to provide a degree of externality. Initiatives usually originate in smaller groups with a narrower focus; in Schools with several subject areas (this is the case for most) this will usually be in subject-specific teaching committees.

5 Quality Enhancement and human capital

5.1 Professional development

5.1.1 The University provides training for academic staff at all stages of their careers: from PhD students working as part-time demonstrators to Continued Professional Development (CPD) for experienced teachers. The Centre for Teaching, Learning and Assessment (known as the "TLA Centre") is responsible for the professional development of teaching staff, and also for the support of innovation and dissemination of good practice in teaching.

5.1.2 Newly appointed lecturers participate in the Professional Development and Review (PDR) scheme which operates over three years and covers all aspects of the academic role. A central part of PDR is the Professional Certificate in University Teaching and Learning which is accredited by the HEA. Stages 1 and 2 are a contractual requirement, and will usually be completed within the first year in post. Stage 3 is optional and successful completion of it leads to HEA certification. Training covers topics such as large- and small-group teaching, practical and field work, academic guidance, course design and postgraduate supervision. As of 2007, the TLA Centre will be offering a modularised postgraduate programme (60 credits as compared to the 30 credit present certificate programme) and the existing programme (as described above) will be phased out. The contractual requirement for new members of staff will include a shorter two day orientation plus a number of modules.

5.1.3 CPD offered by the TLA Centre includes several elements. The Learning and Teaching Forum (which usually takes place once per semester) addresses significant and timely topics in relation to higher education teaching and learning. Recent topics have included formative assessment, alternative career paths and rewards for teaching, employability, quality enhancement, teaching and learning on line, and "better feedback-better learning". The fora usually involve leading practitioners from other institutions and give us the chance to learn from their experiences. The TLA Centre also organises a seminar series on teaching and learning issues, with speakers from the UK and abroad; and the Higher Education Colloquium, which is an annual event that addresses topical issues in higher education pedagogy. The Centre provides induction and annual CPD training for Directors of Studies and an annual forum for Course Organisers. Consultations with individual staff and schools/colleges, on matters related to teaching, learning and assessment are also an important strand of the TLA's work.

5.1.4 An issue for us, as for other universities, is how to encourage participation in teaching-related CPD. It is likely that not all staff who would benefit from participating in teaching-related CPD actually do so or do so on a regular basis. CPD activity is not at present required of academic staff by the University, and it is doubtful whether compulsion would generate the level of active participation required to make a positive impact. We are therefore taking a different approach. Through the development of learning and teaching strategy at the College level, we intend to foster an academic culture in which engagement with higher education pedagogy is seen as a necessary and normal part of academic life.

5.1.5 The TLA Centre also provides an induction programme for postdoctoral researchers and research students working as part-time tutors and demonstrators. This is supplemented, for postgraduate students, by a course on tutoring and demonstrating skills which is offered as part of the University's Transferable Skills Programme (see also section 7.7).

5.1.6 After a good deal of discussion and several pilot exercises, the University decided in 2002 to introduce a system of peer observation of teaching that was entirely confidential to the two peers, who had to observe no formalities other than recording the fact of their mutual observation. Senate and Staff Committee decided that participation in the scheme should be "a normal expectation for every teaching member of the academic staff", and charged heads of schools with ensuring that this happened.

5.1.7 It cannot be denied that this scheme (as described in the Teaching Quality Handbook) has been only a limited success. SQAEC received a general report on the issue at its meeting in October 2005) and also receives reports from colleges as part of the general QA process. The report makes some suggestions for improving the take up of the scheme, but making it formally compulsory would be very unpopular, and other ideas so far also seem difficult at a time when staff in general feel over-stretched (although participation in the scheme would, in fact, involve very little extra time). It is clear that some colleagues have not been persuaded

of its value, perhaps because we do not prescribe in any comparable detail any other single staff development activity across the University.

5.2 Reward modernisation

5.2.1 The University of Edinburgh, like other UK universities, is in the process of implementing Pay and Reward Modernisation. This will give a fairer and more transparent reward structure across the whole University. The main impact on learning and teaching is that the academic role profiles within the new framework will explicitly recognise leadership and management complexity in both teaching and research. This will give an expectation of leadership at the appropriate level for all academic ranks, and will allow complex and highly responsible academic leadership roles (such as Director of Teaching) to be evaluated against a consistent set of criteria and, if appropriate, rewarded by a higher grade. The overall effect will be to mainstream academic leadership (not "administration") ensuring appropriate recognition of its value, and, in some cases, increasing the associated rewards. Over time, we expect this to improve the quality of academic leadership across the University.

5.3 Recognition of excellence in teaching

5.3.1 As in many other research-led institutions, the more obvious strand of academic career progression at the University of Edinburgh (particularly at Reader and Professorial level) has been that which relates to excellence in research. However, both in promotion to Senior Lecturer and in the award of incremental advance, contribution to student learning has always played a significant role. As indicated in the previous section, Reward Modernisation further explicitly recognises the need to reward leadership in both teaching and research. Separately, the University has grown conscious of the need to increase the recognition and reward given to innovation in learning and teaching at the highest level. Consequently, in 2003 Senate approved the introduction of Personal Chairs of Student Learning. Since then there have been five appointees to Personal Chairs of Student Learning and one honorary chair. The theme of the December 2004 Learning and Teaching Forum was Alternative Career Paths and Rewards for Teaching: Sharing Experiences and Envisioning Alternatives. This event was addressed by external speakers from five other institutions including the University of Toronto and Lund University, Sweden.

5.3.2 In 2003 the University introduced the Chancellor's Awards to recognise the outstanding contribution of two members of staff. One award is made each year for teaching excellence and one for research excellence. In presenting the teaching award, we aim to honour a colleague who has enhanced the teaching reputation of the University by a particularly significant contribution to the leadership of improvement and innovation in student learning or to the creative or professional application in the field of learning. This year we have also made changes to increase the visibility of these awards as well as introducing a third Chancellor's Award to acknowledge colleagues who are considered as 'rising stars' in either teaching or research.

6 Student Support

6.1 EUCLID Project

6.1.1 Our student administration has traditionally been a 'behind the scenes' activity carried out largely as a central function, with no direct student access, and limited capabilities (so, for example, enquiries by prospective applicants and marks for individual elements of assessment are handled locally). This no longer matches our aspirations, or the expectations of an increasingly diverse and international student population. The EUCLID (Edinburgh University Complete Lifecycle Integrated Development) Project was established in October 2004 to deliver radical improvement to the way the University interacts with current and prospective students, and supports the academic activities of the University. To our students, EUCLID will deliver on-line services including course enrolment, payment of fees, personal timetables, and return of detailed assessment results. To academic staff, EUCLID will deliver administrative efficiency (leaving more time for academic activities) and up-to-date, integrated student information.

6.1.2 These benefits are what would be expected from a modern student record system. However, we will also make further gains by using the EUCLID project to deliver business process change. In effect, EUCLID is not a

software project, but rather a business-process-change project that involves software. Current business processes (in, e.g., postgraduate student admissions, examination administration, and course enrolment) are diverse, leading to unnecessarily high costs and, in some cases, confusion among either staff or students. Extensive analysis of business processes was carried out during 2005, and the EUCLID project is in the process of a comprehensive business change programme. This stage of the project is highly collaborative, and involves implementation teams of staff and students in the re-design of processes and changes to aspects of policy and practice. The aim is to have for each activity a single business process, except where academic needs (not preferences) make this infeasible, and for the process to be as simple and as understandable as possible. It is intended that by the end of academic year 2008/09 the new technology will have been implemented and the business-process changes will be in place.

