

University of Glasgow

Academic Standards Committee - Friday 28 May 2010

**Departmental Programmes of Teaching, Learning and Assessment:
Responses to the Recommendations arising from the Review of
Mathematics held on 12 and 13 February 2009**

Mrs Catherine Omand, Clerk to the Review Panel

Conclusions

The Review Panel commends the Department on the overall scope and quality of its provision, and for its conscientious approach to student support and its efforts to encourage students in their enjoyment of mathematics and to improve retention of students in their early years. Despite the number of recommendations, the Panel was impressed with the level of commitment displayed by staff and students.

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 by the areas for improvement/enhancement and are ranked in order of priority.

The 2003 review recommendations should be further reviewed in the light of the present recommendations and both sets used to inform process and practice during the next inter-review period.

*Recommendations***Curriculum***Recommendation 1*

The Panel **recommends** that the Department conducts an overview survey of its entire provision of courses and programmes with a view to streamlining and where possible reducing the number, in order to target resources and reduce staff workload, especially at Levels 1 and 4. The third year non-honours courses should also be critically reviewed. In addition, a rolling timetable for regular and systematic course and programme review should be established. (Paragraph 4.4.1)

For the attention of: The Head of Department***Response:***

When it was reviewed, the Department was in the middle of a review of its entire teaching at Levels 1 to 5. At the time of the review, changes had been implemented to Levels 1 and 2, and proposals had been developed for the Honours provision for taking to Board of Studies for implementation in 2009-10. Work has continued on the related changes to our Level-4H provision for implementation in 2010-11, together with proposals for the development of Level-5M courses, for the increasing number of students taking that Level.

Meantime a proposal has been taken to the Board of Studies to reduce the provision of separate teaching at Level 3. If this proves successful, we intend to go further in this direction.

Having just completed one review of our teaching provision, we would wish to give time for the changes we have implemented to bed in, so that we can monitor their effectiveness. This will provide the time to implement a regular and systematic course and programme review. Once this has been done, it should be a lesser job to ensure that documentation is kept up to date.

Recommendation 2

The Panel **recommends** monitoring student demand and closure of consistently unpopular Level 3 and 4 courses. (Paragraph 4.4.2)

For the attention of: The Head of Department

Response:

The Departmental Learning and Teaching Committee will be reviewing student demand, with a view to closing consistently unpopular optional courses. However we will be mindful of the fact that sometimes courses are unpopular because of the person delivering them, rather than because of the material contained in them per se. Equally we are mindful of the fact that courses may be valuable as training for students going on to further study but may not be as attractive to students who are completing a degree programme and heading out into industry and commerce. So we feel that we have a lot of competing pressures to balance, and will aim to always achieve the right balance between reducing workload and offering a good experience to our students.

Recommendation 3

The Panel **recommends** that individual programme aims and ILOs be made more explicit in demonstrating progression in order to enable students to make informed choices of degree programmes. (Paragraphs 4.1 and 4.2)

For the attention of: The Head of Department

Response:

The Learning and Teaching Committee will review the individual programme aims and ILOs with a view to ensuring that students can make individual informed choices from the programmes that we have on offer.

Assessment

Recommendation 4

The Panel **recommends** that the Department fully adopts the Code of Assessment for non-numerical forms of assessment and that the Department gives explicit information to students and staff about the University Code of Assessment and the departmental marking and scaling system and makes clear to students and staff the method of assessment to be applied to each piece of assessed work. (Paragraph 4.3.2)

For the attention of: The Head of Department

Response:

The attention of our Honours students has been drawn to the method that we use to implement the University Code of Assessment, where appropriate, and to the method of scaling that we use. Members of Staff are also aware of this through the work of the Learning and Teaching Committee relating specifically to the assessment of project work, which is our major instance of a non-numerical form of assessment.

