

SENATE

Minutes of Meeting held on 14 December 11

Present: The Rector, Sir Keith O’Nions (Chairman), Professors Alford, Buckingham, George, Haigh, Kramer, Magee, Matar, Thompson, Warwick; Drs Albrecht, Broda, McCoy, McGarvey, McPhail, Pike, Rogers, Smith; Mrs Cunningham; Mr Heath and Mr Parmar (Student Representatives); with Mr Wheatley (Academic Registrar), Ms Richardson (Deputy Academic Registrar) and Ms Penny (Senior Assistant Registrar).

Apologies: Professors Belvisi, Riboli, Wright; Dr Buckle.

Present by Invitation: Mrs Shorley (for Minute 1573), Professor Higham and Professor Partridge (for Minute 1578)

1570 Minutes

The Minutes of the meeting of the Senate held on 2 November 2011 were confirmed.

1571 Matters Arising

Received: **Paper Senate/2011/29.**

Minute 1550: Online Publication of Theses

Reported: (1) That at its November meeting Senate had approved the recommendations presented by the Quality Assurance Advisory Committee (QAAC) regarding the online publication of theses, subject to some adjustments relating to initial implementation.

(2) That the QAAC had now considered further the implementation of the new system and recommended that:

(a) Although it had originally been intended for the new arrangements to be implemented by January 2012, this should be delayed until March 2012 to allow more time for training arrangements within Departments to be set up and piloted.

(b) The definition of an ‘automatic embargo’ system should be clarified to mean the restricted access of an online publication of a thesis. Electronic theses would continue to be made available internally, within Imperial, unless a student sought an embargo based on grounds already stipulated by the College.

(c) In order to address concerns regarding the original proposal to withhold the award of a student’s degree until all copies of permission documents had been appended to the final version of the thesis, it was proposed that the declaration which students must sign should include the following sentence:

Where I have not been able to obtain the necessary rights or permissions I hereby affirm that I have exercised my best endeavours to secure these and have appended copies of my letters/emails seeking these to the thesis.

QAAC recommended that examiners should be encouraged to draw to the College's attention any concern they might have over copyright issues in a thesis but that they would not have veto over the award of a degree based solely on such issues.

(d) That the agreed new system for the online publication of theses should only apply to those new theses being submitted in the first instance. Supervisors and students with theses already in the internal version of Spiral would be given the option to opt into the new scheme if they wished but it would not be an automatic process and would be subject to the requirements for copyright and IP being satisfied. Once the new system was established, the QAAC would review arrangements for those theses already available via Spiral where students and supervisors had not opted into the external version.

Agreed: The recommendations made by QAAC.

Noted: That, as agreed at the November 2011 Senate meeting, a progress report would be submitted to Senate one year after the implementation of the new arrangements. It was intended that following Senate's consideration and approval of this report online publication would move to being automatic, with those staff and students wishing to use the embargo system specifically requesting this.

Minute 1551(4): Quality Assurance Advisory Committee – Examination Regulations: Students and External Examiners

Reported: (1) That at its November 2011 meeting, Senate had approved an amendment to the Examination Regulations to address the issue of students contacting external examiners directly, subject to clarification of the 'direct contact' (i.e. inappropriate contact) that could be liable for disciplinary action.

(2) That the QAAC had now reconsidered this matter and recommended revised wording, as outlined in the Senate's paper.

Approved: On the recommendation of QAAC, the revised regulation, with immediate effect.

Minute 1552(3): Graduate School Master's Quality Committee (Business, Engineering and Physical Sciences) – Change of Award Title, MSc in Innovation and Entrepreneurship

Reported: (1) That at the November 2011 Senate, approval had been given for the Business School to amend the title of the MSc in Innovation and Entrepreneurship to the MSc in Innovation, Entrepreneurship and Management with effect from the 2012 entry.

(2) That the Business School had now consulted with the existing students on this course who had unanimously agreed that they would like to graduate with the new award title.

Agreed: On the recommendation of the Graduate School, that the new title of MSc in Innovation, Entrepreneurship and Management be introduced with effect from the 2011 entry.

Received: A Report from the Rector (**Paper Senate/2011/30**).

(1) Academic Health Science Partnership for North West London

Reported: (i) That the College had announced plans to form a new partnership with healthcare providers in North West London which aimed to improve the health and care of the local population of 1.9 million people.

(ii) That in the summer Lord Tugendhat (Chairman of the Imperial College Healthcare NHS Trust), Ruth Carnell (Chief Executive of the London Strategic Health Authority) and the Rector of Imperial College London had asked Lord Darzi to chair a new Academic Health Science Centre (AHSC) Steering Board. Part of that Board's remit was to lead a consultation on the opportunities to develop and grow teaching, research and healthcare links for the benefit of a network of healthcare providers in North West London.

(iii) That as a result of that review, 11 providers of primary, secondary, tertiary and community and mental healthcare had now agreed to work with the College to develop the first model of its kind in North West London. The partnership would present Imperial with valuable opportunities to extend the reach and influence of its activities among a network of healthcare providers. It would build on the College's approach to population-based research; would facilitate the conduct of clinical trials at scale; and in collaboration with the other partners would allow Imperial to apply its research to bring about innovations in the provision of healthcare. The College would be able to broaden and deepen the impact of its research by reaching more people and through the partnership could take a leading role in training and educating healthcare professionals.

(iv) That over the coming months, a Transitional Partnership Board also to be chaired by Lord Darzi would develop plans for this new collaboration, known as an Academic Health Science Partnership (AHSP). The Board would include as members the Rector of Imperial College London, the Chief Executives of the Trusts which had agreed to progress plans, and a GP representative. The AHSP was expected to be launched in April 2012 as a company limited by guarantee in which members would hold equal rights. The Imperial College Healthcare NHS Trust would be represented separately on the Board.

(v) That the AHSC would continue to integrate healthcare services with teaching and research between the College and the Imperial College Healthcare NHS Trust, and would be complementary to the AHSP. As previously reported to Senate, the AHSC Steering Board had also been asked to evaluate the success of the AHSC and to advise on its future direction. This report was expected to be received by the end of 2011.

(2) Awards Ceremonies

Reported: That the Postgraduate Awards Ceremonies in 2011-12 would be held on Wednesday 9 May 2012 and the Commemoration Day Ceremonies in 2011-12 would be held on Wednesday 24 October 2012.

(3) Rector's Away Day

Reported: That further details of the recommendations and action points arising from the Rector's Away Day, held on 21 October 2011, were now available on the College's website at:

<https://www2.imperial.ac.uk/blog/rectorsawayday11/>

1573 Library Annual Report

Considered and approved: The annual report to Senate by the Director of Library Services (**Paper Senate/2011/31**).

Reported: (1) That a new library strategic plan had been launched in November 2010, spelling out the Library's aims for the next four years. The Library would do all it could to make its services efficient and cost-effective, whilst continuing to innovate and lead the sector in creativity and good practice. The strategic plan was available at:

https://workspace.imperial.ac.uk/library/Public/Strategic_Plan_2010-2014.pdf

(2) That the Director of Library Services had led a successful campaign on behalf of the Russell Group universities to secure reductions in the costs of licences for Elsevier and Wiley Blackwell collections, due for renewal in January 2012. The final offers from the two publishers, accepted in October 2011, had been substantially lower than those the College would have had to accept had Research Libraries UK (RLUK) not taken coordinated action. At a conservative estimate this would result in savings of around £700k for the College over the next 3 years and around £20m across the sector as a whole. This success would also make it easier for the College to negotiate better value deals with other publishers in the year ahead.