6.2 New matriculation and registration arrangements

6.2.1 At the beginning of the academic year in 2004, we made major changes in the way in which new students are formally matriculated into the University. Before then, they generally completed all the formalities over a couple of days in the week before classes begin and this could involve long queues of students waiting to be 'processed' by the University machinery. It worked, but it was slow and appeared bureaucratic, although the processing was generally done sympathetically and helpfully. It is not to our credit that most academic staff had little understanding of the process and did not realise how tedious and unproductive most new students found it. Registry had a complete rethink about what was required and what was not, and introduced a new system in which the whole process is completed during the weekend when most Freshers arrive and takes place at Pollock Halls (the main halls of residence). New students and their parents are now greeted by a large enthusiastic team including many students and other volunteers, offered coffee, and helped to find their way around a series of stations where the necessary enrolments are completed. There is little waiting around, and the whole atmosphere has become welcoming and comforting instead of bureaucratic. At the same time, Registry arranged for most matriculation of continuing students to be undertaken without students having to attend an office.

6.3 Director of Studies System

6.3.1 Every undergraduate student and some taught postgraduate students have a Director of Studies (DoS). The DoS is the student's main personal contact with the University, his or her most important source of help and advice on academic matters[4] and is recommended as a student's initial port of call if difficult personal matters arise. Ideally students retain a single DoS throughout their time at Edinburgh, but we cannot guarantee this, and is particularly difficult in some Schools, where, for example, there are relatively frequent changes because of staff on sabbatical leave. When it works well, the DoS system allows one individual to oversee an individual student's progress. Much of the discussion in recent years has looked at how to get the best value from DoSs. It was recommended, with EUSA support, that all academic staff become directors to ease the workload of this role. Some schools have adopted this approach while others continue to appoint a smaller number of DoSs. Both systems have their advantages and disadvantages. It is hoped that, when the DoSs' administrative role decreases as a result of the development of EUCLID (see Section 6.1) and increasing administrative support is provided through teaching organisations and schools, DoSs will have more time available to have detailed discussions with students regarding their academic choices and progress.

6.4 Other sources of advice and support

6.4.1 EUSA runs The Advice Place, which provides advisory services to students and staff. This service is funded by the University and is the official advice service within the University but is entirely operated by EUSA. Its mission is 'to provide a professional walk-in advisory service for students that is informative, independent and confidential, in order to help students achieve their potential at university'. The service has 3 key aims:

- To ensure that all students are aware of the service and how to make best use of this resource.
- To develop the knowledge and resources of the Advice Place to meet the changing needs of students.
- To maintain the quality of the service through appropriately trained staff.

The service is student led, and uses student volunteers but also employs professional full and part time staff. It deals with a wide range of issues including funding, debt, accommodation and rent difficulties, academic

4 In CMVM, the DoS's role is usually purely pastoral because the programme is essentially completely prescribed.

problems and immigration as well as general signposting and referral to other units/services both within and outside the University. It also advises Directors of Studies on welfare and academic matters relating to directees. The service provides three walk-in advice centres (in the central area, at King's Buildings and at Holyrood). Advice Place staff also routinely have input into University Open Days, the Access Course and various University staff training events. The annual report of the Advice Place, which is seen by SQAEC (because it is regarded as a support service) gives an impressive idea of the range of its work. It is the first port of call for most students and is also valuable to Directors of Studies and others who know where to send students for advice particularly on technical issues usually outwith their competence.

6.4.2 The EUSA permanent staff are a source of support in a number of ways, for instance by providing consistency as well as advice and training for the student officers. These people are not, of course, employees of the University, but they have become well known to University staff in relevant areas and their advice is welcomed on both sides. Thus, student representatives of some committees are accompanied by the relevant EUSA officer.

6.4.3 EUSA's permanent staff are also extremely useful to students and to the University in that they often play an important intermediary role. For example, students who want to appeal against their academic results are strongly advised (although not, of course, compelled) to consult EUSA. The officers have the experience that enables them to give valuable and impartial advice about the likelihood of success and the best way of progressing. If the student wishes, a EUSA member of staff will accompany them and/or represent them at the appeal hearing. Their position as EUSA staff enables them to do this in a way that no University member of staff ever could.

6.4.4 The University provides a range of other support services open to students seeking advice on academic or personal matters. These include:

- Registry
- Academic Affairs section
- Accommodation Services
- Careers Service
- Chaplaincy
- Counselling Service
- Centre for Sport and Exercise
- University Health Service
- Disability Office
- Library (which is currently embarking on a major redevelopment project, very much sensitive to the needs of students)
- Computing Services
- International Office

Information on these services is provided to students at enrolment and DoSs or other members of University staff will direct students to the appropriate source of professional advice as required. In order not to overload this reflective analysis, we are not giving more details of these services here.

It is our aim to provide a full range of student services wherever a student is studying. This is not usually a problem for DoSs and other academic sources of help, who are normally housed where the students are. Nor is it a problem for the large number of students who work within a short distance of the central, George Square, areas where most main services are situated. The other big site, King's Buildings (essentially devoted to Science and Engineering) is about a mile and a half away, but has its own libraries as well as branches of many of the other services and of the Advice Place (section 6.4.1). The more remote sites, principally at hospitals and at the Easter Bush Veterinary Centre are less well served in some respects, particularly non-academic ones, but arrangements are made whenever possible for the medical and veterinary students who work there.

6.5 MyEd

6.5.1 MyEd is the University's web portal. Launched initially in January 2004, it provides staff, students and alumni with a personalised, secure gateway to web based services within the University and beyond. It is particularly useful to students in providing easy access to features such as personal and registration details, programme and course information, examination results, EUSA events; news and discussion, personal and shared announcements, VLE access, Library access and other general services. It is available worldwide, at any time, to all University of Edinburgh students following their offer of an unconditional place of study. There is a MyEd tour specifically for students to help new users learn about the portal's special features and how to make the most of this facility. In March 2006, 23,000 students were registered to use MyEd (approximately 90% of our student population) with 70% of that number logging on at least once a month.

7 Quality Enhancement and the student as an individual

7.1 Enhancement through addressing students' needs

7.1.1 The University's Strategic Plan 2004-2008 expresses our intention to:

- "ensure fair access and progression for all who can benefit whilst maintaining the high quality of our student intake and graduate output" and "produce graduates equipped for both personal and professional achievement at the highest levels" in pursuing our goal of excellence in education;
- provide transferable and generic skills training to all research postgraduates' and motivate and equip "undergraduates to enter research careers" in pursuing excellence in research; and
- develop "flexible access routes (including articulation routes with further education colleges) and flexible degree structures" and ensure "'that students [and staff] with particular needs have access to appropriate facilities and support services" in promoting our opportunity and diversity operational priority.

7.1.2 In addressing the needs of students with particular backgrounds or requirements we are conscious of the opportunity this gives us to deliver better support and more flexible learning opportunities for the student bodies as a whole. For example, our experience shows that the induction needs of further education (FE) students coming into years other than first year have a great deal in common with those of other students admitted after first year. Similarly, the concept of Teachability, intended to address the needs of disabled students, has delivered improved teaching materials for the student body as a whole.

7.1.3 The University offers a number of scholarships to prospective students, both undergraduate and postgraduate: some awards pay all or part of the full tuition fee, others a maintenance allowance as well. They all not only reward students for their success so far, but also take some financial pressure away from students to allow them to spend more time on their studies enjoying the University experience. The Scholarships and Student Finance Office produces an annual funding booklet for prospective undergraduate students, and a similar one for postgraduates will be available shortly.