Recommendation 5

The Panel **recommends** that the Department continues to investigate possible alternatives for assessment of student learning, particularly in tutorial, seminar and project activities, allowing for formative as well as summative scrutiny of and feedback on student ability, including transferable generic skills, in the belief that the benefits of such enhancements to the student learning experience will offset the additional burden on staff. (Paragraph 4.3.1)

For the attention of: The Head of Department

Response:

In the past few years, the Department has introduced a programme of Workshops at Level 1, the Skills Test programme, again at Level 1, and the course Writing and Presenting Mathematics at Level 3H. This year, for the first time, students in 5M were required to give a presentation on the topic of their project. This appears, from discussion with both staff and students after the event, to have been a very successful and beneficial experience.

We have also put to the Board of Studies a proposal that changes the way in which some of our 5M courses will be assessed. If agreed, this will involve assessment of coursework during the semester to be followed by an oral, rather than a written, examination. We are alive to the possibility of extending our assessment methods, but are also mindful of the particular problems with regard to plagiarism that can be introduced with alternative assessment methods when applied to Mathematics. We are also very concerned to ensure that the load on academic staff is not increased at the current time, particularly in the expected financial climate and with the REF arriving in the near future.

Feedback

Recommendation 6

The Panel **recommends** that guidelines are established with recommendations about average workload, information on procedure, the role of the supervisor and what level of supervision and feedback may be expected, and that this information be included in the relevant course/programme handbook. (Paragraph 4.3.4)

For the attention of: The Head of Department

Response:

A document has been produced, and made available on the Honours Moodle pages relating to precisely what is expected of students undertaking a project, and precisely what help and support they can expect from their supervisor. A reference to this will be included in the next version of the Honours Handbook when it is produced.

Recommendation 7

The Panel **recommends** that GTAs are offered staff review of and feedback on their teaching performance and more specific feedback from their students. In addition the Panel **recommends** that the Department, possibly in conjunction with the Faculty, considers founding a GTA forum to assist in their training and development as teachers (Paragraph 4.3.6)

For the attention of: The Head of Department and the Dean

Response – Head of Department

The Convener of the Departmental Learning and Teaching Committee contacted all staff for whom GTAs are involved in tutorial work, indicating that regular feedback, positive as well as negative, be given to our GTAs. He will review this at the end of the current session to see whether the new system is working satisfactorily, or whether yet more guidance and feedback is required.

Response – Dean

Student feedback from the Tutoring and Demonstrating sessions held with new PhD student (in addition to the L&T centre course) have suggested having students involved more in their training, e.g. as mentors, or even just a being available for question and answer sessions.

Not sure a fully fledged faculty forum would be very successful (teaching gets very subject specific), but general involvement of 2nd/3rd/4th year students at the start of generic skills training is feasible at Faculty/College level. After this it is thought that the recommendations is best dealt with at School level.

Support

Recommendation 8

The Panel **recommends** that the Department reverts to small group tutorials at Levels 1 and 2, with one tutor per group per semester in Session 2009-10. (Paragraph 4.6.9)

For the attention of: The Head of Department

Response:

The Department has reverted to small group tutorials at Level 1, as far as possible. It was not possible to hold small group tutorials at Level 2. In both cases, the difficulties were caused by Central Room Bookings, who could not provide us with sufficient small group tutorial rooms at the times when our students were available to attend.

Recommendation 9

The Panel **recommends** that the Department makes renewed efforts to make new students aware of the necessary set of study skills that require to be developed during the transition from school to university and that these can only be achieved if disciplined daily study habits are developed early on. (Paragraph 4.6.2)

For the attention of: The Head of Department

Response:

This session the Faculty of Information and Mathematical Sciences introduced its own Induction Session for new students, in which a major emphasis was placed on the study skills that are necessary for success in our subjects. The Department contributed to this Induction Session both with staff and student involvement. In particular, a number of level-2 students attended to pass on their experience of what is necessary to successfully negotiate the transition from school to University. The response from students appears to show that this new style of Induction session was a highly useful experience for the students attending. [All students entering first year in the Faculty of Information and Mathematical Sciences were contacted before the Induction Session took place and told that it was compulsory that they attend Induction.]

