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Staff room

The Open Learning Foundation Mathematics Working Group

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The Open Learning Foundation − its membership, aims and function

The Open Learning Foundation (OLF) was founded in 1990 as 'The Open Polytechnic' − a name that indicated its primary membership at that time. Even today, with all UK polytechnics redesignated as universities, its membership of 25 British universities is still mainly the former polytechnics, although membership now includes 'old' universities and FE colleges (those with a preponderance of HE work). Currently there are 29 members who together have a total enrolment of over 400,000 students.

From the outset, the OLF's primary commitment was to encourage and help member institutions to develop a more flexible approach to their teaching and learning strategies, in particular with respect to open learning. This is encapsulated in the OLF stated aim that the OLF exists to:

> *"help its members meet the demands for new patterns of teaching and learning. It aims to increase the accessibility of universities and higher education to individuals, companies and public sector organisations by supporting the growth of the highest quality education."*

From the membership fee paid by member institutions, the OLF funds projects to satisfy the above aim. Many projects are proposed and completed by academic staff within member universities and have included the development of student−centred self−learning packages (both paper−based materials and computer−based courseware), handbooks and case studies − all reflecting 'best practice' in their respective areas.

Information regarding these projects can be found in OPUS, the newsletter of the OLF − multiple copies of which are regularly circulated to member institutions − or directly from the OLF.

The main impetus for OLF projects necessarily comes from its members. Working group meetings are regularly held at OLF headquarters in London although, on occasions, they are held 'on−site' at member, or even other, universities or colleges where work is being undertaken which would be of interest to group

members. Through the auspices of the OLF, groups organise the agenda for their group meetings (usually chaired by an OLF representative), organise conferences, generate reports and produce teaching and learning material. Any member university has automatic membership to any of the working groups and can send delegates to meetings of their choice. There are 'Issues Groups', such as those in Assessment, Learning Technologies and Learner Support and Study Skills, and there are 'Subject Groups', including those in Business Studies, Social Work, Health and Nursing − and there is the 'Mathematics for non−Specialist Mathematicians' Working Group.

The Mathematics for non−Specialist Mathematicians Working Group

This group was set up specifically for those lecturers involved in teaching mathematics on courses such as Business Studies and Engineering − courses in which mathematics plays an important, though not a major, role. Although precluding discussion of problems on mainstream mathematics courses, group meetings often indicate that many of the problems/solutions mentioned with respect to non−specialist mathematics courses are common to mathematics degree courses too.

During the six years that the group has been active it has held its meetings at institutions in which members have been shown items of mathematical interest or innovation in teaching and learning. These have included,

- Bradford and Ilkley Community College, where the mathematics 'Drop−In' centre was viewed by members present,
- Leeds Metropolitan University, where members tried the self−learning mathematics material in the computer centre, and
- University of North London, where the paper−based self−learning material was viewed in the 'Maths Corner' of the Learning Resources Centre.

Also during this time, the Mathematics Working Group has, amongst other things, organised two conferences, produced a number of handbooks and case studies and undertaken a number of surveys.

An internal report for OLF members published in 1994 [1], presented the findings of a survey undertaken for the OLF amongst its members relating to the provision of mathematical support at foundation level to non−specialist mathematicians. In 1996 another survey [2] was undertaken amongst member universities into the use of Mathematics Diagnostic Testing. This publication, again an OLF internal report with free distribution amongst member institutions, formed the basis of a second publication [3] which appeared in the OLF's 'Handbook' series − material which is commercially available from the OLF. A combination of this latter publication together with another OLF publication [4] prompted the respective authors to co−organise a conference emotively entitled, "Mathematics − Picking up the Pieces" [5]. This conference, not restricted to OLF members, was held at OLF headquarters and attracted over 60 delegates. Interestingly, a large proportion of these were from Business Studies departments. The Mathematics Working Group had an earlier success with another of its conferences in the early 1990s, "Mathematics Made Easy", held at the University of North London. This conference, also attracting a large number of delegates, reflected the fears of those in HE relating to the mathematical standard of incoming undergraduates.

What does membership of the OLF Mathematics Group bring?

Mathematics is not as popular a subject today (in terms of student numbers) as it was even just five or ten years ago. Fewer students are taking A−level Maths, even fewer taking Further Maths. As a consequence, mathematics departments in some universities have been reduced in size and some disbanded altogether. In such universities it is possible to find mathematicians working in 'mathematical isolation' in non−mathematics departments. How, in such cases, does one maintain a 'finger−on−the−pulse' of current trends in mathematics

teaching?

There are a number of web sites now emerging such as 'PASS Maths', 'CTI Maths', 'CTI Stats' and 'Mathskills' that are making excellent efforts to disseminate current thinking in the teaching and learning of mathematics. There is no doubt that an offshoot of this 'virtual interaction' may produce 'personal interaction' by web contributors and readers forming working groups in which members meet and discuss the latest thinking.

However, The Mathematics for non−Specialist Mathematicians Working Group of the OLF already exists. There is no doubt that face−to−face interaction is vibrant and exciting. Group meetings are a forum for debate and, frequently, casual discussion over tea and biscuits during a break in the proceedings can often be as productive as the main items on the meetings' agenda. 'The way forward' is often taken from discussion amongst members during meetings, with the required subsequent action often being passed back to members for implementation.

It is important to ensure that there is a constant dialogue between Mathematicians at all levels of Education. The Open Learning Foundation's Mathematics Working Group, together with its publications and conferences, is just one further contributor to the overall discussion.

References

[1]A. C. Grove, Mathematics for non−Specialist Mathematicians: A Survey on Behalf of the Open Learning Foundation, Open Learning Foundation, 1994
[2]P. Edwards, A Survey of Mathematics Diagnostic Testing on non−Specialist Mathematics Courses, Open Learning Foundation, 1996
[3]P. Edwards, Implementing Diagnostic Testing for non−Specialist Mathematics Courses, Open Learning Foundation, 1996
[4]M. J. Grannell, E. J. Halton and D. A. Parker, Self−managed Study in Mathematics using Text and Video, Open Learning Foundation, 1996
[5]P. Edwards and M.J. Grannell, Mathematics: Picking up the Pieces − A Conference Report [available in PDF format], *MathsVol 8 no 2, May 1997*
Examples of other OLF publications (not mentioned in the above text):
[6] R. J. S. Stokes, Computer Assisted Learning of Engineering at the University of Humberside, Open Learning Foundation, 1994
[7] B. Lisewski, A Pilot Project at the Liverpool Business School, Open Learning Foundation, 1994

For further information on the Open Learning Foundation, any of its publications, or the various levels of membership, contact:

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Web sites

- OLF Home Page
- CTI Maths
- CTI Stats

- Mathskills

Plus is part of the family of activities in the Millennium Mathematics Project, which also includes the NRICH and MOTIVATE sites.