University of Glasgow

Academic Standards Committee - Friday 15 February 2013

Periodic Subject Review: Responses to Recommendations Arising from the Review of Life Sciences 27 and 28 October 2011

Mrs Amber Marquez-Higgins, Clerk to the Review Panel

Conclusions

The Review Panel commends the School on the overall scope and quality of its provision, and for its conscientious approach to student support and its effort to maintain the high quality of the student experience. The Review Panel noted the concerns raised about the conflict between teaching and research and encourages the School and College to establish a robust and consistent approach for the allocation of teaching duties. The School and Research Institutes should continue to work together to ensure that research-led teaching continues to a strength of the degree programmes offered.

Commendations

The Review Panel **commends** the Head of School and teaching staff within the School for maintaining the quality of the student experience through a period of significant change. [paragraph 4.6.4]

The Panel commented that the staff within the School work towards ensuring that the students have an engaging and positive experience through their commitment to teaching and support for the students and the Panel **commends** the School for this. [paragraph 6.1]

The Review Panel **commends** the School for its use of innovative technology to improve teaching administration and feedback for the large student cohorts. [paragraph 4.3.3]

The Review Panel **commends** the School for its use of Moodle for groupwork in Biology level 1 which works towards integrating all students into the learning experience and facilitating student engagement, both socially and academically. [paragraph 4.6.1]

Recommendations

The recommendations interspersed in the preceding report are summarised below. The recommendations have been cross-referenced to the paragraphs to which they refer in the text of the report. They are grouped together by the areas for improvement/enhancement and are ranked in order of priority.

Recommendation 1

The Review Panel **recommends** that the School urgently redevelops the final taught year of the MSci to provide the attainment at SCQF Level 11 required by the QAA and by the University Regulations, that will bring it in line with MSci programmes at other UK universities. [paragraph 4.4.2]

For the attention of: The Head of School

Response

This recommendation has been discussed extensively with the leader of the School's MSci work placement scheme and debated at the School's Education Committee: our aims have been to retain the clear strengths of the programme and meet our obligations with respect to the Panel's recommendations.

Having reviewed a range of options, the School's Education Committee has agreed the following actions:

- That the timing of work placement is retained as the penultimate year of study
- That students be set a series of assignments at SCQF Level 11 through the work placement year that are timed to align with the academic session (the ends of Semesters 1 and 2 and the summer exam period)¹. Students would also be required to submit a final report on their work placement experience to be assessed on their return to the University and to attend *viva* examination as is presently the case. These assessments will also be set at Masters level
- That a 10 credit course a SCQF Level 11 running through Semesters 1 and 2 be added to the curriculum for the final year of study² to satisfy Boards of Examiners that students are maintaining performance at Masters level through to the completion of the programme. This would be assessed entirely by coursework
- That all work assessed at SCQF Level 11 (assessment through the work placement year, assessment on return to the University, coursework assessment for the proposed 10 credit course in the final year of study) would be brought together and contribute 50% to the classification of the final award for students on the MSci programmes³

Subject to approval from Academic Standards Committee, these actions will be implemented to the following timescale:

- That students going on work placement session for session 2013 14 would be assessed against criteria aligned with SCQF Level 11 during their work placement experience as outlined above
- That a new 10 credit course at SCQF Level 11 would be added to the curricula for their final year of study (session 2014 – 15)
- That for students admitted to the MSci programmes from the start of session 2013 – 14, final degree classifications would be weighted such that 50% was derived from attainment at Masters level

Recommendation 2

The Review Panel **recommends** that the College puts the highest priority on putting effective workload and financial models in place to ensure that both teaching and research are properly supported within the College in 2012-13 and to prevent divisions from developing between research and teaching staff. [paragraph 4.8.5]

For the attention of: **The Head of College**For Information: **The Head of School**

¹ This should also help to address recent guidance from QAA on the education of students by external organisations, specifically in relation to the assurance of academic standards.

² This would raise the overall credit for the final year of study from 120 to 130 credits but given that students are expected to perform at Masters level, this should not present serious problems.

