

MSOR connections

Guidelines for Authors

MSOR Connections is the quarterly newsletter of the **Maths, Stats & OR Network**. It is available internationally via the Network website and is distributed free of charge to those within UK Higher Education involved in the teaching, learning and assessment of Mathematics, Statistics and Operational Research. It is published in February, May, August and November of each year and aims to promote, encourage, enhance and disseminate research, good practice and innovation in all aspects of the student learning experience within Mathematics, Statistics and Operational Research wherever these may be taught in Higher Education.

All documents submitted for publication within **MSOR Connections** should be of a high quality and will be reviewed by the Editors and members of the Network prior to publication. Please ensure that you have proof-read and corrected your documents prior to submission. The Editors reserve the right to correct documents for spelling, grammar, layout, consistency and style.

Submissions are welcomed in three categories:

Articles

Articles are welcomed on any topic relevant to the teaching of Mathematics Statistics and Operational Research within Higher Education. They may take the form of pedagogic research papers, case studies, critical reviews and evaluations; analysis of successful teaching practices and tested new strategies for teaching; discuss the impact of national policy matters, the changing nature of teaching, learning and assessment and the professional development of all staff within higher education. If you have any questions about whether a topic you are writing on is suitable for submission, please do not hesitate to contact us.

The readership of **MSOR Connections** is primarily lecturers within Mathematics, Statistics and Operational Research but also consists of educational and staff developers and support staff. Articles should therefore be written in a clear and easy to read style. Before submitting your article, you are advised to review previous articles that have been published within **MSOR Connections**. You should include references, where appropriate, and these must be presented using the Harvard system of citation.

Articles should be no more than 3000 words in length and should ideally include illustrations of some kind.

Courseware Reviews

Reviews of software products should be no more than 3000 words, and should include screenshots and other appropriate illustrations. The content of any review will depend upon the nature of the software, but as a guideline you should try to include:

- A heading, containing the full title of the software reviewed, version number, author and supplier;
- A brief description of the courseware which may include its intended use, area of application, summary of features and background;

- Summary of pedagogical content, its application to teaching, technical performance, ease of use, quality of documentation, functionality, record-keeping and overall performance;
- A summary of the strong and weak points of the software;
- A conclusion summarising your findings.

We routinely send copies of reviews to courseware distributors and on occasion we will publish their responses. While this should not inhibit reviewers, please ensure that strongly critical comments are justifiable.

Have You Seen This...?

'Have You Seen This...?' is a regular feature within **MSOR Connections** that is designed to promote a resource, activity, or initiative that will be of interest to a wide audience. The text should be no more than 200 words in length, and if possible should include illustrations.

Submission Process

Submissions will be accepted at any time, however, in order to be considered for publication in the next available issue, articles and reviews must be submitted in electronic form by the dates stated below. For 2007/2008 the submission dates are as follows:

- November Issue: 19th September 2007
- February Issue: 3rd December 2007
- May issue: 20th March 2008
- August issue: 20th June 2008

Articles and reviews should be submitted in electronic form ideally in either a Microsoft Word (.doc) or a .rtf compatible format. Illustrations should be saved and submitted separately (see below); the intended location of the illustration within the final text should be indicated within square brackets. Submissions may either be made via email (editors@mathstore.ac.uk – but please be aware of possible restrictions with regard to the size of email attachments), or by sending a cd-rom to the Maths, Stats & OR Network at the University of Birmingham.

Upon receipt of the article, it will be typeset in the standard **MSOR Connections** style. Please note that the Editors reserve the right correct documents for spelling, grammar, layout, consistency and style. The article will then be returned to you by email where you will have two working days for final comment, but please note that at this stage significant changes to the document will not be possible.

Style Guidelines

The style and format to be used for submissions is as described below. Please do not try to recreate the layout used within **MSOR Connections** as this can hinder the typesetting process.

