



Athena SWAN: Bronze and Silver department applications



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Athena SWAN Bronze Department Awards

Recognise that in addition to institution-wide policies, the department is working to promote gender equality and to identify and address challenges particular to the department and discipline.

Athena SWAN Silver Department Awards

In addition to the future planning required for Bronze department recognition, Silver department awards recognise that the department has taken action in response to previously identified challenges and can demonstrate the impact of the actions implemented.

Note: Not all institutions use the term 'department'. There are many equivalent academic groupings with different names, sizes and compositions. The definition of a 'department' can be found in the Athena SWAN awards handbook.

Completing the form

DO NOT ATTEMPT TO COMPLETE THIS APPLICATION FORM WITHOUT READING THE ATHENA SWAN AWARDS HANDBOOK.

This form should be used for applications for Bronze and Silver department awards.

You should complete each section of the application applicable to the award level you are applying for.

Additional areas for Silver applications are highlighted throughout the form.

If you need to insert a landscape page in your application, please copy and paste the template page at the end of the document, as per the instructions on that page. Please do not insert any section breaks as to do so will disrupt the page numbers.

Word Count

The overall word limit for applications are shown in the following table.

There are no specific word limits for the individual sections and you may distribute words over each of the sections as appropriate. At the end of every section, please state how many words you have used in that section.

We have provided the following recommendations as a guide.

Department application	Bronze	Silver
Word limit	10,500	12,000
<i>Recommended word count</i>		
1. Letter of endorsement	500	500
2. Description of the department	500	500
3. Self-assessment process	1,000	1,000
4. Picture of the department	2,000	2,000
5. Supporting and advancing women's careers	6,000	6,500
6. Case studies	n/a	1,000
7. Further information	500	500

Name of institution	The Open University	
Department	School of Mathematics and Statistics	
Focus of department	STEMM	
Date of application		
Award Level	Silver	
Institution Athena SWAN award	Date: 2021	Level: Bronze
Contact for application	Professor Gwyneth Stallard	
Must be based in the department		
Email	gwyneth.stallard@open.ac.uk	
Telephone	(redacted)	
Departmental website	School of Mathematics and Statistics (open.ac.uk)	

Guidance for Athena Swan Assessment Panels on Open University submissions

This is a standard Guidance document that has been agreed by Advance HE to accompany all OU submissions. Please note that it is not included in the word count. This version was agreed in December 2021.

The Open University (OU) provides flexible, open and distance learning that delivers nearly 200 qualifications and 400 modules, and as such the OU's model of teaching, staffing structure and student body are different from that of a conventional university. This guidance gives additional background information to assist the Athena Swan panels in completing their assessment of OU submissions.

The Open University has its headquarters in Milton Keynes with national offices in Belfast, Cardiff and Edinburgh, and student support/administrative centres in Manchester, Nottingham and Dublin. With students spread across the UK, Ireland and 151 countries, the OU does not have a typical campus-based environment.

1. Open University Academic Staff

OU academic staff fall into two categories: academic staff and Associate Lecturers (ALs). The majority of academic staff (Central Academics) are employed at the Milton Keynes campus. Associate Lecturer (AL) staff are mainly home-based, and Regional Academics (also known as Staff Tutors) have been mostly home-based since the closure of English regional offices in 2016. Most academic and research staff members carry out research and scholarship as well as teaching and, together with Research Associates and Fellows, they form the OU's research base. However, since the OU is a distance learning institution, the teaching role of academics is different from other universities. Regional Academics also have specific management and administrative duties and have less allocated time for research and scholarship.

Rather than teaching students directly, Central Academics develop teaching materials (usually working in module teams) and manage the delivery and assessment of the modules they have written. Direct teaching of students is the responsibility of Associate Lecturers.

Associate Lecturers (also called tutors), support student learning through online and face to face tutorials and provide formative and summative feedback on assignments. Regional Academics line manage ALs, and also lead AL recruitment and professional development. The OU employs more than 4,000 ALs to carry out direct teaching of undergraduate and taught postgraduate students. They are located across the UK and Ireland and play a vital role in the delivery of OU course material to our students. Associate Lecturers have been on salaried employment terms since 2002 but these have been on a time limited basis. From October 2021 all ALs have transitioned onto a guaranteed FTE based salary that is now paid equally over a 12-month period. From August 2022 it is planned for ALs to transfer on to new enhanced employment terms and conditions, similar to other OU staff groups. ALs from this point will be employed on the basis of hours/FTE and not on a module-by-module basis. In agreement with Advance HE, AL data is currently not presented in OU submissions, other than the headcount by gender.

ALs are managed at Faculty level rather than by Schools, so there is limited scope for School submissions to comment on AL career development, promotion and progression. These items are, however, part of our current work priorities to implement ALs into the Faculty communities. The new terms and conditions are planned to be implemented fully in August 2022, and the process of change has already begun. The new employment arrangements will change the way AL workload is recorded and managed, thus it will be possible to present more detailed AL data in future submissions, from 2023 onwards.

2. OU Undergraduate and Taught Postgraduate Students

The OU is the largest UK university, with 168,000 students (undergraduate and postgraduate students), based in all parts of the UK, Ireland and beyond. The OU operates an open access policy, meaning there are no traditional university entry qualifications for the majority of its courses. Over 70% of Open University students are in employment and the average age of a new OU undergraduate is 27. In addition, over 27,000 current OU students have declared disabilities, and the OU has the highest percentage of disabled students (16%) in the UK HE sector.

Study mode

Students are taught via the OU's unique model of learning known as 'supported open learning'. Course materials are a blend of printed texts, online readings and interactive and audio-visual resources. Students are allocated an AL who provides academic guidance and feedback individually and in tutor groups. Tutor groups meet online as well as in face-to-face tutorials, which usually take place in the evenings or at weekends. Some modules include residential schools. Full-time funded PhD students are based at the Milton Keynes campus while part-time research students (mostly self-funded) can attend supervisions, and often seminars, either face to face or remotely. During the pandemic, this activity was all undertaken remotely.

Modules and Qualifications

Students register for OU modules, which build towards qualifications. Individual modules may be common to several different qualifications, as well as contributing to the interdisciplinary Open Degree (which is studied by around one-fifth of all students). For these two reasons, panels should note that the Athena Swan applications may consider and reflect on student data at module level, as well as on qualification outcomes in some sections.

GLOSSARY

Abbreviation	Definition
2016-AP-1.1	2016 Action Plan, Action 1.1
AL	Associate Lecturer
AS	Athena Swan
BOC	Badged Open Course
CA	Central Academic
DoR	Director of Research
DoT	Director of Teaching
EPSRC	Engineering and Physical Sciences Research Council
GESG	University Gender Equality Steering Group
HoS	Head of School
IMA	Institute of Mathematics and its Applications
LMS	London Mathematical Society
M&S	School of Mathematics and Statistics
ME	Mathematics Education
PGRT	Postgraduate Research Tutor
PI	Principal Investigator (on a grant)
RSS	Royal Statistical Society
MT	School Management Team
ST	Staff Tutor
SAT	Self-Assessment Team
SST	Student Support Team
UKRI	UK Research and Innovation (containing seven UK Research Councils including EPSRC)

1. Letter of endorsement from the head of department

Recommended word count: Bronze: 500 words | Silver: 500 words

An accompanying letter of endorsement from the head of department should be included. If the head of department is soon to be succeeded, or has recently taken up the post, applicants should include an additional short statement from the incoming head.

Note: Please insert the endorsement letter **immediately after** this cover page.

**School of Mathematics and
Statistics**

The Open University
Walton Hall
Milton Keynes
United Kingdom
MK7 6AA

As Head of School, I strongly endorse this application for an Athena Swan Silver award. I confirm that the information presented in the application (including qualitative and quantitative data) is an honest, accurate and true representation of the institution and School.

My Management Team and I are strongly committed to the values of the Athena Swan Charter. When I became Head in 2018, I was determined to continue and develop the excellent work others had pioneered. I asked the Athena Swan Lead, Gwyneth Stallard, to become my deputy, valuing her clear grasp of the problems to be tackled with respect to equity of workload, working conditions and career progression.

Progress against the AS Action Plan is a standing item at Management Team meetings, and informs work across the School. Our progress since the last submission has been considerable.

Notable achievements include:

- The appointment of our first female Central Academic in the Applied Mathematics group and our first female Professor of Statistics. The professoriate is now 50% female, having been 100% male until 2009.
- Supporting Staff Tutors (>70%F) through the transition to homeworking following the University's decision to close regional offices in 2016. Support included the provision of high-quality remote access and mentors to support career progression and maintain a sense of academic community. Survey feedback is notably positive. Six STs (5 female) have been supported to promotion to Senior Lecturer, with cases featuring scholarship, required under the teaching profile since 2015.
- The growth and repositioning of scholarship alongside research, enabled through a new scholarship budget and seminar series with mentors for projects (many winning STEM prizes) and support groups working towards SFHEA status.
- The Mathematics Education group (which has a particularly high proportion of female staff and students) is now on a secure footing. There are three permanent members of staff (just one in 2016) and we secured a 3-year position to cover time during and after a maternity leave. The group is refreshing its curriculum and providing leadership in developing scholarship into educational research.
- A transparent workload system, with more integrated career development, appraisal and workload planning, and regular meetings between myself and Group Leads.

Looking ahead, the School has a number of priorities:

- As the University explores “New Ways of Working” following the pandemic, our priority is to maintain our sense of community and ensure all staff feel consulted and supported.
- We have a number of pioneering EDI initiatives to support students, including the production of a major open resource on “decolonising the mathematics curriculum”, which will be available to other universities.
- We will continue work to improve fairness of workload allocations, in particular, to address the gender imbalance in time spent on research.
- As Associate Lecturers become permanent members of staff, we will integrate them into the School, and support the Staff Tutors who line manage them.

In summary, we are committed to ensuring that all staff have the opportunity to realise their full potential and we will innovate and develop our working practices to support them in achieving their goals.

A handwritten signature in blue ink, appearing to read 'A. Umerski'.

Andrey Umerski
Head of School of Mathematics and Statistics

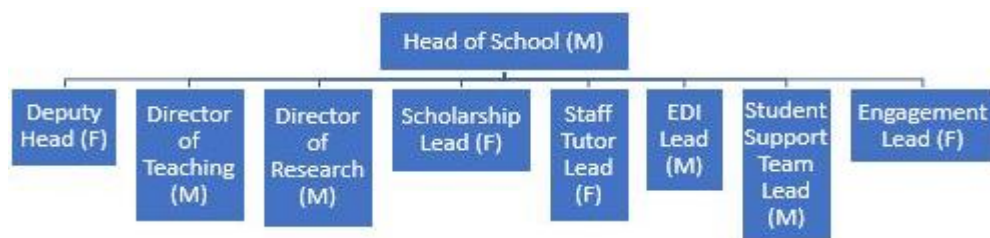
Word count: 504

2. Description of the department

Recommended word count: Bronze: 500 words | Silver: 500 words

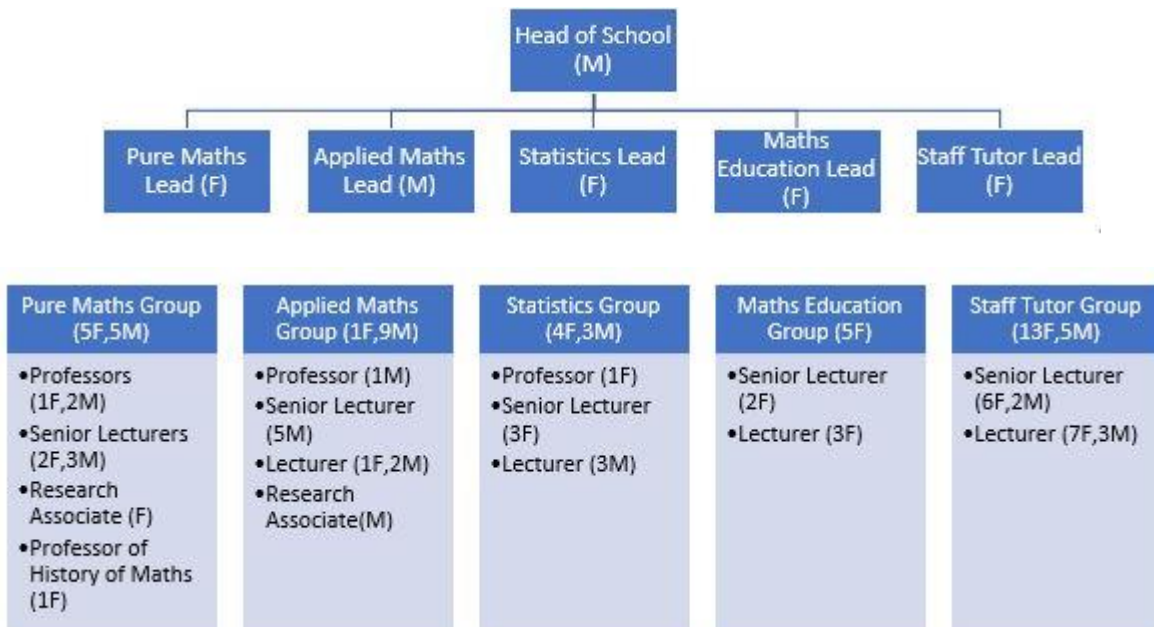
Please provide a brief description of the department including any relevant contextual information. Present data on the total number of academic staff, professional and support staff and students by gender.

Together with five other Schools and one Institute, the School of Mathematics and Statistics (M&S) belongs to the STEM Faculty. EDI work in STEM is led by the Associate Dean for Academic Excellence. Work in M&S is led by the Management Team (MT, 44%F).



Structure of the Management Team (July 2021)

Central Academics belong to four groups, working together with a group of Staff Tutors. Group Leads (80%F) meet regularly with the HoS, with responsibility for workload planning and appraisals.



Structure of groups within M&S (July 2021)

Our Central Academics (CAs-14F,16M) are based at the Milton Keynes campus in a refurbished building, most in individual offices. Research Associates (1F,1M) share offices in pairs, with PhD students sharing larger offices in groups of around four. There is a well-used common

room and seminar room with high quality equipment (updated in 2018) to enable remote participation. Prior to 2020, these staff and students were expected to work on campus at least three days per week. Since March 2020, most staff have worked from home with returns starting in 2021. The impact of covid and trials of future ways of working are discussed in Section 6.



The Alan Turing Building – home to the School of Mathematics and Statistics

Our Staff Tutors (STs-13F,5M) are mostly homeworkers. They have responsibility for appointing and managing 345 (43%F) part-time Associate Lecturers (ALs) who directly support students. ALs will start to have more formal links with M&S once their new contract is finalised.

2021 Action Plan 1.4: Engage with University plans for the implementation of the new AL contract and introduce appropriate actions to support ALs and Staff Tutors.

CAs and STs have different contracts (as described in the Guidance document) and have been treated separately in this submission. At all levels, the proportion of women is significantly higher than the national average (23%F) in mathematical sciences.

	Female	Male	%Female
Professor	3	3	50%
Senior Lecturer (CA)	7	8	47%
Lecturer (CA)	4	5	44%
Senior Lecturer (ST)	6	2	75%
Lecturer (ST)	7	3	70%
Research Associate	1	1	50%

Table 1: Academic and research staff composition (July 2021)

Three (female) administrators support the School working alongside fourteen curriculum staff (12F,2M) who deal with the administrative aspects of our teaching and a new technical support post (F). We regard these staff as members of M&S – with an awareness that there are limitations on possible actions since their line management sits outside M&S.

Grade	Female	Male	%Female
8	3	0	100%
7	7	1	87.5%
6	2	0	100%
5	4	1	80%
Total	16	2	89%

Table 2: Professional and support staff composition (July 2021)

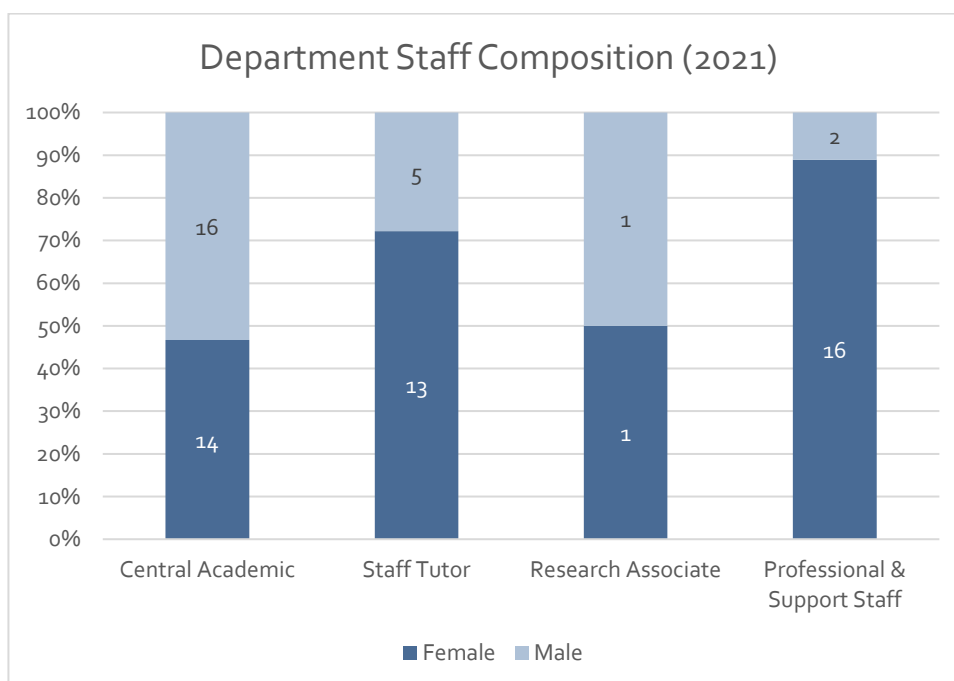


Figure 1: Department Staff Composition (July 2021)

We offer over 20 undergraduate modules at different levels which contribute to a variety of degrees. Level 1 modules annually register several thousand students, many of whom progress to modules in other disciplines. There are around 250 students on each level 3 module.

We also offer a range of taught postgraduate modules linked to our MSc in Mathematics, with around 60 students studying each module annually.

We have PhD students on campus (predominantly full-time), funded by competitive studentships, and self-funded part-time PhD students, mostly living at a distance.

	Female	Male	%Female
Undergraduate	2138	3412	39%
Taught postgraduate	114	334	25%
Full-time PhD students	3	9	25%
Part-time PhD students	6	3	67%

Table 3: Student composition (PhD students at July 2021, taught students at May 2021)

M&S first received an Athena Swan Bronze award in November 2013, renewed in November 2016. As a result of our actions, the gender balance in all groups has improved or been maintained.

Group	%F 2013	%F 2016	%F 2021	Areas in which actions were taken
Management Team	25%	44%	44%	Career development
Professors	9%	22%	50%	Career development, promotion, recruitment
Central Academic Lecturers	25%	29%	44%	Recruitment

Table 4: Key improvements in gender balance of staff groups arising from Athena Swan work

The School is regarded as a beacon of good practice.

Action Lead	Action	Impacted
SAT Chair	Good practice to support promotions	OU promotion practices
SAT Chair	Good practice guide for recruitment of postdocs	University AS recruitment action
SAT ST Rep	Induction support for homeworkers	STEM induction resources
DoR	Undergraduate internships for part-time students	LMS Undergraduate Bursary Scheme

Table 5: Examples of actions with impact outside M&S

Work of SAT members has been recognised nationally.

Awardee	Award	Area of work recognised
Professor June Barrow-Green	2021 Royal Society Wilkins-Bernal-Medawar Medal	History of women in maths, decolonising the curriculum
Professor Gwyneth Stallard (SAT Chair)	OBE (2015) Suffrage Science Award (2016)	Support for the careers of women in maths

Table 6: National awards given to recognise work of SAT members around gender equality

Word count for Section 2: 455, plus 30 for Covid

3. The self-assessment process

Recommended word count: Bronze: 1000 words | Silver: 1000 words

Describe the self-assessment process. This should include:

- (i) a description of the self-assessment team;

M&S formed an Athena Swan Committee in April 2013. The committee has increasingly considered diversity more widely than gender and, in January 2021, formally became the EDI Committee. This committee becomes the SAT for the year preceding a submission. The outgoing AS Lead is now Deputy EDI Lead and continued as SAT chair when this submission was postponed due to Covid, ensuring a smooth handover.