7.1.4 We recognise that a critical period for any student is the transition to University life; an enjoyable induction period can set the tone for a secure and productive educational and social experience for the rest of the degree programme. EUSA is responsible for organising the annual Freshers' Week and runs a comprehensive programme of events to complement the formalities required on first arriving at the University (e.g. students meeting with their Director of Studies). In addition to entertainment events we have an extensive programme of events intended to help students settle in to the University so they know what to expect and what is expected of them. These include welfare/orientation sessions, sessions aimed simply at helping students to meet each other and sessions (which are also run throughout the year) run by the Computing Service and the Centre for Teaching, Learning and Assessment on topics such as essay writing and time management. In organising Freshers' Week EUSA has had to respond to the needs of an increasingly diverse student population. So there are always specific events for international students, postgraduates, mature students and students living at home. Some of these groupings (for example postgraduate students, and students living at home) are particularly difficult to engage with and EUSA has suggested that this might be made easier if academic

Schools or subject areas had more interest and involvement. EUSA also runs an Academic Fair staffed by academics and aimed at helping students choose outside courses, and encourages School level representatives to speak at School introductory talks. Freshers are sent copies of the EUSA produced publications the Alternative Prospectus and the Survival Guide. Student societies are also a vital part of Freshers' Week and organise a diverse range of events that ensure there is something for everyone.

7.2 Equality and Diversity in the Monitoring of Student Data

7.2.1 The University has a robust framework for monitoring and analysing the equality and diversity data about its students. The Equal Opportunities Technical Advisory Group (EOTAG) is convened by the Senior Vice Principal and has members from senior academic and administrative staff across the University. The group generally produces annual reports in which data on both students and staff are analysed by age, disability, ethnicity, gender according to their school. EOTAG reports analyse both the intake of students and their outcomes. The quality of the reports has steadily improved as the integrity of data from within the student records has increased. In general, the results are reassuring and where issues arise, as with the revealed poorer performance of male students compared with females in Science and Engineering, they are investigated with a view to action being taken

7.2.2 We are, however, aware that there remain some areas of weakness in our student data. Our primary concerns are around the need to comply with existing and planned diversity-related legislation. For example, the University would not currently be able to report fully on the outcomes of all postgraduate applications in terms of ethnicity, as these data are not recorded at the initial application stage. This fails to comply with the requirement to monitor the admissions of different ethnic groups (Race Relations (Amendment) Act 2000). Similarly, the students have not always been monitored by demographic factors when they apply for student finance and bursaries. Currently the positive duty to monitor such information extends only to race, but this will be extended to disability in December 2006 and to gender in April 2007. This will increase the amount of reporting and analysis needed by all public bodies. The University has acknowledged this systematic weakness and has made improving monitoring central to the development of the EUCLID project (see section 6.1). However, we also recognise that there is a need to increase institutional awareness about the need to improve local monitoring and analysis of data and ensure that we can develop courses and procedures that are free from bias and unwitting discrimination and so allow all students to develop to their full potential.

7.3 Disabled students

7.3.1 In 2005 1400 students at the University declared a disability, the highest number by far of any university in Scotland. The University has a Disability Office which supports disabled students directly on a one-to-one basis by arranging pre-application visits, liaising over building adaptations, providing dyslexia screening and study skills support, assisting students with funding applications, advising on technology, matching students with personal assistants, such as tutors, note takers and proof readers, and producing a learning profile which details any barriers to study and adjustments that are required. The Disability Office supports academic and support staff through the provision of advice and staff development, and provides advice on disability issues to the University community as a whole.

7.3.2 Our policy is to mainstream as much as possible of the support for disabled students. This is done as part of the University's commitment to inclusiveness, benefiting both disabled students and the student body as a whole, as well as to comply with the Disability Discrimination Act. A recent reform of the management of adjustments for disabled students has led to decisions on adjustments being made in individual Schools by "Coordinators of Adjustments", based on Learning Profiles produced by the Disability Office, in a consistent way that maintains academic standards and according to a common administrative model. (The previous approach involving ad hoc adjustments, without a unified administrative scheme, though nearly always satisfactory, was prone to error.) The University is currently introducing Teachability concepts to teaching access and materials – see Box 8 opposite.

Teachability and the School of Health in Social Science

The Teachability Audit provided the School of Health in Social Science with an opportunity to examine its level of 'friendliness' to disabled students. Staff from the University's Student Disability Services and from the Scottish Disability Team provided welcome and effective support. The close contact between the students and staff, which underpins teaching throughout the School of Health in Social Science, also provides a sound understanding of the interaction between the School and the disabled student. Using a variety of data collection techniques, such as questionnaires and group discussions, each of the subject areas scrutinised its own practices in relation of all aspects of the student experience using the following themes:

Current practice

Core non-negotiable requirements

Scope for improvement

Adjustments that can be made

The Teachability Audit encouraged the component subject areas within the School to work together and learn from each other's good practices and served to demonstrate a variety of strengths in each of the four subject areas. These, as well as any gaps, have been brought together through a School wide consultation to produce the School Teachability Report.

This Report addresses interactions in a number of different directions. For example, the information available to prospective students, both electronic and paper-based, is to be brought up to a uniformly high standard. Most of the subject areas in the School liaise with a statutory professional body; the extent to which these bodies are proactive in disability matters varies considerably. Thus, the teaching staff may bear considerable responsibility. Flexibility in attendance, help for 'guest' lecturers, appropriate resources and student-friendly assessment also proved important issues. In order to ensure that the points addressed are put into action, target dates have been developed for each recommendation.

Box 8

7.4 Students from under-represented groups

7.4.1 We have been at the forefront of developing initiatives aimed at widening participation to Higher Education for a number of years and are conscious of the need to work hard to widen participation whilst maintaining our academic standards. We have a number of ongoing initiatives aimed at broadening the University community, for instance, the Lothians Equal Access Programme for Schools (LEAPS), Pathways to the Professions, the Scottish Wider Access Programme (SWAP) and the Edinburgh Lifelong Learning Partnership (ELLP). The Office of Lifelong learning (OLL) also has a well-developed access programme with Stevenson College and its own New Horizons and Credit for Entry programmes. More details are available on the Current Widening Participation Projects page of the Student Recruitment and Admissions' website.

7.4.2 The University, as part of its Widening Participation programme, awards over 125 undergraduate bursaries each year to students from schools or colleges in the UK who would find it difficult financially to take up a place at the University. We work hard to ensure that these Access Bursaries are awarded to those students who meet the academic requirements for entry to the University but are most in need of financial support. Other factors, such as personal or family circumstances, are also taken into account. The bursaries also mean that students need do less part-time work and so can concentrate more fully on their studies

7.4.3 We are committed to facilitating the progression of students from Further Education colleges to study at the University, both by formal articulation agreements and more generally, including through SWAP. CSCE and CHSS have recently appointed FE Development Officers, who have been actively promoting opportunities at the University by a variety of means including the distribution across Scotland of a booklet for Further Education students. CSCE accepts students from Higher National Diploma (HND) and Higher National Certificate (HNC) courses in Biology, Chemistry, Environmental Science and Engineering with entry into year 1 and year 2. We have signed an articulation agreement with Lauder College in Fife, promoting the transfer of science and engineering students from Lauder College to the University. An articulation statement has been developed for students wishing to enter third year of a Civil Engineering course from the ordinary degree

programme in the Institutes of Technology in the Republic of Ireland. Students from under-represented groups studying science and engineering are often disadvantaged by a poor background in mathematics. We are addressing this problem (see box 9 below). In CHSS, students with HN qualifications are considered for several degree programmes with acceptance generally into the first year. However students applying with a relevant HNC plus experience gain direct entry into year two of the part time BA Childhood Studies programme.

Solving the Mathematics Problem: COSMaP

It is now common knowledge that the mathematical backgrounds of freshers starting degrees in science and engineering is increasingly inadequate. This is partly due to changes in school mathematics curricula, and partly to recruitment of students with more diverse backgrounds, some of whom have weaknesses in mathematics. Over the years, we have modified curricula to accommodate such problems as best we can. However, if we are to maintain standards of our degrees we need to do much more to ensure that the students have the mathematical abilities needed to cope with our courses.

