UNIVERSITY OF ABERDEEN
QUALITY ASSURANCE COMMITTEE

INTERNAL TEACHING REVIEW OF COMPUTING SCIENCE, SCHOOL OF NATURAL & COMPUTING SCIENCES

FINAL REPORT
PANEL VISIT: WEDNESDAY 4 DECEMBER 2013

PANEL:

Dr Kath Shennan, Quality Assurance Committee and School of Medical Sciences, College of Life Sciences and Medicine (Convenor)
Dr Alfred Akisanya, School of Engineering, College of Physical Sciences
Dr Andrew Gordon, School of Language & Literature, College of Arts and Social Sciences
Dr Julian Padget, Department of Computer Science, University of Bath
Ms Jodie Molyneux, AUSA student representative
Ms Sarah James, Registry (Clerk)

SCHEDULE:

TIME	INTERVIEWEES
09:30	**Department Director of Undergraduate Teaching, Department Director of Postgraduate Teaching, plus head of PGR supervision** Dr Bruce Scharlau, Dr Nigel Beacham, Dr Jeff Pan
10:15	**Head of School, Head of Department, College Director of Graduate School** Professor Jan Skakle, Professor George Coghill, Dr Judith Masthoff
11:15	**Representatives from the UG and PGT teaching teams, including lecturers and teaching fellows and new members of staff, plus staff who are PGR supervisors** Dr Adam Wyner, Dr Wei Pang, Dr Matthew Collinson, Dr Advaith Siddharthan, Dr Chenghua Lin
12:00	**Level Co-ordinators, Disability Co-ordinator, Placement Co-ordinator, Industrial Liaison Officer** Dr Frank Geurin (Level 1 and 4 tutor/Adviser), Professor Kees van Deemter (Level 2 tutor), Dr Martin Kollingbaum (Level 3 tutor/Adviser), Dr Nir Oren (Disability Co-ordinator/Adviser), Dr Wamberto Vasconcelos (Industrial Liaison Officer)
12:30	**School Administrative Officer (SAO), Department Administrative Staff and Technical Support Staff** Sandra Edwards (SAO), Shirley Mackie, Sheryl Mackay, Lynn Harrison, Michael Chung, Naveed Khan
14:00	**UG students (Levels 1–4)** Maria Haman, Laura Murray, Kieran Joseph Donohoe, Heather Langley. Yasen Visulchev, Adeoyin Kehinde Okuboyejo, Alex Hunter. Svilen Gotsev, Ventsislav Tanev, Nikola Petkov. Andrada Dragoescu, Todor Davchev, Christopher Shanks
14:30	**PGT students & PGR students, including PGR students who teach** Tony Etuk, Roman Kutlak, Matt Dennis, Xin Wu, Gordon Ross, Ayandeko Fatima Modupe

Additional comments on the self-evaluation document were received from:

Equal Opportunities Policy Officer, Policy, Planning & Governance .... Ms Christina Cameron
Head of Student Support.. Dr Lucy Foley
College Relationship Manager, Information Technology .... Mr Russell Moffat
Head of College, College of Physical Sciences .... Professor Bryan McGregor
Deputy Registrar (Quality Assurance), Registry .... Ms Katja Christie

Overall Impressions

The Panel is grateful for the co-operation of staff and students throughout the Internal Teaching Review (ITR) and for their commitment to the ITR process. Staff and students provided their opinions openly in the spirit of the ITR process. The overriding impression is positive and is that the department of Computing Science, within the School of Natural & Computing Sciences, provides an approachable and supportive environment for study, excellent feedback to students, a proactive approach in providing programmes that remain relevant to industry, and innovative outreach programmes to local schools. Throughout the ITR process, however, it was clear lack of consistency in approach and practice within the department is an issue, with particular concerns in relation to assessment and examination. Many of the recommendations in this Report relate to this. There was also some evidence of similar lack of consistency and coherence across the School as a whole.

1 Range of Provision

1.1 Computing Science offers 21 undergraduate (UG) and 3 taught postgraduate programmes (PGT), as follows:

Undergraduate taught programmes:
• BSc Honours in Computing Science
• BSc Honours in Computing Science – Mathematics
• BSc Honours in Computing Science – Philosophy
• BSc Honours in Computing Science – Physics
• BSc Honours in Computing Science – Psychology
• BSc Designated in Computing Science
• BSc Designated in Computing Science – Mathematics
• BSc Designated in Computing Science – Philosophy
• BSc Designated in Computing Science – Physics
• BSc Designated in Computing Science – Psychology
• MA in Computing
• MA Designated in Computing
• MA in Computing (Joint Programmes)
• MA in Computing and Music
• MA in Major Component with Computing
• MA Joint Honours in Computing Science – Mathematics
• MA Joint Honours in Computing Science – Philosophy
• MEng in Computing
• MSci Computing with Industrial Placement
• MSci in Computing Science with Industrial Placement
• MSci in Information Systems with Industrial Placement

The following programmes are running for current students but are not open to new students as they are being withdrawn:
• BSc Honours in Artificial Intelligence*
• BSc Honours in Business Information Systems*
• BSc Honours in Computing Science – Education (Primary)*
• BSc Honours in Computing Science (Artificial Intelligence)*
• BSc Honours in Computing Science (Business Computing)*
• BSc Honours in Computing Science with French*
• BSc Honours in Computing Science with Spanish*
• BSc Honours in Geographical Information Systems*
• BSc Honours in Information Systems*

• MA in Information Systems and Management*
• MSci in Artificial Intelligence with Industrial Placement*
• MSci in Business Information Systems with Industrial Placement*
• MSci in Computing Science (Artificial Intelligence)*
• MSci in Computing Science (Business Computing)*
• MSci in Computing Science with French and Industrial Placement*
• MSci in Computing Science with Spanish and Industrial Placement*

Postgraduate taught programmes:
• MSc/PgDip in Informatics: Software Project Management
• MSc/PgDip in Information Systems and Data Management
• MSc/PgDip in Information Technology

The following programmes are running for current students but are not open to new students as they are being withdrawn:
• MSc/PgDip in Cloud Computing*

2 Aims of Provision

2.1 Computing Science states that the overall aims of the taught provision are to increase students' knowledge and understanding of Computing Science, and to ensure the acquisition of department-specific application, analytical, synthesis and evaluation skills, and generic skills that will be of value to them in their chosen career path.

2.2 For all taught provision:
(i) Equip students with up-to-date knowledge and skills to work as information technology professionals within industry and the public sector or to pursue a research degree through developing students' ability to analyse computing science problems, choose and apply appropriate computing science methods and techniques, specify, design and create software systems and documentation, critically evaluate specifications, designs, software systems and documentation.
(ii) Develop students' transferable skills, in particular the ability to utilise problem-solving skills in a variety of situations, communicate ideas effectively both orally and in writing, manage time and resources and work to deadlines, work effectively as a member of a group, adapt to a changing technological environment, use information and communications technology, take responsibility for independent learning and professional development, understand career opportunities and begin to plan a career path.
(iii) Provide a breadth of coverage which encompasses both the theory and the practice of computing.