The HoS is a key member of the committee, with meetings arranged around their availability. The former HoS is also a member to ensure continuity. Other positions are filled by asking for volunteers within different categories of staff, postdocs and PhD students, taking care to keep a good gender balance (academic members currently 54%F), range of backgrounds, and appropriate expertise to lead sections of our Action Plan. Membership is agreed with line managers and accounted for in workload planning. There is a natural turnover as staff take on different roles. Five members were on the previous SAT and eleven have joined since 2017.

Name	Title	Description
Gwyneth Stallard	Professor of Pure Mathematics (Central Academic)	Chair of SAT and Deputy Head of School. Led women in mathematics work nationally (2006-2015). Worked part-time (1999-2012).
Andrew Potter	Lecturer (Staff Tutor)	School EDI Lead and Deputy Associate Dean Academic Excellence, with focus on EDI. Leads on undergraduate section of Action Plan.

Andrey Umerski	Senior Lecturer in Applied Mathematics (Central Academic)	Head of School since 2018. Supports SAT Chair on leadership of staffing, workload and promotion sections of Action Plan.
Uwe Grimm	Professor of Mathematics (Central Academic)	Head of Department/School 2014-2018. Former member of University SAT and Associate Dean Research. Leads the Applied Mathematics Group.
June Barrow-Green	Professor of the History of Mathematics (Central Academic)	Research and outreach including history of women in maths formed REF Impact Case Study. Leads culture section of Action Plan.
TC O'Neil	Senior Lecturer in Analysis (Central Academic)	Member of University Senate. Former Head of Department (2010-2014). Paternity leave in 2009. Leads flexible working section of Action Plan.
Ian Short	Senior Lecturer (Central Academic)	School Director of Research since 2019. Joint responsibility for childcare over 9 years. Leads research-related parts of Action Plan.
Hayley Ryder	Senior Lecturer (Staff Tutor)	Member of University Senate. Deputy Director of Maths MSc and deputy accessibility lead. Leads taught postgraduate section of Action Plan.
Charlotte Webb	Lecturer in Maths Education (Central Academic)	School External Engagement Lead. Took maternity leave in 2019/20 followed by part-time working.
Kaustubh Adhikari	Lecturer in Statistics (Central Academic)	Represents the Statistics section. Early career researcher. Leads the Genetics section of OU Race and Ethnicity Hub.
Vasiliki Evdoridou	Research Associate in Pure Mathematics	Postdoc rep on SAT and on University Gender Equality Steering Group. Co-organiser of AS tea and cake events.
Brigitte Stenhouse	PhD student in the History of Mathematics	PhD rep on SAT. Thesis on 19 th century mathematician Mary Somerville. Co-organiser of AS tea and cake events.
Libby Meade	Senior Manager, Qualifications	Senior member of curriculum support staff. Leads support staff section of Action Plan. Worked part-time for nine years.
Tracy Johns	PA to Head of School and School Office Manager	Provides administrative support to the School including arranging and taking minutes of SAT meetings. Has compressed hours through agile working.
Karen Baylis	Senior School Manager	Provides support with data aspects of the submission. Took maternity leave in 2018/19 followed by compressed hours through agile working.

Table 7: Self-Assessment Team (September 2021)



SAT meeting held on Microsoft Teams, September 2021

(ii) an account of the self-assessment process;

Since 2014, our AS Committee has had four full meetings per year, with each section of the Action Plan reviewed in detail at least annually. Each section is led by one or two members of staff with responsibility for the implementation of actions, proposing additional actions, and leading the annual discussion. In 2016 we formally extended our remit to include the P&S staff based in M&S, with a section led by a senior curriculum manager.

Discussions take place throughout the year between Section Leaders, the AS/EDI Lead and the HoS as actions are progressed. Section Leaders include the HoS, Deputy HoS, DoR, Scholarship Lead and EDI Lead, all of whom sit on Management Team (MT); the work is now well-embedded and owned by the School.

To prepare this submission, two-monthly meetings of the full team were organised and each of the Section Leaders worked with the SAT Chair to draft the relevant sections. Data was provided by the OU EDI Data Analyst and M&S administrators.

The EDI Lead provides a report for discussion at each MT meeting (at least six times per year) and gives a report and presentation at each School meeting (four times per year). This ensures that there are regular opportunities for staff to ask questions and provide input.

The SAT Chair was a member of the 2020 University SAT. This has helped to ensure that the School's Action Plan is properly linked to the University's. The Chair and Deputy regularly meet with other SAT Chairs and exchange ideas.

M&S encouraged staff to participate in the 2019 OU AS survey; the participation rate was one of the highest in the University, For most questions our results were more positive (often considerably so) than the University results, with less difference between men and women. We also paid for a separate analysis of the results broken down by CA and ST; the results were particularly positive amongst STs. Note that some staff did not identify as F/M and that researchers are included in the F/M data but not in the CA/ST data – these explain some apparent discrepancies between the M/F and CA/ST datasets presented later.

Informed by these results, we carried out surveys in 2021 asking for more detailed feedback on School initiatives and suggestions for new actions. Because of the focus on STs in our Action Plan, we also carried out a short ST survey in 2019. We have very few postdocs; they were surveyed alongside PhD students as they are supported by the DoR/PGRT as well as their line manager and mentor.

Survey	Response Rate from within M&S
2019 OU Athena Swan Survey	65%
2019 M&S ST Survey	74%
2021 M&S Academic Survey	76%
2021 M&S Support Staff Survey	94%
2021 M&S Postdoc/ PhD Survey	48%

Table 8: Response Rate for Athena Swan surveys

Taught students are regularly given explicit opportunities to feedback on gender-related issues, including a question on support for EDI in the annual student consultative forum, and in specific events, such as Student Voice Week. EDI work regularly features in the M&S student newsletter. We also meet with our Student Support Team advisers (**2016-AP-1.4**) to discuss gender-related issues emerging from their work. One-to-one interviews were held with several MSc students (**2016-AP-2.5**).

M&S is a supporter of the London Mathematical Society’s Good Practice Scheme and SAT members have participated in LMS workshops, sharing good practice with other UK maths departments. This facilitated the organisation of an external reviewer for this submission. It was also reviewed by two members of the University’s Gender Equality Steering Group (GESG), and was reviewed and approved by the M&S MT.

- (iii) plans for the future of the self-assessment team.

The EDI Committee will oversee the implementation of the Action Plan at quarterly meetings, as part of its wider remit. Section Leaders will have overall responsibility for implementing the relevant actions, reporting to the Committee at least annually. All work will be overseen by the EDI Lead who will continue to report to MT and School meetings, providing updates and input and consulting staff as appropriate. The HoS, Deputy HoS and DoR will continue to be key members of the team and Section Leaders. Most roles within M&S now have an initial three-year time period, with deputies for all leadership positions (**2016-AP-5.5**) creating a greater rotation of roles and helping with succession planning.

2021 Action Plan 1.1: Embed new ways of working within the wider remit of the EDI Committee to ensure the Action Plan is implemented.

2021 Action Plan 1.2: Document good practice established in earlier action plans and ensure properly embedded and updated.

2021 Action Plan 1.3: Ensure regular feedback is obtained.

Co-operation between EDI Leads across the OU has become increasingly co-ordinated with an active OU AS Champions Network. SAT members will continue to play leading roles in improving gender equality beyond M&S.

SAT Member	Role
EDI Lead	Chair of STEM EDIA Working Group
EDI Lead / SAT Chair	Members of OU GESG
SAT Chair	Buddy to School new to AS
SAT Chair	Diversity Champion, EPSRC Mathematical Sciences Strategic Advisory Team

Table 9: Some roles of SAT members beyond M&S

Word count for Section 3: 854, plus 17 for Covid

4. A picture of the department

Recommended word count: Bronze: 2000 words | Silver: 2000 words

A. Student data

If courses in the categories below do not exist, please enter n/a.

- (i) Numbers of men and women on access or foundation courses;

There is one access module involving mathematics.

	2016/2017			2017/2018			2018/2019			2019/2020		
	F	M	%F	F	M	%F	F	M	%F	F	M	%F
Access module	338	634	35%	346	688	33%	396	655	38%	394	638	38%

Table 10: Students studying the Science, Technology and Mathematics Access Module

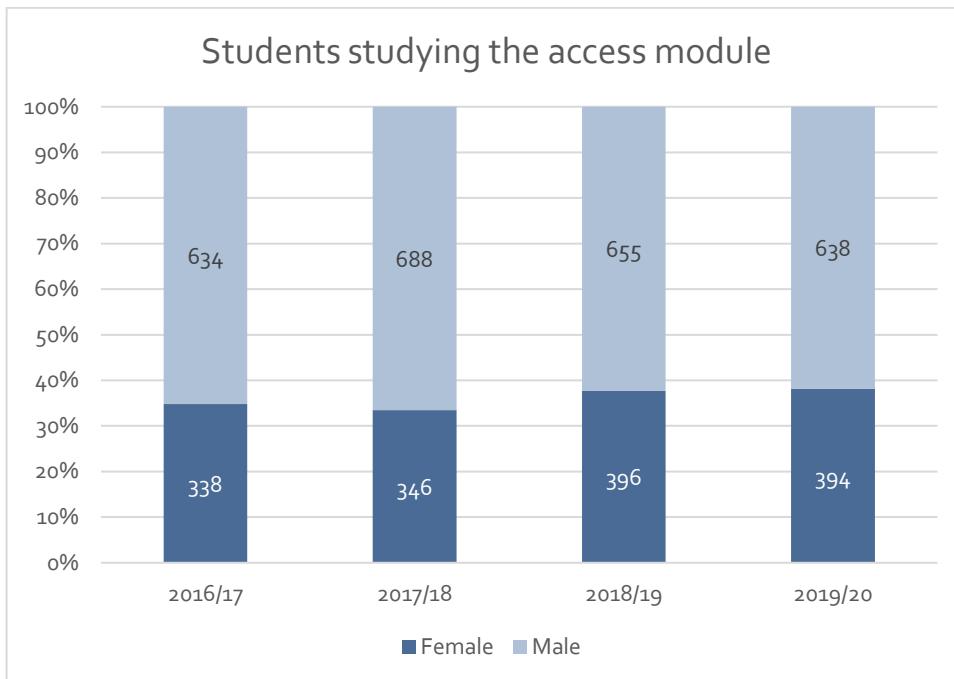


Figure 2: Students studying the Science Technology and Mathematics Access Module

A STEM Access Pick Up campaign is underway to encourage completing students to register for Level 1 modules.

Word count: 25

(ii) Numbers of undergraduate students by gender.

Full- and part-time by programme. Provide data on course applications, offers, and acceptance rates, and degree attainment by gender.

For undergraduate students, the OU operates an open access policy (see Guidance document). Thus the notion of applications, offers and acceptance rate does not apply.

Actions related to student data are discussed annually at the M&S Board of Studies (**2016-AP-1.1**) with responsibility for three undergraduate qualifications and joint responsibility for *Maths and Physics*, launched in 2013/14 and *Data Science*, launched in 2019/20.

Data on qualification registrations is fluid; students can and do change qualifications easily. For example, a student registering on *Mathematics* in 2016/17 and moving to *Data Science* in 2019/20, now shows against *Data Science* in 2016/17.

	2016/2017			2017/2018			2018/2019			2019/2020		
	F	M	%F	F	M	%F	F	M	%F	F	M	%F
Mathematics	278	424	40%	320	455	41%	282	394	42%	256	413	38%
Mathematics and Statistics	102	142	42%	112	191	37%	100	206	33%	104	150	41%
Mathematics & its Learning	132	57	70%	124	42	75%	87	51	63%	91	39	70%
Mathematics and Physics	80	283	22%	75	263	22%	72	226	24%	85	210	29%
Data Science	5	6	45%	15	32	32%	28	40	41%	158	293	36%
Combined Total	597	912	40%	646	983	40%	569	917	38%	694	1105	39%

Table 11: New student registrations, with studies currently linked to the specified undergraduate qualification.

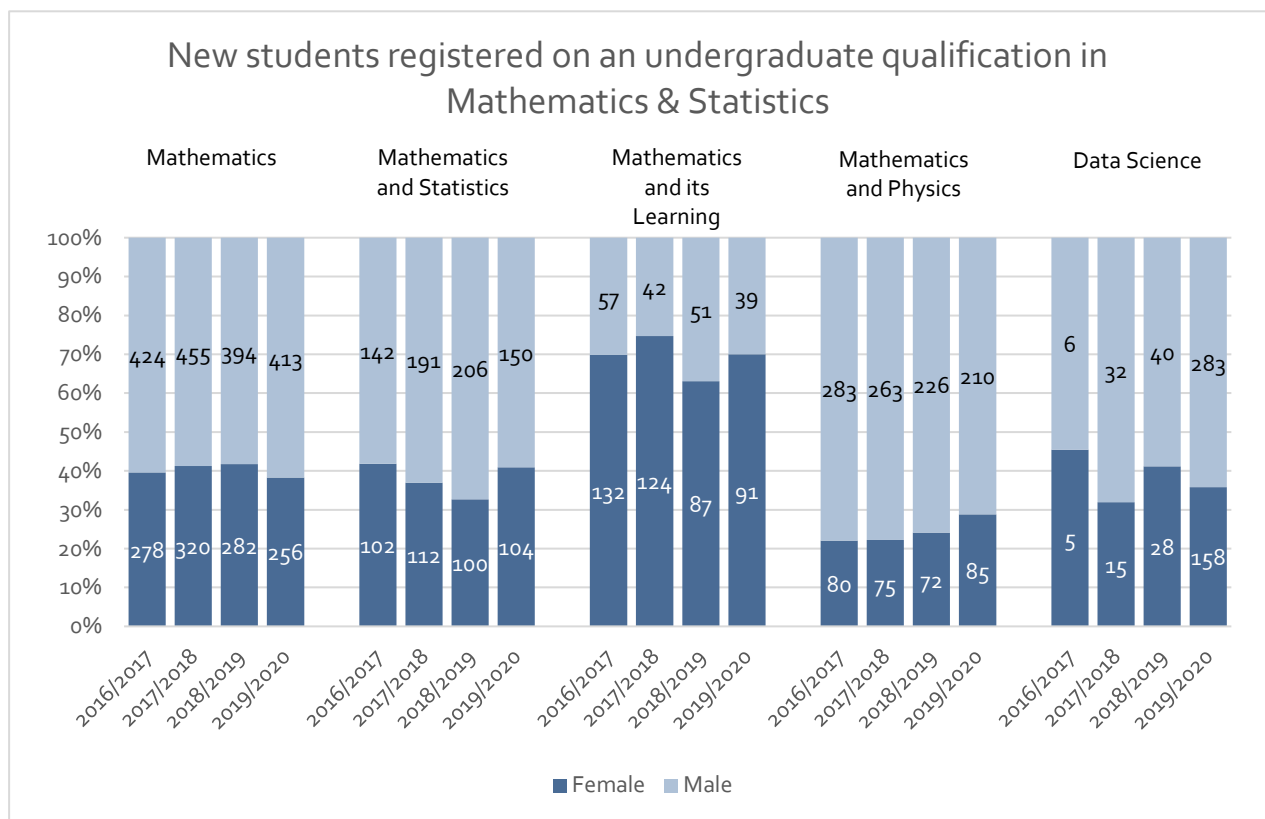


Figure 3: New student registrations on undergraduate qualifications

Although individual qualification data fluctuates, the total proportion of women consistently meets or exceeds the HESA benchmarking data for mathematical sciences of around 38%.

Mathematics and its Learning, studied by students with an interest in teaching, attracts a high proportion of female students, many of whom are parents, home-schoolers, teachers and teaching assistants looking to upskill. New staff are refreshing the curriculum (**2016-AP-1.5,1.6**) and have produced a BOC, with the aim of increasing student numbers which are lower than on our other qualifications.

2021 Action Plan 2.1: Promote the new Mathematics Education modules through a range of internal and external activities.

2021 Action Plan 2.2: Monitor the contribution of the free BOC (Badged Open Course) “Teaching Mathematics” towards driving prospective students towards the new Mathematics Education modules.

2021 Action Plan 10.1: Review and update externally facing School website annually for diversity, including “Student Stories” across all qualifications.

The SAT has well-established links with the Physical Sciences SAT (**2016-AP-1.8**); proportions of women on *Maths and Physics* are steadily increasing, and are now above the physics benchmark (25%F).

Data Science has attracted large numbers of additional students; the proportion of women is much closer to the mathematical sciences benchmark (38%F) than the computing benchmark (18%F).

2021 Action Plan 2.3: Track the proportion of women registering for the new Data Science qualification. Liaise with the Computing & Communications SAT to devise new actions as appropriate.

We now examine the data by stage of study.

	2016/2017			2017/2018			2018/2019			2019/2020		
	F	M	%F	F	M	%F	F	M	%F	F	M	%F
Stage 1 (4 modules)	2883	6306	31%	3079	6040	34%	3046	5831	34%	3093	5869	35%
Stage 2 (5 modules)	689	1281	35%	710	1250	36%	719	1299	36%	770	1421	35%
Stage 3 (13 modules)	1314	1780	42%	947	1338	41%	881	1373	39%	894	1378	39%

Table 12: Undergraduate students studying modules in mathematics or statistics, by stage of study, across all OU qualifications

A large proportion of students studying Stage 1 (and, to a lesser extent Stage 2) M&S modules are doing so as part of other STEM qualifications with much lower proportions of women. The proportion of female students at Stage 1 increased in 2017/18 when engineering students

started to study engineering mathematics modules instead of M&S modules. The decrease in the proportion of female students at Stage 3 is likely due to higher proportions of women trying to complete their studies before the end of lower “transition fees” in 2018/19 (introduced for continuing OU students when UK fees changed in 2012); surveys of our MSc students showed that women were more concerned than men about higher fees.

We now consider student *attainment*. First, we consider results across all M&S modules. It is likely that the higher proportion of female students completing before the fee change led to the 2017/18 increase in lower grade results. The results from 2019/20 when students sat remote exams due to the pandemic are hard to compare with earlier years. Arrangements for remote exams included consideration of those with caring responsibilities.

	2016/2017		2017/2018		2018/2019		2019/2020	
	F	M	F	M	F	M	F	M
Good Passes	841	1281	685	1094	665	1107	881	1442
Other Results	638	942	519	733	435	751	423	747
Good Pass Rate	56.9%	57.6%	56.9%	59.9%	60.5%	59.6%	67.6%	65.9%
Awarding Gap	0.7%		3.0%		-0.9%		-1.7%	

Table 13: Students obtaining a Grade 1 or Grade 2 pass on an undergraduate M&S module

The following graphs show the performance of students graduating with one of our qualifications, with no apparent gender difference. Because our students typically take over six years to complete their degree, there is no data for *Data Science*; data for *Mathematics & Physics* is still emerging.