³ This achieves compliance with the University's Code of Assessment.

Joint Response: Head of College and Head of School

Significant progress has been made to address this recommendation.

A Working Group was established within the College in 2011 and at the meeting of College Management Group on May 31st 2012, the College Secretary brought forward proposals for a workload model that will capture both teaching and research contributions: this is being trialled in the School of Medicine and the Institute of Molecular, Cell and Systems Biology in session 2012-13. The intention is that the trial will test the principals of the model and allow recommendations for refinement to be advanced, as required. These pilots will also provide an indication of the resources required and the most efficient means of inputting and collecting data.

In parallel, the School of Life Sciences has been working in partnership with Estates and Buildings through 2012 and into 2013 to establish effective processes for capture of data on teaching activities associated with courses run from the School. This makes full use of Facilities CMIS, the University's space management software. This will allow reports to be generated on teaching contact hours for staff irrespective of their membership of Schools or Institutes, data that can be transferred to the workload model.

Similarly, research outputs captured on Enlighten, decisions on output quality from the College's REF Assessment Panel and measures of esteem will contribute to the model. In time, the on-going project to develop a Research Management System should be able to contribute data from PAFs that are currently only held as paper copy.

Together, these measures should ensure appropriate recognition of the full breadth of academic activity and to prevent divisions emerging between research and teaching staff.

With regards to the distribution of finance, the School of Life Sciences provided data to College Finance team in November 2012 that can be used to determine the distribution of teaching income between Schools and Institutes according to class sizes and staff contributions. Currently, teaching income is held at College level pending agreement between College and the University Finance Director on the principles of a resource distribution model.

Recommendation 3

The Review Panel **recommends** that the School review its Intended Learning Outcomes (ILOs) for programmes and courses, ensuring that they encompass development of knowledge, intellectual skills and transferable and/or key skills and that assessment criteria match the developed ILOs such that the attainment of the ILOs aligns constructively with the published course aims. [paragraph 4.2.2]

For the attention of: The Head of School

Response:

The School has been in contact with staff in the Academic Development Unit of the Learning and Teaching Centre and enhanced guidance has been provided. This includes a glossary of terms that will assist course and programme teams as they undertake a review of ILOs. A glossary of active verbs associated with different levels of Bloom's taxonomy has been of particular assistance.

Given the range and scale of the School's existing provision and the limitations of staff time, we hope that Academic Standards Committee will appreciate that it will take some time to make significant progress against this recommendation.

As a starting point, it was the School's intention to begin systematic review and revision of UG ILOs for courses associated with the BSc programme in Pharmacology during the 2012 – 13 session but other issues intervened, specifically difficulties with room

bookings and the need to train key members of staff in the use of Facilities CMIS to try and avoid the risk that problems in room bookings recur next session. Embedding all course events in FCMIS will help the School with workload modelling (*Recommendation 2*) and the allocation of teaching duties for staff the College's Schools and Research Institutes (*Recommendation 5*).

That said, we hope ASC will be reassured that in bringing forward new proposals, course and programme teams are make use of the guidance received from the ADU and drawing on their advice. This has been the case for new course and programme proposals for PGT in the School (MRes Bioinformatics: new programme and course proposals; MRes Biomedical Sciences: modifications to existing programmes and new course proposals).

Our intention is thus that all upcoming programme and course proposals will be compliant with the Panel's recommendations and that review of ILOs for existing provision will take place as time and staff commitments allow.