2.3 Specifically for undergraduate taught provision:
(iv) Cater for a range of competencies on entry ranging from those with little or no computing experience, to those who have qualifications at Higher or A level.
(v) Enable students to qualify for membership of professional bodies such as the British Computer Society (BCS).

2.4 Specifically for undergraduate degrees with industrial placement:
(vi) Provide an opportunity for development of knowledge, understanding and skills through industrial experience.

2.5 Specifically for Masters provision:

(vii) Equip students with the advanced knowledge and skills to operate as computing science specialists within industry and the public sector.

3 Staffing

3.1   The Panel **commends** the department on the commitment of all its staff. In particular, the open-door environment and academic support provided to students.

3.2   The Panel noted that the head of department and staff agree that staffing levels within the department are good with a workload model that operates well in practice – balancing the needs of teaching, research and administration – and that is negotiated with staff. The staff–student ratio is good and enables students at all levels to have exposure to teaching by senior and research-active members of staff. Temporary teaching staff, some of whom are postgraduate students, are employed to assist with laboratory and seminar teaching.

3.3   It was evident from the Panel visit that the School's administrative team work well together in the day-to-day running of administrative duties in what is a difficult environment given the different practices of the departments within the School. The technical support staff have a heavy workload with no provision to cover for holidays and sickness. The Panel **recommends** that the School review the workloads of the administrative staff and that the School Administrative Officer work with the Head of School to consider how the disparate practices within the School might be made more consistent so that workloads are reduced and adequate cover for holidays and sickness can be accommodated. (See, also. 8.12 below.)

4 School Organisation

4.1   The Panel noted that the School states that it operates like a 'mini College' with the departments within the School operating independently. The Head of School convenes a weekly head of department meeting and the head of department convenes regular staff meetings for Computing Sciences staff for the dissemination and discussion of operational and academic matters. The Panel noted that the School is considering introducing Committees at School level to bring consistency across the School and to match what happens in other Schools. In relation to points in several of the sections below regarding inconsistencies in practice, the Panel **recommends** that the School introduce School-level Committees and posts to co-ordinate the various departments.

4.2   In interviews with the administrative and technical staff, the Panel heard that information is rarely filtered down to them formally and that there is a lack of timely communication from the central professional services departments. These staff felt it would be helpful to have a School meeting to which all staff (or representatives of all staff groups) were invited for the dissemination of School and University information and discussion of changes in practice, and to be able to provide feedback when processes are not working. The Panel therefore **recommends** that there should be a regular School-wide forum for all staff to meet and discuss problems with procedures.

4.3   Whilst there can be benefits to having a small department, the Panel noted that staff within Computing have quite different understandings of learning and teaching policy and practice – especially those relating to assessment and examination, and to monitoring. Many staff did not seem to be familiar with the University's Academic Quality Handbook (AQH). It was noted that there is no department- or School-level examinations officer and that some posts relating to

academic quality assurance exist only at College level. The Panel noted that the Computing Sciences Director of Undergraduate Teaching, Director of Postgraduate Taught Teaching and Level Tutors have diverse roles that nonetheless do not appear to cover the role of examinations officer. In interviews, it was of concern that there is no attempt within these roles to manage or bring cross-department consistency (across and between levels) to question setting and moderation of the marking for assessments and examinations, much of this being decided by the course co-ordinators. The Panel therefore **strongly recommends** that the department/School review the existing roles and responsibilities to ensure that these are transparent and that there are no gaps, and considers that part of this review should include the appointment of a department or School examinations officer to oversee and co-ordinate procedures for academic quality assurance. The Panel note that the department says in its corrections of fact that it has internal academic scrutiny. However, in interviews with staff, including those with the department Level Tutors, Undergraduate and Postgraduate Directors, the staff were clearly unaware of these procedures.

4.4   In relation to 4.1, 4.2 and 4.3 above, the perceived lack of coherence and consistency in the practices relating to assessment and examination is of concern to the Panel. The Panel therefore **recommends** that thought is given at School and department level to the creation of a coherent School/department structure and roles that ensures consistency of knowledge and practice relating to learning and teaching across staff within and between all departments and which ensures a robust and transparent mechanism for the setting and marking of assessments and examinations, that includes internal academic scrutiny both across and between Programme levels.

5   **Course and Programme Design, Accessibility and Approval**

5.1   The Panel heard that the department had updated its undergraduate programmes in line with the expectation of the accrediting body, the British Computer Society (BCS) and to improve the graduate attributes of its students in line with the expectations of industry and employers. As part of this rationalisation, the number of programmes is being reduced. Computing has also reduced the number of taught postgraduate programmes to focus on the main themes of computing in industry and on the skills for progressing to PhD. It is hoped that this will make the taught postgraduate programmes more attractive to students. The Panel **commends** the department for rationalising its provision and updating the range of programmes it offers at undergraduate and taught postgraduate level – both to improve the quality of the programmes and the student experience, and to ensure the department is sustainable.

5.2   The Panel **commends** the School for diversifying its provision by creating a Sustained Study Programme and recognises the large number of students from outwith the School who take Computing Sciences courses as department breadth. This brings in a large number of student FTEs for the department but also requires additional staff effort in teaching students with non-computing backgrounds.

5.3   The Panel noted the department's ongoing issues with the standard of maths at entry. Staff and students confirmed that this causes problems. It is acknowledged that students are entering with higher qualifications overall than in previous years because of the reduced number of offers being made by the University. The level of maths is still a problem, however, despite programmes having been reorganised (eg with maths for Computing Sciences being offered early on in the programmes). It is not yet known whether or not this reorganisation is of benefit to students. Students had mixed view on the matter. The Panel **recommends** that the department discuss with SRAS whether they should amend the entry requirements for the degree programme to include a

requirement for Maths at Higher or A-level but in doing so they should consider the impact such a change might have on recruitment.

5.4   Some students commented that there appeared to be a lack of topic and 'difficulty' progression running through their programmes. It was of particular concern to the Panel that students reported that even at Level 4 many of the courses were introductory and did not build on previous courses. Students added that there were no clear programme learning objectives indicating what they should be able to do at the end of a course or at the end of a year. Students wanted to have such milestones and wanted to be able to see the links between the courses and the progression from one year to the next. Many students also reported that there should be an introduction to research papers at an earlier stage of the programmes, saying that year 4 was too late.

5.5   Following 5.4 above, staff reported that they were unaware of the content of the courses being run by other staff members so did not know what students were being taught overall. They added that they did not have access to MyAberdeen for courses other than their own. On questioning by the Panel, staff reported that the design of courses was not done collectively but by the individual course co-ordinators. The Panel noted that the department reports in its corrections of fact that development of courses and programmes are discussed at the teaching away-day, teaching and learning committee and the staff meeting. It is of concern to the Panel that there is a discrepancy between what the staff who were interviewed reported and what the department reports in its corrections of fact. The Panel therefore **recommends** that the department ensure that the mechanisms for the design of its programmes and courses are transparent and communicated clearly to all staff. Students also commented on the seeming lack of a clear connection between the different elements of their programme. The Panel therefore also **recommends** that the progression of the programmes and topic threads are reviewed and that programme learning objectives are made clear and published in the course and programme handbooks.

