
Staff development project - update

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Staff development is a word with negative vibrations for many. What the Maths, Stats & OR Network staff development project is about is trying to improve the teaching of mathematics, statistics and operational research in HE nationally by sharing our collective experiences.

In *MSOR Connections* November 2001 (page 8) I introduced the project, and in the February 2002 (page 20) issue Helen MacGillivray wrote about developments and provided a possible index of resources.

Between us we have so far visited over 20 universities and one idea that has come across as being useful is that part of the Network website (Mathstore) should be devoted to a large number of small articles on staff development. Getting colleagues to see this would be a useful resource is easy; getting them to write something is much harder.

Request for contributions

What about you? Don't be modest: if you have been teaching a while you must have at least one good insight that is worth sharing; and if you only started lecturing last September you have had to face many teaching issues for the first time and your solutions will still fresh in your minds. **Why don't you contribute an item for the site?**

We are also looking for **suggestions to add to a booklist and useful pointers** (see (i) below). Please send these to me.

Have you got a colleague who you have learnt from? Why not persuade him that others in other institutions would benefit from him writing it up.

Below is to give some indication of the sort of articles that we are would like for the staff development area of the Mathstore web site. We are focusing on things that are specific to one or more of the MSOR disciplines, not those that are generic to many disciplines. Below are the most common suggestions that have come out in visits to universities and hopefully can be produced quite quickly, knowing how busy everyone is. In Helen's earlier article is a more extensive index of what we would like the site to become and even this is not closed if people come up with other useful ideas.

If you are planning to write an item it would be worth emailing me so that I know what is coming and can check it is not too close to something received (although overlap is unlikely at the moment).

We can handle your article in most reasonable formats. We are happy to convert (for example) Word or LaTeX documents to web format if wanted. We can also convert files into pdf format or zip up a collection of files, ready for downloading.

Web site timescale

A very primitive, almost empty, pre-release version of the web site will go live about the time this issue of *Connections* is published. This will have a few examples, written by Helen and myself. As more articles are contributed they will be added. If you would like access to the pre-release site email me and I will let you have the URL when it is available.



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If enough material arrives in time the site will go public to correspond with the publication of *MSOR Connections* in August 2002.

Priority article ideas

- a) **Assessment:** When we move away from the conventional unseen timed exam or test mathematical assessment tends to run in to difficulties of trying to avoid plagiarism without making the marking load too enormous for the lecturer because of the number of individual answers that need calculating. If you have strategies on this why not let a wider audience know.
- b) **Teaching Case Study (an idea):** We are not looking for how you teach a whole module but taking a single idea. Maybe one that is difficult to teach but you have found a successful way or a way of introducing a topic that motivates students well. The article might be about 2 to 3 pages long, outlining the teaching point you were trying to solve and its solution. You might want as attachments copies of your own teaching notes, notes given to students, copies of OHP slides or possibly the assessment it leads to.
- c) **Teaching Case study (a module):** Here we are looking for the description of either unusual module or ones on mainstream topics that are taught in an unusual way. How they are treated is very much up to the author but it should make it clear why the author thinks the module/ treatment is important. Include enough detail for the reader to see what is going on. In some cases an outline syllabus will be useful or examples of material for students but this is not essential.
- d) **Diagnostic testing:** In my visits I have come across universities who do this, either electronically or by paper; who follow up in various ways; do it on service courses but not main maths/stats or vice versa etc. Others do not do it but are interested in exploring the options so can we have some articles from those who currently do. If you have already written this up and the article is on the web can you give me a pointer to it?
- e) **Modelling:** Have you any starters for modelling that work well for you and you would be prepared to share with the community?
- f) **Approaches to planning module delivery:** How do you go from being given a module syllabus to preparing the materials you need for actually delivering it. Anything you would like to share.
- g) **Historical snippets:** Do you put in historical asides in your lectures? Why not share them with a wider audience. A brief note of the context you use them in and the actual historical snippet.
- h) **Learning a computer package:** Many lecturers in their first job, moving institution or because their institution has bought a new package (e.g. Derive, Matlab, S-plus) have to learn the packages basics quickly. Working through an existing set of notes for students is often a good starting point. I am looking for people to volunteer such sets of notes. If you want to publish them later say no as it will be too easy for them to be ripped off.
- i) **Hints & tips:** mainly of a "How to ..." nature. e.g. "How do I convert a Word document which uses Equation Editor into a PDF file." Does your department have any existing handouts of this nature that it would contribute to the wider community? Are there topics which you and your colleagues would like to see covered in it?
- j) **Booklist & useful pointers:** I have had several suggestions of good books and useful pointers that we shall be putting on the web site. Have you any additional suggestions.
- k) **Motivating school pupils to do "A" level maths:** Not really staff development but if no one does maths in the sixth form we don't have any students to teach. Does your university run an event that encourages this? Could the same idea be used elsewhere? Then let's hear about it. As most of these initiatives are aimed at local schools whose students go elsewhere this works to every ones benefit.