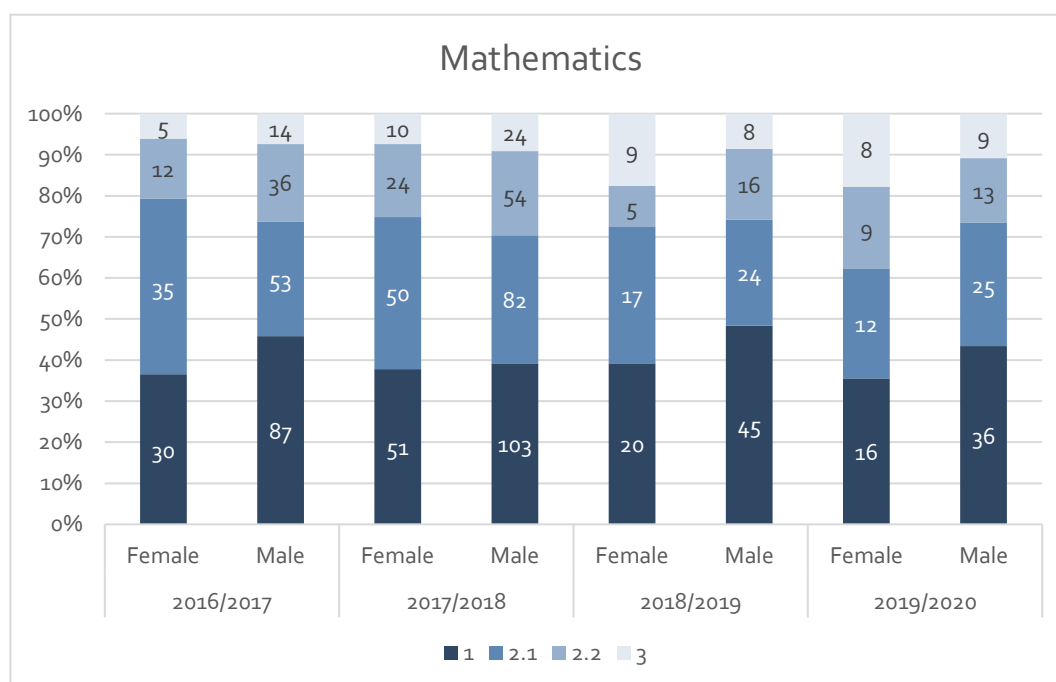


Figure 4: Performance of students graduating with a Mathematics degree

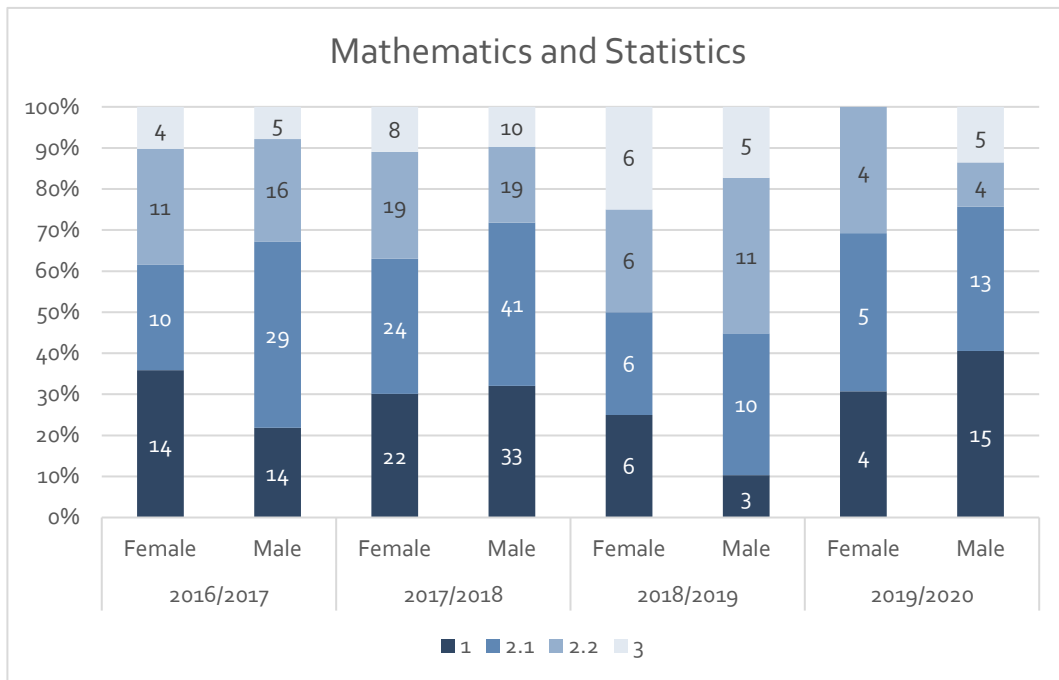


Figure 5: Performance of students graduating with a Mathematics and Statistics degree

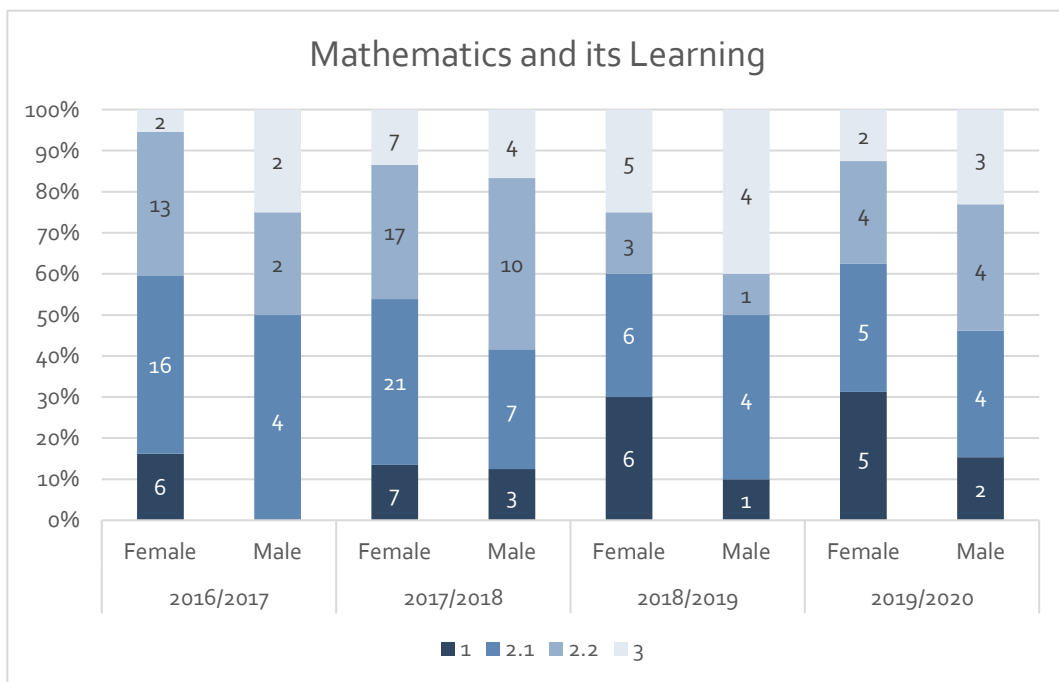


Figure 6: Performance of students graduating with a Mathematics and its Learning degree

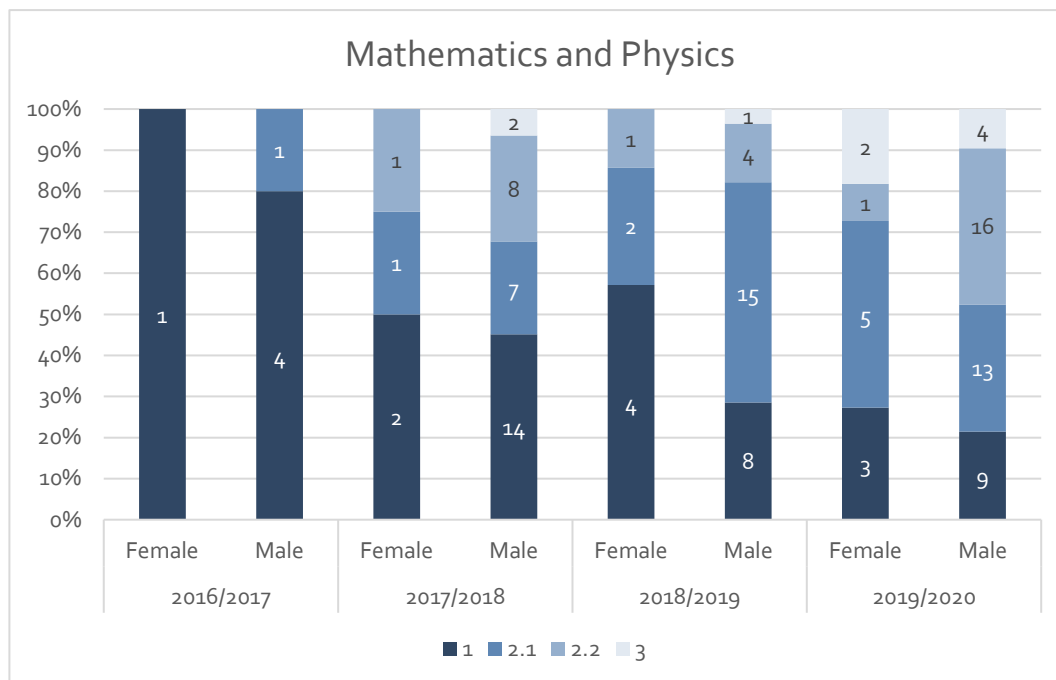


Figure 7: Performance of students graduating with a Mathematics and Physics degree

A detailed analysis undertaken by an M&S statistician in 2017 (**2016-AP-1.2,1.3**) showed no significant differences by gender. She proposed a Keeping in Touch programme to support students (often female) taking a break from their studies. This was approved and funded, with support subsequently provided through the Study Site described below.

More recent feedback from the SST (**2016-AP-1.4**) suggests that female students are more likely to defer/withdraw at an earlier stage than male students. This may suggest that female students are more receptive to study advice. One of our Stage 3 module teams is pioneering actions on mathematical resilience to prevent unnecessary withdrawals.

2021 Action Plan 2.4: Formalise link between SAT and SST with annual meetings to discuss emerging gender-related issues for undergraduate students.

2021 Action Plan 3.3: Investigate and develop appropriate interventions around growth mindset and mathematical resilience, on MSc and undergraduate modules.

Feedback from students has led to new initiatives regarding gender-related issues.

2021 Action Plan 2.5: Build on 2021 events and organise annual focus groups in Student Voice week to engage with female and non-binary students; use the results to form new actions as appropriate.

The M&S Study Site, launched in 2017, provides interactive resources enabling students to make informed decisions about module choices, revise and refresh content and make a head-start on modules. There are over 3000 unique student visits and 20,000 total visits from M&S students every month. The site includes several interactive forums to which CAs, STs, ALs, students and support staff contribute and offer support. In 2021, a new EDI page was added, linking students to external resources and networks offering support for women and other under-represented groups.

2021 Action Plan 2.6: Continually review the content of the EDI web-page on the student Study Site, using feedback from staff and students. Highlight the existence of the EDI page at EDI events and module welcome tutorials.

M&S is highly unusual in having expertise in the History of Mathematics, with a particular focus on the role of women in mathematics. New funding will enable us to use this expertise to develop a major new resource, available to other universities.

2021 Action Plan 2.7: Develop a new Open Educational Resource “Global Mathematics – Ancient and Modern” which highlights the historical contributions of mathematicians from under-represented groups, including female mathematicians and statisticians.

Word count: 687, plus 31 for Covid

(iii) Numbers of men and women on postgraduate taught degrees.

Full- and part-time. Provide data on course application, offers and acceptance rates and degree completion rates by gender.

We have one taught postgraduate programme – our MSc in Mathematics.

2016/17			2017/18			2018/19			2019/20			HESA benchmarking data for part-time taught postgraduate students in maths 2019/20
F	M	%F	F	M	%F	F	M	%F	F	M	%F	
35	100	26%	36	98	27%	17	65	21%	26	64	29%	29%

Table 14: Students enrolling on the MSc in Mathematics

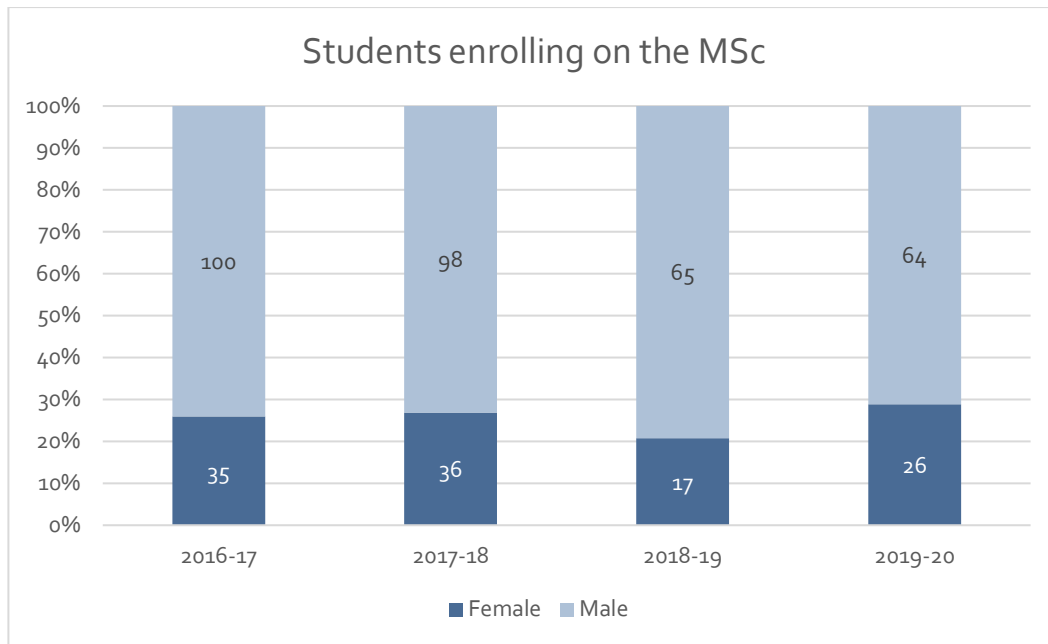


Figure 8: Students enrolling on the MSc in Mathematics

Increasing the proportion of female MSc students has been a focus of successive action plans, with proportions steadily increasing from 22% in 2013/14.

In 2015 we ran detailed surveys which revealed:

- men were more likely to study our MSc for interest
- women were more likely to be motivated by a desire to improve their career
- women were more concerned about spending money on postgraduate study.

In response, we publicised a range of case studies and the availability of new postgraduate student loans available from 2016/17 (**2016-AP-2.1**), contacting all students performing well at UG level (**2016-AP-2.2**). The proportion of women subsequently increased.

In 2018 the OU cut several MSc programmes. Our MSc survived but the proportion of women dropped – given our earlier findings, women were possibly more affected by the uncertainty. This situation subsequently stabilised, although the impact of the pandemic remains unclear – a situation that we will monitor closely, introducing further actions as appropriate.

There are entry requirements for students registering for their first MSc module. All students meeting these are automatically enrolled; borderline applicants are sent a test. Recent data suggests that women are less likely to return their paper.

2021 Action Plan 3.1: Review MSc admissions process, including the entry test and the wording on the letter accompanying it.

2021 Action Plan 3.2: Ensure that anonymised data on students sent and returning the MSc entry test are retained within the School.

We have tracked the progression and performance of women through the MSc, studying data (2016-AP-2.4) and interviewing students (2016-AP-2.6). This showed that women were performing well but were more likely than men to withdraw from the earlier modules.

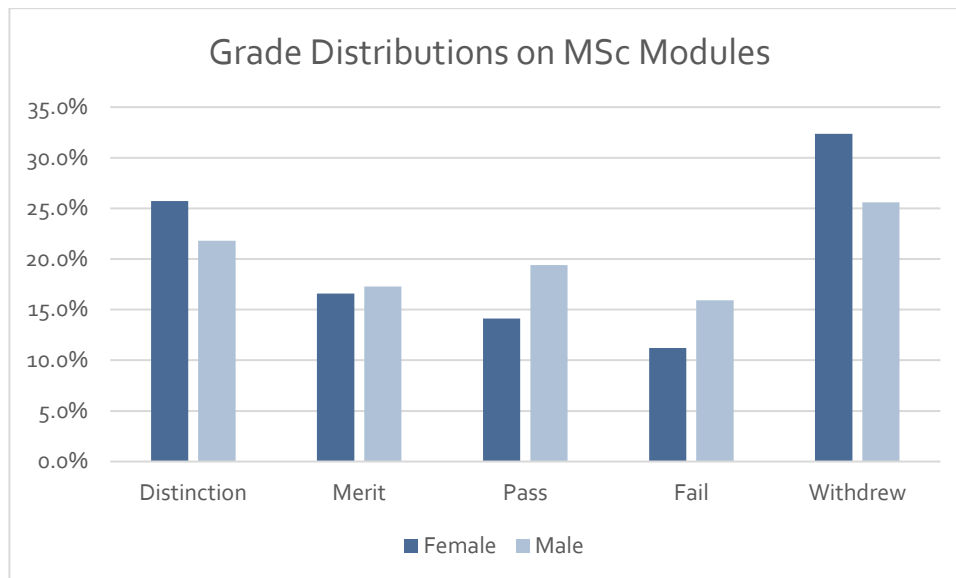


Figure 9: Grade distributions on entry level MSc modules, by gender

We have recently provided material to ALs to support students with mathematical resilience to try and prevent unnecessary withdrawals. The MSc Director has also encouraged the development of much more active student forums.

2021 Action Plan 3.3: Investigate and develop appropriate interventions around growth mindset and mathematical on MSc and undergraduate modules.

2021 Action Plan 3.4: Analyse engagement with MSc student forums by gender and introduce appropriate actions if needed.

In 2016, we highlighted the low proportion of women graduating from the MSc. Recent data are more encouraging with women comprising 24.4% of total graduates from the last three years. As for undergraduate students, the high proportion of women graduating in 2017/18 was likely due to the end of transition fees.

2016/17			2017/18			2018/19			2019/20		
F	M	%F	F	M	%F	F	M	%F	F	M	%F
6	35	15%	16	36	31%	11	37	23%	6	29	17%

Table 16: Students graduating from the MSc in Mathematics

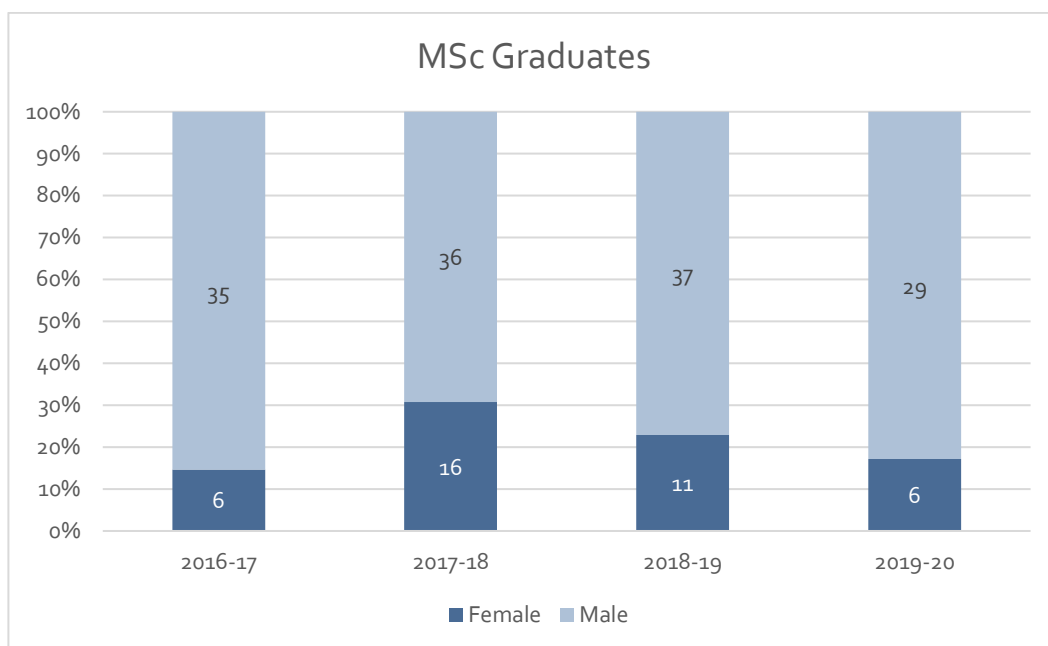


Figure 10: Students graduating from the MSc in Mathematics

Word count: 318

(iv) Numbers of men and women on postgraduate research degrees.

Full- and part-time. Provide data on course application, offers, acceptance and degree completion rates by gender.

The proportion of female PhD students (particularly part-time) has steadily increased; actions to encourage female applicants are described after the data.

	2016-2017			2017-2018			2018-2019			2019-2020			National HESA data 2019/20
	F	M	%F	F	M	%F	F	M	%F	F	M	%F	%F
Full-time	1	8	11.1%	3	10	23.1%	3	11	21.4%	3	7	30%	26.9%
Part-time	1	7	12.5%	2	9	18.2%	5	5	50%	6	4	60%	35.9%

Table 17: PhD students in the School

	2017			2018			2019			2020		
	F	M	%F	F	M	%F	F	M	%F	F	M	%F
Applications	9	9	50%	4	11	25%	7	14	33.3%	10	26	27.8%
Offers	2	1	66.7%	0	2	0%	2	3	40%	2	3	40%
% Offers/Apps	22.2%	11.1%		0%	15.4%		22.2%	17.6%		16.7%	10.3%	
Enrolments	1	1	50%	0	2	0%	1	2	33.3%	1	2	33.3%

Table 18: Applications for full-time PhD places in the School

	2017			2018			2019			2020		
	F	M	%F	F	M	%F	F	M	%F	F	M	%F
Applications	1	3	25%	2	5	28.6%	1	0	100%	0	4	0%
Offers	1	0	100%	2	2	50%	1	0	100%	0	2	0%
% Offers/Apps	100%	0%		100%	25%		100%	X		X	33.3%	
Enrolments	1	0	100%	2	2	50%	1	0	100%	0	2	0%

Table 19: Applications for part-time PhD places in the School

The School strategy for good practice in PhD recruitment is refined annually (**2016-AP-3.6**). Advertising uses wording welcoming women and those from diverse backgrounds (**2016-AP-3.1**). Our MSc students are invited to a streamed introductory session on PhD topics, with a mixed gender group of presenters, including at least one current female PhD student (**2016-AP-3.7**). High-performing MSc students (female and male) are also contacted individually to encourage them to consider applying for a PhD (**2016-AP-3.4**).