The CoSMaP (Contextual Solution of the Mathematics Problem) project aims to tackle this issue. On the one hand, the nature of the fundamental problems is essentially the same in every discipline, and on the other, there are important differences: for example, students need to be able to manipulate fractions for a variety of purposes but, in engineering, this might be best motivated by studying resistors in parallel, while in physics, it might be a problem in optics. We believe, based on research in the area, that context is a vital motivating tool for our science students. COSMaP is a web-based system which presents the student with short self-assessments and intelligent tutorial exercises. This material contains context-sensitive feedback to help students develop mathematical confidence at their own pace, and uses examples from the students' own field, to help motivate their mathematics learning.

Box 9

7.4.4 We support the transition to University of local students from widening participation backgrounds through 'Moving On', a week-long induction to the University just before Freshers week provided to ninety incoming students by the Office of Lifelong Learning and the M Power mentoring scheme.

7.4.5 Although our retention rates are excellent, in 2004 a Study of Student Withdrawal was commissioned which examined the reasons behind student withdrawal. A working group is now taking forward the findings of this report and implementing suggestions on how to better support students who may be vulnerable. It has published a preliminary report which will be available next semester.

7.5 Study Skills

7.5.1 In order for students to gain the greatest benefit from their studies, it is important that they understand how to learn effectively within University teaching and learning environments. These contexts may differ quite markedly from their prior learning experiences. In November 2002, we appointed a Study Development Adviser to enhance the support provided to students to help them to develop their skill in learning. This work is carried out for the benefit of all undergraduate students but with particular attention to the needs of those from groups currently under-represented within the University. The Study Development Adviser provides study skills workshops, resource materials and one-to-one study advice for students, and also participates in CPD for academic staff provided by the TLA Centre.

7.5.2 Anonymous feedback collected from students seen by the Study Development Adviser individually up until February 2006 indicated that the majority of respondents had found the sessions valuable. Further, 8 students (13% of those responding) said that the sessions had helped a lot in terms of preventing them from leaving higher education all together and 2 students said the sessions had helped quite a bit in avoiding this outcome. The response rate for this feedback exercise was 55%.

7.6 Personal Development Planning

7.6.1 Work on Personal Development Planning (PDP) has been pursued in several different parts of the University over the last decade or more. A major pilot was introduced in the old Faculty of Arts in the late nineties and a similar system in the then School of Biology a bit later. Both of these systems are no longer running and we have not, so far, introduced anything else University-wide although there are a number of good schemes running in some parts of the University, particularly Medicine and Veterinary Medicine. Progress has been slow, because we are convinced that PDP is not worth having unless it is backed up by a significant amount of preparatory work, and, most important, by regular meetings to discuss their files between students and DoSs. These Directors already have a very high workload and would find it difficult to take on more. However once the new student-record system, EUCLID, is introduced, the routine work should decrease a great deal allowing time for more interaction with students.

7.6.2 The issue of how to progress PDP for undergraduates has been discussed at several meetings of SUGSC, which commissioned a working party to report. The upshot of this is a paper discussed at SUGSC in March 2006, and subsequently agreed to by the Heads of College at the Principal's Strategy Group, where it was agreed that this should be progressed with high priority. The policy is as follows:

1. Introducing PDP for all students should be a firm identifiable goal to be incorporated within the learning and teaching strategies for the three colleges. In the medium term, thought will be given to how best to implement this element of these strategies, with a time scale not clearly defined but expected to be not more than five years or so.
2. At the same time, MALTS (Media and Learning Technology Service) and MIS (Management Information Systems) will work in collaboration with representatives of the two colleges in modifying the software currently in use in Education (an Open Source Portfolio which can be made accessible through MyEd) to make it useful for those students who would find it helpful. This would provide university-wide provision, if not uptake. Guidance and encouragement along with tools for self-diagnosis and development of generic study, information literacy and employability skills will be provided but, initially, no more.

Work on this will proceed in 2006/2007, along with similar work for taught and research postgraduate students.

7.7 Skills training for Postgraduate Research Students

7.7.1 In 1997 the University of Edinburgh established a transferable skills programme for PhD students and a professional development programme for research staff. The University has since built a national reputation in the area of transferable skills training and career development for researchers. This was recognised by the UK GRAD Programme asking the University to host its Scottish Hub in 2002, and in the first report from the UK Research Careers Initiative (RCI) in 1998.

7.7.2 Since academic year 2003/04 new funding from the Research Councils to support the implementation of the training recommendations of the Roberts Review for PhD students and research staff has provided the means to support a step change in the amount and style of personal and professional development support offered. The University strategy for the implementation of the Roberts training recommendations is described in a report submitted to the Research Councils in November 2004. This includes the expansion and enhancement of current skills training and support, the development of new and innovative provision, and the embedding of skills training, personal, professional and career development in PhD programmes. An important element of this strategy is to identify the most effective ways of supporting PhD students, to support activity in and with Graduate Schools and to develop infrastructure and systems to allow personal and professional development to be embedded within PhD programmes.

7.7.3 The combination of Graduate School, College and University support and training that we are moving towards, together with the inclusion of personal and professional development during induction, annual reviews and through personal development planning places the University of Edinburgh in a strong position to support the implementation of the recommendations of the Roberts Review and in meeting the requirements of the revised Quality Assurance Code of Practice for Postgraduate Research Degree Programmes.

7.7.4 During the past year we have developed a number of new initiatives with a particularly exciting area being those initiatives that explicitly and deliberately highlight the relationship between academic practice, transferable and career skills for postgraduate and postdoctoral researchers. In this specific area we have piloted novel interactive induction sessions to identify training needs of postgraduate students by bringing together 1st, 2nd and 3rd year students and supervisors to share advice and experience. We have run half day 'Good Practice in PhD Research' workshops, which have been tailored to local, discipline specific, requirements in Medicine & Veterinary Medicine, and which consider broader career development opportunities along with analysis of ethical issues and practical advice on research practice. In the School of Arts, Culture and Environment transferable skills have been built into the School's postgraduate research methods course. We have also expanded our existing programmes of academic paper writing and PhD thesis workshops, including new collaborative courses with St Andrews University and Heriot Watt University for Chemistry students.

7.7.5 Our vision is for all PhD students and postdoctoral researchers to have access to a wide range of flexible and appropriate skills training courses, professional and career development opportunities that cover all areas of the Research Councils' Joint Skills Statement. Each individual will be able to tailor this training and support to meet their own requirements in terms of prior experience, interests, career aspirations and learning styles, whilst reflection and review of the skills developed and future training needs will be built into postgraduate degree programmes and staff induction, appraisal and management.

Appendices

Appendix 1 – Case Studies

We have chosen to illustrate our approach to learning and teaching using three very different examples: one from each college. They all part of programmes that have been running for many years, but show different ways in which the ideas of improving student-centred learning, employability and the inculcation of basic principles have been introduced. Each example is separately and briefly described here. Fuller details, as prepared by those responsible for the relevant courses, will be available.

College of Humanities and Social Science – Work Placements in History of Art

A good and long-standing example of the integration of employability into the curriculum that also puts responsibility firmly in the hands of the students is the work-placement option in History of Art, in many ways a quintessentially academic subject. Even when the History of Art degree started in the 1970s, some work experience was introduced but it was not then formally embedded into the curriculum. But in 1990 the then department got the largest grant in the University from the Enterprise Initiative to introduce such a thing into its standard curriculum. The discipline has always been interested in integrating the desk-based study of the intellectual discourse of art history with first-hand scrutiny of works of art in galleries, museums and private collection.

Independent project work is seen as a very important part of honours work in Art History. The work-placement course is one of three different types of independent study which are offered to third-year History of Art students (of which there are about 50); each is 40-credits at level 10. Students make their own choice. The Careers Service has always organised parallel sessions for students to make it clear to them how this fits it with their long-term plans. Students are on placement for two days a week for eleven weeks in the first semester, and then write a report in the second semester.