Recommendation 4

The Review Panel **recommends** that the School review the guidance it gives to students progressing from Level 2 to 3 prior to any formative assessments, to ensure that students understand the level of attainment and depth of knowledge required in order to achieve certain grades, particularly with respect to written reports and essays. [paragraph 4.3.1]

For the attention of: The Head of School

Response:

The School is making efforts to make more evident to students the attainment and depth required in written assignments with particular emphasis on the transition from Level 2 to Level 3, as identified in the Panel's recommendations. This is a component of an integrated initiative as detailed below:

- At Level 1, the School is taking part in roll-out of the Academic Writing Skills Programme. This should complement the efforts that are already made by staff contributing to Biology 1A and 1B to provide detailed guidance to students on their writing and the quality, clarity and engagement with the literature that is expected.
- In Level 2, we are achieving better co-ordination between course teams so that students are set a range of assignments at points through the year with opportunities for feedback. Following the PSR, several course teams have moved to diversify assessment practice and whilst the logistic challenges recognised by the Panel still dictate that MCQ assessment is used frequently, sequencing questions, problem analysis and written assignments have been introduced to several courses that are pre-requisites for entry to Honours. Our intention here is to establish the range of academic skills required by students for success in the Honours years.

Towards the end of Semester 2, Honours teams run briefing sessions to provide students with information on the range of Honours programmes offered by the School. This enables students make informed decisions on the programme that best suits their interests and aspirations. In the current session, these briefing meetings will include extra guidance on expectations for study at Level 3

• For students entering Level 3 session 2012 – 13, Moodle sites now provide clearer guidance on staff expectations and what students need to demonstrate

in order to attain good grades⁴. This is available from the start of session; it is reinforced at initial class meetings.

By way of follow up, a number of courses have introduced early written assignments so that students can gauge their performance against these expectations⁵. In these areas, Turnitin is being used for the electronic submission of written assignments⁶ and the Grademark facility is used to provide feedback and guidance to students so that their written performance can be enhanced as the session progresses. Turnitin also allows staff to monitor whether students have viewed the annotated version of their work.

This process also helps to speed the return of grades and feedback to students. Recognising that we also need to speed turnaround when student work is handwritten, assessment on our degree programmes in Human Biology⁷ have moved over from the use of script books to double-sided A3 answer sheets. These are annotated by staff during the marking process, grades added, and the sheets are then scanned so that assessment data is automatically captured and the scanned copy of the work is returned to students quickly by electronic distribution. Grades are automatically redacted before return of the work so that students are encouraged to compare their efforts with outlines provided by staff as to what was expected⁸. Grades are then released in a second phase, our experience being that students often fail to take account of feedback when grades are immediately available.

We are thus confident that students in Level 3 are given much better guidance than was the case prior to the PSR and that course teams are providing better support to students as they make the transition to study in Level 3.

• In Level 4, supporting information is provided to students from the start of session so that performance can be maximised⁹. In addition, the School is progressively introducing opportunities for formative assessment before the end of each 5 week option course¹⁰ so that students have the chance to benchmark their performance in final year, bearing in mind that summative assessment most commonly takes place in the April / May diet. Our goal is that for session 2013 – 14, all final year courses will offer this opportunity to students.

⁴ An example of the guidance given to students can be viewed at the Anatomy 3H Moodle at http://ibls.moodle.gla.ac.uk/file.php/84/MWelsh_files/understanding_the_marking_scheme_students.pdf

⁵ This is used to particularly good effect in our degree programmes in Genetics, and Molecular & Cellular Biology.

⁶ This is also of value in reinforcing the University's policy on plagiarism. A two stage submission process is used so that students are clear about the perceived originality of their initial effort and an opportunity is offered for revision before the final version is submitted for assessment.

⁷ Degree programmes in Anatomy, Neuroscience, Pharmacology, and Physiology. About half of all students in Level 3 are taking one or other of these programmes.

⁸ An example is at http://ibls.moodle.gla.ac.uk/file.php/85/MARKERS_FEEDBACK_AND_COMMENTS_ON_PERFORMANCE_DECEMBER_CLASS_EXAM.pdf

http://ibls.moodle.gla.ac.uk/file.php/66/Silverthorn2008_WhatDolNeedToMakeAnAQ_Teaching_2_.pdf

10 For example, the Level 4 course "Core Skills in Microbiology, Parasitology and Virology" introduced a compulsory session at the end of the course http://ibls.moodle.gla.ac.uk/file.php/112/timetables_and_outlines/2012-13_CSMPV_timetable.pdf to provide students with practice and feedback in preparation for a component of the final exam.