We are waiting to see whether this new Induction Session has had the desired effect before embarking on any further initiatives in this direction

Recommendation 10

The Panel **recommends** that the Department thoroughly reviews and revises all departmental information and instructional literature and web-based materials for student and staff use (especially Advisers) to ensure clarity and user-friendliness, especially in respect of course choice and career pathways. (Paragraph 4.8.10)

For the attention of: The Head of Department

Response:

A start has been made on this task, particularly in relation to the departmental website containing material appropriate to potential applicants. Members of staff are being encouraged to keep the Moodle pages of their courses up to date so as to be of benefit to our students. The handbooks for Advisers and students have been revised with a view to making them more helpful to potential users, and will contain all courses offered by the new School of Mathematics and Statistics.

Recommendation 11

The Panel **recommends** that the Department reviews the present uptake by students of open office hours and other advisory and support mechanisms with a view to streamlining the opportunities for students to consult staff in order to maximise potential benefit to students and economy of staff time. (Paragraph 4.6.8)

For the attention of: The Head of Department

Response:

The Department carefully considered various options for changing the current Office Hour system. Unfortunately all the suggested alternatives foundered on the same difficulty, that some members of staff are perceived by students to be more approachable and helpful than others, and that students tend to utilize the time of such members of staff more than others. Any streamlining that reduced possible Office Hours for some staff would almost inevitably result in an increased load for those who felt obliged to offer extra support.

Recommendation 12

The Panel **recommends** that the Department engages more closely with the Faculty development of Employability and PDP initiatives and that relevant information is given to students together with departmental endorsement of the importance of Employability and PDP. (Paragraph 6.2)

For the attention of: The Head of Department

Response:

All students entering the Faculties of Science are given a leaflet, when they meet their Senior Adviser before starting at University, highlighting the opportunities for Employability training and PDP. These initiatives were also a feature of the Faculty Induction Programme mentioned earlier.

Recruitment and Retention

Recommendation 13

The Panel **recommends** that academic members of the Department be appointed to actively participate in postgraduate student recruitment in cooperation with the Recruitment, Admissions and Participation Service (RAPS) and the International and Postgraduate Service (IPS), in order to identify viable student markets and foster applicant interest. (Paragraph 4.4.3)

**For the attention of: The Head of Department, the Director of RAPS and the
Director of IPS**

Response – Head of Department:

A committee has been set up under the Convenership of Professor XiaoYu Luo to develop recruitment material and to look for opportunities in particular for our taught MSc courses.

Response: Director of Recruitment and International Office

An annual networking lunch has been initiated between the Faculty and RIO and staff from Mathematics attended. A PGT Gap Analysis has also been commissioned, which will provide competitor information on PGT student numbers and course provision at 8 peer universities across the UK. This is due to be published in June 2010. This will provide information to inform the development of a five year recruitment and course development programme to improve recruitment activity. No academic 'champions' as such have been appointed to liaise with the Recruitment & International Office. RIO has appointed a champion for FIMs: Robbie Willis (Senior International Officer).

Recommendation 14

The Panel **recommends** that the Department liaises with RAPS and the Faculty in order to accurately monitor figures for the recruitment, admission and retention of students within the Department, particularly in respect of their mathematical ability on entry and subsequent performance at Levels 1 and 2, in order to more meaningfully assess the success of the support initiatives developed by the Department (MathsBase and PAL) and also the University-wide initiative (NUMBER). (Paragraph 4.6.4)

**For the attention of: The Head of Department, the Director of RAPS and the
Director of IPS**

Response – Head of Department:

This is one of a number of issues that the Department will be addressing during the next few months. It has not been able to do this so far because the main focus of attention was on ensuring that the continuing provision for students was of the very high standard that they are entitled to expect and that we are committed to delivering.

Response: Director of Recruitment and International Office

Much work has been undertaken by the Department to support recruitment and admissions activity. RIO has nominated a champion for FIMS (Lily Phoon) who meets regularly with the Department. Examples of joint activity to support recruitment activities in the last year include:

- * Science drop in sessions after the Afternoon Visits and Maths is one of them. David Moore also sometimes does the Science Faculty talk for the Afternoon Visit

- * Maths Department staff involved in applicant VTC (Visits to Campus)
- * FIMS have their own Applicant evening sessions and also have Saturday morning Maths club
- * Mail shot went out last August to UK schools highlighting studying Maths and Accountancy
- * Raising the profile of Maths with UCAS so that the subject was easier to find in the search options
- * Attendance at Leeds and Birmingham Parent Information Events

Retention work is taken forward by the Retention Working Group, who will be able to comment on retention activities.