5.6   The Panel noted that the department has changed the content of Level 1 of its programmes – rather than focussing on one programming language students now study the principles of programming in Level 1 and study specific languages in year 2. This was in response to External Examiner recommendation which was supported by a persuasive rationale. The department believes this to give students greater flexibility and facilitates advanced entry to level 2 for well qualified applicants even if they currently lack programming skills. The teaching and assessment is more creative and gives greater opportunity for problem-solving. In addition, the Level 1 courses include maths for Computing Sciences. This is the second year that the programmes have run in this way. Students had mixed views as to whether or not this approach was better. However, the students clearly understood the reason why the change had been made and this is evidence of good communication with students, which the Panel **commends**.

5.7   The Panel noted that following the review of its existing programmes, the department was now considering the direction it should take in redesigning their content. Staff commented that it took approximately 1 year to develop a new programme and its constituent courses, after which it needed to be approved. Accredited programmes, or programmes such as the new MSc, which is closely linked to the oil and gas industry, would take longer.

5.8   The Panel noted that the department held an annual Teaching Away Day and that the School held an Annual Joint Committee to discuss how to develop research-led teaching. The Panel **commends** the department and the School for these initiatives.

6   Teaching, Learning and Assessment

6.1   The Panel noted that teaching at all levels is done by research-active staff, with temporary services staff predominantly assisting in laboratory and seminar teaching. Staff reported that the department tried to assign courses to staff that aligned with their interests. Often an accrediting body would place constraints on the topics that should be covered but otherwise course ideas would be discussed with the head of department and director of undergraduate teaching.

6.2   The Panel noted from the SED that some courses are taught to Level 1 or 2 and Level 5 students together. The Panel questioned how this worked in practice. It was said that all students received the same lectures and assignments but that extra activities were built into the course for Level 5 students. Staff reported that such courses could be difficult to teach because of the broad spectrum of abilities. Some Level 5 students had not studied computing before but the extra activities were designed so that they were stretched and developed their higher-level skills. Staff admitted that some students are overwhelmed but that from the start of each course a strong team ethic is encouraged and everyone works together – which works well. Interviews with students confirmed that this was the case. The Panel **commends** the department for its innovative teaching practices in this regard and for finding creative solutions to practical problems. The Panel noted, however, that according to the SCEF returns this approach was not popular with either L1 or L5 students. The Panel **recommends** that the department reflect on this practice and determine if there might be a better way to teach the basics to L5 students that does not affect the learning experience of either the L1 or L5 students.

6.3   In relation to 6.2 above, the Panel noted that although the courses are taught to students at Levels 1 or 2 and 5, they are branded at Levels 1 or 2. As Level 5 students are permitted to take a certain amount of credits at Level 1 or 2 this is not an issue. The Level 5 students are on programmes that are not accredited by a professional or statutory body so having all credits at Level 5 is not an external requirement.

6.4   Students were generally happy with the teaching though commented that in too many of the laboratory sessions they are left to get on with their group or individual work and that they do not receive enough guidance from the demonstrators. Students said that as a result they have to learn from each other and it is not clear whether they are learning good practice. Students reported that they would like more guidance as to whether or not they are on the right track so that they can progress and learn from the process. Students reported that some demonstrators were better than others. The Panel **recommends** that the department continues to promote to the students the benefits of peer-assisted learning but that they should also ensure that all demonstrators receive appropriate and consistent training in order to support students in their learning.

6.5   The Panel heard that at Levels 3 and 4 there are optional modules that are strongly research-led and which prepare students for their final year project and for selecting supervisors. Students select their preferred Honours project from those that are advertised and then discuss with the supervisor. Some students suggest topics to a preferred supervisor and generally such students have researched the topic well and are successful in obtaining this topic. Students who are not proactive in selecting a project and supervisor will be assigned a project from those topics that remain.

6.6   Some students felt the process for selecting the honour projects was frustrating as only those who were clear about what they wanted to do at the beginning of the year were able to choose their projects. Students also felt that it was unfair that some students would speak with a potential supervisor about doing a particular project and be accepted before the topics were advertised – so that topic and supervisor was then not available to anyone else. **T**he Panel notes that the

department has changed the way that projects are advertised and allocated. The Panel **commends** the department for responding to student feedback in this way.

6.7   The Panel heard that the department provides web pages with instructions on how to go about the honours projects, and reading lists are provided for each topic. The department also runs a research methods course. Students attend two preparatory meetings with the supervisor in December (this is a new initiative) and are required to prepare a research project plan in February (at the official start of the project) which is checked by the honours projects co-ordinator. Students who have problems with their projects can speak with the projects co-ordinator; however, the Panel noted that the department is considering introducing a half-way check to monitor progress against plan. The Panel considers this half-way check would be of benefit to students and **recommends** the department proceeds with this proposal.

6.8   Students on the taught postgraduate programmes were very happy with the level of teaching – most saying there was a great deal of one-to-one support and that the department was very friendly. Most students at Level 5 were comfortable with the L1-L5 co-taught courses though there were mixed reports about the assessments as some students with no prior experience were unclear how to approach the topic.

7   Course and Programme Monitoring and Review

7.1   The Panel noted from interviews with staff that external examiners for most courses have access to course work through MyAberdeen, which is set up by the administrative staff. External examiners saw the examination scripts and course work on the day of the Examination Meeting and that generally they reviewed course mark borderlines, discrepancies between internal marks, firsts and fails. For some courses, especially those that used continuous assessment only, more work was being sent to examiners in advance of the Examination Meetings.

7.2   The Panel heard that the department had noted that some external examiners had reported that they did not know whether or not action had been taken as a result of comments in their Annual Reports and whether the comments fed through to course development. For example, external examiners had suggested changing the level of some courses. As a result, the department was looking at ways to ensure that external examiner comments fed through to course and programme design and then to ensure that this action was fed back to the external examiners. The Panel **commends** the department for noting and acting on the comments of external examiners and for considering how this should be fed back to the external examiners. The Panel considers that having a department or School examinations officer might help address some of these issues.

7.3   Following 7.2 above, staff were aware only of the comments of external examiners on their own courses and not of the comments of the external examiners overall. The Panel **recommends** that the School ensure that a mechanism is in place to ensure all staff have access to external examiner reports and, as a minimum, that all staff are aware of the main themes that are being commented on in relation to the Computing Sciences programmes.