Recommendation 5

The Review Panel **recommends** that the College establishes a robust, transparent and consistent process for the allocation of teaching duties, in which all academic staff are encouraged to engage in learning and teaching and that ensures that research-led teaching continues to be a strength of the degree programmes offered by the College. [paragraph 4.4.3]

For the attention of: The Head of School and The Head of College

Joint Response Head of College and Head of School:

Again, progress has been made on the recommendation.

As indicated in the response to Recommendation 3, on-going work will capture teaching activities associated with courses run from the School of Life Sciences. While the data has to be checked by staff for accuracy, the School is determined that initial reports are drawn from timetabled activities to ensure objectivity, and that as far as possible, the process is automated to ensure it does not become overly burdensome. This information will enable managers to allocate teaching duties in ways that are robust, transparent and consistent.

Following discussion at the meeting of College Management Group on January 31st 2012, a statement emphasising the importance of teaching duties was circulated to Heads of Schools and Directors of Research Institutes. This was noted at University Learning and Teaching Committee on May 10th 2012, and its principles have been reiterated at subsequent meetings of College Management Group. The position statement makes clear that all academic staff have an obligation to contribute to teaching that is research-led in its delivery.

Recommendation 6

The Review Panel **recommends** that the School ensures Staff Student Liaison Committees are minuted and that the minutes are made readily available to students. The School should also ensure that actions taken in response to issues raised are reported back to SSLC's and this is recorded in the minutes of these meetings such that the feedback loop is closed. [paragraph 6.2]

For the attention of: The Head of School

Response:

This is now embedded as standard practice and all SSLC minutes are made available to students through Moodle¹¹. Effort has been invested to extend the published minutes back to the 2010 – 11 session so that recurring issues are evident to student representatives along with actions that were taken or reasons why existing practice was continued.

The School looks forward to using the Student Voice website ¹² as an additional means of communication with students, to supplement arrangements for SSLCs and dialogue through course Moodle sites using discussion forum features.

Recommendation 7

The Review Panel **recommends** that there is dialogue with undergraduate students on an annual basis to ensure that they understand the processes used when marking assessments and the use of different forms of feedback, e.g. written, verbal and Peerwise. [paragraph 4.3.2]

For the attention of: The Head of School

¹¹ http://ibls.moodle.gla.ac.uk/course/view.php?id=422

¹² http://www.gla.ac.uk/services/senateoffice/gea/studentfeedback/thestudentvoice/

Response:

As set out in the response to *Recommendation 4*, staff have now made more explicit to students the marking process to try and provide better clarity for students.

We are also confident that students will now understand better the nature of the feedback they receive:

- Induction events and the first meetings of classes commonly explain to students
 that they will receive feedback on their work through multiple routes and that
 any form of comment, guidance, or advice, be it oral or written should be
 regarded as "feedback".
- In some courses, material from staff is explicitly labelled "feedback"¹³ ¹⁴ to leave no room for ambiguity.
- Peerwise and Aropa have been adopted by a number of courses. This is primarily to enhance students' engagement with course materials and to betterprepare them for assessment but in many instances, instructions make clear that comments posted by other students constitute "feedback"¹⁵.

Recommendation 8

The Review Panel **recommends** that probationary members of staff are given an induction programme and meet regularly with mentors to help enhance career progression and that a full record is kept of these meetings. [paragraph 4.8.2]

For the attention of: the Head of School

Response:

We recognise that induction processes for probationary staff need to be improved and the issue has been raise at the College Learning and Teaching Committee. The objective going forward will be to develop a College-wide process so that best practice can be adopted and consistent provision can be made across MVLS.

A new member of staff¹⁶ will join the School towards the end of the 2012 – 13 session; revised induction processes have been initiated to provide clarity in advance of his start date with regard to key staff contacts, office provision, support for research, teaching duties and the differentiated provision between Honours and pre-Honours courses.