Learning Resources

Staffing

Recommendation 15

The Panel **recommends** proleptic appointment of more junior staff to shadow colleagues currently responsible for administration of learning and teaching and supervising student support mechanisms to facilitate smooth handovers and continuity of practice. The Panel further **recommends** that this process would be enhanced if responsibility for day-to-day management of aspects of learning and teaching (eg timetabling, office hours and other advisory opportunities, disability compliance) be devolved to the Head of Learning and Teaching. (Paragraph 4.8.5)

For the attention of: The Head of Department

Response:

The Head of Learning and Teaching has indeed taken on a much fuller role with regard to day-to-day management of the major aspects exemplified above of learning and teaching within the Department, as recommended by the Panel. We have approached the problem of ensuring a smooth transition of responsibilities by asking those currently carrying out functions to write detailed descriptions of what is involved in their roles. We felt this was preferable to making proleptic appointments, particularly in the uncertain climate within the University, caused by the Department of Mathematics being subsumed into the School of Mathematics and Statistics, where some roles currently carried out by members of the Department of Mathematics may in future be carried out by members of the current Department of Statistics.

Recommendation 16

The Panel **recommends** that the Department demonstrates its commitment to probationary staff by their representative inclusion on departmental committees, especially the Learning and Teaching Committee, IT and Research Committees. (Paragraph 4.8.6)

For the attention of: The Head of Department

Response:

This session, 1 member of the Learning and Teaching Committee, 1 member of the IT Committee and 2 members of the Research Committee were probationary staff. These appointments were because of the expertise that these particular staff members could bring to their membership of these committees. As the Committee structure of the new School is put in place, serious consideration will be given to whether it is appropriate to specifically

reserve places on these committees for probationary staff, particularly given that we may not have many such staff in the near future.

Recommendation 17

The Panel **recommends** maximising the teaching potential within the Department by providing holders of advanced research fellowships with the opportunity to contribute to the teaching and thereby gain valuable career-building experience. (Paragraph 4.8.7)

For the attention of: The Head of Department

Response:

This point has been addressed in the allocation of teaching for the current session and for the coming session.

Recommendation 18

The Panel **recommends** that as part of the enhancement process, lecturing styles should be monitored, perhaps videoed, but definitely peer-reviewed, in order to provide staff with feedback on their technique and any recommendations for change. (Paragraph 4.7.1)

For the attention of: The Head of Department

Response:

The Department has devised a scheme for peer-reviewing teaching with a view to making any improvements we can to the quality of our teaching. It is our intention to implement this scheme at the start of the new session in consultation with our colleagues from the Department of Statistics.

Recommendation 19

The Panel **recommends** that the Department organises MOODLE training for staff and that it is increasingly used for administrative communication and for uploading of supporting material for lectures and tutorial classes, with care taken to ensure accuracy of detail. (Paragraph 4.7.2)

For the attention of: The Head of Department

Response:

MOODLE training was offered to staff during the first semester partly to increase the usage of MOODLE as a prime administrative communication forum and partly to reduce the workload on our administrative support team at a time when they were having difficulties through various unforeseen factors. The Department has been committed to the use of MOODLE as the prime means for disseminating supporting material for lectures and tutorials ever since the introduction of MOODLE several years ago.

Physical resources

Recommendation 20

The Panel **recommends** that a more robust system of regular board cleaning and removal of chalk dust be instituted to minimise its detrimental effects, and that additional protection of electronic equipment be provided, where the latter is close to frequently used chalk boards. (Paragraph 4.8.3)

For the attention of: The Head of Department

Response:

It has proved very difficult this session to implement a more robust system for board cleaning and for the removal of chalk dust. The previous system involved recruiting students who were paid to carry out these functions. Unfortunately this year's cohort of students proved unwilling to take on this task. Approaches have been made to Cleaning Services and it is expected that, starting next session, regular cleaning of the boards and removal of excess chalk will be paid for by the Department (or School as it will then be) and performed by Cleaning Services.

