

BoS 19 April 2023

Wednesday, 19th April 2023 10:15 am

Teams | Faculty of Science Board of Studies

Attendees

Attended

Zoe Burke
Andrew Burrows
Duncan Craig (Chair)
Susan Crennell
Charlotte Dodson
Nikoletta Fotaki
Marguerite Hallett (Secretary)
Amanda Harper
Matthew Jones
Adele Murrell
Fei Qin
Tim Rogers
Tony Shardlow
Gan Shermer
Dmitry Skryabin
Gunnar Traustason
Stephen Ward

Did Not Attend

Rachael Bedford
Florin Bisset
Elizabete Francmane
Julia Kildyushova
Matthew Lennox
Eamonn O'Neill
Jeyabal Sivaloganathan
Ventsislav Valev
Michael Wright
Zidong Zhao

1.0 Welcome and Quorum (7399)

The Chair welcomed members, noted apologies and observed that the meeting was quorate.

2.0 Declarations of Interest (7400)

There were no declarations of any potential conflicts of interest.

3.0 Minutes of the Previous Meetings (7401)

The Board approved the minutes of the previous meetings held on 18 January (Paper 179A) and 7 March (Paper 179B) 2023.

4.0 Matters Arising (7402)

There were no matters arising from the previous minutes.

5.0 Chair's Business (7403)

- **Faculty planning meeting:**

The Chair reported that the meeting at which the Faculty's financial planning for the forthcoming year was discussed was positive in terms of continued funding, replacement of staff and new staff positions. It is expected that the outcome of the majority of the investment requests will not be known until later in the summer.

- **Institutional PGT strategy:**

The University is keen to grow its PGT student numbers. The Chair therefore welcomed ideas for new PGT courses. It was noted that PGT students often stay on to complete PhDs.

- **Curriculum Transformation (CT), assessment and unit sizes:**

The Faculty plans to secure additional support for managing CT on the basis that the savings that will be made through reduced assessment will justify any further funding. It is expected that once CT courses have launched, there will be a re-examination of current practices, e.g. unit cohort sizes, with particular regard to staff time/cost and space/timetabling. Teaching next year will be 90% in person and 10% online to ensure that the benefits gained from online delivery are retained and to reduce demands on space. It was noted that PGT class sizes can often be small and that to mitigate this some PGT units are co-taught with UG students. However, the University's Academic Framework states that there should be no shared teaching between UG and PGT courses, although exemption can be sought from this parameter. The Board agreed that co-teaching is less problematic between PGT and UG Masters students.

6.0 Establishment of Prizes (7404)

The Board approved establishment of the Janet Scott Prize for Collaborative Research in Sustainability in the Department of Chemistry (Paper 180). Professor Burrows commented that the prize celebrates Professor Scott and the research that she did in this area.

7.0 Report on Research Grants (7405)

The Board received details of awards accepted by Research and Innovation Services from 11 January until 11 April 2023 (Paper 181).

The Chair congratulated in particular:

- Professor Neill Campbell, Department of Computer Science, for his award of £1,400,000 from the West of England Combined Authority for Strategic Research and Innovation Capital Investment.
- Professor Ravi Acharya, Department of Life Sciences, for his award of £726,914 from the BBSRC for research into the Structural and Thermodynamic Dissection of the Interdomain Cooperativity of Human ACE.
- Dr Emma Stone, Department of Life Sciences, for her award of £326,621 from the NERC for research into A Novel Interdisciplinary Approach using Bats as Models.
- Dr Matthew Nunes, Department of Mathematical Sciences, for his award of £559,930 from the EPSRC for research into Network Stochastic Processes and Time Series.

The Chair commented that achieving these large grants is important and reported that he and the Associate Dean (Research) were currently exploring how to further support staff and nurture the situations whereby the likelihood of success is enhanced. Professor Traustason reported that Professor Manuel Del Pino, in the Department of Mathematical Sciences, had been successful in renewing his Royal Society Professorship for £1,100,000 for a further 5 years starting 31 March. The Chair reported that the Vice Chancellor is holding receptions for staff who have brought in large grants in order to share best practice and help others achieve similar success. Professor Ward reported that out of 4 bids submitted, 3 Academy of Medical Sciences Fellowships of approx. £100,000 each had been awarded to Bath this year, whereas in the past the University had only been awarded one per year, if at all.

8.0 Semester 1 Scaling Report and Errors in Examination Papers (7406)

The Board approved the scaling of unit marks (Paper 182A) and errors in examination papers (Paper 182B) in Semester 1 2022/23.