(3) That the investment made by the College in its library continued to be reflected in the NSS and ISB results. In the 2010 NSS, 92% of students had agreed with the statement "Library resources are good enough for my needs": this was 12% above the average percentage for the sector as a whole. In the 2010 ISB exit wave, over 87% of home and international students had been satisfied with the Library. Negative comments focused on the crowded conditions in the Central Library, highlighting the popularity of these facilities. In 2009/10, footfall in the Central Library had exceeded 1M for the first time, and in 2010-11 it had increased by 2.8%.

(4) That the Library at St Mary's continued to be a cause of concern. While a unique and attractive building it was entirely unfit for purpose and urgently needed to be sensitively refurbished. The Director of Library Services continued to seek funding for this work and hoped that the issue would be resolved this year.

1574 Pro Rector's Business

Considered: A Report from the Pro Rector (Education and Academic Affairs) (**Paper Senate/2011/32**).

(1) Review of Transferable Skills Training

Reported: (i) That in November 2011 the Senate had been informed that the Strategic Education Committee had considered a report from the Transferable Skills Review Committee and had agreed to make recommendations to Management Board for developments to the College's Transferable Skills Training Programme.

(ii) That the Management Board had approved the 'Imperial College Attributes', attached to the Senate's paper, and the recommendations regarding the development of Transferable Skills Training for postgraduates and early career researchers at its November meeting. The postgraduate and early career researcher training would now be taken forward by the Graduate School and Postdoc Development Centre.

(iii) That the Management Board had also agreed that there was a need to ensure that undergraduates had appropriate opportunities for professional development and had approved a pilot of the Horizons programme; this would take place in spring 2012 with a

programme for 200 1st year students, based on Climate Change. In parallel with this the Business School would be running a pilot Business course for 200 2nd year students. The Management Board had however expressed concerns that the current undergraduate timetable was overloaded and had agreed that in the long term professional development programmes needed to be embedded in the curriculum, not delivered as additional courses in the evening. It had therefore been agreed that Faculty Principals should consult with Departments on how increased transferable skills provision could fit and be embedded within course curricula.

(2) Education Day Autumn 2011

Reported: (i) That the Education Day had taken place on Wednesday 30 November, in its new, annual, end-of-the-year slot in the College calendar. The event had been attended by over 200 people from across all areas of the College, together with a number of headteachers from schools in the Greater London area and representatives of companies that regularly recruited Imperial students. The afternoon had focused on the wider role of teaching and education in equipping students with the broad range of skills they needed to develop successful careers after leaving university.

(ii) That guest speakers had included Mr Malcolm Horton, Global Head of Recruitment and Programmes, Nomura International Plc, Professor Adrian Sutton, Imperial College and Dr Evan Harris, Vice-Chair Liberal Democrat Federal Policy Committee, writer, and former MP. A chaired keynote debate, *Is university education failing our students?*, had also been held with a panel consisting of Sir William Atkinson, Executive Headteacher, The Phoenix Canberra Schools Federation; Dr Anthony Seldon, Master, Wellington College; Sir Richard Sykes, Chairman, UK Stem Cell Foundation; Hamish Common, Barrister and former President of Imperial College Union; and Paul Milliken, Vice President Human Resources - UK, Ireland, Nordics and South Africa, Shell UK.

(iii) That the day had concluded with the presentation by Baroness Eliza Manningham-Buller of the 2011 College Awards for Excellence in Teaching, Supporting the Student Experience, Pastoral Care and Research Supervision, and had been deemed a great success by all.

Further Reported: (i) That feedback from the headteachers who had attended Education Day had been positive and the College had subsequently received some invitations for members of our staff to visit their schools.

(ii) That Dr Annette Mahon and Mark Williams were thanked for their excellent work in organising the Day.

(3) Helping Students Adapt: Pilot Induction Programme

Reported: (i) That the first two sessions of the pilot new undergraduate student induction programme had taken place in early November. The first event on 3 November had focused on study skills and careers advice, while the second event on 14 November had covered a range of issues from cooking to time management. Participants had provided a wealth of useful feedback, which would be used to evaluate the success of the different events and to determine whether the programme should be rolled out further next year.

(ii) That the activities which had proved most popular were career talks from a graduate employer and an alumnus entrepreneur, as well as a cookery class and self-defence demonstration. Many students had also appreciated the opportunity to meet and share ideas with peers from other discipline areas.

(iii) That a third and final pilot session was planned for spring 2012 and would be designed to help students consider how university formed a foundation for future careers. The format was likely to be focused around a series of short talks from alumni speakers

based on their own life experiences (e.g. how they had managed challenges in their careers and what skills they had found most useful). It was planned that this event would be followed by a drinks reception, allowing students and alumni to mix together. The results of the programme would be reviewed by the Student Recruitment and Admissions Strategy and Operations Committee.

(4) Grade Point Average

Reported: (i) That the Strategic Education Committee (SEC) had considered a paper exploring the issues associated with moving towards a Grade Point Average (GPA) system for degree classification. The Committee had heard that UCL had recently announced plans to replace honours classifications with GPA scores.

(ii) That SEC had noted that switching to GPA would be relatively straightforward because the College already calculated weighted average marks. However, it was not clear whether GPA offered any real advantages or whether it might create confusion. It had been agreed that the issue should be considered further by the Faculty Teaching Committees and that the College should consider including the final mark students achieved on the transcript.

(5) UCAS Admissions Process Review

Reported: (i) That following a review of the current admissions system, UCAS had proposed a Post-Qualification Application (PQA) admissions process. A consultation on the proposals was currently underway, with a response deadline of the 20 January 2012. UCAS recognised that the proposals, if accepted, represented significant change and proposed two phases of implementation. The first phase would introduce transitional arrangements in the 2014-2015 academic year. The full PQA system would be then introduced in the 2016-2017 academic year.

(ii) That the College sought to identify, attract and develop students of the highest ability who were most able to benefit from an education at Imperial. It was clear that the proposals would undermine the College's ability to undertake this strategic aim effectively, through the extreme compression of the admission process. A robust College response was therefore being prepared. This would be included, for Senate's information, in the papers for the next meeting.

(6) House of Lords STEM Inquiry

Reported: That the House of Lords Science and Technology Sub-Committee was conducting an inquiry into higher education in Science, Technology, Engineering and Mathematics (STEM) subjects, citing a healthy science base and supply of suitably trained STEM graduates as vital for the UK economy. The College's response, to be submitted by 16 December 2011, would centre on the demand for excellent graduates benefitting from high-quality, research-led and laboratory-based STEM education, the importance of postgraduate provision, the need to improve STEM teaching in state schools and the high-cost of world-leading STEM provision. A copy of the College's response would be included, for Senate's information, in the papers for the next meeting.

(7) New Programmes in Learning and Teaching Symposium

Reported: That a symposium was currently being arranged for staff in the Faculties and Business School to discuss the development of the College's new arrangements for the training of academic staff, which had been in place since October 2010. The symposium would enable newly appointed academic staff to meet their peers in other Departments/Faculties and share experiences and good practice. The programme, which was expected to include a guest lecture, and date for the symposium would be finalised

shortly.

(8) Prevent Workshop – 18 January 2012

Reported: (i) That a Prevent workshop would be held on Wednesday 18 January from 14.30–16.30 in the Pippard Lecture Theatre, South Kensington Campus. The purpose of the workshop, which would be led by a local Prevent Engagement Officer, was to introduce the Prevent programme to staff members who might encounter issues surrounding radicalisation in the course of their work at the College.