Face-to-face female interviewees meet up with current female PhD students and staff (**2016-AP-3.2**) and remote interviewees are given the contact details of a diverse collection of current students for confidential discussions (**2016-AP-3.8**). All interview panels include at least one academic of the same gender as the candidate (**2016-AP-3.3**). For fairness, the PGRT or DoR sits on all interview panels. Candidates are ranked by the Research Committee, informed by interview reports and application forms, using a carefully considered scoring system.

Survey feedback from PhD students on our processes was positive:

- “Very friendly interview panel” (F),
- “Welcoming to mature students” (M),
- “Informal discussions following the interview were also useful for helping me to make the decision to accept the offer.” (F).

We will build on measures to encourage a diversity of applicants.

2021 Action Plan 4.1: Develop a formal process for offering funded part-time PhD studentships.

2021 Action Plan 4.2: Develop a process for offering financial and logistical support through the School / Graduate School to international students and postdocs regarding new visa and NHS health surcharge fees and support with visa applications.

Every PhD student in the School has close support from two supervisors, a third-party monitor, and the PGRT, who knows the students personally. Progress reports are completed every six months. Additionally, after an initial probationary period, students undergo an upgrade process overseen by a mixed gender panel.

	2013				2014				2015				2016			
	Registered		%completed / unfinished		Registered		%completed / unfinished		Registered		%completed / unfinished		Registered		%completed / unfinished	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
Full-time	1	3	100%	100%	0	2	–	100%	0	3	–	100%	0	4	–	100%
Part-time	0	3	–	66.7%	0	3	–	33.3%	1	2	0%	100%	2	1	100%	100%

Table 20: Completion rates for PhD students starting in the specified years

For students registered in 2013-2016, only two (both part-time men registered in 2014) dropped out, due to personal circumstances. Five students are still studying; of those five, one woman switched from full-time to part-time and one man from part-time to full-time; all are scheduled to complete within a year.

Ten of the thirteen full-time students who have completed secured academic positions following their PhDs, including the full-time woman.

Word count: 339

- (v) Progression pipeline between undergraduate and postgraduate student levels.

Identify and comment on any issues in the pipeline between undergraduate and postgraduate degrees.

As described earlier, the relatively low proportion of female students on our MSc programme compared with our UG qualifications is a continuing focus of actions.

Recent analysis shows that the age profile of our MSc students is very different to that of the UK sector. In 2019/20, 84% of our registrations came from students over 30, compared with 66% across the UK. The age profile of our female students is also very different to that of our male students: in 2019/20, 29% of our MSc students under 50 were female compared with just 17% of those aged over 60.

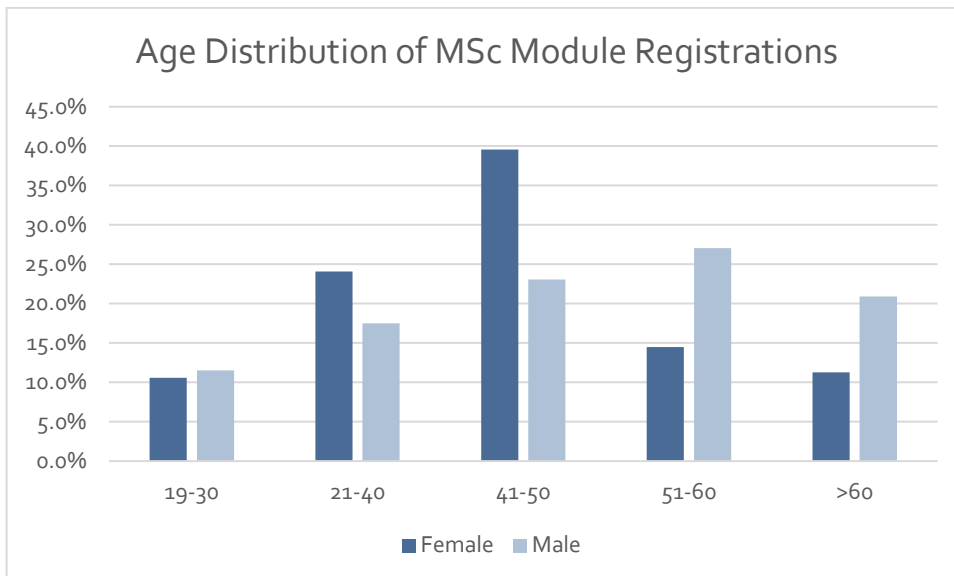


Figure 11: MSc module registrations for 2016-2019 by age band, for men and women

Although there is a large pool of older men with maths degrees studying the MSc for interest, we are recruiting well amongst younger women.

2021 Action Plan 2.8: Carry out intersectional analysis of distribution of students on each undergraduate qualification.

2021 Action Plan 3.5: Use insights into different age distributions to inform discussions with female students on possible recruitment/ retention actions.

2021 Action Plan 3.6: Support Stage 3 module teams to encourage students to consider studying the MSc.

Analysis of our ALs and module teams has shown higher proportions of women teaching at lower-level undergraduate level, and higher proportions of men teaching at MSc level. We have begun to improve the gender balance of module team chairs across stages.

2021 Action Plan 6.3: Improve the gender balance of teaching teams at different stages of study, providing a variety of role models to students progressing through their studies.

Word count: 164

Word count for Section 4A: 25 + 687 + 318 + 339 + 164 = 1533, plus 31 for Covid

B. Academic and research staff data

- (i) Academic staff by grade, contract function and gender: research-only, teaching and research or teaching-only.

Look at the career pipeline and comment on and explain any differences between men and women. Identify any gender issues in the pipeline at particular grades/job type/academic contract type.

	2017			2018			2019			2020			2021			HESA data for mathematical sciences in UK (2020)
	F	M	%F	F	M	%F	F	M	%F	F	M	%F	F	M	%F	%F
Professor	2	6	25%	2	5	29%	2	5	29%	2	4	33%	3	3	50%	12%
Senior Lecturer / Reader (CA)	6	7	46%	7	8	47%	7	8	47%	7	8	47%	7	8	47%	27% (for SL and L)
Lecturer (CA)	2	5	29%	1	4	20%	1	4	20%	4	5	44%	4	5	44%	
Senior Lecturer (ST)	6	3	67%	6	3	67%	6	2	75%	7	2	78%	6	2	75%	34% (teaching only contracts)
Lecturer (ST)	8	1	89%	8	1	89%	7	4	64%	7	3	70%	7	3	70%	
Research Associate	0	0	N/A	1	0	100%	1	3	25%	1	4	20%	1	1	50%	23%

Table 21: Academic and Research staff composition on 31st July

The proportion of female staff is considerably higher than the national average. Since our AS work started in 2013, there has been a steady improvement in the gender balance. Measures to support good practice in recruitment and promotion are now embedded in the School's work, and are described in more detail in the next section.

Across the University there has been concern about the low levels of promotion amongst STs; M&S is regarded as a beacon of good practice and has a sustained track record with 6 ST promotions in the period.

In our previous submission, we noted that, at Lecturer level, we had a lower proportion of women CAs and a higher proportion of women STs. Following new actions, these are becoming more balanced.

The group of postdocs has the lowest proportion of women. We have produced a guide to postdoc recruitment to support panels.

Word count: 146

SILVER APPLICATIONS ONLY

Where relevant, comment on the transition of technical staff to academic roles.

In 2020 a new Grade 7 post was created to support STEM academic staff in the development and maintenance of systems to deliver mathematical and scientific content to students. The appointee (F) is currently studying two of our undergraduate modules. (Note that OU staff are entitled to a fee waiver.)

This appointee also helps manage the technical activities of two Grade 5 Faculty Assistants.

Word count: 64

- (ii) Academic and research staff by grade on fixed-term, open-ended/permanent and zero-hour contracts by gender.

Comment on the proportions of men and women on these contracts. Comment on what is being done to ensure continuity of employment and to address any other issues, including redeployment schemes.

	2017						2018						2019						2020					
	Female			Male			Female			Male			Female			Male			Female			Male		
	FTC	P	% FTC	FTC	P	% FTC	FTC	P	% FTC	FTC	P	% FTC	FTC	P	% FTC	FTC	P	% FTC	FTC	P	% FTC	FTC	P	% FTC
Professor	0	2	0%	0	6	0%	0	2	0%	0	5	0%	0	2	0%	0	5	0%	0	2	0%	0	4	0%
Senior Lecturer (CA)	0	6	0%	0	7	0%	0	7	0%	0	8	0%	0	7	0%	0	8	0%	0	7	0%	0	8	0%
Senior Lecturer (ST)	0	6	0%	0	3	0%	0	6	0%	0	3	0%	0	6	0%	0	2	0%	0	7	0%	0	2	0%
Lecturer (CA)	1	1	50%	0	5	0%	0	1	0%	0	4	0%	0	1	0%	0	4	0%	2	2	50%	1	4	20%
Lecturer (ST)	1	7	12%	0	1	0%	0	8	0%	0	1	0%	0	7	0%	2	2	50%	2	5	29%	1	2	33%
Researcher	0	0	N/A	0	0	N/A	1	0	100%	1	0	100%	1	0	100%	3	0	100%	1	0	100%	4	0	100%

Table 22: Fixed-term (FTC) and permanent (P) contracts

M&S does not use zero-hour contracts and there does not appear to be a gender difference in the use of fixed-term contracts.

A key aim in 2016 was to put the ME group on a secure footing (**2016-AP-4.1**), following a period of uncertainty with only one permanent member of staff. We are delighted that this has been achieved (**Case-Study-1**).

In 2019, a fixed-term position advertised to provide support during and after a maternity leave was filled by two part-time staff (female).

The Faculty funded several fixed-term positions to provide cover for staff taking on substantial internal/external leadership roles and temporary additional workload: one CA appointment (male) in 2020, and four ST appointments in 2017, 2018 and 2020, of which three (2F, 1M) have now been appointed to permanent positions.

In 2021, M&S was given 4 additional permanent posts (2 ST and 2 CA), providing a more sustainable staffing level for the rising workload.

All postdoctoral researchers are on temporary contracts. Two researchers (1F, 1M) had their contracts extended by six months after successful bids to the OU UKRI Covid-19 allocation.

All staff, including researchers, approaching the last six months of their contracts have formal meetings with their line managers at which the possibilities for future employment both within and outside the OU are discussed, with support to find such employment wherever possible.

Word count: 202, plus 20 for Covid

(iii) Academic leavers by grade and gender and full/part-time status.

Comment on the reasons academic staff leave the department, any differences by gender and the mechanisms for collecting this data.

	2017		2018		2019		2020	
	F	M	F	M	F	M	F	M
Central Academic (CA)	1	1	1	0	0	2	0	1
Staff Tutor (ST)	0	0	1	1	1	1	0	0
Researcher	1	1	0	0	0	0	0	1

Table 23: Leavers for the period 2017-2020 (including retirees)

The School Office Manager keeps records of all leavers and their reasons for leaving. There do not appear to be any differences by gender.

The two 2017 CA leavers were in ME: one female retirement and one male on a temporary contract who decided not to apply for a permanent position.

The University went through a difficult period in 2018 with senior leadership proposing major changes, prompting three staff to take up positions elsewhere. All have retained links, for example through visiting positions – and one ST leaver (female) returned having successfully applied for a CA position once the university situation stabilised under new leadership.

Subsequent CA leavers were all retirements.

In 2019, one female ST left for personal reasons and one male ST on a temporary contract decided, for personal reasons, not to apply for a permanent position.

All three researchers were on temporary contracts and left to take up positions elsewhere (one permanent).

Word count: 154

Word count for Section 4B: $146 + 64 + 202 + 154 = 566$, plus 20 for Covid

Total word count for Section 4: $1533 + 566 = 2099$, plus 31 + 20 = 51 for Covid

5. Supporting and advancing women's careers

Recommended word count: Bronze: 6000 words | Silver: 6500 words

A. Key career transition points: academic staff

(i) Recruitment.

Break down data by gender and grade for applications to academic posts including shortlisted candidates, offer and acceptance rates. Comment on how the department's recruitment processes ensure that women (and men where there is an underrepresentation in numbers) are encouraged to apply.

Post	Applicants			Shortlisted			Appointed		
	M	F	%F	M	F	%F	M	F	%F
Professor of Statistics (2020)	6	3	33%	1	2	67%	0	1	100%
L/SL in Statistics (2019, 2021)	37	14	27%	9	2	18%	3L	1SL	25%
L in Applied Maths (2019,2020)	64	11	15%	9	3	25%	1	1	50%
L in Pure Maths (2021)	43	11	20%	3	2	40%	1	1	50%
Total Central Academic appointments in mathematics and statistics (2017-2021)	150	39	21%	22	9	29%	5	4	44%
L/SL in Maths Education (2017,2019, 2021)	45	40	47%	7	14	67%	1L	2SL 2L (job share)	80%
Lecturer – Staff Tutor (2017,2018,2019,2020, 2021)	69	45	39%	11	13	54%	6	6	50%
Researcher (2018,2019,2020,2021)	67	24	26%	19	6	24%	6	2	25%

Table 24: Recruitment of staff 2017-September 2021 (missing application data for one ST post)

In the previous submission period, we were concerned that both CA appointments in maths/statistics were male and 4/5 ST appointments were female, despite actions aimed at improving the gender balance of staff. In the current period we have built on earlier actions and introduced new ones, achieving gender-balanced appointments in these groups.

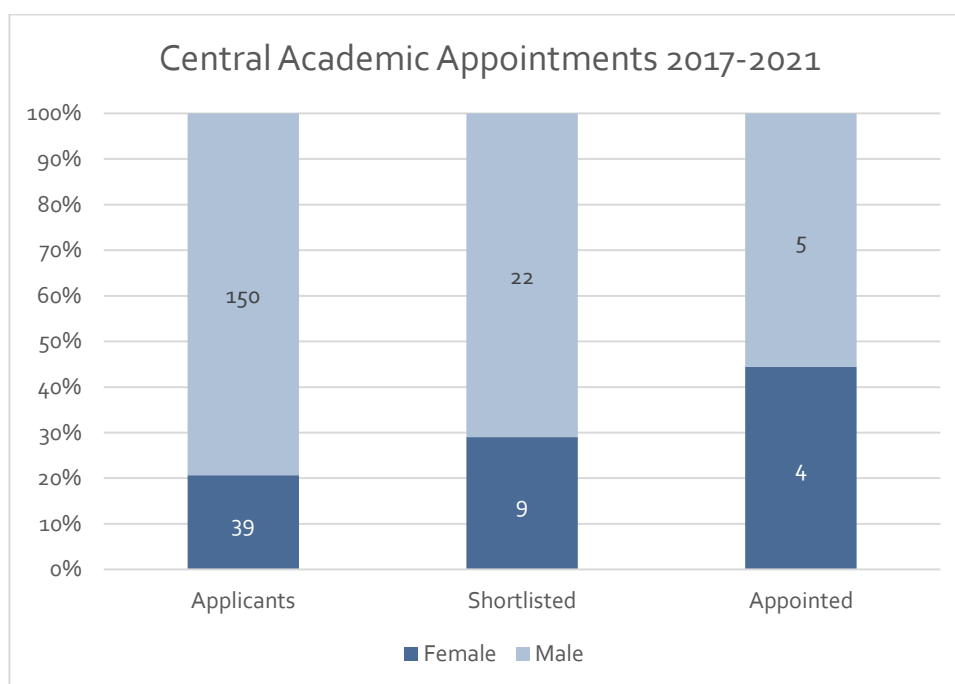


Figure 12: CA appointments in Maths and Statistics, 2017-2021

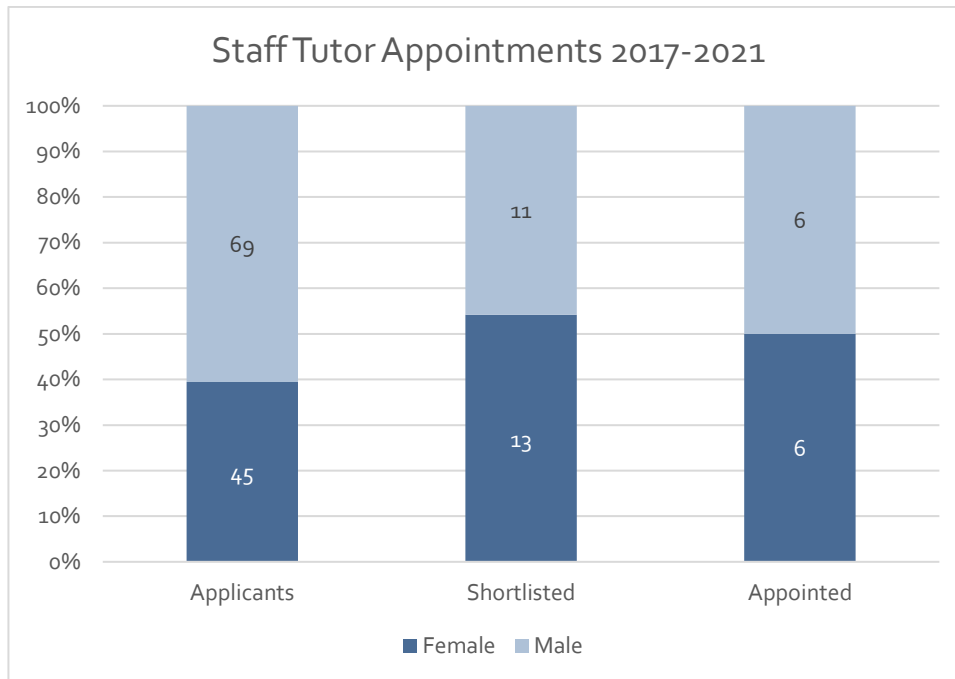


Figure 13: ST appointments 2017-2021

We are delighted to have appointed our first female professor of statistics and our first female CA in the applied maths group. An action to identify possible future job applicants and invite them to give a seminar (2016-AP-4.4) directly contributed to this success.

“Visiting the OU to give a talk put it on the radar for me. I discovered that M&S has a vibrant and friendly research environment, and a calm, bucolic campus. Thus, when a posting for an academic position later appeared, I did not hesitate to apply.”

The pool for ME posts has a much higher proportion of women. In 2021, we appointed a male lecturer to join the group of female staff. (Note that, alongside some other appointments, this member of staff started after the census date of July 31st used elsewhere in the document.)

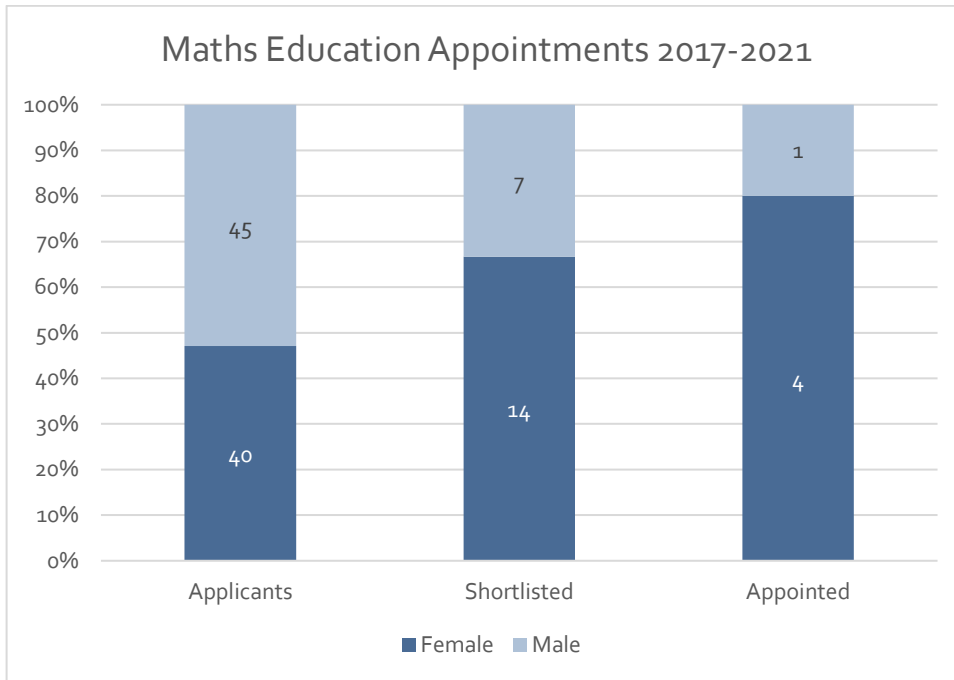


Figure 14: CA appointments in Maths Education, 2017-2021

M&S ensures flexible working and EDI are emphasised in job advertisements and the AS/EDI Lead is consulted on all person specifications and recruitment material. All panels are mixed gender and training is provided. For CA positions, staff are required to prepare teaching material as well as a research talk to ensure that all aspects are assessed fairly. Applicants meet a good gender balance of staff and frequently comment on the positive and friendly interview process.