History of Art students benefit enormously from studying in a city where they have choice of work in many national collections and in the head offices of national bodies, such as the National Galleries of Scotland, the National Museums of Scotland, the Royal Commission on the Ancient and Historic Monuments of Scotland, and National Trust for Scotland. But even more individual in their potential for work experience are the myriad of private smaller galleries scattered throughout the city, such as Doggerfisher, Stills, and Fruitmarket Galleries, and the many stately homes and country houses in the area, such as Gosford and Paxton Houses. The University itself offers placements, for example, in its Talbot Rice Gallery, the special collections in the University Library and in the conservation research lab.

The sort of activities in which students have been engaged have included selecting and mounting an exhibition of impressionist paintings at the Burrell Collection in Glasgow, working with children in the Royal Museum of Scotland, preparing information leaflets on artworks from the University's special collections, cataloguing exhibitions at Inverleith House (a small gallery of modern art within the Royal Botanic Gardens), engaging with Art in Partnership in establishing the "silver horn" sculpture which towers over the M8 to Glasgow, and costume conservation at the Shambellie outstation of the Royal Museum in Dumfriesshire.

History of Art keeps closely in touch with students while they are on placement and liaises with their mentor at work. Many of these mentors are personal friends or professional colleagues of members of the school or are its graduates and so find themselves very interested in the success of their successors. Students often continue to have a close relationship with their placement after they have finished.

Their final report (about 7,000 words written to a prescribed format and including a self-assessment) is the formally assessed part of the course, and is submitted towards the end of Semester 2. Initially hosts were asked to contribute to the marking, but this proved to be very difficult, so now their contribution is restricted to comments on a pro forma sheet.

The nature and content of the work placement has evolved over time and the successful elements have been now incorporated into the new MSc in History of Art, for which it is a compulsory element.

College of Science and Engineering – Physics 1A Foundations

The University has been offering physics for 150 years or more and many of the fundamental principles remain unchanged. Anybody who has taught the subject knows the difficulties learners have in understanding these principles. How can we use new approaches to learning and teaching to introduce the subject to an increasing number of students, many of whom believe themselves, wrongly, to have learnt them already?

Physics 1A: Foundations is an introductory course (first Semester, first-year, 20 credit, level 8, class size rapidly expanded recently from 150 to more than 250) in the classical Physics of space and time. Following a redesign of the course in 1999, we began to develop online materials to support the face-to-face teaching activities. These materials have grown over the years and now comprise some 1400 individual "learning objects". More recently, we began to use an on-line voting system to encourage the students to interact with the lecture material. The integration of these technologies with the lectures, small-group teaching and laboratory work results in a learning experience for the student that is truly "blended", marrying the best of both real and virtual environments in delivering the course.

Concurrent with this development of online resources has been the changing character of the student cohort. In a social context, they are the leading edge of a wave of so-called "digital natives", for whom computers in the classroom have been a constant presence throughout secondary education. Their expectations of studying at University is informed by this previous experience and also the role of computing (and more broadly technology) in their lives outwith their studies. The student body also has diverse prior experience of physics, and has varying aptitude for pursuing it further. (In recent years, about half the class have been studying towards a degree in Physics; the rest were working towards other programmes mainly, but not exclusively, in other sciences).

Several principles of good design have been recognised.

1. The real and virtual resources must coexist as part of a *coherent* framework, components of one integrated whole; disjunctions or inconsistencies between the two undermine the enterprise. An illustration of this is the course notes. We issue a skeletal printed course handbook to students. This is intended to be fleshed out in lectures and with the help of the additional material provided online. So that students in one environment, e.g. the real printed material, can co-locate their position in the other, the printed material is marked with "buttons" in the margin indicating the presence of additional online material – perhaps an example, a proof, a derivation or more information.
2. We adopted the view that the online materials[5] should be developed to *support and enrich* existing teaching structures, but not to supplant them, as short-sighted resource-focused thinking might dictate. Examples of how this is achieved include the deployment of a series of formative self-test multiple-choice questions at the end of each topic and in the lectures (see below) for students to test their own understanding of the material, with immediate feedback provided. More recently (see below) we have come to realize that the provision of such materials online allows us to consider changing the way lectures are utilised.
3. One should aim to build structures that *cater for different student needs and aspirations*: not to do so would mean failing to exploit one of the key strengths of information presented online, in that routes through it are inherently non-linear and therefore offer a degree of personalization of the experience for the students. This is illustrated by what we call in the online course material "inlines" and "popups". Inlines are the additional nuggets of information referred to earlier. In the online material, they are activated by a link that opens the material up in-line in the page, hence the name. Multiple inlines can nest within one another. Inlines are supplemented by popups which do exactly as the name suggests; they pop up in another window. This distinction is quite deliberate, since they offer material which is clearly delineated as off the beaten track, such as additional mathematical details to stretch those at the head of the class.
4. One should be prepared *to be an importer* in the e-marketplace: this principle seems likely to become ever-more compelling as the educational learning object economy continues to grow in size and diversity. Examples of this within Physics 1A include the use of interactive simulations and applets within the additional material, wrapped in a local commentary to suggest methods of use and relate to the course material. A further example is the inclusion of streaming video clips for revision of mathematical techniques, from the Mathematics Education Centre at Loughborough University.

5 To access this link, choose the option "Direct login to WebCT" at the bottom of the page and access the pages with username "s_U00380_2" and password "sunshine". We hope to have more convenient general access to WebCT early in 2006/07.

Despite what appears to be an overwhelming presence of technology, it is worth stressing that the aim of providing this is to enrich the learning experience, whilst still retaining effective engagement with academic staff; staff teaching the course are consistently rated as one of the best features of the course in student feedback.

In the academic year 2005-6, we introduced interactive engagement exercises into lectures, facilitated by an electronic voting system. (We had previously tried out a low-tech version of this approach using coloured cards.) At certain points in the lecture, a conceptual multiple-choice question is posed to the students, who consider the responses and vote using hand held units that are issued to them at the start of the course. After, typically, a couple of minutes, the histogram of responses is displayed on screen. There is then the possibility to allow further discussion between students and a revote. Each of these episodes ends with a consideration and explanation of the correct and incorrect answers. These conceptual questions not only facilitate engagement on the part of the students, but also provide immediate feedback to the lecturer. In this way, it is possible to move away from the one-way transmission model of a lecture and towards a two-way conversation mediated by the technology. In its most radical implementation, it is possible to use the collective responses to guide the route taken by the lecture; this model of "contingent teaching" transfers a certain amount of authority to the class as a whole to use their understanding, or perhaps lack of it, of a particular topic to shape the activities that directly follow.

One casualty of such use of lecture time is inevitably that of coverage of the material. In this respect, we return full circle to the online materials; for us, these constitute a fairly detailed representation of the A-Z of the course, permitting us somewhat more freedom to consider alternative uses of lecture time. We have introduced the notion of a "learning contract" with classes; if we spend time involved in these interactive episodes in lectures, any material not covered is caught up in other face-to-face activities or in self-study time. As a first year experience, for students grappling with what learning at a University level is all about, this confers a certain autonomy onto the students, fostering a responsible approach to their learning.

We have learned much from two years of detailed tracking of how students utilise the online resources and this has been used to inform future course design for subsequent iterations of the course. In particular this has exemplified the need for personal, preferably customisable, use of online material, accommodating a variety of learning pathways for different students. There is no "one size fits all" for large heterogeneous classes of this type. The development of the materials and the infrastructure that houses them has necessitated considerable staff effort, both academic, and technical. The investment is one that is we firmly believe to be paying dividends.