8 Academic standards and the academic infrastructure

8.1 It was of concern to the Panel that issues relating to lack of consistency in practice, or lack of central oversight of practice, arose repeatedly in interviews with staff and with students, and that this results in lack of robust quality assurance and hinders transparency. The Panel note that there is a working group at College level that is looking at the discrepancies between the departments within the College – there being only eight departments within the three Schools in the College. The Panel **strongly recommends** that the processes for the oversight of assessment and examination in particular are reviewed as a matter of priority and that a School-wide, if not a College-wide policy and procedure is put in place together with an appointment to the role of examinations officer.

8.2 Following 8.1 (and 4.3 and 4.4) above, it was a matter of concern to the Panel that there was no department or School examinations officer and that some posts relating to academic quality assurance exist only at College level. The Panel noted that the department's Director of Undergraduate Teaching and Director of Postgraduate Taught Teaching have diverse roles that nonetheless do not appear to cover the role of examinations officer. The Panel heard that there is no across-department monitoring of the content of the draft examination papers (eg the appropriateness of the questions and checking for similarity), the level of marking (eg comparing marks distributions and pass rates, which is not done until the Examination Meeting), or what is sent to external examiners.

8.3 The Panel notes that the department reports in its corrections of fact that papers are vetted by a second member of staff and that all papers are sent to a single external examiner to check the appropriateness and similarity of questions. The Panel asks that the department notes that, if this is happening, the staff who were interviewed – including Level Tutors, Directors of Teaching and Course Co-ordinators – are not aware of this. The Panel **recommends** that the department ensures that all of its staff are aware of the quality assurance mechanisms that are in place, and also **recommends** that, in relation to the scrutiny of examination papers, that it would be good practice for the department to undertake internal checks before the exam papers are sent to the external examiner.

8.4 Students commented that there were clashes in deadlines for assessments. In speaking with staff, it appeared that there was no oversight as to the dates of assessment deadlines across the department to ensure there were as few clashes as possible and, where clashes remained, that students had adequate notice of the deadline and the task. The Panel noted that the department has removed the previously highly co-ordinated deadlines to facilitate the 'time management' graduate attributes. The Panel therefore **commends** the department for encouraging graduate attributes and **recommends** that if it is not already done, that all assessment deadlines are advertised at the start of each session to enable students to manage their time and workloads.

8.5 There were mixed reports from staff as to the requirements for progression to honours. Some stated that the department's threshold for progression to Honours was a minimum of CAS12 in all courses, others stated that it was a minimum of CAS9, others thought a student could fail only one course and others two. Students also reported that they were unclear about the rules for progression and did not know who to go to if they had questions about marks, progression, course weightings and classification. The Panel notes that the department reports in its correction of fact that progression requirements are listed clearly in the undergraduate and postgraduate programme handbooks. The staff interviewed were not aware of this. This concerned the Panel and it therefore **recommends** that there is clear communication to staff and students about where to find the School/departmental rules for progression.

8.6   The administrative staff reported that draft examination papers were provided to the external examiners using password protected Dropbox. Dropbox is also used for sending out examination scripts and continuous assessment for some courses. Specialist members of the Panel have concerns regarding the use of Dropbox and, given that the University's IT Services department does not endorse its use, the Panel **recommends** that the department reviews the security of this method.

8.7   For some courses, external examiners had been given access to MyAberdeen if they had requested this. For most courses the continuously assessed work and the examination scripts for the first- and second-half-session courses were seen by the external examiners on the day of the Examinations Meeting. The administrative staff made all the materials available and the external examiners would decide which pieces of work they wanted to see.

8.8   Staff reported that mitigating circumstances were discussed with the student to obtain further clarification if necessary. The documentation and certification was then put to the MC Committee prior to the examination meeting, who passed recommendations to the examination meeting on an anonymised spreadsheet. Generally the recommendations were followed for borderline cases. Staff confirmed that there were no strict criteria but that cases were each reviewed on their own merits and categorised as 'mild', 'medium' or 'severe'. Staff reported that there was no cross-referencing between courses of how medical certificates and good cause were categorised and there appeared to be some discrepancy in the way MC and GC were handled by individual staff. The Panel notes that the department states in its corrections of fact that it has a department-wide mitigating circumstances committee. As staff who were interviewed appeared not to be aware of the existence of this committee, the Panel **recommends** that it be advertised widely within the department to make sure that all staff direct MC and GC issues there.

8.9   In interviews, staff report that the department has seen no change as a result of self-certification for sickness and it was said that, unfortunately, many students do not engage in the process until they receive a C6. The department records attendance and engagement at all teaching sessions and students who appear to be at risk are flagged and invited to meet with the course co-ordinator. Students who miss laboratory sessions are given alternative assessments to complete.

8.10   Some staff commented on the opaque system for overturning C6 (at risk) and C7 (withdrawn class certificate) saying that there were no clear criteria for how one should make judgements. Staff commented that it would be helpful to have department guidance on this as it was left to the course co-ordinators or class tutors to make a decision. Staff said there was a broad idea that non-attendance led to C6 but many were not clear precisely how. It was clear from interviews with several staff groups that not all staff had the same understanding of the C6 C7 process and that various different procedures were followed and criteria used. The administrative staff reported that they did all the student monitoring – processing the attendance sheets and flagging students who were at risk (C6), reporting these to the Course Co-ordinator, who would decide whether or not this should be overturned. A perceived lack of transparency in this process could be avoided if the department (and perhaps the School) adopted a more centralised system for dealing with student monitoring issues. The Panel therefore **recommends** that at department level the level coordinators could be used to ensure consistency in approach to the C6/C7 process.

8.11   The administrative staff reported that there is a School Office but that most students go directly to the Course Co-ordinator if they have queries rather than to the Office. The School has one secretary for each of the four departments within the School, one senior secretary and a School Administrative Officer (SAO).

8.12   The Panel noted that the administrative staff reported that there were significant differences between the procedures followed by each of the departments and that this could be problematic – especially when having to cover for holiday and sickness. The Panel notes that this supports the observed lack of oversight of the procedures followed by academic staff that has been commented on in various sections of this report. If a student came in with a query about a procedure – for example, how they should submit their assessment – then mostly it was only the department secretary who could answer. The administrative staff said that it was clear to them that the differences in procedures confused students. The SAO reported that attempts had been made in the past to bring consistency across the School but this had not happened. The Panel **commends** the administrative staff for the support they provide to the School's students, and recognises the difficulty the staff face in administering such disparate practices. The Panel also **recommends** that the School try and unify practices as much as possible especially as regards who students should report absence to, how they should ask for extensions to deadlines, how they should submit their work and the penalty imposed for late work.

8.13   The Panel heard that the department IT support officer looks after the computer laboratories and acquires any software that is needed for teaching and for research, also investigating any new technologies that might be used or that staff are interested in – robotics, for example. Examinations are supported centrally but the department IT officer supports in-class assessments. The Panel noted that the workload of the IT support officer is very high and not sustainable, with no cover for holiday and sickness. This view was supported by other staff. Given the necessity of this role for the effective functioning of the department, the Panel **recommends** that the College give serious consideration to providing funding for an additional post.