The proportion of female appointments to postdoctoral positions remains low (although in line with the national average and with applications) and is a focus of attention. We produced a guidance pack (**2016-AP-4.4**) to support grant holders (who may have little experience of recruitment) in following the good practice described above when appointing researchers.

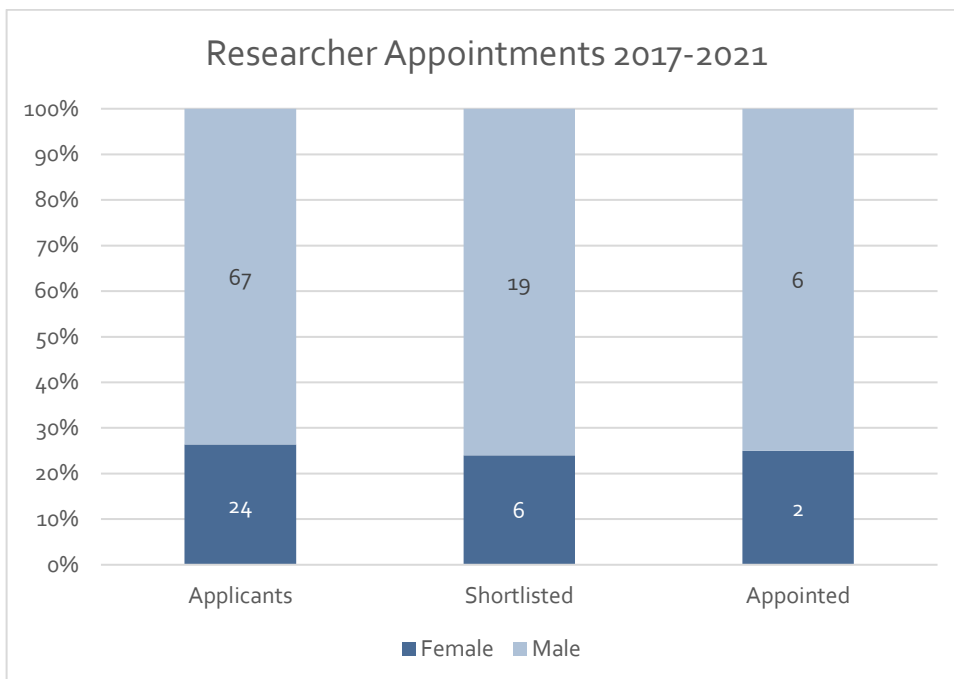


Figure 15: Researcher appointments, 2017-2021

M&S feedback on recruitment is very positive.

2019 OU AS Survey	M&S School		OU	
	F	M	F	M
Recruitment and selection processes are fair and transparent	94%	91%	78%	91%
Recruitment and selection policies lead to the best candidates being recruited	67%	64%	53%	62%

Table 25: Staff perceptions of recruitment processes

2019 OU AS Survey	M&S School		OU	
	F	M	F	M
The job advert reflected the diversity of the institution	100%	100%	55%	64%
My interview panel included a mix of genders	100%	100%	93%	84%

Table 26: Feedback on recruitment from staff recruited in the last 5 years

We continue to strengthen our good practice.

2021 Action Plan 5.1: Appointment panels to be provided with the gender breakdown of applicants before shortlisting. Gender breakdown of applicants, shortlisted candidates and appointments to be recorded within the School.

2021 Action Plan 5.2: Provide guidance to panels to consider re-advertising posts if all candidates meeting the essential criteria are of the same gender.

2021 Action Plan 4.4: Analyse and replicate the recruitment practices for those postdoc positions that have attracted the highest proportions of female applicants.

2021 Action Plan 5.3: Review and monitor the new AL recruitment process, incorporating good practice established for other staff recruitment in the School.

Word count: 332

(ii) Induction.

Describe the induction and support provided to all new academic staff at all levels. Comment on the uptake of this and how its effectiveness is reviewed.

The OU has a comprehensive induction programme for all new members of staff including postdocs. Completion of the programme is mandatory with 100% uptake in M&S. A checklist ensures that all tasks are completed in a timely manner and relevant staff are aware of their responsibilities. The programme lasts about three months with four stages:

1. Before a new employee starts, they are contacted by the School Office Manager to ensure that required resources and equipment are in place. A personalised induction programme is drawn up in discussion with the line manager, and a mentor and probation supervisor are put in place.
2. During the employee's first few days, they have meetings with key people in M&S (including the EDI Lead). The induction programme and pack are carefully discussed.
3. Over the first few weeks, meetings are held to discuss probation, appraisal and training needs. The employee also works through an online induction module which includes diversity training.
4. Over the next few months, the induction programme is completed, with meetings to agree probation targets and evaluate the induction programme.

With the switch of many STs to homeworking in 2017, M&S led the way in producing special resources, shared across STEM, and a higher level of mentoring to support their induction. The necessity was then recognised more widely; comprehensive information for STEM STs is now available through a handbook and a dedicated wiki. This paved the way for providing online induction for all new staff during the pandemic.

M&S staff feedback on induction is very positive.

2019 OU AS Survey	M&S School		OU	
	F	M	F	M
When I started at the OU I felt welcomed	100%	100%	94%	88%
I was given an induction to my role and School	100%	100%	93%	93%
The induction process was useful for understanding my role	83%	100%	93%	83%
I was made aware of the OUs diversity practices and objectives at my induction	100%	100%	57%	60%

Table 27: Survey responses on induction from staff starting in the last 5 years.

Word count: 241, plus 15 for Covid

(iii) Promotion.

Provide data on staff applying for promotion and comment on applications and success rates by gender, grade and full- and part-time status. Comment on how staff are encouraged and supported through the process.

M&S continues to build on its good practice for supporting staff through the promotion process. The Deputy HoS was a member of the Steering Group for the 2019/20 OU promotions review, following which much of the good practice in M&S is being adopted across the OU.

M&S is the only STEM School with 100% success rate for staff applying for promotion to SL since 2017.

	2017		2018		2019		2020		2021		Success rate	
	F	M	F	M	F	M	F	M	F	M	F	M
Central Academic	0	1	0	1	0	0	0	0	0	0	100%	100%
Staff Tutor	0	0	1	0	1	0	1	0	2	1	100%	100%

Table 28: Promotions to Senior Lecturer

These promotions are in line with our permanent lecturing staff which, in 2017, comprised six CAs (1F,5M) and eight STs (7F,1M). One ST promoted in 2021 is part-time. The impact of part-time working, Covid etc. are included in a special circumstances form submitted alongside the promotion case.

In 2018, M&S established a Promotions Group chaired by the Deputy HoS/AS Lead, formalising pre-existing support mechanisms, embedding good practice across the School. It is a subgroup of the M&S CV Review Group which comprises all appraisers, HoS, Deputy HoS/AS Lead, DoT and DoR. It includes representatives of all groups with a mix of STs and CAs, SLs and

Professors. In 2020, experienced members produced a guide for appraisers on supporting staff through promotion to SL (**2016-AP-6.6**).

The annual process is:

1. In November, the CV review group considers the CVs of all Ls/SLs. Those with potential for promotion to SL in the next couple of years, or Professor in the longer term, are referred to the Promotions Group and allocated a mentor who works with them and their appraiser.
2. In February and March, the Promotions Group discusses draft SL promotion cases, before submission to the Faculty in May.
3. In June, the Promotions Group discusses staff with potential for promotion to SL the following year, to support their progress. It also reviews strategic matters and the mentoring of potential chair cases – these can be submitted to the University at three points during the year.

There were no applications for promotion to professor in 2017-2020. In 2019, we established a group (~1/3F) receiving long term mentoring for professorial promotions (**2016-AP-6.3**); the first case (female CA) was submitted in 2021 and announced as successful in January 2022.

2021 Action Plan 5.5: Build on mentoring for professorial promotions: produce guide for mentors and annual timeline for reviews, and support staff with preparation of cases.

The current promotion system, introduced in 2015, has four profiles, each including leadership criteria. Staff can choose any profile and move between them for subsequent promotions:

- Research and teaching;
- Research;
- Teaching;
- Knowledge exchange.

Most STs use the teaching profile, as did the recent successful professorial case. This profile requires scholarly outputs; the success of actions introduced by M&S to support the development of scholarship is described in Section 5(b).

M&S led on raising concerns that the criteria did not take sufficient account of the differences in contract between STs and CAs. This led to additional Faculty-guidance for STs in 2018 and to OU-guidance in 2020. We have organised regular briefings on promotions at School Meetings – from the Dean, HoS and Deputy HoS (**2016-AP-6.1,6.2**).

Staff now report a good understanding of the promotion system.

2021 M&S Academic Staff Survey	F	M	CA	ST
How well do you understand the OU promotion system and the way this works within the School?	4.2	3.7	4.1	3.8

Table 29: Average score for staff in post at least 3 years: 1 = not very well and 5 = very well

In our ST Survey, actions around promotions were highlighted by 5 out of 14 respondents – with praise for clarification of the criteria and support during the process (**Case-Study-2**).

We have recently recruited several new members of staff and will brief them on the promotion process, to support their career development.

2021 Action Plan 5.4: Run briefing for new members of academic staff on the promotion process.

The CV Review Group also reviews and recommends staff for special awards or additional increments (**Case-Study-1**). Analysis of the data (**2016-AP-6.5**) shows that the CA/ST split matches the pool of eligible staff, but women receive a disproportionately high share, partly for historical reasons.

2021 Action Plan 5.6: Record and analyse data on staff rewards by gender and staff grouping, introducing new actions if appropriate.

Word count: 576

(iv) Department submissions to the Research Excellence Framework (REF)

Provide data on the staff, by gender, submitted to REF versus those that were eligible. Compare this to the data for the Research Assessment Exercise 2008. Comment on any gender imbalances identified.

	2008 RAE (UoAs 20 and 22)			2014 REF (UoA B10)		
	F	M	%F	F	M	%F
Eligible (inc Staff Tutors)	18	38	32%	20	30	40%
Eligible (exc Staff Tutors)	10	31	24%	9	25	26%
Submitted	5	19	21%	5	14	26%
% submitted (exc Staff Tutors)	50%	61%		56%	56%	

Table 30: Staff submitted to the REF in 2008 and 2014

For the 2008 and 2014 exercises, the ST contract (with 50% on teaching-related management) meant that it was almost impossible for them to achieve the necessary outputs. Taking this into account showed that there was no gender imbalance.

REF 2021 included all staff with a significant responsibility for research. Under the OU's code of practice, this was staff spending more than 0.15FTE on research (or 0.1FTE plus additional criteria). Equality issues were considered carefully, with the AS Lead co-chairing the M&S REF Panel from late 2019.

The proportion of female staff in the Mathematical Sciences submission was 26% (as in 2014). In addition, 2 female ME staff were included in the Education submission. M&S also supported two research-active STs (both female) to spend the necessary time on research, enabling them to be included in the Mathematical Sciences submission (**2016-AP-8.4**).

“My efforts to keep research-active have consistently been respected and supported, enabling me to publish two papers that have been pivotal for my career progression.”
(Female ST)

We have recently appointed several new research-active STs (2F,3M).

2021 Action Plan 7.3: Establish six monthly review meetings between DoR and group of research-active Staff Tutors to identify actions that could be implemented to support them in developing their research.

The REF preparations did, however, highlight that female CAs were spending less time than male CAs on research-related activities. This is already improving, following recent retirements and recruitment, with new female appointments taking on research leadership roles. Further actions to address this are a priority moving forwards – see 5b)iii).

Word count: 214

SILVER APPLICATIONS ONLY

Key career transition points: professional and support staff

(i) Induction.

Describe the induction and support provided to all new professional and support staff, at all levels. Comment on the uptake of this and how its effectiveness is reviewed.

The induction process for professional and support (P&S) staff is similar to that for academic staff and occurs every time the member of staff is appointed to a new role. The Induction Programme is compulsory and there is 100% uptake. The Faculty provides an induction plan which typically consists of an Induction Guide (introducing the role, how it fits within the structure, rudiments of the job, guidance about where to find more information, etc), a series of meetings with key managers and colleagues, and being set up with a work buddy (in the local School team) and a mentor (in the wider Faculty P&S community).

2021 M&S P&S Staff Survey	
If you started your role in the last three years, how helpful was your induction?	4.3

Table 31: Average score for induction: 1 = not very helpful and 5 = very helpful

(ii) Promotion.

Provide data on staff applying for promotion, and comment on applications and success rates by gender, grade and full- and part-time status. Comment on how staff are encouraged and supported through the process.

University policy is that promotion is not available to P&S staff. There is provision for a job to be re-graded if it changes substantially in nature but this happens very rarely as many roles have counterparts across the University. Staff can apply for a different role within the OU, on a competitive basis, at a higher (or identical) grade. Usually such jobs are advertised internally initially to maximise the opportunities for internal career progression.

In 2016/17, the number of Grade 8 posts linked to M&S increased from 1 to 3 and this has provided greater opportunities for staff to progress, with two M&S Grade 7 staff members successfully applying for these new posts. One subsequently left to take up an opportunity outside the University; the subsequent appointment was a Grade 7 staff member returning to M&S following a secondment. An additional Grade 7 staff member successfully applied for a Grade 8 secondment elsewhere in the University and was subsequently appointed to a permanent Grade 8 position. (These staff were all female, as are nearly all our staff at this level.)

Word count: 180

Word count for Section 5A: 332 + 241 + 576 + 224 + 105 + 180 = 1678, plus 15 for Covid

b. Career development: academic staff

(i) Training.

Describe the training available to staff at all levels in the department. Provide details of uptake by gender and how existing staff are kept up to date with training. How is its effectiveness monitored and developed in response to levels of uptake and evaluation?

The University offers a wide range of online training sessions. These include compulsory modules for all staff on topics such as GDPR, with additional modules for roles such as appraisers, module chairs and recruitment panel chairs. There are also numerous sessions on topics such as supervision of PhD students, applying for grants, pedagogical aspects of teaching.

The new OU EDI Data Analyst has provided initial data on uptake of some modules. We will monitor higher quality data as it becomes available, introducing actions if appropriate.

Type of training	F	M
Appraisals	11%	13%
EDI	33%	40%
Leadership/management	39%	33%
Recruitment, selection and interviewing	56%	40%
Role specific	28%	47%

Table 32: For women/men who undertook training in one of these areas in the last three years, percentage who took modules in the specified area.

Our appointment guide provides links to the online modules on unconscious bias and fair selection. In addition, M&S paid for a consultant from AdvanceHE to run a session on these topics in 2018 (**2016-AP-4.3**). This was attended by 27 academics (16F, 11M) and 6F support staff, with very positive feedback. The course was subsequently recommended to STEM for use with promotion panels.

In addition, M&S has introduced a scholarship seminar series (>50%F average attendance) which includes sessions on Academic and Professional Development (APD) – see section (iii).

The Faculty has also introduced an APD seminar series. The Steering Group includes a representative from each School with regular meetings to review attendance, feedback (usually very positive) and current training needs. Attendance will now be recorded formally giving more robust data by gender.

Staff are encouraged to use funds from the M&S Staff Development Budget to participate in external events such as Teaching and Learning workshops run by the IMA, and the Aurora Leadership Programme (2 female STs applied successfully).

Staff have access to a generous M&S Research Budget, funding conference attendance and academic visits and, since 2019, the M&S Scholarship Budget. New members of staff, early

career researchers, and those returning from an extended period of leave or a time-consuming teaching or leadership role have higher automatic allowances.

During the pandemic, these budgets funded activities such as a series of workshops by external consultants on matters related to research and scholarship.

Information on internal and external training opportunities related to research/scholarship are circulated to staff in regular bulletins from our DoR and Scholarship Lead.

The University appraisal form asks staff to state any training needs and give feedback on training received. This information is currently only available to the appraiser and appraisee.

2021 Action Plan 5.7: Establish mechanism for annual collection of training needs.

Word count: 353, plus 23 for Covid

(ii) Appraisal/development review.

Describe current appraisal/development review schemes for staff at all levels, including postdoctoral researchers and provide data on uptake by gender. Provide details of any appraisal/review training offered and the uptake of this, as well as staff feedback about the process.

All members of academic staff take part in the University’s appraisal scheme CDSA. Within M&S there is 100% uptake of annual appraisals.

Professors are appraised by the HoS and other CAs are usually appraised by their Group Lead. STs are appraised by the Lead ST or another senior ST and postdocs are appraised by their PI. All appraisees can request an alternative appraiser. All appraisers undertake compulsory University training.

There is a comprehensive online CDSA form, with the priorities being to reflect on work carried out during the previous year and to agree objectives and workload plans for the following year. There are also sections on training required and received and a section on career development.

In 2019, feedback from M&S STs was particularly positive.

2019 OU AS Survey	M&S				OU	
	F	M	CA	ST	F	M
I find the CDSA process useful	56%	55%	35%	82%	49%	57%
My line manager makes time to discuss my personal development and progression	83%	82%	67%	92%	70%	73%

Table 33: Staff feedback on appraisals in 2019

We subsequently held regular appraiser briefings with reminders of relevant AS actions (**2016-AP-Section5**) and produced a document detailing the good practice within the ST Group (**2016-AP-5.10**). We also reminded staff that their appraiser should give feedback related to career development from the CV review meeting.

In 2021, 100% of M&S staff (excluding those retiring imminently) reported that they had discussed career development / promotion in their previous CDSA. High proportions of CAs (and consequently men) reported improvements.

2021 M&S Academic Staff Survey	F	M	CA	ST
Over the last 3-5 years the level of discussion about career development in CDSA meetings has improved.	39%	56%	59%	17%

Table 34: CDSA experience of staff in 2021 for staff in post at least 3 years

The majority of appraisers are female; we will work to address this.

2021 Action Plan 5.9: Train up new mentors and appraisers, giving a better gender balance.

Word count: 353

(iii) Support given to academic staff for career progression.

Comment and reflect on support given to academic staff, especially postdoctoral researchers, to assist in their career progression.

Career development is an integral part of the annual CV review, appraisal and workload planning round. In addition to their appraiser, all postdocs and new members of staff have a mentor and a probation supervisor who offer advice and support with career development. Feedback is overwhelmingly positive (**Case-Studies-1&2**), with much along the following lines:

"I think there is huge support and encouragement for career development." ST(F)

2021 M&S Academic Staff Survey	F	M	CA	ST
How well do you feel the School supports your career development?	4.3	4.3	4.1	4.4

*Table 35: Average score for staff feedback on career development support:
1=not very well, 5=very well*

We have introduced long-term mentors for promotion to professor(**2016-AP-6.3**), alongside mentors for new staff and short-term mentors for SL promotion. In 2019 we appointed a female Visiting Professor who provides research-related mentoring. STs in M&S (~72%F) are

particularly likely to have received mentoring.

2019 OU AS Survey	M&S				OU	
	F	M	CA	ST	F	M
I have the opportunity to be a mentee	83%	64%	71%	92%	64%	66%

Table 36: Staff feedback on availability of mentoring

A key part of our Action Plan (**2016-AP-Section7**) aimed to support the career development of STs, with most seeing the new teaching profile as their most likely route for promotion. In our ST Survey, these actions received particular praise from 5/14 respondents.

Promotion under the teaching profile requires scholarship. We established a highly successful programme of scholarship seminars to support the development of pedagogic skills (**2016-AP-7.1**). Attendees (>50%F, 33%STs) include many academics who do not normally attend research seminars curriculum support staff, student advisors and ALs.