Recommendation 9

The Review Panel **recommends** that Postgraduate Taught students are sent an information pack prior to arrival, including information about induction and timetables and that they are given an early opportunity to meet with their peers. [paragraph 4.6.3]

For the attention of: The Head of School

Response:

Sending out printed documentation to PGT students is impractical and inflexible when staffing and teaching locations are subject to late change. The costs for distribution to international students are also prohibitive.

http://ibls.moodle.gla.ac.uk/file.php/85/MARKERS_FEEDBACK_AND_COMMENTS_ON_PERFORMANCE_DECEMBER_CLASS_EXAM.pdf

¹³ http://ibls.moodle.gla.ac.uk/mod/resource/view.php?id=18970

¹⁴

¹⁵ http://ibls.moodle.gla.ac.uk/course/view.php?id=384 - see section 8

¹⁶ http://www.eva.mpg.de/evolution/staff/sylvester/index.htm

The College Graduate School has developed online resources¹⁷ that provides information to meet the Panel's recommendations in this area. In addition, the School has made substantial efforts through 2011 – 12 and into the current session to create course structures for the School's PGT programmes that can be embedded into MyCampus. In parallel, we are working to ensure that all teaching events are schedules into Facilities CMIS, the University's timetabling software. For 2013 – 14, this should ensure that timetables for formal taught courses are available to students online¹⁸ in advance of the start of session enabling them to better plan their travel arrangements.

Induction for all the School's PGT programmes now include a number of social meetings to ensure that students are able to meet their peers at an early stage and form friendship groups.

It is notable that students travelling from individual countries to study in Glasgow now set up Facebook groups so that they can interact in advance of arrival.

Recommendation 10

The Review Panel **recommends** that the School develop a system of feedback and other support mechanisms for Graduate Teaching Assistants to enable their career development. [paragraph 4.8.1]

For the attention of: The Head of School

Response:

Progress has been made on this recommendation, most significantly on those courses where support from GTAs is engaged on a regular basis and hence, where they have the opportunity to improve performance in response to feedback from academic staff or students.

- Best practice is evident in Level 1 courses where GTAs are recruited for a set laboratory for an entire Semester, working with the same group of students and same member of academic staff. Here, a bespoke Moodle site has been developed¹⁹ that provides GTAs with training and briefing materials, feedback from the students with whom they work (e.g. information from the simple principle of "two stars and a wish" is transformed to a word cloud; more specific comments), and resources from the Learning and Teaching Centre are made available to support their career development (e.g. "Reflection on Your Teaching").
- In Level 2, the course Microbiology 2²⁰ again draws on support from GTAs for a series of weekly laboratory sessions extending over 10 weeks. Here, GTAs are provided with training and support, but essentially take first-line responsibility for supervision of groups of around 16 students. This allows them to build a rapport with their groups, develop an individual teaching style and take responsibility for student assessment, whilst having immediate access to an experienced member of academic staff working within the same laboratory environment.
- In other courses where GTAs are engaged on a more occasional basis (eg a small number of times during the course of the session, in disparate areas of activity), it has proved more difficult to embed systematic support for career

¹⁷ http://www.gla.ac.uk/colleges/mvls/graduateschool/enrolmentinduction/

¹⁸ http://www.gla.ac.uk/colleges/mvls/graduateschool/enrolmentinduction/ and available to staff through MyGlasgow at https://sharepoint.gla.ac.uk/staff/myglasgow/default.aspx

¹⁹ http://moodle2.gla.ac.uk/course/view.php?id=10

²⁰ http://ibls.moodle.gla.ac.uk/course/view.php?id=332

development but academic staff are encouraged to provide advice, feedback and guidance to GTAs with whom they work.

Recommendation 11

The Review Panel **recommends** that the School review its Programme Specifications to ensure that each one is distinctive to the programme, and contains the relevant information for, all available degree pathways. [paragraph 4.1.1]

For the attention of: The Head of School

Response:

The School will take this forward in parallel with its efforts to address *Recommendation* 3. Where new programmes are being developed (*e.g.* we are working with the School of Psychology to bring in a joint Honours degree in Psychology and Neuroscience; proposals for an Honours programme in Nutrition are also at an early stage), a natural opportunity will arise for us to create specifications that are distinctive and we will use this to review specifications for other programmes in cognate areas. Given the large number of Honours programmes that are delivered from the School, review in other areas will be taken as time and opportunity allows.

