Minutes of the biannual meeting of the Directors of Studies in Mathematics
    held at 2on Tuesday 13th November 2012
    in the New Combination Room, Corpus Christi College

Present: Christopher Brookes (CC), Jonathan Evans (CAI), Irena Borzym (CTH),
Thomas Forster (ED), Ross Lawther (G), Tadashi Tokieda (TH), Stuart Martin (M),
Adriana Pesci (DOW), Berry Groisman (SID), Julian Holstein (CHR), Julia Goedcke
(N, Q), Andras Zsak (PET), Anita Briginshaw (SEL), Maciej Dunajski (CL), John
Lister (T), Peter O’Donnell (HOM), Christopher Tout (CHU), Stephen Cowley (EM,
Chair of Faculty), Stephen Siklos (JE), Vicky Neale (ME), Henri Johnston (JN),
Vladimir Dokchitser (EM), Simon Wadsley (HO), Sophia Demoulini (DOW), Wayne
Boucher (SID), Orsola Rath Spivack (LC) Julia Gog (Q), Robert Hunt (CHR), Chris
Warner (R), Philip Dawid (DAR)

1. Apologies: Rachel Camina (F), Matthias Doerrzapf (JN), Nilanjana Datta (PEM),
Carola-Bibiane Schoenlieb (JE), Gareth Taylor (CC)

2. The draft minutes of the previous meeting on 8 May 2012 were approved subject to
replacing
‘The majority of Directors of Studies felt that claims for preparations to Part III
presentations and seminars should not be made, as these activities are optional for Part
III students.’
with
‘Some Directors of Studies felt that claims for preparations to Part III presentations
and seminars should not be made, as these are optional for Part III students. However,
others felt that (given that the students pay college fees) there is no justification for
not rewarding the instructors who actually do the work. Thus, there was no consensus.
It was decided to ask the Faculty Board for its view, clarification and guidance.’

3. Matters arising from the minutes

(a) STEP analysis of data: Dr Siklos reported that there was now a lot of raw data
available and he would report back in due course.

(b) MIT exchange
This year (2012/13), two MIT mathematics students are visiting, one at Trinity and
one at Sidney Sussex, one taking Part II and one taking Part IB. The colleges are
allocated roughly on an exchange basis. BP will be generously funding an extra three
places for Cambridge students (non-engineers) to visit MIT for each of the next three
year and it is therefore possible but not very likely, that some of our mathematics
students will be selected to visit MIT. As usual, the approval of the relevant director
of studies and senior tutor will be required.

(c) IA supervision norms and CamCORS data: It was noted that some of the data on
total student hours and class sizes was a bit suspect – not all supervisions are recorded
on CamCORS and some figures include induction events. It was clear however that
for supervisions there is uniform behaviour, with most colleges providing about 40,
but there is non-uniform practice on examples classes. Dr Cowley said the unevenness
was difficult to defend to students as some of the numbers were available to them.
4. Tripos matters: Parts IA, IB and II:

(a) Report from the Faculty Teaching Committee on the 2012 examinations. This report was received.

Section 2.2: Disquiet was expressed about the differences in question difficulty and there was support for the idea that examiners should be asked to have a target alpha rate. However there are other factors, eg quality of lecturing, that influence take up of questions.

Section 5.8: It was reported that a faculty working group would be considering the efficacy of the C courses in due course. They are currently not doing what they are meant to do, perhaps since some weak students feel they should concentrate on alphas. Some courses have too much material and there have been some supervision problems. The review should consider the amount of material. There was no support for having fewer courses; there needed to be a variety of topics.

5. Tripos matters: Part III
(a) Progression from Part II to Part III
A paper from Drs Cowley and Lister was received. It was reported that the Faculty Board had set up a working party (Convenor of Directors of Studies (Dr Brookes) as chair, Prof Leader, Prof Lister, Prof Peake, Dr Pesci) to consider the composition and guidelines for the Permissions Committee, and to consider the notes provided for Directors of Studies. The working party’s recommendations on the composition of the permission committee were supported as were the guidelines for the permissions committee and the notes (in the form of a letter from the Chairman of the Faculty). It was noted that some colleges were not in a position make comparisons with past students. There were some concerns expressed about the relative difficulty between admission to Part III for internal and external applicants.

(b) Part III supervision/example classes: Dr Cowley said that the Part III committee were yet to report.

6. Admissions matters

(a) Level of conditional offer and usefulness of physics:

A detailed paper by Dr Cowley on admissions was discussed at length. Dr Cowley observed that, despite an increase in applications, Cambridge is still not managing to reach its admissions target of 250 mathematicians. He said that there were applicants we might have taken. STEP seems to be a good predictor of tripos performance for male applicants but less good for female ones.
He wondered whether in admissions literature it should still be stated that A level physics is useful. A separate paper on this topic was also discussed. It was noted that A level Physics is not essential for reading Physics in Part IA. There was strong support for the proposal to remove the assertion that ‘A level physics is useful’ from the mathematics admissions material.

Dr Cowley argued in favour of admissions offers based on A*A*A at A level for mathematics applicants. He was concerned that Cambridge mathematics would look weaker unless we adopted the same A level offer standard as our other main rivals. In a vote this was passed nem con.

Dr Cowley reminded the meeting that the outcome of previous discussions about the STEP grade boundaries, in particular the number of candidates achieving 1,1 or better, meant that if the admissions target of 250 was to be reached then colleges should be accepting people with 1,2 in STEP.

(b) Skype/Adobe connect interviews
The Faculty Admissions Officer (Dr Siklos) has recently received a number of questions from prospective applicants about the possibility of being interviewed remotely. A short discussion showed that some colleges do offer such interviews but most do not.

(c) Winter pool
The agreed procedure for the winter pool (2011/12) meeting was received. Last year, because of the increased number of applicants in the pool, the process of reading out names and expressing interests became interminable. At the summer pool, the process was streamlined so that the list of names was read out, directors of studies expressed interest vocally and only numerical data was recorded: 0,1 or many. This saved a considerable amount of time. The dates of the Winter Pool were noted.

(d) Faculty Open days
The dates of this year's open days are: Saturday 27th April and Saturday 11th May.

7. STEP

(a) Easter School
A report from the coordinator (Dr Siklos) was received and it was noted that this year the School was run entirely ‘in house’, with NRICH staff (Dr Steve Hewson in particular) taking a leading role in the planning and execution.

(b) Expansion of the STEP Easter School: Dr Siklos reported that there would be 25% extra places this year.

(c) 2012 Examinations
A report from the principal examiner (Dr Siklos) was received. As Directors of Studies are aware, the first line of Q1 of Paper III was omitted. It turned out that this was not the disaster that had been feared, most candidates moved on rapidly and a few did the question with the information available which was perfectly feasible but made the question harder. The issue of borderlines would need to be revisited in due course.
8. Other matters

(a) Maintaining and enhancing the quality of supervisions
A letter from the Chair of the Senior Tutors' Standing Committee on Education (Dr Hunt) was received.

(b) Code of Practice: Reasonable adjustments for disabled students:
A draft code was received. The Faculty needs to publish the aims and competencies of the Mathematical Tripos and it was noted that input from Directors of Studies would be welcomed.

(c) Teach First: a short information paper was received.

(d) Induction meeting: a report was received for information.

9. Any other business:

(a) Deselection:
Dr Siklos noted that it was important to try to ensure common practice across the colleges and wondered whether a Deselection Pool might be useful. Directors of Studies should wait for the moderation spreadsheets before making deselection decisions.

10. Date of next meeting: 7 May 2013 at 11 am in Corpus Christi