9   Training and supervision of research students

9.1   Staff reported that postgraduate research students generally are assigned two supervisors. Depending on the research area, one of the supervisors might be external to the department, for example a member of staff of dot.rural. Students confirmed that generally they had two supervisors and that for some interdisciplinary topics there might be three.

9.2   The Panel heard that there is a two-part 1-day induction for postgraduate research students, half being led by the College and half by the departments. Staff reported that the induction covers everything a student needs to know – in relation to their academic research, support mechanisms and administrative procedures.

9.3   Staff reported that there is no formal requirement for research students to attend training courses run by the Centre for Academic Development and the Researcher Development unit. However, the first meeting with the Supervisor always covers training needs and the courses available and students are strongly encouraged to take advantage of them.

9.4   Staff reported that research students are encouraged to tutor or teach and to attend and present at conferences. Those who tutor or teach are encouraged to take the training available from the Centre for Academic Development (CAD) but there is no University requirement for students to do so. Students were happy with the training available for research skills but thought there were too few teaching courses specifically for PGR students. Given the importance of all tutors being properly trained, the Panel **recommends** that CAD consider the training needs of PGR students who also teach and develop specific training courses for them if these do not already exist. In addition, the Panel **recommends** that the University make it a mandatory requirement that PGR students involved in teaching receive appropriate training.

9.5   The Panel heard that PGR students who also taught received support from the course co-ordinator but that the quality of this depended on who the course co-ordinator was and how much time they had. The Panel **recommends** that the department consider establishing a role or adding to an existing (administrative) job description for the function to oversee PGR teachers so that they have a central contact and consistent information and support.

9.6   The Panel heard that there is a high failure rate for postgraduate students meeting their thesis submission date, with few students able to complete in 48 months. Staff considered this was due to most students needing to work in order to have income but also thought that the rate would improve once the College adopted the monitoring framework for the first and second years of a student's PhD. The department was also expecting an improvement since the introduction of the year 2 preparatory 'mock vivas'. Students reported that they found these to be very helpful in presenting their research and that the feedback helped them to focus on the areas needing revision. The Panel recommend that the department monitor their PhD on-time submission rate and compare them to other Institutions running similar programmes to determine if their submission rate is out of alignment with the sector.

10   Personal development and employability

10.1   Staff reported that generally they agree that CRef and the graduate attributes are a good thing but that students do not always see the impact until after they graduate. The main problem is at Levels 3 and 4 where students have difficulty finding courses that they want to do which are compatible with their timetable. Staff were happy to see more Sixth Century Courses at Level 3-4 as this provides more options.

10.2   The Panel noted that the Industrial Liaison Officer (ILO) has excellent relationships with various employers and University-linked employment (eg dot.rural and the Aberdeen Software Factory). The Panel heard that the ILO arranges placements with employers and that the Placement Co-ordinator (PC) co-ordinates the placements. The ILO stated there are three main channels for placements: e-Placement Scotland, the university Careers service, and industrial liaison. The department advertises the placements and the students then research the suitability of the placements themselves and select those they wish to apply for. Students are interviewed by the placement organisations. Staff commented that the advertisement and application system reflects 'real life' and is intended to build students' graduate attributes and employability in itself. The Panel heard that students are monitored whilst on placement though continual assessment and that students submit monthly reports. Some organisations will not allow release of reports to maintain security of intellectual property and in these cases the reports are submitted to an independent third party. Each student is assigned a named supervisor at the organisation where they are placed and a named contact within the department. The students' reports and final presentation are assessed. Staff reported that the placements system is manageable at the moment but stated that the department would have to revisit the system if more students were to go on placement.

10.3   The Panel heard mixed reports from students about the placements process. Students confirmed that they are happy with the number and types of placement available but that most of these come through Careers rather than through the department. Some students felt that they were required to do too much work themselves to obtain the placements and felt that more support should be provided by the Placement Co-ordinator – saying that the application and interview process could be intimidating.

10.4 Following 10.2 and 10.3 above, the Panel **commends** the department, the ILO and the PC for the amount of work that goes into the placement system. Currently the scheme caters for small numbers, however, and the Panel **recommends** that the department review the workload in light of potential expansion. Some students considered the level of support that was provided through the application and interview process to be too little. The Panel **recommends** that staff refer students to the central University Careers service as appropriate but also **recommends** that the department increases the support it offers students to find placements if it decides to continue to offer "with placement" degrees. The Panel noted that students are not visited whilst on placement due to lack of funding and were concerned about monitoring of student welfare, especially as the monthly reports cover academic issues only. The Panel therefore **recommends** the School keep this under constant review and investigate ways that such visits might be funded. Alternatively, the department should investigate students having monthly meetings via Skype with their Personal Tutors to ensure that pastoral as well as academic issues are covered.

10.5 All students interviewed had heard of Graduate Attributes but not all understood what they were.

11 Professional units/bodies

11.1 The Panel noted the documentation provided by the School relating to professional units and bodies. This area was not explored during the review other than in relation to Section 12, below.

12 Staff Training and Educational Development

12.1 The Panel noted from interviews with new staff that they felt there was adequate training provided by the University in learning and teaching and the support systems (eg Student Records System). Staff reported that Computing Sciences was a small and friendly department and that someone was always available to answer any questions one might have. Staff mentioned, however, that is was not always clear who to ask and that often it would take a long time to find out the correct answer.

12.2 Some staff were aware of the PgCert Higher Education Learning & Teaching (HELT) whereas others were not. Those who had heard of the PgCert HELT were keen to pursue it. Similarly, only some staff had heard of the Quality Assurance Agency (QAA) Scotland Enhancement Themes and of the linked funding that was available.

12.3 The Panel noted that the department ran an optional and informal mentoring system for academic staff and that in line with University policy mentoring is mandatory for all new staff until probation is completed. After probation, mentoring is not mandatory but highly recommended. Some staff reported that whilst the mentoring system was good in principle, it very much depended on who the mentor was and whether or not the relationship worked. A mentor was not necessarily the best person to give instruction in the University's regulations and procedures.

12.4 All staff commented that the workload model was transparent and discussed with and distributed to all staff. There was a general perception that the head of department made a genuine attempt to ensure that the distribution of teaching and administration was fair, with clear reasons given for any apparent disparities in load. New staff stated that they had a 50% workload in their first year to allow them time to become familiar with the University and to organise their courses and the teaching. The workload increased to 75% in the second year or in year 1 if the staff member had

taken over the teaching of existing courses. Staff were clearly happy with opportunities to teach in their specialist areas, and with the rationale behind decisions over which courses were run. The Panel **commends** the department for its good communication with staff over such issues.

12.5 The Panel heard that the administrative staff considered the University's training courses to be adequate and that the Schools within the College worked with HR to get the courses they needed. However, staff reported that the system for progression and pay rises for support and academic-related staff is not appropriate. Staff reported that a great deal of paperwork is required for progression and that it is linked to the job description not to performance. The Panel acknowledged this is a University process that cannot be changed by the department but **recommends** the department consider using a mentoring system to help guide staff through the process.