2021 M&S Academic Staff Survey	F	M	CA	ST
Good practice around teaching	83%	75%	82%	80%
Academic professional development	78%	58%	68%	67%
Support for scholarship	57%	50%	50%	67%

Table 37: Proportion of staff who find this aspect of the new seminar series helpful / interesting

Staff can bid for money to support projects from the OU centre for STEM pedagogy. They are supported by our Scholarship Lead and, for their first project, by a more experienced mentor (**2016-AP-7.3**). Our new scholarship budget enables participation in external events.

Since 2016 there have been 38 completed scholarship projects in M&S with 15 (9F,6M) staff taking part in at least one and 27 current projects (17 staff-9F,7M). In 2020, 3/4 Faculty scholarship prizes were awarded to M&S projects. These prizes and projects have formed part of the promotion cases for six STs (**Case-Study-2**).

2021 Action Plan 7.6: Build on successful scholarship work, using experienced staff to mentor staff new to scholarship.

Scholarly work forms the basis of SFHEA applications, encouraged through monthly online peer-support sessions launched by M&S in 2017 (**2016-AP-7.2**), leading to 20 (12F,8M) successful applications. At least one female CA is currently preparing a PFHEA application.

2021 Action Plan 7.7: Build on successful scheme to support Senior HEA Fellowship applications through organised peer support groups.

In 2019, M&S created a writing support group led by ME staff to help develop scholarship work into educational research. This has resulted in 3 published journal articles, 2 accepted conference papers, 2 accepted papers, 1 blog and 2 submitted papers. **(Case-Study-1)**.

2021 Action Plan 7.8: Use writing group to support staff with developing scholarship into educational research.

A priority now is to improve research-related career development. In 2021, a Research Directions Group (3F,3M) was formed to provide leadership for this activity.

2021 Action Plan 7.1: Embed the new Research Directions Group into the School structures, with formal reporting and ways of working, to lead on providing support to staff.

A particular focus is those mid-career academics, particularly female CAs, who have shouldered sustained teaching/ leadership roles that have impacted their research. Some are now actively pursuing scholarship but others would like to re-invigorate their research.

2021 Action Plan 7.2: Introduce a Back to Research Scheme to support mid-career Central Academics.

In 2021 M&S held two professional development courses delivered by external consultants (1F,1M). These were especially welcomed by female CAs.

Workshop attendance	F	M	CA	ST
Resilient research	56%	44%	72%	28%
Productive research	61%	39%	67%	33%

Table 38: Proportion of academic attendees at workshops belonging to each staff group

The principles from these talks will be developed into a Framework promoting healthy, productive working practices, supporting staff at all career stages.

2021 Action Plan 7.5: Develop a Productive Researcher Framework to support staff with maintaining a research/ scholarship profile.

Early career researchers are encouraged to apply for grants (with support described later) and to advertise for PhD students – supported by experienced co-supervisors.

Postdocs are supported in applying for fellowships and grants through mentors and the School's Employability Framework which offers step-by-step guidance on building up a strong academic profile. They are included in career development activities for staff as well as those for PhD students described below.

Word count: 539

(iv) Support given to students (at any level) for academic career progression.

Comment and reflect on support given to students at any level to enable them to make informed decisions about their career (including the transition to a sustainable academic career).

The M&S Study Site for students at all stages (see Section 4) has a dedicated careers and employability section with resources jointly produced by M&S and the OU Careers and Employability Service (CES).

M&S nominates students to attend LMS UG Summer Schools to explore whether they might be interested in research. Such nominations are required to be gender-balanced. M&S has recently successfully petitioned the LMS to make their Undergraduate Bursary Scheme more suitable for part-time students.

2021 Action Plan 4.3: Offer funded summer research internships for undergraduates and MSc students, linked to the LMS Undergraduate Bursary Scheme. Impose condition that at least one third of each cohort are women.

Additional actions to encourage MSc students to consider PhD opportunities are described earlier.

PhD students have access to the CES and to University-wide training events. They discuss their skills development with their supervisors as part of their six-monthly progress reports. All PhD students have a third-party monitor who provides independent advice and pastoral support. For M&S female students, at least one member of this team is female.

The PGRT organises events for PhD students and postdocs, and provides individual support and advice. She organises two annual one-day meetings with speakers covering a range of topics, many related to career progression. Part-time students are offered expenses to enable them to participate in person when such events are run on campus; remote access is always provided.

2021 Action Plan 4.5: Work alongside the LMS Early Career Research Committee to develop a set of resources for PhD students and postdocs on topics related to employability.

There is an informal graduate seminar series and lunch, and students are actively encouraged to travel, present their work and network with other students and academics. Funded students have £1,250 per year for such expenses, and self-funded students can apply for M&S travel funds (usually successfully).

PhD students and postdocs are encouraged to gain teaching and outreach experience, working with organisations such as the UK Mathematics Trust, the Brilliant Club and the Royal Institution. Postdocs can offer lecture courses at the London Taught Course Centre (1F did so recently).

2021 M&S PhD and Postdoc survey	F	M
How well do you feel the School supports your career development?	4.2	4.0

Table 39: Average score with 1=not very well, 5=very well

All female PhD students (and undergraduates where appropriate) are encouraged to participate in LMS Women in Mathematics Days; these include presentations from women in a range of careers. One of our students led a session at the 2021 event.

Word count: 328

(v) Support offered to those applying for research grant applications.

Comment and reflect on support given to staff who apply for funding and what support is offered to those who are unsuccessful.

Bid to UKRI	Female PI	Male PI	% F
Successful	4	3	57%
Unsuccessful	2	14	13%

Table 40: Success rates of bids to UKRI from Principal Investigators (2014-2020)

Following good practices of the leading bidders (many of whom are female), M&S developed a *Grant Application Framework* for researchers, comprising stage-by-stage guidance. The researcher first explores grant schemes with guidance from the DoR and discusses workload implications with their appraiser. New staff are given extra time in their workloads to facilitate research and grant writing.

The researcher is mentored by a *Sponsor Team* comprising at least two other academics with experience in grant writing. They provide advice and feedback throughout the process of writing the submission and responding to reviewers.

Practical support with the submission process and financial aspects is provided by the Faculty Research Enterprise and Scholarship Team.

In 2020, an external consultant delivered two (recorded) workshops and provided several one-to-one sessions (**2016-AP-8.6**). The DoR contacted researchers individually to encourage attendance, ensuring a good gender balance (given the gender balance of active researchers).

2021 Workshop Attendance	F	M	CA	ST	Researcher
Grant writing	39%	61%	70%	13%	17%

Table 41: Proportion of staff attending who belong to these groups

The DoR followed up with participants to help them maintain momentum in preparing grant applications and produced a resource for the intranet summarising the consultant’s approach, with additional guidance specific to M&S.

As evidence of the success of the Framework, the two most recent applications for EPSRC New Investigator Awards (1F,1M) were both successful.

Unsuccessful applicants are encouraged by the DoR and mentors to rework their applications, perhaps for an alternative funder. Both funded and unfunded grant applications with positive feedback can be (and are) used effectively in cases for promotions and rewards.

The DoR provides regular reports to MT on grant applications and discusses ways of supporting and encouraging new applications with the new Research Directions Group.

An ongoing concern is that staff have limited time available for grant writing. This has been especially true during the pandemic, with several staff taking on increased caring responsibilities. Moving forwards, the School will adopt a targeted approach to allocating time for preparing grant applications, paying particular attention to gender balance, early career researchers, and those who have returned to research following a period of absence.

2021 Action Plan 7.4: Director of Research to work with Group Leads to ensure time is allocated to staff appropriately in workload allocations for bidding for grants.

Word count: 313, plus 16 for Covid

Word count for Section 5B: 353 + 214 + 539 + 328 + 313 = 1747, plus 23 + 16 = 39 for Covid

SILVER APPLICATIONS ONLY

C. Career development: professional and support staff

(i) Training

Describe the training available to staff at all levels in the department. Provide details of uptake by gender and how existing staff are kept up to date with training. How is its effectiveness monitored and developed in response to levels of uptake and evaluation?

Informal on-the-job training and development take place continuously in response to new and revised policies, procedures, systems and initiatives introduced at University or Faculty level. All staff participate in these activities, as appropriate, and evaluation is monitored through regular informal feedback and discussions at appraisal. All staff have the opportunity (and are encouraged) to request additional training or development to support particular activities through annual appraisal meetings or as such opportunities arise.

In addition, the University runs an evolving training programme covering management and leadership, team-working, personal development, change, project management, IT, plus bespoke training for groups or individuals. Uptake and evaluation of such training and development opportunities is considered at annual appraisal meetings and at any time, line managers are able to access training records for individuals in their team. Staff at Grade 7 and above are encouraged to consider training and development in the form of recognised schemes such as Aurora and the Association for Project Management (APM) qualifications.

Since the last application, two Grade 7 staff have completed the Aurora programme. Another four have undertaken APM training (two of whom remain in M&S) and others are being actively encouraged to take the chance to apply for HEA status.

Word count: 201

(vi) Appraisal/development review.

Describe current appraisal/development review schemes for professional and support staff at all levels and provide data on uptake by gender. Provide details of any appraisal/review training offered and the uptake of this, as well as staff feedback about the process.

P&S staff participate in the same appraisal system used for academics with annual appraisals reviewing past objectives and setting future ones. There is 100% uptake and formal training for line managers.

During the 2016 AS consultation, it became clear that many P&S staff felt that the appraisal forms placed too much emphasis on setting detailed objectives for the following year and insufficient emphasis on career development; this was discussed with Faculty Management (2016-AP-9.1). A new online system was introduced in 2018 and the developers have made ongoing improvements. Appraisers within the School have introduced more discussion about career development. Feedback has improved, particularly from senior staff.

2021 M&S P&S Staff Survey	Grades 5&6	Grades 7&8
A thorough review of the last year	3.8	4
A chance to set meaningful objectives	3	3.7
Dedicated time to discuss career development	3.5	4

Table 42: Average score for usefulness of CDSA process in each of these areas:
1 = not very useful and 5 = very useful

2021 Action Plan 8.1: Contribute to feedback on the online CDSA system, suggesting further ways in which it can be improved.

Word count: 106

(ii) Support given to professional and support staff for career progression.

Comment and reflect on support given to professional and support staff to assist in their career progression.

Those who wish to seek career progression are encouraged by their line manager to apply for jobs/secondments when they are advertised within the University, with 30% of our P&S staff reporting such encouragement in the current period. Short term secondments helped two Grade 7 staff members to obtain permanent Grade 8 positions – one in M&S and one elsewhere in the University (as described in Section 5A above).

These secondments, together with two maternity leaves, have created opportunities for staff members from elsewhere in the University to join us for short periods. Our Grade 7 roles are appealing to staff wishing to develop their curriculum knowledge and are often used as a stepping-stone to a permanent role either in M&S or elsewhere at the same or higher grade.

The increased encouragement to consider secondments has been very beneficial to the career development of staff. The increased movements have, however, created some challenges.

Action Plan 8.2: Hold discussions with Faculty Management to address the impact of secondments and short-term contracts.

Our 2016 survey showed that some members of staff enjoyed working in M&S and were reluctant to apply for jobs elsewhere but would welcome opportunities to take on new tasks in a more informal manner; we have explored ways to address this (**2016-AP-9.2**).

M&S now has two members in the Faculty ‘Voices’ group, which has links with the People Services area and has the aim of addressing employment issues that affect support staff. Discussions have included how staff can informally develop their career (for example by shadowing someone of a higher grade) and how taking on additional responsibilities may be rewarded.

In early 2021, a STEM MS Teams ‘Staff Room’ area was set up to gather together information relating to P&S staff development and on relevant job vacancies.

2021 M&S P&S Staff Survey	
Proportion of staff who had looked at the new ‘Staff Room’ resource	76%
Proportion of these staff who found it useful	83%

Table 43: Feedback on the new MS Teams ‘Staff Room’

2021 Action Plan 8.3: Promote the MS Teams ‘Staff Room’ to Professional and Support staff as a way to look for development opportunities.

Word count: 279

Word count for Section 5C: 201 + 106 + 279 = 586

d. Flexible working and managing career breaks

Note: Present professional and support staff and academic staff data separately.

- (i) Cover and support for maternity and adoption leave: before leave.

Explain what support the department offers to staff before they go on maternity and adoption leave.

In the previous submission period, no staff took maternity leave but we worked closely with the University SAT to improve processes and guidance. This was fully implemented during this submission period when a CA took maternity leave in 2019/20 (**Case-Study-1**).

There are now checklists for line managers and staff giving step-by-step guidance on arrangements to be made and considerations to be taken into account covering the time before, during and after maternity leave. These were helpful for the 2019/20 case, and M&S highlighted the need for People Services to provide them automatically.

Well in advance of leave starting, staff meet their line manager to discuss appropriate cover, communication whilst on leave, use of Keeping in Touch (KIT) days to support the member of staff and arrangements for return. Links to all the relevant policies are now together on one webpage – highlighted to staff during School meetings.

M&S decided to supplement the University actions by providing a mentor to support staff through parental leave (**2016-AP-10.2**). In 2019/20, we had no staff with recent experience of maternity leave and arranged a buddy from another School.

2021 Action Plan 9.7: Produce short guide on maternity leave, signposting resources, appropriate documentation and good practice established within the School, and publicise to staff.

Word count: 183

(ii) Cover and support for maternity and adoption leave: during leave.

Explain what support the department offers to staff during maternity and adoption leave.

Prior to 2017, no cover was provided for the work of CAs, although fully-funded cover was available for support staff and for ST's regional work. Postdoctoral researchers have their position paused where funding rules allow.

Following discussions with the Deanery (**2016-AP-10.5**), a business case can now be made for cover. This enabled M&S to appoint a temporary lectureship to cover the CA maternity leave in 2019/20,

During parental leave, line managers keep in touch as agreed, ensuring that staff are aware of any changes and are in agreement with plans for KIT days and workload upon their return.

Word count: 98

(iii) Cover and support for maternity and adoption leave: returning to work.

Explain what support the department offers to staff on return from maternity or adoption leave. Comment on any funding provided to support returning staff.

Arrangements for return to work are made on a case-by-case basis. Staff can use their accrued annual leave to help support a staged return and many (including the 2019/20 case) have returned to work on a part-time basis.

M&S aims to ensure that academic staff can use some study leave to help catch up after several months absence from research and scholarship, but this has sometimes been challenging due to staffing constraints. The SAT Chair is currently in discussions with the GESG and senior management concerning a possible funded University-wide sabbatical system for staff returning from parental leave.

The temporary lectureship appointed to provide cover for the 2019/20 maternity leave was extended to allow for some overlap on return and has since been extended to 2023 to support the ME group through a period of heavy teaching production.

All M&S staff returning from extended parental leave are now entitled to increased support from the research budget e.g. to enable the returner to invite collaborators to visit (**2016-AP-10.6**).

Word count: 167

(iv) Maternity return rate.

Provide data and comment on the maternity return rate in the department. Data of staff whose contracts are not renewed while on maternity leave should be included in the section along with commentary.

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Provide data and comment on the proportion of staff remaining in post six, 12 and 18 months after return from maternity leave.

	Number taking leave	%return	In-post after 18 months
Central Academic	1 (in 2019/2020)	100%	100%
Staff Tutor	0	N/A	N/A
Support Staff	2 (in 2018/2019)	100%	100%

Table 44: maternity return rate

All members of staff taking maternity leave in this period returned and remain in post to date. One member of support staff went on maternity leave before the start-date of their post in M&S – a temporary secondment was put in place to provide cover and the member of staff started their post on return from maternity leave.

Word count: 57

(v) Paternity, shared parental, adoption, and parental leave uptake.

Provide data and comment on the uptake of these types of leave by gender and grade. Comment on what the department does to promote and encourage take-up of paternity leave and shared parental leave.

	2017, 2018, 2020		2019		2021	
	Number eligible	%uptake	Number eligible	%uptake	Number eligible	%uptake
Central Academic	0	N/A	1	100%	1	100%
Staff Tutor	0	N/A	0	N/A	0	N/A
Support Staff	0	N/A	0	N/A	0	N/A

Table 45: Paternity leave uptake

Staff are reminded of their entitlement to paternity leave and shared parental leave during AS presentations at School meetings and there is 100% uptake of paternity leave among eligible staff. Our new guide (**2016-AP-10.4**) summarises the key points concerning the different types of leave, with links to the full policies, and reminds staff to discuss arrangements for cover (for example by deputies) with their line manager. Staff are assigned a mentor with previous experience of paternity leave – this aspect of support is reported to be especially helpful.

A recent OU survey of paternity leave (and M&S individual feedback) identified frustration that paternity leave is currently limited to 10 days and that the shared parental leave documentation is complicated, with financial considerations often providing a disincentive to uptake.

2021 Action Plan 9.8: Ensure staff are aware of School paternity guide and work with the GESG to improve provision around paternity leave.

Word count: 127

(vi) Flexible working.

Provide information on the flexible working arrangements available.

M&S has always offered great flexibility to academic staff. Because staff do not teach face-to-face they are largely able to manage their own hours and work at home when needed.

Pre-Covid, most CAs worked on campus around three days a week. P&S staff were normally required to work on campus within core hours (10-4). Many STs are homeworkers and we ensured that high-quality remote access was available for all M&S meetings.

Most staff are currently working at home – see Section 6.

Staff wishing to change their working hours discuss this with their line manager and complete an agile working request form. Appraisers are reminded to ask staff whether they are happy with their contracted working hours at their appraisal (**2016-AP-5.8**).

During the period, there have been successful agile working requests from CAs (2F,2M), STs (3F) and support staff (7F). These include requests to reduce hours following maternity leave, to reduce hours prior to retirement and to work compressed hours.

M&S women in particular, have high confidence in flexible working practices.

2019 OU AS Survey	M&S School		OU	
	F	M	F	M
I can take advantage of informal flexible working	94%	80%	81%	89%
My line manager is supportive of flexible working	94%	91%	86%	92%
I am confident that a formal flexible working request would be agreed	94%	91%	81%	89%

Table 46: Feedback on flexible working

Word count: 160, plus 10 for Covid

vii) Transition from part-time back to full-time work after career breaks.

Outline what policy and practice exists to support and enable staff who work part-time after a career break to transition back to full-time roles.

Part-time staff who wish to increase their working hours discuss this with their line manager. No approval is required if reductions have been in place for less than two years. Otherwise, the School presents a business case to the Faculty. The School has been extremely supportive in enabling several members of staff who have returned from maternity leave part-time to gradually increase their hours over several years as circumstances change; all requests have been granted.

Word count: 75

Word count for Section 5D: 183 + 98 + 167 + 57 + 127 + 160 + 75 = 867, plus 10 for Covid

e. Organisation and culture

(i) Culture.

Demonstrate how the department actively considers gender equality and inclusivity. Provide details of how the Athena SWAN Charter principles have been, and will continue to be, embedded into the culture and workings of the department.

AS work has become increasingly embedded in M&S; MT includes the EDI Lead, and diversity issues are routinely considered in discussion and decision making. The EDI Lead meets with all new members of staff to ensure that they are aware of AS/EDI principles and the importance that M&S attaches to supporting all members of staff.

Feedback from M&S staff is very positive.

2019 OU AS Survey	M&S School		STEM Faculty	
	F	M	F	M
The gender diversity of my School impacts positively on my sense of belonging and inclusion	78%	82%	65%	59%
The gender diversity of my School impacts positively on my desire to stay	67%	64%	66%	52%
I have a sense of belonging to my School	94%	91%	88%	87%

Table 47: Feedback on gender diversity and culture



Women's networking event in the common room

In 2013, the SAT initiated women's networking events with tea and cakes. These provided an informal opportunity to get to know each other, share advice and concerns, and celebrate successes (**2016-AP-11.7**). Over time, the M&S gender balance improved and other staff

increasingly expressed an interest in the events. In 2018, we opened the events to all staff to improve inclusivity and attendees now include male, female and non-binary staff. Discussions often turn to topics related to diversity as well as more general topics.

2021 Action Plan 9.5: Improve awareness of ways to support and include non-binary staff.

One of our key actions to improve the inclusion of STs (>70%F)) has been to improve facilities for remote access to meetings and seminars, with training for staff to use the equipment and to chair meetings inclusively (**2016-AP-11.8**). In our ST Survey, comments were extremely positive with 11 out of 14 respondents highlighting actions in this area as having a very positive impact.

In our 2016 consultation, P&S staff indicated they would welcome greater involvement in School Meetings. In addition to successfully widening inclusion for these meetings (**2016-AP-9.3**), we have also ensured that P&S staff are invited to social events and teaching-related seminars.