(ii) That a protocol outlining the lines of communication for staff, students, or anyone else with concerns about radicalisation had been written and would be published on the College's website shortly.

1575 Quality Assurance Advisory Committee

Considered: A Report by the Quality Assurance Advisory Committee (**Paper Senate/2011/33**).

(1) Amendment to the Examination Regulations

Reported: (i) That the Committee had considered an amendment to the undergraduate Examination Regulations proposed by the Medical Studies Committee (MSC).

(ii) That the Committee had noted that approximately 8 years ago the PACES clinical examinations were becoming untenable due to the number of students being examined, and the need for the two examiners at each station to be NHS consultants. In order to address this, the organisation of clinical examinations had been altered. A single examiner was now present at all stations, with a small number of second examiners (internal observers) moving through each station to ensure standardisation of practice. External Examiners were also required to rotate through multiple stations in order to check on the overall quality and delivery of the examination. Each PACES clinical examination had between 6 and 12 stations.

(iii) That an amendment to the undergraduate Examination Regulations was required, to clarify this process.

Approved: On the recommendation of the Committee, the amendment to paragraph 17 of the Regulations for the Examination of BSc, MSci, BEng, MEng and MBBS Degrees, outlined in the Senate's paper, with immediate effect.

(2) Amendments to the Procedures for the Approval and Review of New and Existing Undergraduate Programmes

Considered and approved: On the recommendation of the Committee, minor amendments to the *Procedures for the Approval and Review of New and Existing Undergraduate Programmes*, with immediate effect, to reflect matters already approved by the Senate since the procedures were last revised. Changes to the procedures included the strengthening of requirements for the monitoring of e-learning provision and collaborative programmes. The Committee had also agreed questions that external reviewers should be asked when considering proposals for new undergraduate degrees.

(3) Student Representation on Periodic Review Panels

Reported: (i) That the Committee had noted that a number of other institutions had now adopted the practice of having a student representative on their periodic review panels and that the QAA had also made reference to this in their document *Outcomes from Institutional Audit 2007-09, Student Engagement and Support (Third series)* as an

example of how institutions might enhance student engagement. Institutions included in the *Outcomes* paper had reported that they had found the contribution that students made as members of review panels to be valuable with only a few institutions reporting inconsistency in attendance or effectiveness at reviews.

(ii) That the Committee had agreed to pilot the inclusion of a student representative on at least 3 periodic reviews (at least 1 undergraduate review and 1 postgraduate review) during the 2011-12 session. The Committee had agreed that student representatives would be full members of periodic review panels and should normally be sabbatical officers. Student panel members should not have studied in the Department under review.

(4) Audio Recording of Lectures

Reported: (i) That the Committee had considered a formal procedure for disabled students to use should they wish to gain permission to audio record lectures, along with guidance to academic staff on why such students might wish to take recordings.

(ii) That the ability to take audio recordings of lectures was recognised as good practice in terms of the support made available by institutions to students with disabilities, and considered to be a reasonable adjustment which the College had an obligation to make for such students under the Equality Act 2010. Students who wished to record lectures might be those with specific learning difficulties, physical and sensory impairments as well as those experiencing prolonged periods of mental or physical ill health. Most psychologists recommended that students with short term memory and processing speed difficulties should be encouraged by their institutions to record lectures, using audio and possibly video equipment.

(iii) That currently, there was no formal College policy on taking audio recordings of lectures and Departments had local arrangements for this. The Committee had acknowledged that many students both with and without disabilities already recorded lectures but that all were missing out on vital support which would assist them with this process; for example, students recording lectures were not being warned of the dangers of misusing recorded materials.

(iv) That some members of the Committee had been concerned that the recording of lectures might have implications in terms of performers' rights and copyright owned by lecturers. However, the Committee had noted that Disability Liaison Officers would be able to inform individual members of staff when recordings would be made.

(v) That some members of the Committee had also been concerned that confidentiality might be an issue, for example where a lecturer presented research data which had not yet been published. However, the Committee had been satisfied that these risks were adequately minimised because the procedure clearly stated that teaching sessions could not be recorded where confidential information was to be presented. The guidance for lecturers advised staff to give students advance warning when they were about to discuss/raise anything confidential.

(vi) That the Committee had considered whether this policy should be extended to all students, but had agreed that it would not want to impose a policy on Departments without prior consultation with the Faculties. The Committee had also recognised that some Departments had local arrangements which worked well. The Committee had agreed that the Faculty Teaching Committees and the Graduate School should be asked to consider whether they would like a similar policy to be developed for all students and to report their findings back to the Committee.

Approved: On the recommendation of the Committee, the policy on audio recording of lectures for disabled students, attached to the Senate's paper, with immediate effect.

Noted: That external lecturers on College courses would also need to be made aware of this policy. If an external lecturer insisted that their lecture could not be recorded the College would need to respect this, however it was anticipated that most external lecturers would appreciate the need for such recordings.

(5) Student-led Educational and Professional Projects

Reported: (i) That the Committee had approved a procedure for approving Student-led Educational and Professional Projects, with immediate effect.

(ii) That students of the College took part in numerous extra-curricular activities which expanded their professional skills and brought benefit directly and indirectly to the wider community. Whilst the College was keen to encourage students to undertake such activities it had not always been clear that all activities, some of which might involve physical risk to students or members of the public, had had adequate oversight by the College. A Student-led Activities Working Group had been established in order to investigate these matters and recommend a way forward. In February 2011 the QAAC had reported to the Senate that it had considered an interim report from this Working Group. The Committee had now considered and approved the final report, which provided details of a framework by which student-led activities could be approved and considered for recognition by the College.

(iii) That the ICU Community Action Group (CAG), comprising the Tutor for Student-led Activities, ICU staff and sabbatical officers, was currently responsible for the approval of student projects with a charitable or outreach objective, involving a minimum of 5 students. The QAAC had agreed that the CAG would continue to act in this capacity, but that, where projects required additional scrutiny, these would be reviewed by 2 new review groups, as appropriate. These would be the ICU Activities Review Board and the College Student-led Activities Review Board.

(iv) That the CAG would consider all initial proposals and, if successful, would pass them to the ICU Activities Review Board. The ICU Activities Review Board, comprising the ICU Deputy President (Clubs and Societies), the Membership Services Manager, relevant Management Group Chairs and sabbatical officers, would then review the proposal. The ICU Activities Review Board would normally approve projects involving field trips to regions a group visited frequently, tours for which the Union was able to manage the risks in-house or trips already covered by the College insurance. If the ICU Activities Review Board concluded that there might be significant reputational risk to the College or potential hazards to participants of the project or that the project carried risks which the ICU did not feel qualified to assess, the project proposal would be submitted to the College Student-led Activities Review Board. The College Student-led Activities Review Board, comprising members of the Exploration Board, would make the final decision.

(v) That in addition to the framework described, the QAAC had agreed that the ICU should maintain a list of advisers who could advise students on planning suitable projects. This would allow students to source expert help and advice at an early stage of the approval process.

(vi) That the QAAC had approved the framework and had recommended that student-led activities should be showcased as part of the College's Summer Science Festival, the first of which was taking place in 2012. The Committee had also agreed that the Exploration Board should take the lead in putting forward nominations for outstanding achievement awards for students who have been engaged in such activities.

