
Recent activities and future plans

Enclosed with this newsletter is our usual annual evaluation form, including one or two questions on format and presentation. We would really appreciate your feedback on this matter - reducing the size of the newsletter would result in substantial savings in both printing and postage costs, but we do not wish to do this at the expense of readability.

The following publications can be ordered at any time; there is no charge for the leaflets or for individual copies of the booklets. Full details at <http://ltsn.mathstore.ac.uk/publications>

Facts and Formulae leaflet: bulk copies available free of charge for distribution to students

Algebra Refresher, and Calculus Refresher: Bulk copies can be purchased for distribution to students. The current cost is £125 for 100 copies, payable in advance.

Learning and Teaching in Mathematics, Statistics and Operational Research

Occasional series ISSN 1476-1378. Individual copies available free of charge:

- 1/01 Post-sixteen mathematics within Curriculum 2000 (only a few copies left)
- 2/01 Guidelines for Introducing Groupwork in Undergraduate Mathematics
- 3/01 Good Practice in the Provision of Mathematics Support Centres

Teaching Ideas: one of the outcomes promised by the 2001/2 Staff development project was a part of the Mathstore web site devoted to issues which are important for staff development. The beginnings of this can be found by going to <http://ltsn.mathstore.gla.ac.uk> and selecting the Teaching Ideas option from the menu. This area of the site will be organised as a branching tree with editorial notes to guide you through it.

We would like to thank those authors who have kindly written contributions specially for this section of the website. Over the coming weeks existing items in other sections of Mathstore will be added into this area. However, we would still like further contributions. Ideas of what we are looking for were given in earlier issues of *MSOR Connections* (Nov 2001 p8; Feb 2002 p20; May 2002 p4) and are on the web site. Contributions can be sent to the LTSN office marked for the attention of Hugh Williams.

Learning and Teaching Projects - as mentioned last time, two proposals to the LTSN development programme were accepted. The first, led by our Applicable Mathematics Consultant Tony Croft, will lay the foundations for a UK Mathematics Learning Support Centre which will deliver mathematics support materials, free of charge, to academics for use in supporting students, and directly to students themselves. The second, led by Chris Sangwin, will investigate the idea of Mathematicians as Educational Co-Researchers. Three unsuccessful bids are being followed up in different

ways. A bid to embed mathematics assessment into managed learning environments like BlackBoard and WebCT is being submitted to various charitable foundations. New money is being made available for joint work between the LTSN subject centres and the JISC Resource Discovery Network to make their resource databases interoperable. Finally LTSN Physical Sciences have committed to join the MathsTEAM project by contributing case studies and distributing the final publications to their community.

Also mentioned last time: three projects relating to our disciplines have been successful in obtaining substantial funding through the Fund for the Development of Teaching and Learning (FDTL):

- **National Mathematics Support at the Transition to University.** This project will be led by Mike Savage at the University of Leeds, and they are looking for the best maths tutors to feature on their website - see details on the opposite page
- **Open Learning Support for the Mathematical Education of non-specialists.** This project, led by David Green at Loughborough University, has decided to use the name HELM - Helping Engineers Learn Mathematics
- **STARS: Creating of Statistical Resources from Real Datasets,** led by Colin James at De Montfort University. This project has set up an initial web page at stars.ac.uk

A fourth FDTL project will address the teaching of mathematics to physics undergraduates:

- **Promoting Physics Learning and Teaching Opportunities,** led by Mike Tinker at the University of Reading, will be known as PPLATO

We are also funding two new statistics projects. Trevor Spedding of the University of Greenwich will develop a Teaching Simulator for Industrial Statistics. The second project, based at Glasgow, will integrate the different types of computing and statistics software currently available (Java, R, XlispStat etc), harness these tools for teaching and provide facilities for graphical teaching aids from a very widely used system.

