
Staff Development and Teaching and Learning Resources Project

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The LTSN Maths, Stats & OR Network has been successful in a bid to the funding councils to fund a year long project, with a summary description of “Improving the staff development opportunities for HE teachers in Mathematics, Statistics and Operational Research (MSOR) through the provision of new discipline-based resources and support that will increase their effectiveness as teachers thus enhancing the learning experiences of students”. The full bid document may be found at <http://ltsn.mathstore.ac.uk/bids/staffdev.PDF>

The aims of the project include fostering networks of MSOR academics; creating a forum for the exchange of information, ideas, philosophies and experiences; disseminating innovation and good practice; supporting and enhancing academic practice in MSOR. There seems to be universal opinion amongst MSOR communities that discipline-specific support in MSOR is of prime importance. Thus the core aim of the project is to gather and build readily accessible resources to enhance and support the teaching work of all MSOR academics – resources that come from, and will belong to, the community experience of MSOR academics.

Much that is of interest to MSOR HE teachers is common across MSOR, but there are some aspects specific to each of the three areas. For example, in mathematics, there are the challenges of increasingly diverse backgrounds in techniques and skills, and the balance of technology and techniques; while in statistics, feedback points to staff needs for substantial, appropriate and user-friendly data resources for teaching.

The project team is inviting all MSOR academics to contribute examples from their experience. Examples can range from teaching tips of any type to extracts from course materials, and can range in nature from assistance for new staff, to course structure and/or class strategies, to teaching strategies, to assessment strategies, to technological hints. The intention is for staff to extract from their materials/experiences, any examples that they feel will enhance the collective teaching experience/wisdom of the MSOR community, with comments as appropriate on the why, what and effects of examples. Many examples should be able to be produced by writing a short introduction to extracts from existing materials.

Below is a possible “index” for the resources to be developed to assist in choosing examples.

Examples or descriptions of effective teaching materials or comments about innovations and successes can be sent to project consultants. Please do not hesitate to contact the LTSN for further information or with queries.

Project directors:

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Possible “index” for the resources:

1. Staff development in MSOR
 - (a) MSOR-specific materials for new staff
 - (b) MSOR-specific materials for continuing staff development
2. Course and class (eg tutoring, learning support) strategies
 - (a) For service/non-specialist teaching
 - i) In maths
 - ii) In stats
 - iii) In OR
 - (b) For mainstream/specialist teaching
 - i) In maths
 - ii) In stats
 - iii) In OR
3. Examples of teaching strategies
same sub-headings as in 2.
4. Extracts from T&L materials that illustrate good T&L strategies
same sub-headings as in 2.
5. Examples of assessment strategies in assignments and exams
same sub-headings as in 2.
6. Examples of strategies to integrate the development of generic skills
 - (a) In communication
 - (b) In IT
 - (c) In teamwork
 - (d) In problem-solving
7. Technological and other tips for MSOR HE teachers
8. For statistics, data examples
 - (a) For service/non-specialist teaching
 - (b) For mainstream/specialist teaching
9. For statistics, examples of project strategies
(a) and (b) as in 8
10. For mathematics, examples of student support strategies
(a) and (b) as in 8
11. For mathematics, statistics and OR, examples/ comments on balances of technology and/or materials/facilities for students, for example, in
 - (a) delivery mechanisms: lectures, tutorials, notes;
 - (b) technology expectations by staff of students and by students of staff.

Struggling to find an identity

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What is it about Operational Research? Nobody outside the subject seems to have heard of it. And try to describe what you do to anyone at a dinner party and you quickly realise you took the wrong degree course. Yes, fellow Operational Researchers, we're in a real mess. But why, and what shall we do about it?

The problem is not new by any means. No less than the Operational Research Society itself has even held competitions amongst its membership to arrive at an agreed definition - each time without success. And in the Universities, the situation is far from helped by the current 'System'. Specialisation seems increasingly to be the watchword, and for all the rhetoric about the importance of cross-disciplinary and inter-disciplinary research (whatever the difference might be) *you* try to fit research that is truly broad into the neat subject-specific categories of a research assessment exercise. Everyone knows a trouble-shooter when they see one, but not so a problem-solver.

So do we fight on or accept the inevitable? Well perhaps it's the pills but, after a dozen or so years of fighting the good fight, maybe it's time to give up. You can't fight City Hall - and so what if the discipline isn't one coherent, recognisable whole? Yes, at my next dinner party I'll say I teach trouble-shooting. Far sexier!