(6) Course Approvals and Modifications

Reported: That the Committee had approved a document clarifying the required levels of approval for course proposals and course modifications, which was available at:

The Committee had agreed to review how well the arrangements had been implemented across the College in 2 years' time.

(7) Review of Penalties for the Late Submission of Assessed Work and Undergraduate Year Weightings

Reported: (i) That one of the advisable recommendations made by the QAA as a result of the 2010 Institutional Audit was that the College should:

Expedite its review of assessment procedures to ensure consistency in the management of academic standards within and across its degree structures, and ensure parity of treatment for examination candidates.

(ii) That the Audit report also stated that:

The College has recently made progress towards achieving consistent standards in assessment across the institution through the use of common marking schemes and common penalties for academic offences. However, some inconsistency of practice remains between its subject areas: there is variation in level weightings when calculating final degree marks within closely related programmes, and there are differences in the sanctions imposed for late submission of assessed work.

(iii) That, in response to this, the Committee had considered the College's current policy on penalties for the late submission of assessed work and had agreed that a Working Group would be established to review current arrangements within Departments with a view to streamlining processes and penalties, if appropriate.

(iv) That the Studies Committees had also been asked to review the variability in undergraduate year weightings and report their findings to QAAC.

(v) That the QAAC had agreed with the Studies Committees' view that variability in year weightings should not be considered to be problematic because there were good academic reasons why such variability existed. For example, the year in which students registered on "with management" programmes spent studying management was often weighted lower than for years in which students studied for the single honours degree. This was to maintain the balance between the science and management components of the degree and to recognise that there was no progression, in terms of knowledge and understanding of science, between those years.

(vi) That the QAAC had also agreed that the differences in year weightings reflected fundamental differences in course structure and philosophy. Degree programmes in different subjects had different progression requirements. Even within the same Department, different degrees had this feature which was made clear to students within programme specifications. In other cases, Departments had to follow accreditation requirements and sometimes made changes to year weightings following recommendations from External Examiners.

(vii) That whilst the QAAC had been satisfied that the College had now given due consideration to the comment made by the QAA regarding variation in year weightings, it agreed that (a) the School of Medicine would be asked to look again at the difference in year weightings for the 4th year BSc Medical Sciences [with option pathway] programme and the 3rd year of the BSc Biomedical Sciences degree course with the view to aligning them and (b) where there were very small differences in year weightings, within Departments, the DUGS would be asked to consider whether these could be streamlined.

(8) Examinations and Students' Religious Obligations

Reported: That the Committee had discussed how much concession should be given to students undertaking religious obligations during examination periods and how best for them to balance their religious and College commitments. The Committee had agreed that the Registry would circulate an interfaith calendar to all Departments so that this could be taken into consideration when scheduling examinations. The Committee had also agreed that guidance would be developed for students on balancing religious and College commitments. The College Chaplaincy would be involved in the preparation of this.

(9) Periodic Review

Reported: (i) That the Committee had discussed outline proposals for changes to the routine monitoring and periodic review of postgraduate courses which would be considered by the Graduate School before a revised procedure was developed.

(ii) That the Committee had also approved the periodic review schedule for the 2011-12 academic session, available on the College's website.

(10) Quality Assurance of Humanities

Reported: (i) That the Committee had considered the report of the Humanities Committee on the activities of the Humanities programmes for the 2010-11 session and had noted that the Rector had commissioned a review of the Department of Humanities, chaired by the Pro Rector (Education and Academic Affairs) to be undertaken in 2011-12.

(ii) That the Committee had also considered the 2010-11 undergraduate Annual Monitoring Form for the Department of Humanities, including the reports of its External Examiners. The full minute of the Committee's discussion of these reports was attached to the Senate's paper.

(iii) That the Committee had approved the appointment of the undergraduate Humanities Board Chairman and External Examiners for the 2011-12 session.

(11) UK Quality Code for Higher Education, Chapter B7: External Examining

Reported: That the Committee had received the UK Quality Code for Higher Education, Chapter B7: External Examining (October 2011) and had noted that the Registry would present a full report on the implications of this Chapter of the Code for the College at a future meeting.

(12) External Examiner Report Templates 2011-12

Reported: That the Committee had agreed revisions to the College's External Examiner report templates. The revised templates were available to download at:

<http://www3.imperial.ac.uk/registry/proceduresandregulations/qualityassurance/externalexamining>

(13) Guidelines to Departments on the Nomination and Appointment of External Examiners

Reported: (i) That the Committee had also agreed Guidelines to Departments on the Nomination and Appointment of External Examiners, to take effect for the 2012-13 session.

(ii) That the guidelines took into account the requirements of the new UK Quality Code for Higher Education, Chapter B7: External Examining and the College's Examination Regulations.

(14) External Examiner Summary Reports

Reported: (i) That the Committee had considered the 2010-11 undergraduate External Examiner summary report and the 2009-10 Master's External Examiner summary report and had agreed that these should also be considered by the Studies Committees and the Graduate School's Master's Quality Committees, as appropriate. The Committee had noted that the relevant Studies Committees/Master's Quality Committees had already reviewed individual course reports to ensure that course specific comments made by External Examiners had been adequately addressed. The purpose of these summary reports was to identify any reoccurring themes which might require further consideration. The summary reports were available to download at:

<http://www3.imperial.ac.uk/registry/proceduresandregulations/qualityassurance/externalexamining>

(ii) That it had been reported that in some cases both undergraduate and Master's External Examiners had recommended that there should be clearer marking criteria and model answers. Some External Examiners had also suggested that processes for moderating marks should be made more transparent, that guidelines for markers could be strengthened and that double marking needed to be evidenced more clearly on examination scripts. The Committee had been reminded that similar issues had been raised by External Examiners in last year's reports. External Examiners for Master's courses had also recommended that clearer guidelines for dealing with borderline candidates be developed.

(iii) That some undergraduate External Examiners had reported that the grade averages for some elective modules varied considerably, which might lead to some students perceiving that some subjects were easier than others. Similarly, Master's External Examiners had reported that there was an uneven distribution of marks between elements of the same course, an issue raised in last year's Master's External Examiner summary report.

(iv) That, in response to this, the Committee had agreed that Departments should develop appropriate mechanisms for determining how marks were agreed between markers, in particular where discrepancies occurred. These formal processes should be agreed by Board Chairmen and must be communicated to External Examiners and to students. The Committee had agreed that it was not always appropriate to provide model answers to all examination questions. The Committee had noted that the Studies Committees were considering departmental processes for dealing with undergraduate borderline candidates at their autumn 2011 meetings and that the Graduate School was also currently undertaking this task for Master's courses.

(v) That the Committee had also agreed that the Studies Committees and the Graduate School Master's Quality Committees should ensure that all Departments whose External Examiners had reported issues relating to grade inflation and over generous marking were taking appropriate action to address these issues.

(vi) That where External Examiners had reported that they did not receive timely responses to their queries on draft examination scripts or did not receive material to be reviewed in good time, the Committee had agreed that the relevant Studies Committee/Graduate School Master's Quality Committee should ensure that the individual Departments concerned were taking appropriate action to ensure that this did not occur again. The Committee noted, however, that problems in this area often occurred due to

staff changes and poor succession planning in Departments.

Further Reported: In response to a question from the Imperial College Union regarding whether the College could develop a policy outlining good practice in the preparation of model answers, the Pro Rector (Education and Academic Affairs) said that the QAAC would explore this and report back to Senate.