13 Student involvement in quality processes

13.1 The Panel **commended** the commitment of the School in encouraging informal student feedback through various mechanisms and heard evidence that informal routes of communication and face-to-face meetings with members of staff worked well for many students at an individual level.

13.2 Students confirmed that some of the feedback they received was better and some not so good but they all said they could always ask for more feedback if they had queries about anything. Students confirmed that it was a small and friendly department where they felt very comfortable about approaching staff.

13.3 Students gave mixed reports about the class representative process. Students were critical of the new on-line voting method for appointing class representatives – many not knowing who the nominees were. There was criticism that the representative chosen was not on the class they represented and could be a chemistry student rather than a Computing Sciences student, for example. Some representatives seek feedback from the students but others do not.

13.4 Most students were aware of the Staff–Student Liaison Committees and said that changes had been made to courses as a result of issues raised there. Students reported that changes had often been made to courses at Levels 1 and 2 but that there was more reluctance to change courses at Levels 3 and 4.

13.5 The students interviewed reported that they completed the SCEFs. The Panel commend the department for their positive interactions with students with the result that the students who were interviewed were actively engaging in the SCEF process.

14 Public information/management information

14.1 The Panel noted that the department noticeboards for students are up-to-date and logical and populated with clear outline information – with urls to details that can be found on department and University web pages or on MyAberdeen. The University signage (which is generally poor in the Meston building) is supplemented with School signage to the various departments and teaching rooms, with information and contact details of staff and their photographs. The Panel **commends** the School and department for this very helpful initiative.

14.2   The Panel noted that the department is working with the College marketing officer to ensure that the branding of the programmes results in the Aberdeen degrees being seen as industry linked and practical and not purely theoretical. Staff visit local schools and work with school staff and students to market Computing Sciences as a department and Aberdeen as a university of choice with good career prospects. The Panel **commends** the department for this proactive approach to enhancing the public perception of the Aberdeen degrees.

15   Student support, retention and progression

15.1   The Panel noted that the department has a large number of students with disabilities who graduate successfully. The Panel heard that the disabilities adviser obtains a list of all students at the beginning of their studies who are known to have special requirements. The disabilities adviser then works with students and the central disabilities officers and IT to provide appropriate academic, technical and general support for students, obtaining specialist advice for specific students. The disability adviser added that the University now focusses on the special needs of individuals rather than on the disability per se. The Panel also heard that the department is proactive in identifying students who may have special requirements and working with them to obtain the support they need. The Panel noted that the department was very successful in liaising with publishers to obtain special texts for students with disabilities. The head of department said that publishers were very helpful in providing readable pdfs, for example, and did not charge. The Panel was very impressed with the department's proactive approach in identifying and supporting students with special requirements and **highly commends** the disabilities officer and the department for this. However, the department should consider renaming this person as the 'equality and diversity adviser' to introduce a more positive focus to the role.

15.2   The Panel noted the department's comments that figures for retention were somewhat misleading in that students who switched programmes or graduated with a designated degree showed in the figures as non-completers. Staff reported that students with too high a number of resits graduated with a designated degree and other students left or changed programmes. Many students struggled with maths or had unrealistic expectations of a Computing Sciences degree. The department did not have figures for the retention of articulating students. The head of department stated that whilst improvements could be made in retention, the figures produced by Student Information Systems, especially in relation to retention between levels 3 and 4, were highly inaccurate and that the department does not have a retention issue at these levels.

15.3   Overall, staff felt that retention was better than it had been with less diversity in the population of students admitted to the degree as a result of the higher entry qualifications that were being seen. Students were far more focussed than in the past and had more realistic expectations of a Computing Sciences degree. However, the department continued to offer a wide range of courses within their degree programmes so that a wide range of abilities and interests could be accommodated.

15.4   The Panel noted that the department had reviewed the relative weightings of Levels 3 and 4 within degree classification in an attempt to mitigate the problems students encountered when moving in to Level 3. Staff reported that most students found the transition to be difficult and students confirmed that this was the case. Staff added that with the changes in the Level 1 courses, they also hoped to see a smoother transition from Level 1 to Level 2. The Panel **recommends** that the department undertake some study to determine where the problem with level 2 to 3 progression lies with a view to introducing some remedial action.

15.5   The Panel noted that staff email all students who have not submitted assessments on time immediately, and use this as an opportunity to catch any problems at an early stage. Students who miss laboratory sessions are given the opportunity to submit alternative assessments. Student attendance is monitored at all sessions to pick up on students who are not engaging. Students who are not engaging are flagged up and invited to meet with the course co-ordinator. The Panel **commends** this proactive approach.

15.6   On questioning by the Panel, very few students or staff had heard of the S4S scheme (Students for Students), a pastoral scheme whereby student mentors help new students through university life. Students had mixed views on mentoring, saying that whether their experience was of value depended entirely on who one got as a mentor and. Staff reported that the department previously had its own mentoring scheme dealing with academic issues and that this had worked well for the most part. Staff reported that the department scheme had been discontinued in the light of S4S. The Panel **commends** the department for its track record in student mentoring and **recommends** it reconsider its decision to discontinue the department mentoring scheme because of its different focus to S4S.

15.7   The Panel heard that the department has a number of EU students and some international students. Generally EU students have excellent English though the small number of essays required for undergraduate Computing means that language skills are not as essential as they might be for other departments. The Panel heard that this can pose of problem for students at PGT and PGR level as students are not practised at writing, and students can therefore find the dissertations and theses challenging. The Panel note that the department is looking for ideas as to how this problem might be addressed.

16   Recruitment, access and widening participation

16.1   Following 5.3 above, staff and students commented that they thought that Higher/A level maths should be a requirement for entry to Computing. Students in particular commented that their expectations of the programmes would have been more realistic if maths was a stated entry requirement. The Panel therefore **recommends** that the School investigate the possibility of putting in a formal requirement that Higher/A level maths is required for admissions to Computing programmes but that they should consider the impact that this might have on the programme prior to making this decision..

16.2   In addition to 5.2 and 5.3 above, the Panel noted that no extra provisions are made for articulating students and that the School encourages students to articulate into Level 2, rather than Level 3, unless it is very clear that the student will cope with Level 3. This is thought to be common practice not just at Aberdeen. The department has articulation agreements with Motherwell and Angus College and with the Northeast Scotland College of Further Education. Most articulating students enter to Level 2 rather than to Level 3 though staff report that this is similar to what happens in other universities.

16.3   The Panel heard that discussions are ongoing between universities and schools as what is studied in school does not map well onto university degrees. Dinners are held to discuss these issues with school heads and guidance teachers. Staff reported that the introduction of the Curriculum for Excellence might benefit Computing Sciences.