Recommendation 12

The Review Panel **recommends the** School continues to investigate strategies to increase international student recruitment together with the Research Institutes aided by advice and support from Recruitment and International Office. [paragraph 4.5.1]

For the attention of: The Head of School

Response:

This has remained a priority for the School and other areas of the College. Particular areas of focus through 2011 – 12 and 2012 – 13 include:

- Engagement with institutions in Malaysia with whom partnership arrangements have been developed or are emerging. Representatives from the School and the Institute of Molecular Cell & Systems have invested substantial effort and an agreement is now in place with Universiti Sains Malaysia that allows PGT students on the School's MRes Biomedical Sciences programme to take the second project placement back at USM. This will provide training and up-skilling for junior researcher staff at USM to meet local needs, it will make evident to staff at USM the benefits of study on the MRes programme and it is hoped that the initiative will foster joint research activities.
- This partnership model also has been discussed with senior staff at Taylor's University, one of Malaysia's most successful and prestigious private providers of tertiary education. Follow up visits are planned for later in 2013.
- The School has also helped bring forward a proposal for a variant of the MRes Biomedical Sciences in Veterinary Science that uses the same template. This will be a joint Masters award with the Universiti Putra Malaysia.
- We work closely with colleagues in RIO to promote study in Life Sciences to visiting delegations from overseas (e.g. Diyala University, Iraq; Nankai University, China) and are supporting RIO by providing staff and resource to visit potential markets abroad (e.g. Azerbaijan, Kazakhstan, major centres in India).
- We have supported colleagues in RIO at recruitment fairs in the USA and independently established good contacts with target institutions in the USA to

- promote student exchange arrangements (e.g. University of North Carolina at Chapel Hill).
- In addition, we have committed time and resource to the promotion of Glasgow as a study abroad destination for students in the USA using the Principia consortium²¹ of liberal arts colleges and other university member of this association.
- In response to market intelligence from colleagues in RIO, the International Dean for the Americas and our own contacts at American institutions, we plan to develop summer school activities to meet the demand that is evident from students from the USA.
- In session 2012 13, the School has welcomed 11 students from Brazil that have chosen to study with us through the Brazilian Government's "Science without Borders" initiative. We are working hard to optimise the experience for the first cohort so that greater numbers can be accommodated in future years.

²

Managing the teaching interactions between Schools and Institutes in MVLS

Background

All members of MVLS who hold regular academic posts and who are not fully bought out by external funding have a responsibility to contribute to teaching. This includes student support. In almost no cases are people sufficiently well-funded so that the whole of their salary is recouped by overheads on grants and this means that **teaching pays for most people's salary**. Moreover at all levels of seniority, teaching is a significant component in any case for promotion, with the possible exception of progression to a Readership.

Managing interactions

- It is essential that Schools within MVLS can call upon Institute staff to help provide top quality teaching at both Undergraduate and Masters' levels – School staffing levels and expertise cannot sustain taught programmes without significant contributions from Institutes, and University strategy and its competitive position depends upon a research-led approach to teaching.
- Staffing requirements should be organised by the Heads of Schools in discussion with the Directors of Institutes. Any disputes can then be adjudicated by the Head of College.
- When changes in courses are taking place, it is essential that discussions take place in good time to allow staff time to prepare for delivery of the teaching.
- Directors of Institutes should try to manage teaching/student support loads in a transparent manner and so that differences between individuals have an objective basis and are minimised when other contributions are equivalent.
- The workload model will be helpful in this regard but until this becomes available, there has to be an acceptance that all teachingrelated activities delivered in recent years cannot be suddenly redistributed – staffing levels and workloads in Schools make this impossible.
- The attitude in some parts of some Institutes that staff can refuse to teach must be challenged. It is up to the Directors to get this message across so that MVLS can provide the best teaching possible and to ensure it continues to be truly research led.