(15) Procedures for Establishing Collaborative Modules

Reported: (i) That at the last meeting of the Senate, it had been reported that the QAAC had approved a procedure that should be followed and the matters to be considered when establishing collaborative modules: individual modules which formed part of an Imperial College award but that were taught and assessed by another institution / organisation.

(ii) That since that meeting, the QAAC had now agreed that 30% was an appropriate proportion of the curriculum that could be taught and/or assessed by a partner institution before a programme should be classified as a fully collaborative degree. The procedure had been updated to reflect this and was available to download at:

<http://www3.imperial.ac.uk/registry/proceduresandregulations/qualityassurance/collaborative>

(16) Student Surveys

Reported: That the Committee had considered the results of the ISB Exit Wave and had noted that this survey would not run during 2011-12. The Committee had also considered the ICU response to the National Student Survey 2011, the results of the New Student Survey, a more detailed breakdown of PRES 2011 and the results of the Master's Project survey, which had been piloted for a selection of courses in September 2011. The Committee had agreed that a Working Party should be established to review the student surveys run by the College to ensure that these operated as effectively as possible.

(17) Undergraduate Examination Failures 2010-11

Reported: That the Committee had considered a report on the undergraduate examination failures for the 2010-11 session and had agreed that the data presented in the report should be clarified before it was considered by Senate.

1576 Engineering Studies Committee

Considered: A Report by the Engineering Studies Committee (**Paper Senate/2011/34**).

(1) Reorganisation of Undergraduate Courses and Examinations

Department of Electrical and Electronic Engineering

Reported: (i) That the Committee had considered a proposal to change the title of the MEng and BEng Information System Engineering degree programmes to Electronic and Information Engineering. The Committee had noted that there were two main reasons for the change:

- (a) Over the years the name 'Information Systems Engineering' (ISE) had become obscure. Imperial was the only UK university offering a degree programme with this title. Furthermore, due to the way UCAS organised courses, it was increasingly difficult for students to find these courses among the offerings. As a result, many students who could have chosen the courses did not find them among the many course titles. This was demonstrated by the fact that five to ten students

each year switched from EEE to ISE in their first week.

(b) ISE students themselves had asked for the change of title. They had found that ISE was not a course name that was recognised by potential employers.

(ii) That the content of the courses remained unchanged. The Department confirmed that all current ISE students had been consulted about the change.

Approved: On the recommendation of the Committee, (i) the withdrawal of the MEng Information Systems Engineering and BEng Information Systems Engineering degree programmes and (ii) the introduction of the BEng Electronic and Information Engineering and MEng Electronic and Information Engineering award titles with immediate effect.

Noted: That current ISE students would be given the option to transfer to the new course title.

Department of Computing

Reported: (1) That the Committee had considered a proposal for joint group projects to be established between the Department of Computing and the Royal College of Art (RCA). Selected undergraduate students would be provided with the opportunity to collaborate on joint group projects with students undertaking the RCA's new MA in Games Design. The RCA students would focus primarily on artistic concepts and design and the Computing students would focus primarily on the enabling technology and development of prototype software/hardware solutions. Computing students would be assessed by Computing staff independently of the RCA students, who would be assessed by RCA staff.

(2) That a similar proposal for Department of Computing Master's students had also been approved by the Graduate School's Master's Quality Committee and would be considered by the Senate later in the meeting. Undergraduate and MSc students in the Department of Computing would not be working together on the same group projects.

Approved: On the recommendation of the Committee, this collaboration with the RCA, with effect from October 2012.

Aeronautics

Reported: That the Committee had approved a proposal to integrate core mathematics teaching into the Aeronautics Programme. This would entail the Department of Aeronautics taking responsibility for the organisation and delivery of the entire first and second year teaching in mathematics. The advanced mathematics course, available as an option to third year students, should not be affected by this change as it was intended that this would continue to be provided by the Department of Mathematics.

Bioengineering

Reported: That the Committee had approved minor changes to the Department's Scheme for Award of Honours.

(2) Annual Monitoring Statements

Reported: (i) That the Committee had received Annual Monitoring Reports from all Departments together with an Annual Monitoring Report for the Business School undergraduate programmes and the External Examiners' reports for ancillary Mathematics teaching. The departmental representatives had summarised the key points from the reports. The Committee had noted and approved each Department's procedures for assessing students who fell within the 2.5% degree classification boundary and also each

Department's response to the National Student Survey. The Committee had looked in particular at the comments of External Examiners and the responses of the Departments to those issues raised. The Minute of the Committee's full discussion of the External Examiners' reports was attached to the Senate's paper.

(ii) That the Committee had also noted the follow-up report by the Department of Electrical and Electronic Engineering to specific issues raised during the Department's periodic review, which had taken place on 24 November 2009 and was reported to Senate on 16 June 2010. The Committee had been satisfied with the report.

(3) Survey Results

Reported: That the Committee had considered the results of the Summer SOLE Survey and the National Student Survey.

(4) Appointment of External Examiners for 2011-12

Reported: That the Committee had approved nominations for Board Chairmen and External Examiners for the 2011-12 academic session.

(5) Undergraduate Examination Failure Rates 2010-11

Reported: That the Committee had considered a report on the undergraduate examination failure rates and had focused its attention on Departments in the Faculty where the failure rate in a particular year of the course had exceeded 10%, especially where this had occurred in the second or subsequent year.

1577 Science Studies Committee

Considered: A Report by the Science Studies Committee (**Paper Senate/2011/35**).

(1) Undergraduate Examination Failure Rates 2010-11

Reported: That the Committee had considered a report on undergraduate examination failure rates for the 2010-11 session. The Committee had agreed that it would carefully monitor failure rates within the Department of Mathematics and Chemistry during the forthcoming session.

(2) Appointment of External Examiners for the 2011-12 Session

Reported: That the Committee had approved the appointment of Board Chairmen and External Examiners to act for BSc and MSci degrees within the Faculty of Natural Sciences and programmes within the Business School for the 2011-12 session.

(3) Student Surveys

Reported: That the Committee had considered the results of Spring SOLE and TOLE 2011, Summer SOLE 2011 and the National Student Survey 2011.

(4) Undergraduate Annual Monitoring 2010-11

Reported: (i) That the Committee had considered the 2010-11 undergraduate annual monitoring forms for the Departments of Physics, Life Sciences (Biology) and Chemistry. The annual monitoring forms for the Business School, the Department of Mathematics and Life Sciences (Biochemistry / Biotechnology and the BSc Biomedical Sciences) would be considered at the next meeting of the Committee.

(ii) That the departmental representatives had summarised the key points from their

reports, including changes made to their programmes, management structures and personal tutoring systems and an evaluation of examination results and standards. The External Examiner reports, and departmental responses to them, had also been considered. The Minute of the Committee's discussion was attached to the Senate's paper.

(iii) That the Committee had also considered and approved the methods used by these Departments for considering borderline candidates and had received the annual report from the Joint Management Committee for the BSc in Physics and Music Performance.

(5) Minor Amendments to Existing Courses

Reported: That the Committee had approved revisions to the Biochemistry / Biotechnology Scheme for the Award of Honours. The Committee had also approved revisions to the Bologna Templates and programme specifications for the Department of Physics.

1578 Establishment of a Joint Imperial College London-Nanyang Technological University Bachelor of Surgery (MBBS) Degree

Considered: A Report by the Medical Studies Committee (**Paper Senate/2011/36**).

Reported: (1) That, as a result of a collaboration agreement between Imperial College London (Imperial), Nanyang Technological University (NTU) and the Singapore Government, which had been signed in October 2010, a new Imperial/NTU medical school was to be established in Singapore. The Lee Kong Chian School of Medicine (LKCSOM) was due to admit its first undergraduates to a joint MBBS degree programme in 2013.