16.4   Following 15.1 above, the Panel noted that the department has a good number of students with disabilities who graduate successfully and that this is one area where the department feels it has

been successful in widening participation. Staff acknowledge that outreach amongst local schools is difficult – and that this is exacerbated by the false perceptions of an Aberdeen degree and the mismatch between school computing and computing at university. The Panel heard that the department runs 'DeCoder' weekends and has Access courses but these are not targeted and the background of attendees is not recorded so whether or not they widen access is unknown.

17   QAA quality enhancement engagements

17.1   The Panel noted the documentation provided by the School relating to QAA quality enhancement engagements. This area was not explored during the review.

18   Recent developments

18.1   Staff felt that the Personal Tutor scheme had made a slow start and students confirmed that this was the case, not all students having yet met with their Personal Tutor. For some this was because they had not received an invitation, for others it was because they had been unable to meet at the times offered. Some staff thought that this year was confusing because there were Advisors and Personal Tutors and they considered it would have been better to introduce Personal Tutors next year and to have clearer and longer training and preparation. All staff interviewed commented that the role description was not clear and that the remit continued to grow. There was also concern as to how Personal Tutors should engage students with the Graduate Attributes in a way that was consistent and beneficial. Most staff agreed that it would not be until next year that the success of the scheme could begin to be gauged.

19   Quality enhancement and good practice

19.1   The Panel **commends** the development of CodeMarker which automatically marks a student's programming assessments allowing rapid feedback to the student and increasing the number of such assessments that can be given, which in itself increases the student's learning.

19.2   The Panel **commends** the department's welcome reception where prizes for academic achievement in the previous year are handed out. This was seen as incentivising students as well as introducing students to staff and their fellow students.

19.3   The Panel **commends** the department's outreach activities and their proactive approach to involvement with schools. The Panel noted a good awareness of the need to stay abreast of national developments and respond strategically.

20   Impediments to quality enhancement

20.1   The Panel noted a lack of connection to University-wide initiatives. This involved both lack of understanding of university practices (student monitoring as an example), but also failure to pick up on useful opportunities (eg central funding opportunities for developing some of the aims

already identified by the department). The Panel **recommends** the School and department consider the effectiveness of their communication channels.

20.2   The department noted in the SED the challenge of teaching classes with a diverse range of abilities. The Panel encourages the department to liaise with CAD to investigate ways to introduce extra activities in class to stretch the more academically able students whilst providing the less able with sufficient information to allow their progression. The Panel also **recommends** the department consider whether a requirement for Higher or A-level maths for entry to the degree programme might help in this regard.

21   Issues for discussion with external subject specialists

21.1   *No issues were raised by the School for discussion with the external subject specialists.*

22   Production and approval of self-evaluation document

22.1   The Panel noted that the Self-Evaluation Document (SED) had been produced by Dr Nir Oren with extensive input from several other members of staff, and that the document had been reviewed by staff and students before submission.

CONCLUSIONS

The Panel **recommends unconditional revalidation**. Where this report makes **recommendations**, the Panel requests that the School provide, as part of its 1-year follow-up report, an overview of what progress has been made and, where the recommendations have not been followed, the School's arguments leading to and justifying this decision.

09 October 2014

DEPARTMENT OF COMPUTING, SCHOOL OF NATURAL AND COMPUTING SCIENCES
RESPONSE TO INTERNAL TEACHING REVIEW FINAL REPORT

Introduction

We thank the committee for their insightful comments and useful feedback. The final ITR report contains several recommendations, which we summarise below and respond to individually. We would like to begin by noting that some of the issues raised in the report, which aimed to report on the *department*, reflect issues that are applicable to the school (or sometimes even college) level, and which we therefore do not feel can be dealt with here. These issues were highlighted in the draft report, and remained in the final report.

It is also important to note that unlike many other schools, whose constituent disciplines are relatively homogeneous, the School of Natural and Computing Science consists of disciplines with very different academic requirements. We are of the opinion that attempting to unify some of the teaching practices and procedures among all disciplines within our school would negatively impact on our quality of teaching as well as the student experience. The school endeavours to streamline practices where possible, but not to the detriment of the feeling of belonging the students have to their disciplines, nor to the best practice of those disciplines.

Response to recommendations raised in the report

In this section we will provide responses to the recommendations raised in the report; the latter will be italicised and referenced by section.

3.3 School review the workloads of technical staff so that they are reduced and cover for holiday/sickness can be accommodated.

As noted, this is a school level issue, and will be communicated to School level forums.

4.1 School level committees and posts to coordinate the various departments.

Again, this is a school level issue, and will be passed to the appropriate forums. It should be noted that there are regular meetings between Heads of Discipline (HoD) and the Head of School (HoS) in order to facilitate coordination amongst disciplines. More generally, this portion of the ITR appears to ask for a more homogeneous treatment of teaching across the school. For the reasons mentioned in the introduction, we believe that this would be detrimental to teaching within the discipline.

4.2 School-wide forum for all staff to meet and discuss problems with procedures.

This is a school level issue, and will be passed to the relevant forums.

4.3 QAC should raise the issue at Univ. Committee on TL with Registry regarding timely and appropriate communication of procedures.

This is a university level issue that must be highlighted at QAC.

4.4 Strong recommend: the department/school review existing roles and responsibilities to ensure they are transparent and that there are no gaps; appoint examinations officer to oversee and coordinate procedures for academic QA.

We have emphasised the need for staff to be familiar with the AQH at staff meetings, and will continue to do so (**action**). The roles and responsibilities taken on by members of staff are explained in the admin role allocation circulated before each academic year. This document lays out the responsibilities of all roles in a transparent manner. The issue of an examinations officer arose at several points in the report, and will be responded to in detail following our response to 8.2 below.

4.5 Coherent school/department structure and roles to ensure consistency of knowledge and practice relating to learning & teaching across staff within and between all departments; includes internal scrutiny both across and between programme levels.

This recommendation was raised as a summary of points 4.1,4.2 and 4.4. While we have highlighted the importance of familiarity with the AQH and general teaching procedures to staff, we believe that homogeneity should not be pursued across the school due to the differences between disciplines. However, those procedures which can be applied across the school are currently under review. This is not an issue that Computing Science as a discipline can deal with. With regards to scrutiny of assessments, it is important to note that all exams are reviewed by a second member of staff, and their recommendations are fed back to the course coordinator. Following this, additional comments are obtained from the external examiner. There is therefore already academic scrutiny across and between programme levels that is efficient and robust. Note that in some instances, where courses are based on specialist research, particularly at Level 3 and 4, comparisons across the wider programme become difficult.

5.3/16.1/20.2 Department discuss with SRAS whether entry requirement should be amended to require Maths at higher or A level, but consider impact on recruitment.

We fully support this recommendation, and will set up discussions with SRAS (**action)**.

5.5 Ensure that mechanisms for programme/course design are transparent and communicated to all staff. Progression of programs and topic treads are reviewed; that programme learning objectives are made clear and published in course/programme handbooks.

