Advancing women’s careers in university mathematical sciences departments
“The Society recognises the need to give active consideration to ensuring that men and women are treated equally in their prospects, recognition and progression.”
- LMS Council
Introduction

It is well-documented that, although nearly 40% of graduates in the mathematical sciences are female, there is a severe drop-off in the proportion of women who become academic mathematicians.

Only about 4% of professors of mathematics in the UK are female. This is a general story across STEM subjects, although the drop-off rate is particularly bad for mathematics.

The 2010 International Review of Mathematical Sciences included as one of its main findings that ‘action about gender diversity is not a sufficiently high priority for the UK mathematical sciences research community’ and recommended that ‘urgent action should be taken to improve the participation of women’. The panel also stated that, compared to other countries, the proportion of women in the UK mathematical research community is strikingly small.

The International Review has considerably raised the profile of the issue of gender diversity within the community and many discussions have taken place over the past year as to the best way of helping university departments to take action in this area.

During this period, other significant developments have taken place regarding Athena SWAN which runs an awards system for UK universities and departments to recognise and celebrate good employment practice for women working in Science, Technology, Engineering and Mathematics (STEM) in higher education and research.
The 2010 International Review of Mathematical Sciences recommended that urgent action should be taken to improve the participation of women.

Firstly, Athena SWAN has now introduced a Bronze award for departments. Secondly, the National Institute for Health Research (NIHR) has announced that, for certain types of funding, they expect to consider only those medical schools which have achieved an Athena SWAN Silver Award. Following this announcement, the research councils are currently discussing whether they should impose similar requirements on other departments applying for funding.

The London Mathematical Society (LMS) has decided to develop a Good Practice Scheme for departments of mathematics to help them to take practical actions to improve the participation of women and to share examples of good practice with other departments. The scheme will also offer support in applying for an Athena SWAN award for those departments seeking an award to recognise their work in this area.

The scheme has been developed in consultation with Athena SWAN and other bodies such as the Institute of Physics, which has a well established Juno scheme to improve the participation of women in university physics departments. It has also been developed in consultation with HoDoMS in order to ensure that it offers help with measures that can realistically be taken by a head of department.

By engaging with the Good Practice Scheme, a department will move towards a working culture in which all staff and students, both male and female, can achieve their full potential. This has to be good for recruitment and retention of talented staff.
What the Scheme Offers

The scheme will offer support to departments under a number of headings. These will be kept under review and additional support may be added if there is sufficient demand and resource available.

1 Benchmarking survey and data collection

The LMS has commissioned a survey of UK mathematics departments in order to obtain a complete picture of current working practices, processes and procedures with respect to gender balance. This exercise includes a detailed analysis of up to date HESA data on the proportions of women working at various key career points.

This survey will identify the current strengths and weaknesses across the UK and enable departments to assess themselves in relation to the national picture. It will also identify examples of good practice that can be shared amongst departments.
2 Workshops

Workshops will be organised at various locations across the UK. This will enable participants from a number of universities to come together to exchange ideas for good practice, to share problems and discuss possible solutions and to talk about the preparation of Athena SWAN applications.

3 Website

A website will be set up to host a number of useful resources such as up to date data, information on applying for Athena SWAN awards and examples of good practice. This will also contain a link to a discussion forum and to other relevant websites as well as giving details of any recent developments or planned activities.

4 Discussion forum

An electronic forum will be set up to enable department representatives to discuss issues related to good practice and to be kept in touch with activities organised by the LMS, Athena SWAN or other organisations that may be of interest.

5 Mentoring network

A mentoring network will be set up between departments who are applying for an Athena SWAN award and departments who have successfully achieved such an award.
Good Practice Scheme for Mathematical Sciences

Good Practice Supporter Status

Departments are encouraged to apply to become Supporters of the Good Practice Scheme. They will then be entitled to use the scheme logo which will signify their commitment to taking action in this area.

Supporters are expected to engage with the activities offered through the scheme and to help other Supporters as appropriate. For example, if a Supporter has achieved an Athena SWAN award, then we expect that department to offer mentoring support to other departments applying for such awards. This will in turn help them to obtain higher Athena SWAN awards which require departments to be sharing their good practice with others. Continued Supporter status depends on engaging with the scheme.

To become a Supporter, a department should be committed to supporting the scheme and the five principles of good practice.

The Five Principles of Good Practice

Principle 1: A robust organisational framework to deliver equality of opportunity and reward.

Principle 2: Appointment, promotion and selection processes and procedures that encourage men and women to apply for academic posts at all levels.

Principle 3: Departmental structures and systems that enable men and women to progress and continue in their careers.

Principle 4: Departmental organisation, structure, management arrangements and culture that are open, inclusive and transparent and encourage the participation of all staff.

Principle 5: Flexible approaches and provisions that encompass the working day, the working year and a working life and enable individuals, at all career and life stages, to maximise their contribution to mathematics, their department and institution.
‘By engaging with the Good Practice Scheme, a department will move towards a working culture in which all staff and students, both male and female, can achieve their full potential.’

**Becoming a Good Practice Supporter**

Any department or school *(if there is no separate mathematics-based department)* offering mathematics-based teaching and/or research can become a Supporter of the Good Practice Scheme. To become a Supporter the department or school needs to make a commitment to the Good Practice Scheme and the good practice principles by letter. The letter (hard copy on university letterhead) should be signed by the head of department or school and a senior member of university staff who has authority to enter into agreements on behalf of the university. See p10 for guidance on the content of the letter.

Letters should be addressed to:

*Women in Mathematics Committee*

*London Mathematical Society*

*De Morgan House*

*57-58 Russell Square*

*London WC1B 4HS*

An email acknowledgement will be sent to the department’s nominated contact, followed by a letter with confirmation of the date on which the department became a Supporter.

Departments who have been accepted as Supporters are encouraged to use the scheme logo on

- websites
- stationery
- brochures and report covers
- advertisements
- drawings
- site signboards
- presentations

For further enquiries please contact:

*womeninmaths@lms.ac.uk*
Suggested content of letter applying to become a Supporter:

On behalf of the (department/school name) of the (university name) I wish to apply to become a Supporter of the Good Practice Scheme.

I confirm that the (department/school name) of the (university name) is committed to working towards addressing the under-representation of women in mathematics in higher education.

I confirm the department’s acceptance of the five principles of good practice:

• A robust organisational framework to deliver equality of opportunity and reward.

• Appointment, promotion and selection processes and procedures that encourage men and women to apply for academic posts at all levels.

• Departmental structures and systems which enable men and women to progress and continue in their careers.

• Departmental organisation, structure, management arrangements and culture that are open, inclusive and transparent and encourage the participation of all staff.

• Flexible approaches and provisions that encompass the working day, the working year and a working life and enable individuals, at all career and life stages, to maximise their contribution to mathematics, their department and institution.

I understand that information about the status of the department as a Supporter will be publicised through the London Mathematical Society website and other promotional material. The department and university agree to adhere to the guidelines for use of the Supporter status and scheme logo.

The department has nominated (first name, last name, email address, telephone, fax, postal address) as its designated contact.

This text can be found at: http://lms.ac.uk/content/suggested-content-letter-applying-become-supporter
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