(2) That since the signing of the collaboration agreement in October 2010, development of the new school had been progressing rapidly. In London, the project was managed from the London Office of the Lee Kong Chian School of Medicine and overseen by a Project Board. In Singapore an interim office had been created and plans for a permanent base, alongside an impressive infrastructure and learning resources, had been approved. High quality faculty and professional staff were being appointed to support the delivery of the curriculum.

(3) That Senate had received a report in May 2011 on the development of the joint Imperial College/NTU medical degree. It had been reported at that time that, subject to Medical Studies Committee approval, a full proposal would be submitted to the December 2011 Senate meeting.

(4) That the Medical Studies Committee (MSC) had considered and approved the detailed curriculum for Phase 1 (Years 1 and 2) and the outline curriculum for Phases 2 and 3 (Years 3, 4 and 5) of the joint Imperial/NTU MBBS at its meeting on 9 November 2011. Subsequently, at its 23 November 2011 meeting, the Strategic Education Committee had confirmed its support of the proposal, noting that satisfactory due diligence checks had been undertaken. The course had been developed in line with Imperial's 'Procedures for the Approval and Review of New and Existing Undergraduate Programmes' and the College's 'Guidelines for Establishing Collaborative Degree Programmes'.

(5) That the MSC had heard that in late September 2011, a panel of external reviewers had reviewed the curriculum and visited NTU to discuss the project with Imperial and NTU staff. The external reviewers had provided overall positive and constructive feedback, which the MSC had been satisfied the project team had addressed.

(6) That the Committee had noted that following a comprehensive needs assessment undertaken in Singapore by the Senior Vice Dean the curriculum for the joint MBBS had been developed by the Curriculum Development Team based in the London Office of the

LKCSOM in close consultation with colleagues in Singapore. A fully vertically and horizontally integrated curriculum had been designed around 3 themes - Scientific Basis of Medicine; Clinical Management and Patient-Centred Care; and Healthcare Delivery and Professional Standards - that ran throughout the programme. Each theme contained key 'fundamental' subjects and topics.

(7) That the 5 year programme was divided into 3 phases: Phase 1 (Years 1 and 2), Phase 2 (Years 3 and 4) and Phase 3 (Year 5). The overarching learning outcomes of the programme were clustered around 6 areas: Patient Care; Medical Knowledge; Practice-based Learning and Improvement; Interpersonal and Communication skills; Professionalism; and Systems-based Practice. The Programme Specification for the course was attached to the Senate's paper. The detailed curriculum information was available via:

http://www1.imperial.ac.uk/medicine/teaching/singapore/approval_documentation/

(8) That one of the overarching goals of the LKCSOM curriculum was to create an environment in which students felt valued and supported. A new House support system had been planned to ensure careful support and both monitoring and mentoring of each undergraduate within a system that enhanced a feeling of 'belonging' and where older students were encouraged to support those in earlier years.

(9) That delivery of the curriculum would be achieved via the use of 'blended learning' – combining face-to-face and online educational methods and closely matching well-defined learning outcomes with teaching methods. The e-learning strategy would be to develop, deliver, support and maintain key elements of the LKCSOM blended learning pedagogy. A proposed e-learning strategy document was presented for the Senate's consideration. All e-learning modules would be reviewed by two subject experts before implementation.

(10) That considerable work was currently being undertaken to ensure that the academic governance and regulation requirements outlined in the College's 'Guidelines for Establishing Collaborative Degree Programmes' were fully addressed. Policies and Procedures would be fully synchronised between both parties. The Academic Regulations, the Examinations Regulations and the Admissions Policy had been prioritised to accompany the curriculum and were aligned with the equivalent Imperial and NTU regulations. The remainder of the academic governance and regulation matters would be finalised and presented to MSC and Senate for approval, and approved by the relevant authorities in Singapore, before the first cohort of students started in August 2013.

(11) That a quality management strategy had been devised to ensure that the course was continually monitored and reviewed in accordance with the College's requirements. All future changes to the regulations, curriculum, assessment and relevant policies and procedures would be approved by both Imperial and NTU for the duration of the partnership. The quality management strategy was an evolving document and further amendments would be made to this as the outstanding governance and regulation issues were finalised. The final quality management strategy would be presented to Senate before the first cohort of students started in August 2013.

(12) That the award would meet the current and future requirements of the UK Quality Assurance Agency, but would not be accredited by the UK General Medical Council at this stage. However, as the course had been developed to be of equal standard to the Imperial MBBS, accreditation could be sought in the future if desired. Although no formal process existed, the Singapore Medical Council wished to ratify the course.

(13) That to ensure the highest quality faculty to deliver the new curriculum, it was a responsibility of Imperial, under the requirements of the Collaboration Agreement, to

establish a faculty development programme. The Train the Trainer proposal, attached to the Senate's paper, outlined a framework of teaching and learning activities to help guide and support medical educationalist practitioners in varying clinical and academic contexts and to support learners and colleagues effectively in the LKCSoM.

(14) That the full set of new course proposal documentation submitted to MSC could be accessed via:

http://www1.imperial.ac.uk/medicine/teaching/singapore/approval_documentation/

(15). That as this was a joint award of Imperial and NTU, the course proposal and all associated policies, procedures and regulations, had to be approved by both parties. Approval by NTU was scheduled to be sought in early 2012 and therefore the documentation presented to this Senate could be subject to some further change, based on NTU feedback. Any changes requested by NTU would be presented to the MSC/Senate for consideration. Further policies and procedures relating to the new medical school and MBBS programme would also be presented to the MSC/Senate as these were finalised. All would be in place before the first cohort of students started in August 2013.

Further Reported: (1) That a mapping exercise had been undertaken to ensure that the learning outcomes associated with the Imperial MBBS were fully covered in this new joint award.

(2) That in response to a request for additional information on the pastoral support that would be available to the students undertaking this programme, it was confirmed that the LKCSoM would be organised into 5 Houses with every student belonging to a House. Students would have small group timetabled sessions with a tutor once a fortnight and whole House meetings would also take place 4 times a year. All tutors would be paid members of LKCSoM so would be fully engaged in the process. In addition to the House structure, there would be an LKCSoM Welfare Committee and students would also have access to the full range of welfare facilities provided by NTU including the university's counselling service. There were however some aspects of welfare provision that required further investigation, for example support for disabled students and occupational health. Further information on the pastoral care available at the school would be presented to a future meeting of Senate.

(3) That in response to a question regarding student representation on LKCSoM committees, it was confirmed that students would be key committee members and would be represented on the school's Medical Education Committee (MEC) and all of MEC's subcommittees except the Student Progress Committee, which dealt with individual student cases.

(4) That students applying for a place on the programme under the 'Exceptional Individual Scheme' outlined in the LKCSoM Admissions Policy would be required to undertake the same interviews and tests as students shortlisted via the traditional admissions route. They would need to meet the same qualification entry requirements as all other applicants though slightly lower than normal BMAT scores might be considered.

(5) That in response to a question about the provision of medical humanities in the curriculum, it was confirmed that the medical humanities course currently included in the Imperial MBBS was being developed with NTU's humanities department for inclusion in the joint Imperial/NTU MBBS curriculum.