As noted in the correction of fact, programmes are discussed at multiple levels. We will highlight our processes again at staff meetings to ensure that all staff are aware of these

(**action**). We will also conduct a review of topic threads (**action**), and ensure that staff are aware that learning objectives must be made explicit within courses (**action**).

6.2 Deparment[sic] reflect on linking level 1 and 2 students with level 5, and think whether there is a better way to teach the latter without impacting on either cohort.

We will perform a review of this issue, taking into consideration both the impact on students and teaching loads (**action**).

6.4 Continue to promote to students the benefits of peer-assisted learning; should ensure that all demonstrators receive appropriate and consistent training to support students in their learning.

We will continue with our current promotion of peer-assisted learning, and liaise with CAD to determine what training is available for demonstrators (**action**).

6.7 Recommends that a halfway check be introduced for projects to ensure they are complying with project plan progress.

We will review our current timeline for the Final year Honours Project, and explore possible ways to incorporate this recommendation (**action**).

7.3 School should ensure that all staff have access to external examiner reports and be aware of main themes that are commented on within them.

The school circulates these reports to departments; we will ensure that the main themes are highlighted in the appropriate forum (**action**).

8.1 Strong recommend that the processes for oversight are reviewed at a school/college level and procedure is put in place with an exams officer.

We had previously asked for clarification with regards to the role of an examination or exams officer. Our understanding from the document is that this role would be an academic one, ensuring consistency of question difficulty between levels and disciplines; liaising between external examiners and course coordinators, and ensuring that exam preparation processes are followed. The report seems to indicate that this should be a school level role. We believe that as suggested it is impossible to implement such a role due to the differences in disciplines within the school - no academic would be able to gauge the standard, correctness or appropriateness of questions between disciplines. Even if each discipline had their own exams officer, at least within Computing there is no single academic who is able to objectively assess the correctness or appropriateness of exams for all modules.

We believe that our current procedures are highly effective and robust. All exams are checked by a second member of staff for appropriateness and correctness, and all staff are informed of external examiner feedback (and have to respond to any issues raised).

8.3 Ensure that all staff are aware of QA mechanisms that are in place; that the department undertake internal cheks[sic] before exam papers are sent to external examiner.

As mentioned above, we will again endeavour to highlight QA procedures to all members of staff. However, as mentioned in our corrections of fact, the department already undertakes strong internal checks on exam papers before they are sent out to the external examiner.

8.4 Assessment deadlines are advertised at the start of each session

We intend to reintroduce this practice as recommended (**action**).

8.5 Clear communication between staff and students about rules of progression

Our teaching web pages clearly point out where students can find the latest information regarding requirements for progression (namely, within the departmental student handbook), and staff remind students of this every academic year. We will continue to remind staff and students to familiarise themselves with this document (**action**).

8.6 Review security of Dropbox for exam scripts

We have repeatedly reviewed the security of dropbox, and stand by our decision to utilise it. However, we understand that the institution is in the process of introducing an alternative, and we will explore that when it becomes available.

8.8 Advertise existence of mitigating circumstances panel to staff

We will remind staff of the panel's existence, remit and operation (**action**).

8.10 Level coordinators should ensure consistency of C6/C7 processes.

Due to the administrative overheads involved, we believe it is more effective for course coordinators to deal with C6/C7 procedures. These are repeatedly given to staff by email from the administrative staff every session. We will remind staff about these procedures again (**action**).

8.12 Unify practices at school level of absence reporting; extensions for deadlines; work submission and penalties.

We will communicate this recommendation to the school.

8.13 College considers funding another IT support officer post

We will communicate this recommendation to the college.

9.4 CAD consider training needs of PGR students who teach, and develop training courses for them; that the university make mandatory that PGR students who tach[sic] receive appropriate training.

We will communicate this recommendation to CAD and the relevant University bodies.

9.5 Additional role/amend role to oversee PGR teaching and ensure consistency.

The Research and Training Co-ordinator will be tasked with this recommendation (**action**).

9.6 Monitor PhD on-time submission rate to determine alignment with sector

The graduate school has recently begun reporting on this statistic; these figures are now regularly distributed to heads of discipline.

10.4 Review placement workload given potential expansion of scheme. Staff should refer students to careers service as appropriate, but also that dept increases support it offers to students to find placements if it keeps offering "with placement" degrees. School should consider how IP visits could be funded, or whether monthly skype meetings with personal tutor could take place.

We will review the manner in which placements are undertaken (**action**).

12.5 Mentoring system to help guide staff through promotion process

Mentoring is already in place for all probationary staff and part of this process encourages the probationer to reflect on promotion criteria at an early stage. We encourage staff at all levels to utilise the University mentoring scheme but in the College this is oversubscribed. The Head of School offers support to all those applying for, or encouraged to apply for promotion, in conjunction with HR and the College.

15.4 Study where the problem with L2 -> L3 progression lies

We will investigate this issue (**action**).

15.6 Reconsider decision to discontinue department mentor scheme

We will reconsider this decision base on the effectiveness of S2S and resource constraints within the department (**action**).

20.1 School/department consider effectiveness of their communication channels w.r.t university wide initiatives.

We will raise this concern at the school level, as well as in departmental staff meetings.

Summary of Action Plan

Apart from the communication actions mentioned above, we intend to undertake the following actions:

- Discuss with SRAS the possibility of introducing a Mathematics requirement, and consider its impact on recruitment.

- We will conduct a review of topic threads, and ensure that staff are aware that learning objectives must be made explicit within courses.

- We will review whether co-teaching level 5 with levels 1 and 2 is appropriate in the context of learning outcomes and staff load.

- We will continue with our current promotion of peer-assisted learning, and liaise with CAD to determine what training can be made available for demonstrators.

- We will discuss the introduction of a halfway check for Level 4 projects.

- We will make students aware of assessment deadlines at the start of each session.

- The Research Training Coordinator will be made responsible for consistency of PGR teaching.

- We will conduct a review of how industrial placements are monitored.

- We will attempt to determine where the difficulties in progression between Level 2 and 3 lie.

- We will consider reintroducing the departmental mentoring scheme based on the effectiveness of S2S and resource constraints within the department

Reflections on the ITR process

The ITR provided us with an opportunity to consider our teaching from a high level, as well as its interactions with various departmental roles. Obtaining feedback from students via an independent party was particularly valuable, and we believe that many of the recommendations made by the panel are useful and should be implemented. We do however have some concerns with regards to an apparent lack of clarity within the ITR process on whether it should be aimed at the department or school level. This issue led to some recommendations which we are unable to handle in isolation, and to some difficulties during the ITR report writing phase.

School developments

Independent of this review, the School is intending shortly to appoint a School director of teaching & learning. This is not to prescribe a homogenous approach, due to the wide differences in pedagogy within the School, but to look for e.g. shared best practice, ensure consistency in approaches to assessment and the timing is associated with the introduction

of the CGS and the new academic year. It will also assist the HoDs and HoS in managing such processes.