External examiner's report
Mathematics and Statistics Part C, 2009/10
University of Oxford

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My involvement in the examination process was to look at, and comment on, the exam papers and mini-project descriptions beforehand, and to visit the department after the examinations, on 23-24 June, look at exam, dissertation and mini-project scripts, and participate in examiners meetings. This was my second year as an external examiner for the undergraduate programme at Oxford.

The students were set some challenging material and achieved satisfactory academic standards in their examinations, dissertations and mini-projects. The dissertations and mini-projects varied in style from 'take-home exam' to something more open-ended, but were all appropriate for Statistics at this level.

For written exams, examiners were given the opportunity to make written comments on the performance in their exam, including suggested borderlines, which I thought was useful when they took this opportunity. Exams and projects were fairly marked. The scaling procedures were applied in an efficient manner, and the preliminary scaling which occurred before my arrival, certainly helped make this procedure more manageable.

I believe the University issues guidelines regarding proportions of students to be given Firsts, upper Seconds and so on. The preliminary scaling seems to be partly designed to achieve this, apparently via a 'fairness' scatter chart

whereby the students' scores (after scaling) are made comparable with those of the same group of students in their previous year. Since the students have to have done well in the previous year to progress to this year, this more or less guarantees the desired range of scores in Part C, from the point of view of these guidelines.

Nevertheless, the philosophical merits of using the previous year's performance as a benchmark are debatable. Although I would not want to be too prescriptive, it might be worth an appropriate departmental committee discussing this against alternatives, for example where the performance of students in a given course is compared with the performance of the same students in other courses the same year.

As well as the aforementioned guidelines, but the University also desires 'standards equal to or higher than those of comparable universities'. I think acceptable standards have been maintained; the occasional upward scaling of weaker students is a common enough phenomenon the mathematical sciences in UK universities.

It is the assessor (rather than an external examiner on a flying visit) who is best placed to guarantee standards while maintaining fairness. At present the assessor generally seems to be somewhat removed from the scaling process. It would be nice to make them less removed, if feasible; written comments/scaling proposals from the assessor are one welcome step in this direction. One way to try and reduce the need for scaling is to encourage setters to include a greater proportion of easy material (e.g. bookwork) in their exams.

On a practical matter: for looking at mini-projects and dissertations I had the use of a large table to work on. By contrast, for looking at exams I had to make do with a narrow ledge in a lecture theatre. In the latter environment it was hard to spread out the scripts, exam papers and model solutions, and look at them all together. If there is some way to provide a proper table to work at for this part of the visit, it would make the external examiner's task much easier.

Apart from this, my visit ran smoothly. I thank the representatives of the Statistics department (principally Neil Laws and Jan Boylan) for their help with this and for efficiently sending me the appropriate information and documentation beforehand.

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