College of Medicine and Veterinary Medicine – "The Virtual Farm"

This College has done a great deal of work in the use of IT, and indeed has recently won a Queen's Anniversary Prize for the Virtual Hospital Online, a learning support environment developed in Medicine. Here, we describe the "Virtual Farm", which is not really virtual, but in which IT is used to improve veterinary (BVM&S) students' access to a real farm; it is not tied to a particular course, but rather supports the five-year programme as a whole.

The aim of the project is to enhance the entire programme by engaging students with the unique resources of the two farms associated with the Royal (Dick) School of Veterinary Studies in a way that is more immediate than can be managed with actual visits. Nowadays many of the students have little previous experience of farms, and since there is not enough time to visit the University farms at Langhill and Easter Bush as often as they would like, they do not fully appreciate all the resources available on the working farms. The new materials provide ways of interacting with the farm and its activities without being dependent on the time of day or time of year that they really take place, but available to the students when they want them.

Veterinary students need to have a good knowledge and understanding of farming practices to advise on the health, welfare, productivity and economic performance of farm animals and on the quality and safety of the food produced. In broad terms, the focus is very much towards the 'learning' aspect of the resource with facilities for group work, analysis of individual real-life animal data, on-line discussions with the farm manager and input into topical and current farm issues. In time we hope that elements of the resource will be available to prospective students as well as current ones.

To set the scene for the students, there are continuously active web-cams at the farms allowing real time visualisation of farm events, as well as RSS news feeds with regular updates of key information from the farms

further supported by production of a regular farm newsletter and discussion boards which include a section for 'virtual farmers' specifically for queries relating to students with adopted animals (see below).

The project began in 2005. Elements of the project either completed or under development include the following.

Electronic ID systems allow students to interact with the animals. We now have three electronic farm-management systems up and running. One enables electronic identification and recording of all milking cows by means of an electronic neck transponder. Individual health, production and movement records are stored for every cow. In another, each calf wears an electronic collar which enables it to be identified and fed a predetermined amount of milk via a computer controlled feeding system. Automated concentrate feeding and an electronic weighing facility are also available in one group of calves. And in a third, all sheep have been fitted with electronic ear-tags which again allow automatic identification and recording of all health, production and movement records. Lambs are tagged at birth and their live weights will be followed through from birth to slaughter.

Information and reports from the electronic ID systems are made available to the students via the Edinburgh Electronic Veterinary Curriculum (EEVeC) either as part of a course, or for general interest. Data are also obtained from the herd-management software (e.g. milk-yield data and health information) and delivered into the Veterinary virtual learning environment database (EEVeC) as personalised returns to the students' "adopted animals" page (see below). The dairy and sheep programs will also be available on all vet student lab PCs to enable students to access the live data. Not only will this give them direct access to the records from the University farms, but it will also enable them to become familiar with the types of programs which their future clients are likely to be using.

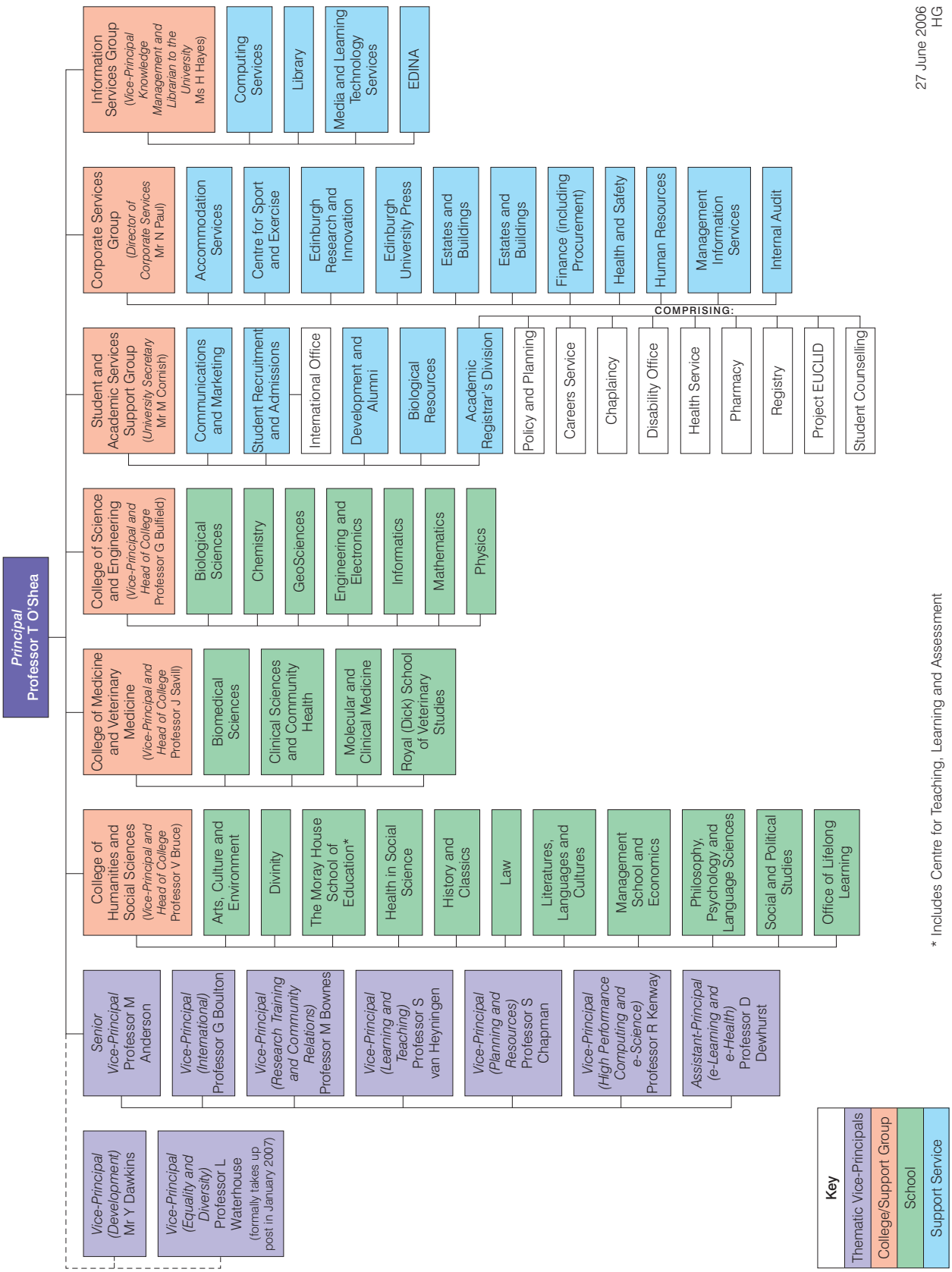
Animal Adoption: First-year students were given the opportunity to "adopt" a cow and heifer calf. Pictures and weekly updates of milk records, health and fertility events are sent to the students via their adopted animal page on EEVeC. Because of the popularity of this scheme it is proposed that all future students will be allocated a calf, cow and sheep at the start of first year and will be expected to follow the progress of these animals. Adopting an animal is particularly valuable in providing a personal context for material that students are learning in Animal Husbandry (a major course running over the first two years of the curriculum). Students are encouraged to participate in a discussion forum dedicated to the 'virtual farmers' and the herd-level data are integrated with core statistical practical classes in the population medicine and veterinary public health course. These aspects are seen as particularly valuable for first-year students as they engage them from the earliest stages of the curriculum with real-life cases and data: a central aim of our ongoing curriculum review.

Husbandry Calendars: Animal husbandry calendars will be produced to enable students to become familiar with the annual cycle of events on the University farms. These will include text, photos and streamed videos of the year in the life of dairy cattle at Langhill Farm and breeding sheep at Easter Bush Farm. Links to clinical information about any health problems on our farms will also be included. This will enable students to be aware of events happening on the farms throughout the year.