(6) That in response to a question about the risks involved in such an initiative, it was confirmed that the project team had developed a detailed risk register. Although it was not possible to eradicate all risks in a project of this nature, careful work was being undertaken to minimise these. Key to this was ensuring that appropriate regulations, policies and

procedures were in place to govern the programme. The College's Management Board also received a monthly update on the progress of the project.

Approved: On the recommendation of the Committee, the establishment of a joint Imperial/NTU MBBS with effect from August 2013; the detailed curriculum for Phase 1 of the MBBS (Years 1 and 2) and the outline curriculum for Phases 2 and 3 (Years 3, 4 and 5); the Academic and Examination Regulations for the programme; the LKCSOM Admissions Policy, Train the Trainer Proposal and e-Learning Strategy; and the latest LKCSOM Quality Management Strategy.

Noted: That the final version of the LKCSOM Quality Management Strategy would be presented to a future meeting of Senate.

1579 **Medical Studies Committee**

Considered: A Report by the Medical Studies Committee (**Paper Senate/2011/37**).

(1) Proposal for the establishment of a substantially revised BSc in Biomedical Science programme

Reported: (i) That the Committee had considered and approved a proposal for a substantially revised BSc in Biomedical Science, to be led solely by the Faculty of Medicine, with effect from 2012-13. The programme had been revised and re-sequenced, harnessing the strengths of the Faculty.

(ii) That it was proposed that Year 1 of the revised course would focus on cell and molecular science and systems physiology. Year 2 would build on these foundations and provide scope for some student-selected options. In Year 3 the students would join the BSc pathways offered to Year 4 MBBS/BSc students. IT and statistics teaching would be embedded in the course and an integrated transferrable skills programme, developed in consultation with the Careers Advisory Service, had also been introduced.

(iii) That the proposal had received favourable reviews from external experts from academia and industry as well as the Medical School Student Union. The course development team had responded to some specific comments and had redesigned a module in Evolutionary Psychology and Behaviour in response to the industrial reviewer's comments.

(iv) That the Programme Specification for the revised programme was attached to the Senate's paper. Students part way through the current BSc in Biomedical Sciences course in 2012-13 would follow the transitional arrangements agreed by Senate at its November 2011 meeting.

Further Reported: That there was much expertise in this area across the College which could be used to further enhance the proposed curriculum. The Faculty of Medicine course management team was keen to do this and was currently exploring possibilities with the other Faculties.

Approved: On the recommendation of the Committee, the establishment of a revised BSc in Biomedical Science programme with effect from October 2012.

(2) Annual Monitoring Reports, including External Examiner Report Responses

Reported: That the annual monitoring reports for the MBBS; BSc in Medical Sciences with [option]; BSc in Biomedical Sciences and BSc in Pharmacology and Translational Medical Sciences; and the Business School had been considered by the Committee.

MBBS

Noted: (i) That the Faculty's mechanisms for considering borderline candidates on the MBBS had been considered and approved. It had been reported that many papers were machine marked. Students on the borderline in clinical examinations were discussed in detail at the examination board. In Year 6 only a borderline fail in one paper was permitted if all other papers were passed.

(ii) That the Committee had noted that External Examiners had identified a small number of weak examination questions in the early years of the course; these were being replaced. Comments had also been made by External Examiners about the high standards of clinical examinations. One External Examiner had noted the number of requests for mitigating circumstances and had proposed a 'fit to sit' policy. The Committee had felt that this was not currently viable. Applications for mitigating circumstances had become more evidence-based, and it was expected that, over time, the number of applications would reduce as a result. It was important that students with genuine mitigating circumstances did not feel deterred from declaring them. One report had highlighted a lack of student helpers for Year 3 examinations. The date of the examination had been moved for future years in order to allow more helpers to be recruited. Some External Examiners had reported concerns that there were areas under-represented in the curriculum. These fields were typically covered elsewhere and in future more information about the overall structure would be supplied to the examiners.

BSc in Medical Sciences with [option]

Noted: (i) That the Committee had been informed that a new Special Study Module in Death, Autopsy and Law had been introduced.

(ii) That the mechanisms for considering borderline candidates had been considered and approved. It had been reported that all students within 2.5% of the grade boundary would now automatically be offered a viva.

(iii) That the Committee had noted that the External Examiner reports had been generally very positive and had recognised the unique educational opportunity that the BSc provided to medical students. Across pathways there had been praise for course leadership and organisation. Third marking in the case of discrepancies between first and second markers had been identified as good practice. Concern had been raised that plagiarism detection software had not been routinely used in all cases. This would now be introduced.

(iv) That there was a discrepancy between the weighting of Year 4 of the MBBS/BSc and Year 3 of the BSc in Biomedical Sciences. A working party was actively reviewing how a more consistent approach could be implemented.

BSc in Biomedical Sciences and BSc in Pharmacology and Translational Medical Sciences

Noted: (i) That the mechanisms for considering borderline candidates had been considered and approved. It had been reported that the process for consideration of borderline candidates in Year 3 was determined by the relevant Faculty in which the student was based; in Medicine students within 2.5% of the grade boundary would now automatically be offered a viva.

(ii) That the Committee had heard that significant progress had been made in the follow-up to the second stage review of the BSc in Biomedical Sciences which had taken place in January 2010. In particular, more structured student support had been introduced through academic and personal tutoring systems.

(iii) That the Committee had noted that the External Examiners were highly supportive of

both programmes and had commented on the high quality of students and the levels of feedback provided to them. Some administrative errors had taken place with sending paperwork to the External Examiners this year. The Committee had been assured that this would not happen in future.

Business School

Noted: (i) That the mechanisms for considering borderline candidates had been considered and approved. It had been reported that processes had been implemented to ensure that the selection of students for vivas was more consistent.

(ii) That the Committee had noted that the External Examiners had commented on the high quality of the students and the programme, which had a national reputation for excellence. Concerns about the spread of results and the possibility that some marking was over-generous were being monitored by a Grade Monitoring Working Group. One External Examiner had commented on the high weighting given to group work. However, the Business School had felt that group work was appropriately emphasised in the programme, and mechanisms were in place to penalise students who did not contribute appropriately.

(3) New course in Biomedical Humanities

Reported: That the Committee had ratified action taken by the chair to approve a proposal for a new course in Biomedical Humanities within the BSc in Biomedical Sciences programme, with effect from 2011-12.

(4) ECTS credits for students undertaking extramural placements

Reported: That the Committee had ratified action taken by the chair to approve a proposal for awarding ECTS credits to students on the BSc in Pharmacology and Translational Medical Sciences who undertook an approved extramural placement from summer 2011.

(5) External Examiner Nominations 2011-12

Reported: That the Committee had approved the External Examiners and the chairmen of the respective examination boards nominated for 2011-12. The Committee had also ratified action taken by the chair to approve outstanding nominations for 2010-11.

(6) Academic Honesty

Reported: That the Committee had approved a proposal for dealing with cases of plagiarism and other cheating offences with immediate effect. A panel would be set up to review cases, set penalties for minor cases, and refer major cases to the Registry.

(7) Pilot of an enhanced Personal Tutoring System for Years 3-6

Reported: That the Committee had received and endorsed proposals to pilot a more structured and supported framework of regular meetings for students in clinical years, starting with Year 6 students but growing to include all years. The pilot would launch in January 2012.

(8) National Student Survey

Reported: That the Committee had considered a paper on the School of Medicine's performance in the NSS. The overall satisfaction rate for the School was 92%, among the highest in the College. Key areas for improvement identified were assessment and feedback, academic support, and management and organisation. Plans were in place to

improve in these areas.