Staff development events: there is a report of last May's Teaching Statistics in Finance course elsewhere in this newsletter. A 24 hour induction course for new lecturers was held at the beginning of September. This attracted 21 delegates and the resources produced have now been placed on the Mathstore website. Feedback on the event was very positive, and a particularly high rating

was given to the quality of personal contact. It was excellent to hear discussions in the bar about teaching experiences, and we have set up an email discussion list for this contact to continue. To quote one delegate: "I came to fulfil University red tape but enjoyed it to such an extent that I would certainly recommend it". There were some adverse comments related to the timing of the event, which precluded some people from attending. Accordingly we plan to run next year's course later in September.

On 25 November there will be a repeat of the well-received **Maths Support workshop**, this time in Swansea in conjunction with LTSN Engineering. And on 26 November we are collaborating on a **Librarians Day**, to inform science and engineering librarians about resources related to learning and teaching which they can then in turn bring to the attention of academics within their institutions.

We have appointed Vic Barnett to design and deliver a programme of workshop and short courses in individual

Books for Review: Let us know if you are interested in reviewing any of the following books, which have kindly been supplied by McGraw Hill:

Elementary Statistics - A step by Step Approach 4th ed by Allan G Bluman

Linear Algebra with Applications 4th ed by W Keith Nicholson

Calculus 2ed by Robert T Smith and Roland B Minton

universities, or at local level, to provide support for classroom practice and technique; reinforcing basic technical knowledge and skills; and bringing research into teaching. Vic will be carrying out market research as part of his brief, so you may well be hearing from him over the next few months.

Presentations at conferences: Ewan Crawford was one of the main speakers at the International Conference on Teaching Statistics in Cape Town in July, and took as his topic "Web resources for teaching and learning statistics". Joe Kyle spoke at a colloquium in Copenhagen in September - as a result arrangements are being made for a Danish speaker to take part in learning and teaching minisymposia at BMC and BAMC next April. Joe also attended a meeting organised by the American Association for Higher Education in Washington. Chris Sangwin participated in the Second Annual Institute for Mathematical Pedagogy in Oxford, and gave a paper at the International Congress of Mathematicians Satellite Conference on Mathematics Education. Reports of both these events appear in this issue.

Search for the Best Maths Tutors on Screen

The Educational Broadcasting Services Trust with LTSN Engineering, the LTSN Maths, Stats & OR Network and a consortium of universities led by the University of Leeds are looking for Britain's most engaging and confidence-building maths tutors to film for a new DVD-Rom and website for students making the transition to university.

Support with maths is now a priority, particularly for students entering courses in engineering, the physical sciences and mathematical sciences. The new DVD-Rom and website will include video action, diagnostics, interactive exercises and support text, but a central feature will be the video tutorial. Topic by topic, a tutor will lead the viewer, the student, through each step of the arithmetic, the algebra, the basic calculus that needs to be understood as a firm foundation for wider studies. This element in the producers' recently published M4E Maths for Engineers DVD-Rom proved to be very popular with students and now there is an opportunity for two, possibly three new tutors to join M4E tutor Tom Roper in putting across their enthusiasm for the subject and sharing their understanding.

Tom Roper is Deputy Head of the School of Education at the University of Leeds. His enjoyment of maths connects with the viewer, his explanations holding their interest and building their confidence on the way. Another tutor may have a very different style, perhaps an infectious enthusiasm, or a quiet reassurance.

EBS would like to hear from anyone who would like to share their interest in maths with a wider audience, or who knows someone else who would, or should, or could. A conversation, a meeting with the production team, a screen test, could all lead to a rather different way of providing maths support, and some new insights into the processes of teaching and learning.

Further Information

- For further information please contact Janice Gardner, email janice@ebst.co.uk or phone 020 7613 5082
- The Educational Broadcasting Services Trust is an independent charitable trust company set up by the BBC in 1987. See www.ebst.co.uk
- "Mathematics Support at the Transition to University" is a project funded by HEFCE under the FDTL4 programme. See www.ncteam.ac.uk