In the future, the plan is to expand into the development of welfare and clinical cases. This will involve embedded videos and protocols of procedures and practices of relevance to farm animal husbandry, welfare, health plans and clinical practice. Linked to this will be the creation of a digital bank of streamed video and other relevant resources which will be catalogued for future use as Re-usable Learning Objects. Embedded formative assessments and discussions will be developed and assessment will be incorporated into the relevant module.

Appendix 2 – Organisational Chart

Organisational Structrure as at 11 September 2006



Appendix 3 – Glossary of Terms

Term	Definition
Associated Institutions	Research units and scientific institutes formally associated with the University by virtue of their contribution to its academic activities.
Boards of Studies	A committee consisting of all those teaching a programme or group of programmes.
Centre for Teaching, Learning and Assessment (TLA Centre)	Aims to help the University achieve high standards in undergraduate and postgraduate teaching and learning. Its remit includes not only the professional development of teaching staff but more general responsibilities for the support of innovation and dissemination of good practice in teaching.
College	One of the three academic management units into which the University was organised following restructuring.
Coordinators of Adjustments	School based staff who oversee adjustments which may be required for disabled students.
Course	A unit of teaching and learning formally offered within the University which carries credit which may contribute to a university award (certificate, diploma or degree).
Course Organiser	The individual with responsibility to the Head of School for an undergraduate course.
Degree Regulations and Programmes of Study	Provides information on the programmes of study offered by the University, and sets out the regulatory framework by which these are governed, together with the regulations and codes that govern the general context of a student's academic career at the University.
Director of Studies	An academic staff member appointed to have responsibility for the academic and pastoral guidance of a number of named students.
EDINA	Based at Edinburgh University Data Library, EDINA is a JISC-funded national datacentre. Its offers the UK tertiary education and research community networked access to a library of data, information and research resources.
Programme	A programme of study is the aggregation of all taught elements leading to a defined graduating curriculum.
Publication Scheme	The Freedom of Information (Scotland) Act 2002 requires the University to adopt, maintain, publish and review from time to time a publication scheme. This is a list of the sorts of information that the University will make available on a routine basis.
Quinquennial Review	The University's regular internal system of review of postgraduate programmes.
School	The core units for teaching and research within a College. There are 21 schools spread across the three Colleges.
Student Affairs Forum	Provides an opportunity for discussion of matters of mutual concern between the University and the Students' Association. Through discussion, appropriate comment, advice and action, the forum aims to enhance the quality of the student experience at the University of Edinburgh.
Students' Representative Council	A body of elected student representatives, it represents student opinion to the University, the Government and the world at large. SRC will take student concerns to the highest level. It is part of the Student's Association.

Support Group	One of three administrative management units into which the University was organised following restructuring.
Teachability	Teachability is a SHEFC funded project aimed at assisting academic staff to reflect on various aspects of delivery of curricula, and to consider possible changes to practices, in order to meeting the teaching and learning needs of students with a range of impairments more effectively.
Teaching Organisation	Single points of contact for academics and students, teaching organisations handle all administrative tasks that relate to undergraduate recruitment, admissions and student learning within a school.
Teaching Programme Review	The University's regular internal system of review of undergraduate programmes.
UK GRAD Programme	The UK GRAD Programme is primarily funded by the UK Research Councils and provides a range of activities to support universities to develop postgraduate researchers' skills.

Appendix 4 – List of Acronyms

APC	Academic Policy Committee
CAM	Communications and Marketing
CCAMS	Course Creation and Maintenance System
CHSS	College of Humanities and Social Science
CMG	Central Management Group
CMVM	College of Medicine and Veterinary Medicine
COSMaP	Contextual Solution of the Mathematics Problem
CPD	Continued Professional Development
CPGSC	College Postgraduate Studies Committee
CPSG	Curriculum Project Steering Group
CQAC	College Quality Assurance Committee
CSCE	College of Science and Engineering
CUGSC	College Undergraduate Studies Committee
DoS	Director of Studies
DRPS	Degree Regulations and Programmes of Study
EASE	Edinburgh Authentication System
ECA	Edinburgh College of Art
EETO	Electronics and Engineering Teaching Organisation
ELLP	Edinburgh Lifelong Partnership
EOTAG	Equal Opportunities Technical Advisory Group
EQUIS	European Quality Improvement System
EUCLID	Edinburgh University Complete Lifecycle Integrated Development
EUCS	Edinburgh University Computing Services
EUSA	Edinburgh University Student's Association
FE	Further Education
HEA	Higher Education Academy
HEFCE	Higher Education Funding Council for England
HNC	Higher National Certificate
HND	Higher National Diploma
ICT	Information and Communication Technology
ISG	Information Services Group
LEAPS	Lothian Equal Access Programme for Schools
MALTS	Media and Learning Technology Service
MIS	Management Information Systems
NSS	National Student Survey
OPS	Open Source Portfolio
PDP	Personal Development Planning
PDR	Personal Development and Review Scheme
PELF	Principal's E-Learning Fund
PGR	Postgraduate Research
PGT	Postgraduate Taught
PSRB	Professional, Statutory or Regulatory Body
QA	Quality Assurance

QE	Quality Enhancement
QQR	Quinquennial Review
RASC	Recruitment and Admissions Strategy Committee
RCI	Research Careers Initiative
SAS	Student and Academic Services Support Group
SCQF	The Scottish Credit and Qualifications Framework
SFC	Scottish Funding Council
SHEFC	Scottish Higher Education Funding Council
SPARQS	Student Participation in Quality Scotland
SPGSC	Senatus Postgraduate Studies Committee
SQAEC	Senatus Quality Assurance and Enhancement Committee
SRC	Students' Representative Council
SUGSC	Senatus Undergraduate Studies Committee
SWAP	Scottish Wider Access Programme
TLA	Centre for Teaching, Learning and Assessment
TO	Teaching Organisation
TPR	Teaching Programme Review
UoE	University of Edinburgh
VLE	Virtual Learning Environment
WISARD	Web Interface to Student, Admissions and Related Data

Appendix 5 – Websites and Electronic References

Academic Affairs Section	http://www.aaps.ed.ac.uk/AcAffairs/index.htm
Academic Policy Committee	http://www.aaps.ed.ac.uk/Committees/APC/index.htm
Accommodation Services	http://www.accomm.ed.ac.uk
Analyses and Commentaries on Annual Newspaper League Tables	http://www.planning.ed.ac.uk/Pub/Tables.htm
Annual E-learning Conference	http://www.elearn.malts.ed.ac.uk/issues/elearnconf06
Annual Forum for Course Organisers	http://www.tla.ed.ac.uk/services/course_orgs/index.htm
Annual Performance Indicators	http://www.planning.ed.ac.uk/PISG/intro.htm
Annual Report of the Advice Place	Direct link to relevant SQAEC minute
Balanced Scorecard	http://www.planning.ed.ac.uk/BSC.htm
Careers Service	http://www.careers.ed.ac.uk
Central Management Group	http://www.aaps.ed.ac.uk/Committees/OtherCommittees/CMG.htm
Centre for Learning, Teaching and Assessment	http://www.tla.ed.ac.uk
Centre for Sport and Exercise	http://www.sport.ed.ac.uk
Chancellor's Awards	http://www.ed.ac.uk/news/0602223chancellorsawards.html
Chaplaincy	http://www.chaplaincy.ed.ac.uk
CHSS Learning and Teaching Strategy	http://www.hss.ed.ac.uk/Admin/Learning_and_Teaching_Strategy.htm
Code of Practice for External Examiners	http://www.ed.ac.uk/qahandbook/external-examiners.html
Collaborative Partners	http://www.planning.ed.ac.uk/edin/Collab/repository.htm
Committee Reporting Relationships	Direct link to document
Common Marking Scheme	http://www.aaps.ed.ac.uk/regulations/AsstRegs2005.htm#8_COMMON_MARKING_SCHEME__
Computing Services	http://www.ucs.ed.ac.uk
Counselling Service	http://www.student-counselling.ed.ac.uk