2021 M&S P&S Staff Survey	Often	Sometimes	Never
School Meetings	47%	29%	23%
Athena Swan tea & cake	6%	12%	82%
Coffee mornings	0%	41%	59%
Teaching-related seminars	6%	23%	71%

Table 48: Frequency of attendance of P&S staff at School events

2021 Action Plan 8.4: Continue to promote School-wide activities to all grades of P&S staff, supporting them to attend / provide input.

During the pandemic, some module teams arranged online social events for ALs; these will be included in our exploration of new ways of working – see section 6.

Word count: 248, plus 27 for Covid

(ii) HR policies.

Describe how the department monitors the consistency in application of HR policies for equality, dignity at work, bullying, harassment, grievance and disciplinary processes. Describe actions taken to address any identified differences between policy and practice. Comment on how the department ensures staff with management responsibilities are kept informed and updated on HR policies.

The HoS has quarterly meetings with our central HR Partner, who plays a key role in ensuring that good practice is followed. Additional meetings occur as and when required. In almost all cases, problems are anticipated and dealt with without the need to invoke formal procedures. Updates to HR policies are cascaded to the HoS through managerial channels, and discussed at fortnightly STEM Executive meetings. This information is then cascaded to the MT and other staff as appropriate.

In the 2019 OU AS Survey, less than 70% of OU staff expressed confidence that bullying would be dealt with effectively. M&S will supplement university actions on this.

2021 Action Plan 9.6: Organise a workshop led by an external provider on bullying in the workplace and explain OU procedures to staff.

Word count: 106

(iii) Representation of men and women on committees.

Provide data for all department committees broken down by gender and staff type. Identify the most influential committees. Explain how potential committee members are identified and comment on any consideration given to gender equality in the selection of representatives and what the department is doing to address any gender imbalances. Comment on how the issue of 'committee overload' is addressed where there are small numbers of women or men.

Name of Committee	Function	Chair	Deputy	Gender balance of academic members					
				2017			2021		
				F	M	%F	F	M	%F
Management Team	Oversees management of School	HoS (M)	F	4	5	44%	4	5	44%
Board of Studies	Governs teaching	DoT (M)	F	9	15	37.5%	11	13	46%
Research Committee	Responsible for PhD recruitment and support, REF, research matters	DoR (M)	F	3	7	30%	5	5	50%
EDI /AS Committee	Responsible for implementation of Athena SWAN Action Plan and wider EDI issues	EDI Lead (M)	F	6	4	60%	7	6	54%
CV Review Group	Identifies candidates for promotion and rewards, provides feedback for career development	HoS (M)	F	7	9	44%	7	5	58%
Promotions Group (established in 2018)	Supports staff with preparation of cases and mentoring for promotion	Deputy HoS (F)	M	-	-	-	5	3	62%

Table 49: Committee membership

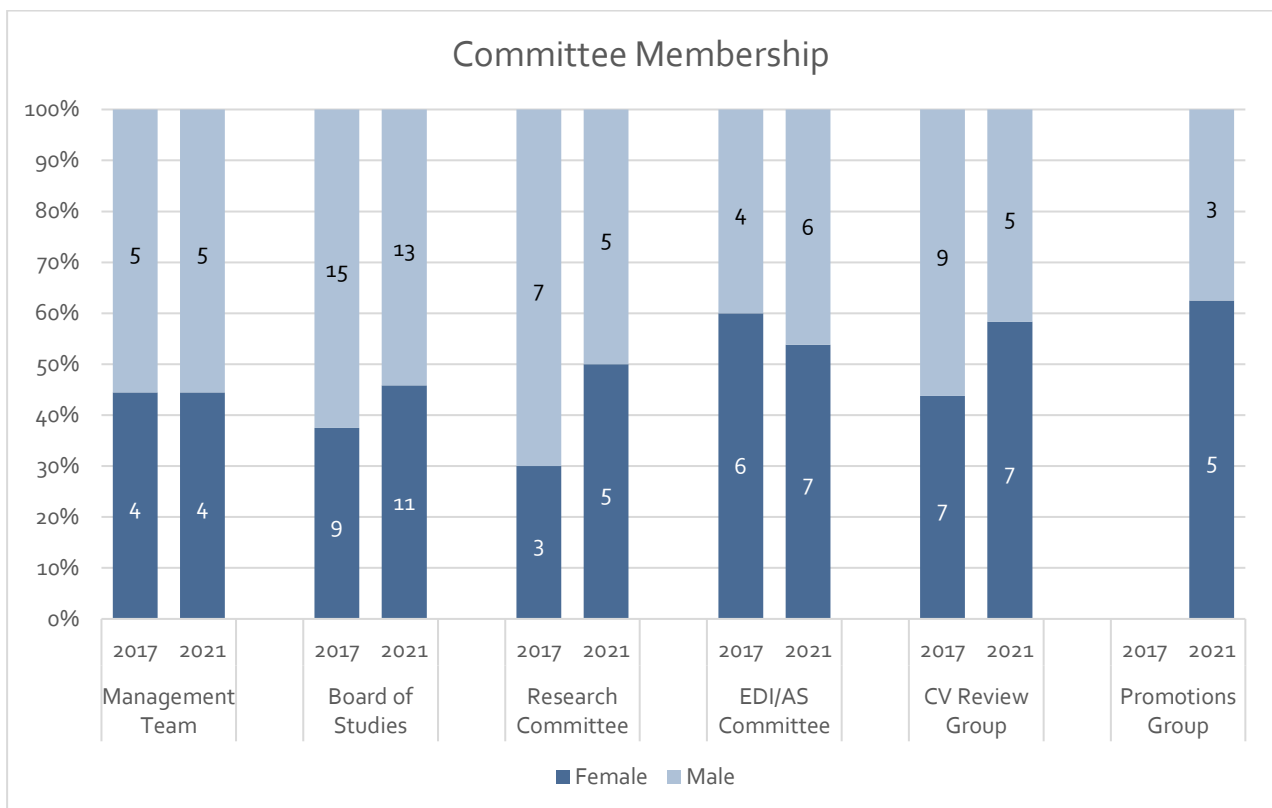


Figure 16: Representation of men and women on committees

The gender balance of M&S committees has improved dramatically since our AS work began in 2013 and is now in line with the gender balance of staff.

Although committee membership is partly determined by role, most committees include non-role-specific individuals, providing scope to address gender imbalances, and encourage wide engagement. The EDI Committee reviews the gender balance of committees each year and discusses any imbalances with committee chairs. In 2016, our Research Committee had low female representation (20%F). The DoR immediately increased this (**2016-AP-8.1**) to 30%F (now 50%F). The number of men expressing an interest in EDI issues has also increased, improving the gender balance of the EDI committee (now 54%F).

2021 Action Plan 6.4: Obtain annual breakdown of committee membership by gender and identify any actions needed.

In the interests of fairness and transparency, all M&S leadership roles now have a description of duties, an assigned workload and an application process. The HoS asks for expressions of interest with a deadline. Since 2016, we have introduced formal deputy roles for all leadership positions (**2016-AP-5.5**) with a similar appointment process. All senior M&S roles now have female deputies, including the first ever female deputy DoR, and so the gender balance of committee chairs should improve. Deputy roles provide a good transition and are used by staff in promotion cases (**Case-Study-2**).

2021 M&S Academic Staff Survey	F	M	CA	ST
Leadership role	88%	100%	93%	91%
Deputy leadership role	63%	44%	40%	91%

Table 50: Proportion of staff who reported being encouraged to consider one of these positions over the past 3-5 years

2021 Action Plan 5.10: Remind appraisers of the importance of encouraging appraisees to apply for (deputy) leadership roles.

Word count: 203

(iv) Participation on influential external committees.

How are staff encouraged to participate in other influential external committees and what procedures are in place to encourage women (or men if they are underrepresented) to participate in these committees?

M&S has a strong tradition of staff playing leading roles on national committees. All staff can record up to 10% of their time against external activities and, for major roles, this can be increased following discussion with the HoS and considered as part of the formal workload allocation. Such work contributes to cases for promotion and rewards. The HoS and DoR actively encourage staff to respond to any advertised vacancies and engage with calls for nominations, with careful consideration of gender balance and career development opportunities.

Two of our female professors have particularly high-profile national roles in supporting women in mathematics and the history of mathematics; this played a key role in their promotion cases. A female ST plays a leading national role in outreach – see (viii)

Two emeritus male professors have been Vice Presidents of the RSS and a female CA (promoted to professor in 2022) is currently Vice President. She is the RSS member of a team of three organising TALMO (Teaching and Learning Mathematics Online), supporting staff in mathematical sciences departments across the UK during the pandemic. This feedback has been overwhelmingly positive with over 600 online participants at the initial workshops and over 1200 subscribers to the website. Many M&S staff have contributed talks to this programme.

In our 2021 survey, many staff expressed an interest in external committees.

2021 Action Plan 5.8: Organise career development training session on getting involved in external committees.

Word count: 163, plus 60 for Covid

(v) Workload model.

Describe any workload allocation model in place and what it includes. Comment on ways in which the model is monitored for gender bias and whether it is taken into account at appraisal/development review and in promotion criteria. Comment on the rotation of responsibilities and if staff consider the model to be transparent and fair.

Staff discuss workload plans at CDSA, informed by feedback on career development from the CV review meeting. Academic staff then complete the electronic workload planning system specifying the number of days they expect to spend on identified activities, including writing bids for grants, AS and other committee work, leadership roles, outreach and work for external organisations as well as writing new teaching material and research/scholarship papers. The plans are scrutinised by School and Faculty management to ensure that overall allocations are fair with all tasks covered appropriately.

Most leadership roles have 3-year fixed terms with new deputy leadership roles **(2016-AP-5.5)** facilitating planning and progression. A gradual increase in rotation of maths module team chairs has been attained **(2016-AP-5.4)**.

In 2016, Statistics was the only group with transparent workload allocations. ME has since adopted a similar process. Workloads for the Applied and Pure Maths Groups have been a focus of attention **(2016-AP-5.1)**.

In 2019, comprehensive workload planning sheets were produced for all groups and made available on the School intranet. They are updated every six months.

These steps have led to improvements in the perception of fairness and, more notably, the transparency of workload allocations.

2021 M&S Academic Staff Survey	F	M	CA	ST
Fairness has improved	39%	22%	42%	31%
Transparency has improved	56%	67%	75%	38%

Table 51: Proportion of staff in each group who thought this aspect of workload allocations has improved over the last 3-5 years

ST duties are allocated by the Lead ST in discussion with staff and these are generally perceived to be fair. There are, however, ongoing concerns about STs' high administrative workload, exacerbated by issues surrounding the implementation of the new AL contract, and the impact of this on their already limited research/scholarship time.

Several CAs were concerned about high teaching workloads and the impact on their research/scholarship, with our workload analysis **(2016-AP-5.11)** identifying that women spend notably less time on research/scholarship than men. Actions discussed in 5(b)(iii) should help to address this.

In addition, MT has raised concerns with the Faculty about the high workload for staff. This fed into a successful case for four additional posts in M&S in 2021 (2ST, 2CA), and the situation should now improve.

Scores for fairness of workloads are high overall, surprisingly so for female CAs.

2021 M&S Academic Staff Survey	Fair	About right
Staff Tutor specific duties	87%	50%
Teaching	80%	94%
Research/scholarship	62%	40%
Other	90%	70%

Table 52: Proportion of Staff Tutors who think their workload allocation is fair given the overall workload / about right

2021 M&S Academic Staff Survey	Fair		About right	
	F	M	F	M
Teaching	91%	56%	67%	56%
Research/scholarship	90%	89%	64%	78%
Other	88%	63%	75%	88%

Table 53: Proportion of Central Academics who think their workload allocation is fair given the overall workload / about right

2021 Action Plan 6.1: Establish annual meetings of the HoS and Group Leads to discuss workload allocations.

2021 Action Plan 6.2: Ensure that staff are aware of the process for allocation of workloads, and that the process is fully linked to objective setting in appraisals.

2021 Action Plan 6.5: Obtain annual analysis of workloads showing the balance between teaching, research and scholarship, and administration, by gender and staff type, and identify any actions needed.

2021 Action Plan 6.6: Continue discussions with the Deanery on the need for the University to consider the implication of new initiatives on staff workloads and to provide proper support.

Word count: 335

(vi) Timing of departmental meetings and social gatherings.

Describe the consideration given to those with caring responsibilities and part-time staff around the timing of departmental meetings and social gatherings.

M&S has a core hours policy that all committee meetings should be held between 10 and 4, Monday to Thursday - to support staff with caring responsibilities, minimise travelling (pre-Covid), and create space for activities such as research/scholarship. M&S also adopted a policy of “quiet August” in 2020 and 2021 where meetings and emails were kept to a minimum. In 2020, STEM also adapted a core hours policy, following suggestions from M&S and others.

Following an annual consultation on timings (**2016-AP-11.3**), all seminars now start at 2. Pre-Covid, remote access was provided for all meetings (see 5(e)i).

“Remote access has been much appreciated, as has the earlier start time, to fit in better with childcare commitments.” ST(F)

Pre-Covid, the main daily social gatherings were over coffee and lunch, with tea and cake events finishing in time for staff to pick up children.

M&S feedback is positive. Lower numbers for social events are primarily due to ST responses. Larger-scale social events are organised for days when STs are likely to be on campus to try and facilitate their attendance.

Events organised through the pandemic and future ways of working are discussed in section 6.

2019 OU AS Survey	M&S School		STEM Faculty	
	F	M	F	M
Important School meetings are at times which enable me to attend either in person or by Skype	100%	100%	97%	91%
My School holds social events at times which enable me to attend	65%	70%	55%	66%
I feel welcome at social events organised by my School	88%	90%	81%	79%

Table 54: Proportion of staff agreeing with these statements on meetings and events

Our 2021 survey highlighted that some part-time staff cannot attend some events.

2021 Action Plan 9.3: Produce a list of the working patterns of part-time staff and take these into consideration when planning School meetings, seminars and social events.

In 2019 the AS Committee and MT co-produced Good Practice Guidelines (**2016-AP-11.9**) to encourage consideration of the needs of others when organising meetings and sending emails. There was some concern about reducing the flexibility of when certain emails should be sent Overall, the guidelines have been welcomed, particularly by women.

2021 M&S Academic Staff Survey	F	M	CA	ST
Emails outside core working hours	56%	44%	65%	33%
Organisation and running of meetings	78%	56%	71%	58%

Table 55: Proportion of this category of staff who thought practice in this area had improved over the last 3-5 years

These guidelines continue to evolve and will be overseen by our new Health and Wellbeing Group.

2021 Action Plan 9.4: Establish a new Health and Wellbeing Group.

Word count: 256, plus 15 for Covid

(vii) Visibility of role models.

Describe how the institution builds gender equality into organisation of events. Comment on the gender balance of speakers and chairpersons in seminars, workshops and other relevant activities. Comment on publicity materials, including the department’s website and images used.

In 2016 we increased our target of female speakers for seminars from 20% to 25% (slightly above the UK benchmark) and identified the need to encourage more internal female speakers (**2016-AP-11.2**). Our average is well above this target. Staff are also encouraged to think about diversity more generally when suggesting speakers. As described earlier, this has helped to improve our diversity in recruitment.

	2016-17			2017-18			2018-19			2019-20		
	F	M	%F	F	M	%F	F	M	%F	F	M	%F
External speakers	5	14	26%	6	17	26%	10	16	38%	3	10	23%
Internal speakers	1	6	14%	5	2	71%	1	3	25%	1	3	25%
Total	6	20	23%	11	19	36%	11	19	36%	4	13	24%

Table 56: Gender breakdown of seminar speakers

In addition to alternating male and female speakers (**2016-AP-11.4**) for the Christmas Lecture (for local sixth formers), we now ensure that the chair is a different gender to the speaker.

To ensure that increased visibility of women in the student prospectus and on the website is maintained and updated (**2016-AP-11.5**), a SAT member has joined the prospectus review group.

As part of the 2020 refresh of the M&S website, we updated our

- diversity statement
- women in maths pages
- “Student stories” documenting the success of a diverse group of students
- “PhD student profiles”, as part of a revamped recruitment section with an emphasis on diversity
- “Research highlights” showcasing the research of a diverse group of staff

2021 Action Plan 10.1: Review and update website annually for diversity.

In 2018, to celebrate the International Day of Women and Girls in Science, our PhD rep organised a Faculty wikithon with expert input.

In 2019 our SAT Chair gave the Distinguished Morley seminar at Reading University, one of many invitations to speak at events as a role model for women in maths.

In 2020 M&S screened viewings of a film featuring the life and work of Maryam Mirzakhani (the only female winner of the Fields Medal) for our MSc students, and our Christmas meeting – many reported that they found it moving and inspirational.

In 2021 three SAT members played leading roles at a UCD Women in Maths Day online event.

2021 Action Plan 10.2: Organise an annual event for staff and students to celebrate women in maths.

Word count: 288

(viii) Outreach activities.

Provide data on the staff and students from the department involved in outreach and engagement activities by gender and grade. How is staff and student contribution to outreach and engagement activities formally recognised? Comment on the participant uptake of these activities by gender.

	PhD student	Research Associate	Lecturer (CA)	Lecturer (ST)	Senior Lecturer (CA)	Senior Lecturer (ST)	Professor
Male	2	0	2	1	5	1	1
Female	3	0	1	0	5	4	1

Table 57: Students and staff involved in outreach 2017-2021

We have a good balance of members engaged in outreach. (A high proportion of our STs are female). Outreach is led by our Engagement Lead, with a workload allocation of 0.2FTE. She provides considerable support and training to staff and PhD students.



June’s PhD student is highly active in engagement linked to her thesis on Mary Somerville, recently co-organising the conference *Marriages, Couples, and the Making of Mathematical Careers*.

Brigitte at the launch of the Royal Bank of Scotland £10 note featuring Mary Somerville.

Several M&S members act as contributors/ academic consultants to BBC programmes such as “Magic Numbers” and “More or Less” aiming to make mathematics accessible to the general public; the latter attracted around 2.5 million listeners/week during the pandemic.

Although events such as Science Festivals have no sign-up sheets, we collect data where possible. For the Christmas Lecture, female attendees generally vary between 30% and 40%, rising to 64% for (incomplete) data captured for 2020 (when the lecture was held online due to covid). For Masterclasses, we aim for an even gender balance of participants and speakers (50%F, 50%M in 2020/21).

M&S recently successfully bid for £11,000 from the National Museum of Scotland to develop an asynchronous online engagement activity.

2021 Action Plan 10.3: Improve the collection of feedback and data on attendance from outreach events.

2021 Action Plan 10.4: Promote our new asynchronous online engagement activity ‘Code Break’ through links with schools, colleges and social media platforms, with a particular focus on rural and remote areas and schools with high levels of deprivation.

Word count: 373

**Word count for Section 5E: 248 + 106 + 203 + 163 + 335 + 256 + 288 + 373 = 1972,
plus 27 + 60 + 15 = 102 for Covid**

Total word count for Section 5: 1678 + 1747 + 586 + 867 + 1972 = 6850

Plus 15 + 39 + 10 + 102 = 166 for Covid

Silver Applications Only

Case Studies: Impact on individuals.

Recommended word count: **1,000 words**.

Two individuals working in the department should describe how the department's activities have benefitted them.

The subject of one of these case studies should be a member of the self-assessment team.

Case Study 1: **REDACTED FOR DATA PRIVACY REASONS**

Word count: 500

THE SECOND CASE STUDY SHOULD BE RELATED TO SOMEONE ELSE IN THE DEPARTMENT. MORE INFORMATION ON CASE STUDIES IS AVAILABLE IN THE AWARDS HANDBOOK.

Case Study 2: **REDACTED FOR DATA PRIVACY REASONS**

Word count: 490

6. Further information

Recommended word count: Bronze: 500 words | Silver: 500 words

Please comment here on any other elements that are relevant to the application.

Here we consider the impact of Covid not covered elsewhere. All staff have worked from home since March 2020 with some CAs/ PhD students given permission to return to campus

in June 2021. All full-time PhD students, and some academic staff returned in September 2021. The wellbeing of staff/students is being prioritised in these arrangements.