(9) Undergraduate Examination Failure Rates 2010-11

Reported: That the Committee had received the report on undergraduate examination failure rates for the 2010-11 session. The statistics would be discussed at the next meeting.

1580 Graduate School Postgraduate Quality Committees

Considered: A Report by the Graduate School Master's Quality Committee (Business, Engineering and Physical Sciences) and the Graduate School Master's Quality Committee (Humanities, Life Sciences and Medicine) (**Paper Senate/2011/38**).

(1) Graduate School Master's Quality Committee (Business, Engineering and Physical Sciences)

(i) Collaboration: Department of Computing and the Royal College of Art

Reported: (a) That the Department of Computing wished to propose a new collaboration with the Royal College of Art (RCA). The proposal concerned joint group project work on the Department of Computing's MSc Computing Science, MSc Computing (Software Engineering) and MSc Computing (Creative Industries) and the RCA's MA in Games Design. The Department of Computing would like selected students from their above Master's courses to participate in joint group projects with the RCA. The RCA students would focus primarily on artistic concepts and design and the Computing students would focus primarily on the enabling technology and development of prototype software/hardware solutions. Computing students would be assessed by Computing staff independently of the RCA students, who would be assessed by RCA staff.

(b) That a similar proposal for Department of Computing undergraduate students had also been approved by the Engineering Studies Committee. Undergraduate and MSc students in the Department of Computing would not be working together on the same group projects.

Approved: On the recommendation of the Committee, this collaboration, with effect from October 2012.

Noted: That a collaborative agreement, covering both the undergraduate and Master's projects, would now be signed with the RCA.

(ii) Major Modification

Aeronautics – MSc in Advanced Aeronautical Engineering (MSc in Advanced Computational Methods for Aeronautics, Flow Management and Fluid Structure Interaction and the MSc in Composites: the Science, Technology and Engineering Application of Advanced Composites)

Approved: On the recommendation of the Committee, the use by the Department of Aeronautics of the award titles MSc in Advanced Computational Methods for Aeronautics, Flow Management and Fluid Structure Interaction and MSc in Composites: the Science, Technology and Engineering Application of Advanced Composites for the purpose of receiving applications, rather than the umbrella course title MSc in Advanced Aeronautical Engineering, with immediate effect.

(2) Graduate School Master's Quality Committee (Humanities, Life Sciences and Medicine)

(i) Change of Award Title

MSc in Modern Epidemiology

Approved: On the recommendation of the Committee, the change of the umbrella award title of MSc in Modern Epidemiology to MSc in Epidemiology, and corresponding changes to the associated course pathway awards, with effect from entry in October 2012.

(ii) Minor Modification

Reported: That the Committee had approved a minor modification to the MSc in Bioinformatics and Theoretical Systems Biology, as outlined in section 4 of the Senate's paper.

1581 Student Welfare Committee

Considered and approved: The annual report of the Student Welfare Committee for 2010-11 (**Paper Senate/2011/39**).

Reported: (1) That over the course of the year, the Committee received reports from its different constituent areas. A brief outline of these annual reports was provided in the Senate's paper.

(2) That there had been a 5% rise in undergraduate applications for accommodation in 2010 compared with 2009; in total 3305 applications were received. The occupation rate had risen from 97.6% in 2009 to 99% in 2010. Increased applications for accommodation resulted in less choice with only 76% of applicants receiving one of their 5 choices compared with 86.5% the previous year. However, the situation had improved for October 2011 entry.

(3) That postgraduate applications for accommodation had risen from 1555 in 2009 to 1663 in 2010. College currently only had 470 bed spaces for postgraduate students; however this would change with the completion of Woodlands and Stanley Road.

(4) That the Early Years Education Centre had been visited by the Office for Standards in Education, Children's Services and Skills (Ofsted) in July 2011. Ofsted had rated EYEC 'outstanding'.

(5) That funding for the Imperial College International Scholarships scheme had not been renewed in 2011. This meant that there was now no centrally-provided funding that was open to international students of all nationalities wishing to undertake a PhD from 2012.

(6) That though not mentioned specifically in the report the College Tutors were also an important source of advice and support for students in College.

Further Reported: That it was unclear where students could obtain advice and guidance on income tax issues within the College. This should be clarified.

1582 Undergraduate Examination Failures 2010-2011

Received: Statistics of undergraduate examination failures for session 2010-11 (**Paper Senate/2011/40**).

Reported: (1) That the statistics were being reviewed by the 3 Studies Committees which had been asked in accordance with usual practice to focus attention and discussion on those Departments where the failure rate in a particular year of the course exceeded 10% especially where this occurred in the second or subsequent year. The Quality Assurance Advisory Committee had also considered the statistics and, as previously reported, had requested that the data be clarified before being presented to Senate.

(2) That it had become apparent that there had been a slight error in the data that had been presented to the Studies Committees. This had been corrected in the Senate's paper. The revised paper would be circulated to the Studies Committees for information.

Further Reported: (1) That there remained some confusion over what the statistics in the paper represented. The report did not distinguish between those failing on their first attempt and those re-sitting a year.

(2) That while the Senate acknowledged that departmental failure rates could fluctuate from year to year, members remained concerned about the relatively high failure rates in some areas.

Agreed: (1) That the paper should be revised further so that first time failures could be identified.

(2) That the Senate should receive a report from those Departments with failure rates higher than 10% in any year on the action being taken to reduce these.

1583 Prizes and Medals Established/Amended

Considered: Recommendations concerning new prizes, as detailed in **Paper Senate/2011/41**.

Approved: The establishment of 2 Materials Design Prizes and the Prize for Outstanding Contribution to the Life of the Theory and Simulation of Materials Centre for Doctoral Training.

1584 Staff Matters

Received: A Note by the Rector (**Paper Senate/2011/42**).

1585 Representation Concerning Decisions of Examiners

Received: A Note by the Academic Registrar (**Paper Senate/2011/43**).

1586 Appointment of External Examiners 2011-12

Received: The names and affiliations of External Examiners for undergraduate and Master's degrees in 2011-12 (**Paper Senate/2011/44**).

1587 Register of Collaborative Provision

Received: The Register of the College's collaborative courses (**Paper Senate/2011/45**).

1588 Monitoring Statement for the 2010-11 Academic Year

Received: The College Monitoring Statement to the HEFCE for the 2010-11 academic year (**Paper Senate/2011/46**).

1589 Research Council Studentships 2011-12

Received: Statistics for the current session concerning the allocation of Research Council Studentships (**Paper Senate/2011/47**).

1590 Graduate School Report

Received: A Report by the Graduate School (**Paper Senate/2011/48**).

Noted: That the Postgraduate Open Day had taken place on Wednesday, 7 December at the South Kensington Campus.

1591 Strategic Education Committee

Received: The Executive Summary of the meeting of the Strategic Education Committee held on 23 November 2011 (**Paper Senate/2011/49**).

1592 Award of Degrees and Diplomas

Reported: That under the provisions of University of London Ordinance 9(2) and Imperial College London Ordinance B1(1), and with the terms of SM 8 of October 1998, that the Academic Registrar had acted on behalf of the Senate in approving the awards for undergraduate and postgraduate degrees for candidates who had satisfied the examiners in the examination and satisfied all other necessary requirements for the award of the degrees, and that degrees had been conferred on these candidates, the date being as indicated on the award.

1593 Valediction

The Rector advised that this was Professor Andrew Warwick's last meeting. The Senate thanked Professor Warwick for his contributions and wished him well for the future.