Course Creation and Approval - Guidance	http://www.ed.ac.uk/qahandbook/programme-course/carc.html
Course Creation and Maintenance System (CCAMS)	http://www.registry.ed.ac.uk/wisard/UserGuide/CCAM_Introduction.htm
Course Monitoring – General Expectations	http://www.ed.ac.uk/qahandbook/programm-course/monitoring.html
Course Monitoring Forms in CHSS	http://www.intra.hss.ed.ac.uk/Academic/QA.index.html
Court	http://www.aaps.ed.ac.uk/Committees/Court/membership.htm
Curriculum Project	http://www.aaps.ed.ac.uk/Projects/CURR/index.htm
December Learning and Teaching Forum	http://www.tla.ed.ac.uk/services/LTforums/LTforums0506Dec05.htm
Degree Classification Working Group	http://www.aaps.ed.ac.uk/Projects/DCIG/Index.htm
Degree Regulations and Programmes of Study	http://www.drps.ed.ac.uk
Disability Office	http://www.disability-office.ed.ac.uk
Disruption to Assessment	http://www.ed.ac.uk/news/examnews (may be moved to archive)
EUCLID Project	http://www.projects.ed.ac.uk/euclid/
Examination Timetabling – New proposals from Registry	Direct link to PDF of relevant APC minute
First Annual Report from the ECA Accreditation Committee	Direct to PDF of relevant APC minute
First Memo on Curriculum Project	http://www.aaps.ed.ac.uk/projects/curr/1stconsult/Memo.htm
Gallery of E-learning Projects	http://www.elearn.malts.ed.ac.uk/gallery
General Report on Peer Observation of Teaching Scheme	Direct link to relevant SQAEC minute
History of Art	http://www.arthistory.ed.ac.uk
Honours Programme in Mind and Language	http://www.hss.ed.ac.uk/Admin/documents/MAHonoursinMindandLanguage.rtf
Induction and Annual CPD Training for Directors of Studies	http://www.tla.ed.ac.uk/services/dos/index.htm
International Office	http://www.international.ed.ac.uk

Introduction of New Academic Year	http://aaps.ad.ac.uk/committees/AcYear/index.htm
Learning and Teaching Forum	http://www.tla.ed.ac.uk/services/LTforums/LTforums.htm
Library	http://www.lib.ed.ac.uk
Links to College and School Level Committees (University's Publication Scheme)	http://www.pubs.recordsmanagement.ed.ac.uk/index.cfm?fuseaction=viewscheme&addsubgrp=152&url_grp=0,1&url_subgrp=0,1#1
M Power Mentoring Scheme	http://www.sra.ed.ac.uk/widening/mentoring.html
Main Library Refurbishment	http://www.is.ed.ac.uk/MLRP/
MyEd Portal	http://www/myed.ed.ac.uk
MyEd Tour for Students	http://www.eportal.mis.ed.ac.uk/tour/student/student_intro.htm
Organisational Structure	Direct link to PDF file
Peer Observation of Teaching Scheme	http://www.ed.ac.uk/qahandbook/peer-observations/
PELF Funded Projects	http://www.elearn.malts.ed.ac.uk/pelf
Personal Chairs of Student Learning	http://www.aaps.ed.ac.uk/Committees/APC/Meetings/2003-04/031022/S-PaperC3-APCForApproval
Personal Development Planning in CMVM	http://www.eemec.med.ed.ac.uk/visitors
Postgraduate Representation Policy	http://www.aaps.ed.ac.uk/Committees/SPGSC/pgrep.doc
Principal's e-Learning Fund	http://www.ed.ac.uk/news/callforprops.html
Principal's Strategy Group	http://www.aaps.ed.ac.uk/PrincipalsOffice/StrategyGroup.htm
Professional Development and Review Scheme	http://www.humanresources.ed.ac.uk/development/PDR/PDRIndex.htm
Programme Specifications Template	Direct link to Word document of template
Progressing PDP for Undergraduates	http://www.aaps.ed.ac.uk/Committees/Senate/ugsc/20052006/20060309/Agenda.htm
Proposals for future of APC	Direct link to PDF of relevant APC minute
Proposals to delegate powers of Senate for Programme Creation and Approval	Direct link to PDF of relevant APC minute

Publications Scheme	http://www.pubs.recordsmanagement.ed.ac.uk/index.cfm?fuseaction=viewscheme&addsubgrp=152&url_grp=0,1&url_subgrp=0,1
Quality Enhancement Strategy	Direct link to PDF of relevant Senate minute
QQR Guidance	Direct link to PDF of relevant SPGSC minute
QQR Reports and Responses	http://www.aaps.ed.ac.uk/Committees/SPGSC/QuinquennialReviews.htm
QQR Standard Machine-readable Questionnaire Form	http://www.aaps.ed.ac.uk/Committees/SPGSC/postgraduate_questionnaire.htm
Recent Reform of the Management of Adjustments for Disabled Students	http://www.aaps.ed.ac.uk/regulations/ManualMgtAdjustmentsDisabledStudents.do
Records Management Society Award 2005	http://www.recordsmanagement.ed.ac.uk/RMSAward2005.htm
Recruitment and Admissions Strategy Committee	http://www.aaps.ed.ac.uk/Committees/RASC/RASCIndex.htm
Registry	http://www.registry.ed.ac.uk
Response to the Burgess Report	Direct link to PDF of relevant Senate minute
Response to 2002 Institutional Review	Direct link to PDF of relevant SQAC minute
Restructuring	http://www.aaps.ed.ac.uk/restructuring/
Restructuring Review	Direct link to PDF file
Results and Analysis of Outcome of RAE 2001	http://www.planning.ed.ac.uk/RAE2001/Outcome.htm
Review of TPR Process	Direct link to relevant SQAEC minute
Scholarships	http://www.scholarships.ed.ac.uk
Senatus Academicus	http://www.aaps.ed.ac.uk/Committees/Senate/Senate_Pages/index.htm
Senatus Postgraduate Studies Committee	http://www.aaps.ed.ac.uk/Committees/SPGSC/Index.htm
Senatus Quality Assurance and Enhancement Committee	http://www.aaps.ed.ac.uk/Committees/SQAEC/SQAEC-Index.htm
Senatus Undergraduate Studies Committee	http://www.aaps.ed.ac.uk/Committees/Senate/ugsc/IndexNEW.htm
SPARQS	http://www.sparqs.org.uk
Strategic Plan	http://www.planning.ed.ac.uk/StrategicPlan.htm
Student Statistics Home Page	http://www.planning.ed.ac.uk/Pub/MI_students.htm

TPR Guidance	http://www.ed.ac.uk/qahandbook/documents/guidance_reviewareasteams_dec2004.rtf
TPR Reports and Responses	www.ed.ac.uk/qahandbook/tpr/reports.html
Transferable Skills Programme	http://www.postgrad.ed.ac.uk/pgskills
University Entrants Equal Opportunities reports	http://www.planning.ed.ac.uk/Pun/MI_entrants.htm
University Factsheet	http://www.planning.ed.ac.uk/Profile/Factsheet/home.htm
University Factsheets (Archive)	http://www.planning.ed.ac.uk/Profile/Factsheet/factsheets.htm
University Health Service	http://www.health-service.ed.ac.uk
University's Initial Approach to E-learning	https://www.portfolio.mis.ed.ac.uk/portfolio.renderview.do?shareId=161
University website	http://www.ed.ac.uk
University-wide Committees	http://www.aaps.ed.ac.uk/Committees/index.htm
Virtual Farm in CMVM	https://www.portfolio.mis.ed.ac.uk/portfolio/renderView.do?shareId=175
Widening Participation Projects	http://www.sra.ed.ac.uk/widening/projectsnewpage.html

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