- Text should be in clear, concise, grammatical English, using English and not US spelling;
- All data that needs to be presented in a fixed form must be within a table, and tables should be kept as simple as possible;
- Authors must not use spaces or tabs to achieve the desired layout;
- Paragraphs should be separated by a double carriage return only (no indent);
- All illustrations, photographs, figures, and diagrams should be referenced clearly within the text (along with a legend) and submitted as separate files;
- Do not use footnotes, only endnotes;
- All captions and references should be listed at the end of the document;
- Where acronyms are used, a full explanation should appear the first time they appear in the text;
- Clearly indicate the level of main and sub-headings;
- All references must be presented using the system detailed on pages 4-5.

Artwork and Equations

In order to ensure a printed publication of consistently high quality, original artwork must be clean, sharp and legible. If an image is blurry, has broken letters or is hard to read, your work may not appear at the quality you desire in print. We reserve the right to ask you to resubmit artwork if necessary.

All artwork and equations should be submitted electronically and the following should be taken into consideration:

Guidelines by Image Type

Author Photographs/Photographs to illustrate the article:

Preferred File Formats: TIFF (.tif) or EPS (.eps)

We will accept high resolution JPEGS (.jpg) but please ensure that they are saved at Maximum Image Quality. Do not use heavy compression, as image quality will be severely degraded and cannot be restored by later processing.

Resolution and Sizing: All images should be between 300 and 600 dpi (it is recommended that your photograph be saved at 600 dpi if it includes small lettering and other fine detail). To ensure high-quality printed images, it is extremely important that the correct resolution is used when submitting digital artwork. Please note that increasing the size of an image will reduce its resolution.

Author Pictures must be at least 40mm x 50mm and figures for inclusion in articles must be a minimum of 90mm wide (at least 190mm wide if they are complex and need to be printed at a large size in order that fine detail may be seen). Please do not reduce your figures below an acceptable size to achieve higher resolution and please don't use interpolation to increase the resolution of an image, as it can seriously reduce image quality.

Digital images that do not meet the required dpi specifications will not be used if they cannot be improved sufficiently for print.

Avoid scanning photographs from published materials because, apart from possible copyright complications, these images have been screened with a halftone pattern that will create an unpleasant moiré effect.

Author pictures should ideally be taken in portrait format, either with the author sitting or standing in front of a plain background or in a setting which has some relevance to the article. It can help if you face the camera and then slightly turn one of your shoulders towards the camera as in the picture on the left.



Illustrations, Diagrams, Figures & Logos

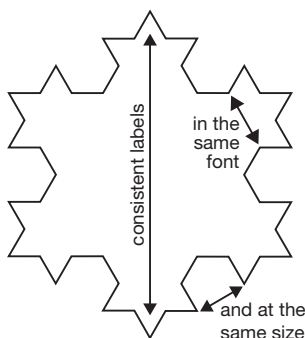
Preferred File Formats: TIFF (.tif), EPS (.eps), PDF (.pdf) or Postscript (.ps) files

We will accept high resolution JPEGS (.jpg) if you have no other way to save a diagram but please ensure that they are saved at maximum image quality. Do not use heavy compression, as the image quality will be severely degraded and cannot be restored by later processing.

Resolution and Sizing: All diagrams should be between 300 and 1200 dpi if they are not vector-based and therefore resolution-independent. Figures and illustrations for inclusion in articles must be a minimum of 90mm wide (at least 190mm wide if they are complex and need to be printed at a large size in order that fine detail may be seen).

Preferred Fonts/Line Weights for diagrams: Helvetica, Arial, Times Roman, Times New Roman. Please use the same font throughout all figures within an article.

Avoid lots of very similar tints and shadings, as these will not be easy to differentiate in grayscale when printed. If the figure is to be reduced, lettering must remain readable and lines sufficiently heavy to print clearly after reduction. We recommend that type is at least between 8 and 10 points, and lines between 0.5 and 1 point at the final, reduced size.



If possible, line artwork should be saved in a format which preserves text and lines as separate, editable components as this gives a sharper result in print.

$$f \frac{az + b}{cz + d} = (cz + d)^k f(z)$$

Equations

Preferred File Formats: With equations it is preferable that they are written within your word document using either the standard Equation Editor or MathType. It would be helpful if you specify which font and point size you have used to type the equations.

