Notes on Meeting of New Lecturers held on 1/3/2000

Present:

John Goff, Rodi Herzberg, Tim Greenshaw, apologies were received from Dave Milstead.

Activities Since Last Meeting

Tim sat in on one of Dave's Problem Classes. The session was well organised and the students appreciated the amount of help available. The problems were felt to be hard by the students Tim talked to.

Postgraduate Certificate in Teaching and Learning in Higher Education

The University offers a course leading to the above qualification. Copies of the Programme Handbook were distributed. It appears from this that various teaching sessions are offered in the course, though there are no details as to the nature and timetabling of these, and that the Certificate is awarded upon presentation of a portfolio describing teaching activities in which the techniques presented in the course are applied to the satisfaction of the assessors. The document is unclear as to who actually does the assessing. Tim will meet the organisers on Thursday to try and clarify some of the points raised above. Following this meeting, we will hold a further discussion in which we consider whether taking the course is worthwhile.

Computing Provision

Since our last meeting John has found out that the Physics Departments at both Cambridge and Oxford teach their B.Sc. students to programme. Cambridge teach their third year to use Fortran90/95, whereas Oxford give their first years a lecture on the use of computer packages and two lectures entitled "Computing for utter beginners". In year 2 Oxford students receive a course entitled "Numerical Methods for Computers".

Tim found the comments of the Physics Advisory Panel on Taught Courses about computing provision at Liverpool. The notes of the meeting are reproduced below:

- Industry hired professional programmers when required.

- Versatility was useful. In particular it was important to:
    - i) be able to handle and manipulate data between packages
    - ii) recognise the limitations of programming and packages
    - iii) be able to ask the right questions about a computer programme or computer system

- There was a mixed response to the value of the knowledge of the Monte Carlo technique, though it was acknowledged that awareness of the kind of problem that could be addressed with it was useful.

- There was little consensus about which language, if any, should be taught. On the whole, Quick Basic was regarded as a poor choice for professional use.

- There was general agreement that the concentration on packages was the correct bias.

The panel consisted of: D. Barnes, ICI Research and Technology, J.A. Cain, Calderstones Community Comprehensive School; J.S. Griffith, Health & Safety Executive; M. Joyce, BNFL;

H.G. Price, Rutherford Appleton Laboratory; T. Russell, Hiden Analytical; J.E. Shaw, Douglas Cyclotron Laboratory.

Subsequent discussion of our computing provision again tended towards the view that it is acquiring the skill of producing algorithms which allow problems to be solved on a computer that we should be teaching to B.Sc. students, and that if this can be done within the framework of a package like Mathcad, this would be a valuable additional skill for out B.Sc. graduates.

Next Meeting

Wednesday is impossible next week, so how about Thursday 9/3/2000 at 12:30?

Tim Greenshaw