The Board noted that there had been 11 instances of scaling in Semester 1 this year, compared to 21 in Semester 1 last year, which represented a considerable reduction. 7 units were scaled in Maths (compared to 10 last year), including 2 units where the mean marks were not atypical (i.e. below 50.00% or above 69.99%) (MA30087 and MA40254), and 4 in Computer Science (compared to 6 last year), all for the online MSc programmes. Last year there had been 1 instance of scaling in Biology and Biochemistry, 2 in Chemistry and 2 in Physics. There had been 31 instances (excluding IFY units) of means that were atypical but not scaled (compared to 25 last year).

The Board noted that where mean unit marks are atypical Boards of Examiners for Units (BEU), with input from the External Examiner(s), are required to consider whether or not scaling is necessary, taking into account the mark distribution (spread of marks), previous years' unit means and the cohort's performance in other units. The Board noted that scaling should only be carried out in exceptional circumstances. The Board agreed that mean unit marks may be above 69.99% for valid reasons, e.g. high achieving UG Masters students. The Board noted that scaling may be required to address atypical unit marks in the current year, e.g. due to a new lecturer with higher expectations of the cohort than are reasonable, or an error/ambiguity in an examination question. The DLTQC would then be expected to review unit delivery and assessment, and take action as needed, to ensure that the unit is pitched at the appropriate level for future years, thereby reducing the need for future scaling. Professor Rogers explained that scaling in mathematics is fairly common across the sector because there is little/no flexibility in the marking process as students either get the questions right or wrong; it is not possible to make adjustments at the point of marking, as might be possible when marking an

essay, for example. It was suggested that issues with a new lecturer's marking standards should be picked up before the BEU. However, it was noted that there is insufficient time between the examinations and BEU to go back and remark a cohort's work. Professor Rogers commented that the die is cast when the questions are set, for the most part; the questions need to be able to differentiate between students and produce a mean unit mark that falls within the typical range. This is compounded by not being able to reuse questions. The Board noted that scaling can be applied to pivot around a certain mark so the students at the lower end are affected less than the students at the higher end, e.g. to avoid students who have passed then failing, and vice versa. Professor Rogers explained that the bottom 40% of marks should be accessible to any student who has engaged with the unit, so those marks are treated differently. Scaling normally takes place because a small subset of questions have not been couched at the appropriate level. The Board agreed that while departments may scale differently, scaling normally involves robust discussions and is viewed as a last resort.

The Board noted that there were fewer errors in examination papers (10, compared to 13 in Semester 1 last year, and 16 the year before). Dr Shermer reported that in the Department of Chemistry, an extra layer of scrutiny was added this year to the existing points of checking, in the form of a member of staff not associated with teaching on the unit doing a final check at the end, which had helped to reduce the number of errors. It was acknowledged that the report (Paper 182B) does not differentiate between minor and major errors.

Overall, the Board noted a downward trend in the amount of scaling and errors in examination papers and reiterated its commitment to continue this downward trend. The Chair requested that members disseminate this message to relevant staff within their respective departments.

9.0 Faculty Learning, Teaching and Quality Committee (7407)

The Board noted the minutes of the meetings held on 25 January (Paper 183A) and 15 March (Paper 183B) 2023.

10.0 Faculty Research and Knowledge Exchange Committee (7408)

The Board noted the minutes of the meetings held on 16 January (Paper 184A), 13 February (Paper 184B) and 13 March (Paper 184C) 2023.

11.0 Faculty Executive Committee (7409)

The Board noted the minutes of the meetings held on 10 January (Paper 185A) and 14 March (Paper 185B) 2023.

12.0 Faculty Doctoral Studies Committee (7410)

The Board noted the minutes of the meetings held on 8 December 2022 (Paper 186A) and 9 February 2023 (Paper 186B).

13.0 University Board of Studies (Doctoral) (7411)

The Board noted the minutes of the meetings held on 12 December 2022 (Paper 187A), 18 January (Paper 187B) and 22 February (Paper 187C) 2023.

14.0 Staff Student Liaison Committee meetings (7412)

The Board noted the minutes of the meetings held on:

Department of Life Sciences: Biology and Biochemistry 2 (Paper 188A) and 23 (Paper 188B) November 2022 and 8 February (PGT) (Paper 188C) and 8 March (Paper 188D) 2023.

Department of Chemistry: 15 February (Paper 189A) and 22 March (Paper 189B) 2023.

Department of Computer Science: 8 February (Paper 190A), 8 February (PGT) (Paper 190B), 21 March (DA) (Paper 190C) and 23 March (Paper 190D) 2023.

Department of Mathematical Sciences: 22 February 2023 (Paper 191).

Natural Sciences 8 February 2023 (Paper 192).

Department of Life Sciences: Pharmacy and Pharmacology 24 February (PGT) (Paper 193A) and 1 March (Paper 193B) 2023.

Department of Physics: 15 February 2023 (Paper 194).

15.0 Any Other Business (7413)

There was none.