If you have a large number of equations and have created them in TeX, you can save the equations as a PDF (.pdf) or Postscript file (.ps) and then we will be able to successfully add them to the publication.

In all cases with equations, please also supply the equation as an image (.jpg, .tif, .eps or .pdf) for cross-referencing purposes in order that we may ensure accurate reproduction.

Screengrabs

Preferred File Formats: TIFF (.tif), High resolution JPEG (.jpg)

We will accept high resolution JPEGS (.jpg) but please ensure that they are saved at Maximum Image Quality. Do not use heavy compression, as image quality will be severely degraded and cannot be restored by later processing. Please do not save your screengrabs in a PNG (.png) format as images which include text become very difficult to resize in print.

Resolution and Sizing: Use your Windows (PrntScr or Alt-PrntScr to the Clipboard), Mac, or Amiga operating system screen capture, or a third party utility to get screen shots. Ensure that the window you want to capture is as large as possible on the screen before you take the shot, as it must be remembered that screen resolution is 72 dpi while print resolution is 300 dpi. To ensure the screengrabs print at as high a quality as possible, they need to be taken as large as possible.

Leave screengrabs at their original resolution and in their original colour and we will process these as required during production.

General Artwork Guidelines

Labels: Please label all your images and equations according to the following system; First Initial of Lead Author, Underscore, Surname of Lead Author, Underscore, Figure Number. For example, the sixth illustration/photograph to appear in an article by John Smith should be named: *J_Smith_Figure06*

Captions: Every image and diagram should have a caption. The only time that this does not apply is for the author photograph and for equations, which sit within the text of the article.

Colour: Most images in **MSOR Connections** are printed in grayscale, however, it is not necessary for you to convert your photographs or diagrams to black and white. This will be done during the production stage to ensure consistent high quality.

Copyright: All illustrations, photographs and screengrabs should be original, as copyright issues must be considered.

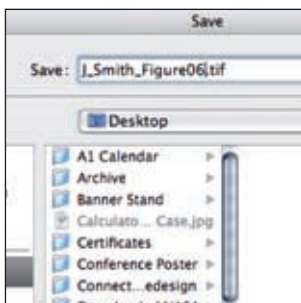
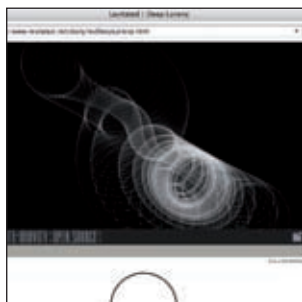
Artwork in Word Files: If you insert artwork into a document (e.g., Microsoft Word), please also send all embedded artwork in a separate folder. It is not always possible to extract print quality images from applications such as Microsoft Word.

References

When referencing, please insert the reference number in the text like this; [1]. When citing references you should include: author(s), date, title, where published, publisher and edition. Book and publication titles should be presented in *italics*. For example:

Books

1. Davison, Robert and Croft, Anthony (2006) *Foundation Maths*. Prentice Hall



A Chapter within a Book

1. Hibberd, Stephen. (2002) "Mathematical modelling skills." In Peter Kahn and Joseph Kyle, eds. *Effective learning and teaching in Mathematics & its applications*. Kogan Page, pp 158-174.

A Journal Article

1. Croft, A. C. and Grove, M.J. (2006) Mathematics Support: Support for the specialist mathematician and the more able student. *MSOR Connections*, Vol. 6 (No. 2):39-43.

An Electronic Source

1. Cox, Bill and Bidgood, Penny (2003) "Widening participation in mathematics, Statistics and Operational Research". Accessed via <http://mathstore.ac.uk/publications/wp.pdf> (15 June 2006)

Please note that contributions to MSOR Connections are accepted on the full understanding that the authors are solely responsible for the accuracy and contents of all published material. The Editors do not accept any liability for the accuracy of articles, or responsibility for mistakes, be they editorial or typographical, nor for any consequences that may arise from them.

If you have any questions about the guidelines or need any further information in relation to writing an article or supplying images for MSOR Connections, please do not hesitate to contact the editors at editors@mathstore.ac.uk