Provision of protection for all sensitive electrical equipment in all of the Lecture Rooms in the Mathematics Building was arranged immediately following receipt of the DPTLA report.

We regret that when the plans were drawn up for refurbishment of Lecture Theater 2 of the Boyd Orr Building, (a Theatre that we require to use for some of our large first and second year classes) the Recommendations of the DPTLA Report regarding the use of chalk-boards to teach Mathematics were ignored. Although our Head of Department was successful in obtaining three visualisers for that Theatre, many of us feel that they will prove highly unsatisfactory for use in teaching Mathematics and specifically that dyslexic students, for whom contrast is an especial requirement.

Enhancement*Recommendation 21*

The Panel **recommends** that the Department engages more fully with the quality enhancement agenda at institutional and national levels for the enhancement of the student experience, including assessment, student support, internationalisation, employability, PDP and MOODLE and at the departmental level, consults with its students in order to offer and encourage greater student participation and partnership in learning and teaching management and planning. (Paragraph 6.4)

For the attention of: The Head of Department

Response:

We regard this as a major Recommendation with far-reaching implications for what the Department currently does and for the directions in which we should be aiming. We have therefore concentrated our effort so far on ensuring that our performance in the current session has been up to the normal standards that we set for ourselves. It was the intention of the Department that this Recommendation would be reviewed by the Learning and Teaching Committee during this coming period, with a view to developing proposals for implementation as soon as possible. With the change to a School structure, and the merger with another Department that has recently undergone its own DPTLA Review, this timetable may be delayed as the joint Learning and Teaching Committees grapple with the problems and opportunities available through the merger.

One small step in the intended direction is the inclusion of a student member on the Learning and Teaching Committee. This has been a very useful and valuable initiative.

Recommendation 22

The Panel **recommends** that the Department adopts a more robust approach to the recommendations from the present Review in order to demonstrate objectively by a written minute, or similar, how it has responded to them and can reflect on how changes and

developments have benefited or otherwise influenced the well-being of the Department, its Staff and its Students. (Paragraph 6.5)

For the attention of: The Head of Department

Response:

The Department accepts that it lost sight of the recommendations that were made by the previous review of Learning and Teaching within the Department. However the current Head of Learning and Teaching is committed to ensuring that the recommendations of the current review are carried through. We believe that we have made a good start in this direction, as exemplified by the responses made above.

We would also make three further points.

Firstly, the Department has operated this session with a new Teaching Administrator and a new Departmental Manager, both of whom have had to learn how to carry out their functions. These are temporary appointments, to compensate for a maternity leave and a secondment to the Student Lifecycle Project. These posts were the two most senior within the secretarial team, both of which were vacant for 6 months. This inevitably meant that extra pressure was put on the remaining junior members of the secretarial team and team members were very significantly affected by the extra load. Given that the Head of Learning and Teaching was also new to his role, this made it very difficult to carry things forward in the way that we would have liked to do.

Secondly, the Mathematics Department has recently suffered from the retirement of a number of key members of staff. Whilst this was anticipated and planned for, it inevitably led to a loss of efficiency as people became accustomed to their new roles. With the pressures that all Departments feel to maximise the amount of time devoted to Research, in order to fulfil one of the University's key aims, there has been a certain requirement to prioritise things. We have taken a strategic decision, at a time of falling staff numbers, to concentrate initially on ensuring that we continued to do what we feel we do well rather than spending time, in the short term, on developing major plans for future provision.

Finally, since the Review the University has decided to adopt a College and School structure, involving inter alia the merger of the Departments of Mathematics and Statistics. Deciding how these two Departments would operate on a collaborative basis has involved quite a commitment of academic and administrative time. Furthermore, since the Department of Statistics has just undergone its own DPTLA review, there is a strong argument for ensuring that we pick out the best features from the provision of the two Departments and that we design a system that responds to the points raised in each of the Review Reports.