How well supported have you felt through the pandemic	PhD students/ postdocs	
	F	M
By the OU?	3.6	4.3
By the School?	4.3	4.5
By your supervisors?	5.0	4.5

Table 58: M&S AS 2021 Survey average scores with 1=not very well, 5=very well

The 2020 transition was relatively smooth due to our experience of home-working for STs and the online nature of our provision. The OU introduced a generous contingency leave system, highly valued by staff with young children. Nonetheless, many staff reported increases in workload due to the difficult circumstances.

How well supported have you felt through the pandemic	Central Academics		Staff Tutors	
	F	M	F	M
By the OU?	4.3	3.4	3.7	4
By the School?	4.7	4.3	4.5	4.3

Table 59: M&S AS 2021 Survey average scores with 1=not very well, 5=very well

M&S support included introducing weekly online subject group meetings (following the example of ST weekly meetings) and coffee mornings, with regular meetings between the HoS and Group/ST Leads (**2016-AP-11.9**).

How helpful have you found the weekly subject group meetings	Central Academics	
	F	M
For social interactions?	4.7	4.9
For work-related discussions?	4.6	4.5

Table 60: M&S AS 2021 Survey average scores with 1=not very helpful, 5=very helpful

How helpful have you found the weekly Staff Tutor meetings	Staff Tutors	
	F	M
For social interactions	4.1	4.7
For work-related discussions?	4.6	4.7

Table 61: M&S AS 2021 Survey average scores with 1=not very helpful, 5=very helpful

Male CAs report being affected particularly badly by the pandemic. This group includes many who previously worked on campus for a high proportion of the week, and (along with female STs) many with young children. STs, who often attended meetings remotely, found greater

equality in online meetings.

How has the pandemic affected	Central Academics		Staff Tutors	
	F	M	F	M
Your ability to work productively?	2.7	2.2	2.6	4.3
Your mental and physical wellbeing?	2.6	1.9	2.5	2.3
Your experience of meetings?	3.2	2.4	4.3	3.7

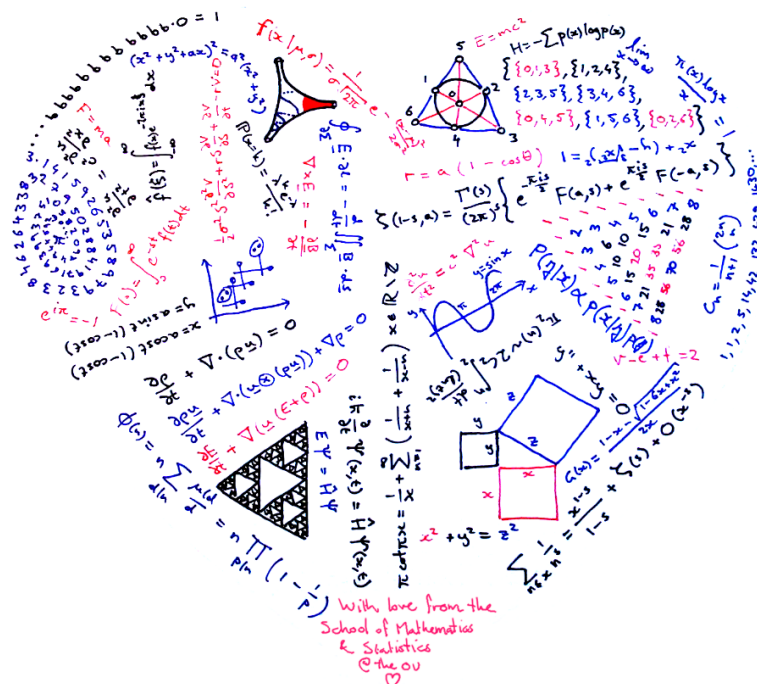
Table 62: M&S AS 2021 Survey average scores with 1=negatively, 5=positively

The University is currently exploring new ways of working, with some staff concerned by the uncertainty. Our AS survey responses gave many useful suggestions, with staff aware of the need to accommodate different preferences. This is a priority moving forwards and will be led by our New Ways of Working Lead.

2021 Action Plan 9.1: Ensure that staff are consulted, listened to, supported and comfortable with new ways of working.

2021 Action Plan 9.2: Develop good practice for using online, face-to-face and hybrid settings for seminars, meetings and social events.

Word count for Section 6: 230 for Covid



*Our School Maths heart created collaboratively for an OU twitter campaign
#loveparttime*

**Total word count: 504 + 455 + 854 + 2099 + 6850 + 990 = 11752,
plus 30 + 17 + 51 + 166 + 230 for Covid**

7. Action plan

The action plan should present prioritised actions to address the issues identified in this application.

Please present the action plan in the form of a table. For each action define an appropriate success/outcome measure, identify the person/position(s) responsible for the action, and timescales for completion.

The plan should cover current initiatives and your aspirations for the next four years. Actions, and their measures of success, should be Specific, Measurable, Achievable, Relevant and Time-bound (SMART).

See the awards handbook for an example template for an action plan. To insert a landscape page, please copy from the first red marker down to here and paste into the document where the landscape page is required.

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Action	Description of Action	Rationale	Timescale	Responsibility	Success Measure
ORGANISATIONAL					
Section Leader: EDI Lead					
1.1	<p>Embed new ways of working within the wider remit of the EDI Committee to ensure Action Plan is implemented:</p> <ul style="list-style-type: none"> • Refresh committee membership • Rearrange meeting agendas • Review and update Action Plan annually 	<p>In 2021, Athena Swan work became the responsibility of the EDI Committee which has a wide remit, including gender equality, ethnicity, LGBTQ+, neurodiversity and intersectionality. Large numbers of staff are interested in joining the committee which up to now has prioritized the development of this submission. To streamline committee business, detailed discussions on the Action Plan will take place in a subgroup, for the second part of the meeting.</p>	<p>February 2022: following submission.</p>	<p>EDI Lead</p>	<p>Athena Swan work efficiently integrated into EDI Committee business by the end of 2022.</p>
1.2	<p>Document good practice established in earlier action plans and ensure properly embedded and updated. Documents to be available to all School staff on the School intranet including:</p> <ul style="list-style-type: none"> • Recruitment guides for staff and PhD students 	<p>Much good practice has been developed since our Athena Swan work started in 2013. Ensuring that this is properly documented in a visible way will support staff taking on new leadership roles to continue this practice.</p>	<p>Documentation to be produced and uploaded to the School intranet during 2022, and reviewed annually.</p>	<p>Former AS Lead to document practice.</p> <p>New EDI Lead to ensure this is reviewed.</p>	<p>All documents produced and available to staff on the School intranet by the end of 2022, so that good practice to continues to be embedded in the School.</p>

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Action	Description of Action	Rationale	Timescale	Responsibility	Success Measure
	<ul style="list-style-type: none"> • Guide for appraisers / mentors for SL promotions • Briefing for appraisers before CDSA meetings • List of leadership /deputy roles and holders • Targets for diversity and balance of seminar speakers • Good practice guide for meetings and emails 				
1.3	<p>Ensure regular feedback is obtained:</p> <p>Encourage staff to engage with University-wide Athena Swan surveys (run in odd years)</p> <p>Run School surveys in alternate (even) years for:</p> <ul style="list-style-type: none"> • Academic staff (Central Academics, Staff Tutors, ALs) • Support staff • PhD students • Postdocs 	<p>Staff feedback is crucial in evaluating the impact of actions and identifying areas where new actions are required.</p> <p>A university wide survey is run in odd years and there is a need to avoid survey overload.</p>	<p>Run next School survey in 2024 – we ran several surveys during 2021 and a University survey will be run in 2023.</p>	<p>EDI Lead</p>	<p>At least 50% of staff engage with 2023 University survey. At least 70% of staff and 50% of PhD students engage with 2024 School surveys.</p>

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Action	Description of Action	Rationale	Timescale	Responsibility	Success Measure
1.4	Engage with University plans for the implementation of the new AL contract and introduce appropriate actions to support ALs and Staff Tutors. Add an AL rep to the EDI Committee once the new contract is implemented.	The University is currently in the process of implementing a significant change to the AL contract. There is a need to ensure that good practice is established for them and the Staff Tutors (a large proportion of whom are female) who are their line managers. The work is currently creating a significant additional workload for Staff Tutors.	Engage with Lead Staff Tutors as plans are developed throughout 2022. Add an AL rep to the EDI Committee in 2023. Develop further actions from 2023 onwards.	EDI Lead/ Lead Staff Tutor	Survey feedback and feedback from Lead Staff Tutors indicates that ALs and Staff Tutors feel supported by the School as the new contract is implemented.
2. UNDERGRADUATE STUDENTS					
Section Leader: EDI Lead					
2.1	Promote the new Mathematics Education modules through activities including social media, promotional material, module choice events and external engagement events with schools, colleges and ITE providers.	Our ME modules are currently being refreshed. The pool of potential students has a high proportion of women (76% of school-teachers and the majority of early career secondary mathematics teachers are female.)	Through 2022-23	Maths Ed Lead	By October 2023, there is a 5% increase in student numbers on the Maths Education modules from October 2020. 50-80% of ME students are female.
2.2	Monitor the contribution of the free Badged Open Course "Teaching Mathematics" in driving prospective students towards the new ME modules.	The ME group developed a new BOC in 2018 which has attracted around 13,000 visits with over 1400 enrolments (approx. 82%F), with potential to increase numbers on ME modules.	Annually from 2022	Maths Ed Lead	At least 10% of students studying the BOC click through to OU module pages.

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Action	Description of Action	Rationale	Timescale	Responsibility	Success Measure
2.3	Track the proportion of women registering for the new Data Science qualification. Liaise with the Computing & Communications (C&C) SAT to devise new actions as appropriate.	The new Data Science qualification is run by M&S, using a mix of modules from M&S and C&C. It is attracting high numbers of students. The initial proportion of women looks strong but there is a need to understand this better and ensure this is maintained.	Annual data from autumn 2022, followed by discussion with C&C	EDI Lead	At least 30% of students registering on our new Data Science qualification are female.
2.4	Formalise link between SAT and SST with annual meetings to discuss emerging gender-related issues for undergraduate students.	The SST advisors have regular conversations with students and are aware of issues around study. Initial meetings have provided valuable insights; arranging such a meeting annually would support the SAT in developing appropriate actions.	Annual meeting between EDI Lead, SST Lead and SST advisors from June 2022 onwards	EDI Lead	SAT is aware of student concerns with notable gender differences, and SST is aware of gender differences in data identified by the SAT. Discussions lead to the implementation of actions that address the concerns.
2.5	Build on 2021 events and organise annual focus groups in Student Voice week to engage with female and non-binary students; use the results to form new actions as appropriate.	Former AS work has had high staff engagement but less from students. These events provide an opportunity for conversations to evaluate impact of current actions and to inform future actions.	Annually from 2021	EDI Lead	Student voice week focus groups are attended by at least 10 students and lead to new actions.
2.6	Continually review the content of the EDI web-page on the student Study Site, using feedback from staff	The EDI page was established in 2021 to facilitate greater engagement with students.	Annually in autumn from 2021	EDI Lead	EDI page has at least 300 student views per year by 2023/24.

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Action	Description of Action	Rationale	Timescale	Responsibility	Success Measure
	and students, and advertise at EDI events. Provide module teams with an EDI slide for their welcome tutorials and encourage teams to use a diversity of staff / images at such events.	It is important that students are aware of the website and can contribute to its development. Highlighting the page in welcome tutorials should also assure students of the School's commitment to EDI.			80% of module teams include EDI material in welcome tutorials by 2024.
2.7	Develop a new Open Educational Resource "Global Mathematics - Ancient and Modern" which highlights the historical contributions of mathematicians from under-represented groups, including female mathematicians and statisticians.	Our undergraduate materials include history boxes with details of the mathematicians who developed the theory that is being studied. These are mainly white male Europeans which is of concern to both staff and students. We have world leading expertise in the history of maths which would enable the development of this resource for use by the OU and other universities.	Early 2022: Appointment of OU funded researcher. January – September 2022: History of Maths Professor to work on design of resource and collect original source. April – September 2022: Researcher to work on all aspects of the resource, including User Notes for each source. 2023: Investigate possibilities of integrating resource into teaching assessment. Advertise to OU students and other UK universities.	History of Maths Professor	Researcher appointed in time for initial version of resource to be available by end of 2022. In 2022/23, resource accessed by at least 2000 students and 10 UK universities. Positive feedback from students.

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Action	Description of Action	Rationale	Timescale	Responsibility	Success Measure
2.8	Carry out intersectional analysis of distribution of students on each undergraduate qualification.	Data shows a significant difference in the age profile of male and female students on the MSc programme. Initial data indicates that age differences also exist at undergraduate level, but differ across qualifications. It is likely that other intersectional differences exist. Greater understanding of these differences will inform future actions.	Carry out detailed analysis in the first half of 2023 Discuss findings with students and Board of Studies in the second half of 2023 Implement any relevant actions in 2024	EDI Lead	Analysis completed. Recruitment and progression actions are targeted at relevant groups.
3. MSc STUDENTS					
Section leader: Deputy Director of the MSc					
3.1	Review the MSc admissions process, including the entry test and the wording on the letter accompanying it.	The current letter wording sets high expectations and could be off-putting to women. The test requires strong expertise in both pure and applied mathematics and could be off-putting to students with strength in one area.	Actions to be agreed with new MSc Director, due to be appointed in summer 2022. Letter wording to be reviewed for use in 2023. Test content to be reviewed for use in 2024.	HoS Director of the MSc Director of the MSc	No significant gender difference in proportion of students returning the test.

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Action	Description of Action	Rationale	Timescale	Responsibility	Success Measure
3.2	Ensure that anonymized data on students sent and returning the MSc entry test are retained within the School.	Some data has been lost due to GDPR cleansing.	From 2022	Director of the MSc	Complete set of entry test data available for annual analysis.
3.3	Investigate and develop appropriate interventions around growth mindset and mathematical resilience, on MSc and undergraduate modules.	Data shows that women are more likely than men to withdraw from studying modules. Some students currently withdrawing are likely to be able to pass, possibly after a resit. Some interventions are currently being trialed by the Deputy Director of the MSc.	2022 – develop interventions and resit support package. 2023 – try out interventions and resit package on some MSc and undergraduate modules and evaluate 2024 – refine interventions and produce a report	Deputy Director of the MSc	By 2025, proportion of students withdrawing from MSc modules has decreased by 5%, with narrowing of gender gap and improved resit support. Report produced with recommended interventions.
3.4	Analyse engagement with MSc student forums by gender and introduce appropriate actions if needed.	The MSc Director has encouraged the development of much more active student forums. Given that the profile of the female cohort is very different to that of the larger male cohort, it is important to understand if there are any differences in engagement.	2022 – carry out analysis of forum posts 2023 – develop interventions if needed.	Deputy Director of the MSc	The gender balance of students engaging with the forum matches that of the MSc student population.

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3.5	Use insights into different age distributions to inform discussions with female students on possible recruitment/ retention actions.	The age profiles of our male and female MSc students are very different. Since women are also in the minority, there is a need to ensure that the younger female students feel properly supported and included. Whilst continuing to encourage applications from this cohort, we should also explore possibilities for growth in applications from the smaller pool of older women with maths degrees.	2022 – discuss findings in a student focus group 2023 onwards – implement any actions identified	Deputy Director of the MSc	Female students give positive feedback on support provided. Maintain an average of at least 25% of students enrolling on the MSc are female. Target and actions to be kept under review as impact of pandemic becomes clearer.
3.6	Support Stage 3 module teams to encourage students to consider studying the MSc.	The proportion of female students on the MSc is less than on UG qualifications. Pro-active engagement with Stage 3 students, with an understanding of the different motivations of male/female students could help to address this.	Develop wording to be used by Stage 3 teams, in time for the 2022 recruitment round.	Deputy Director of the MSc	Maintain an average of at least 25% of students enrolling on the MSc are female. Target and actions to be kept under review as impact of pandemic becomes clearer.
4. PhD STUDENTS AND POSTDOCS					
Section Leader: Postgraduate Research Tutor (PGRT)					
4.1	Develop a formal process for offering funded part-time PhD studentships.	Up to 2021, funded studentships were advertised for full-time study only. This action will widen access to PhD study.	Part-time funded studentships to be offered for study starting from October 2022.	PGRT	At least one funded part-time PhD studentship offered in the period 2022-2024.

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4.2	<p>Develop a process for offering financial and logistical support through the School/ Graduate School to international students and postdocs regarding:</p> <ul style="list-style-type: none"> • Re-imbursement of visa and NHS health surcharge fees • Support with visa applications 	New requirements are prohibitive for many students/ postdocs and this reduces the diversity of researchers able to take up studentships/ postdocs in the UK	<p>In 2022/23, investigate possibilities for providing support in discussion with the Graduate School.</p> <p>In 2023/24 implement any solutions identified as being within the remit of the School.</p>	PGRT	<p>Less than a third of international students turn down offers due to UK entry requirements/ charges</p> <p>Positive survey feedback from PhD students/ postdocs regarding support and advice offered by the School.</p>
4.3	Offer funded summer research internships for undergraduates and MSc students, linked to the LMS Undergraduate Bursary Scheme. Impose condition that at least one third of each cohort are women.	Women are under-represented at PhD level in mathematics. This scheme would enable UG and MSc students to try out research. The LMS has recently widened their scheme to include part-time students.	<p>Pilot scheme trialed in summer 2022.</p> <p>Adjustments made and new scheme launched in summer 2023.</p>	PGRT	Scheme in place, with at least one third of internships held by women.
4.4	Analyse and replicate the recruitment practices for those postdoc positions that have attracted the highest proportions of female applicants.	<p>Postdocs within the School have a lower proportion of women than other staff groups.</p> <p>Some postdoc positions have attracted far more female applicants than others.</p>	This is a long-term project since very few postdocs are recruited each year. We will develop our procedures in 2022-2024.	DoR	Proportion of female applicants for postdoc positions is at least as high as the national proportion of women in postdoc positions in mathematical sciences in the UK.
4.5	Work alongside the LMS Early Career Research Committee to develop a set of resources for PhD	Some part-time students are unable to attend the PhD workshops. Recordings would provide	First recordings made in 2023, with additional ones provided in 2024.	PGRT/DoR	Positive feedback from students on recordings in 2024 student survey.

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Action	Description of Action	Rationale	Timescale	Responsibility	Success Measure
	students and postdocs on topics related to employability.	them (and other students and postdocs) with support for career development. Our DoR is a member of the LMS ECR Committee who have recently started to run workshops with associated slides and articles. We would provide input to these and produce complementary material.			
5. KEY TRANSITION POINTS					
Section Leader: Deputy Head of School					
5.1	Appointment panels to be provided with the gender breakdown of applicants before shortlisting. Gender breakdown of applicants, shortlisted candidates and appointments to be recorded within the School.	This will ensure that panels consider the gender breakdown of applicants and that proper records are kept and analysed. Central data is currently problematic and so we are trialing an approach that may work for other Schools.	All appointments from 2022 onwards	School Senior Manager	EDI Committee is able to review recruitment data annually with high confidence in the data.
5.2	Provide guidance to panels to consider re-advertising posts if all candidates meeting the essential criteria are of the same gender.	Panels are currently unsure of actions that can be taken if it is not possible to produce a mixed gender shortlist. The action should also motivate staff to encourage a diversity of applicants.	All appointments from 2022 onwards.	Deputy HoS/ HoS	All shortlists are mixed gender.

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5.3	Review and monitor the new AL recruitment process, incorporating good practice established for other staff recruitment in the School.	ALs were previously recruited to work on individual modules using a fair selection process and interview panels of two staff, not necessarily gender-balanced. The introduction of the new AL contract provides a good opportunity to review practices.	Create refreshed bank of EDI interview questions by May 2022. Provide Staff Tutors with data on the breakdown of the current AL cohort by gender and ethnicity each May, from 2022 onwards. Encourage gender-balanced panels for recruitment and workload allocation for 2022/23 onwards.	EDI Lead / Lead Staff Tutor	At least 50% of interviews for ALs undertaken by mixed gender panels by 2023.
5.4	Run briefing for new members of academic staff on the promotion process.	We appointed several new members of staff in 2021. The briefing will help support their career development.	September 2022, once all staff from the 2021 recruitment round are settled in post. Repeat for additional new members of staff as required.	Chair of M&S Promotion Group – currently Deputy HoS	Staff report good understanding of the promotion system in surveys.
5.5	Build on mentoring for professorial promotions: <ul style="list-style-type: none"> • Produce guide for mentors and annual timeline for reviews • Support staff with preparation of cases 	Long term professorial mentoring is a relatively new activity and arrangements need formalizing to embed properly into the School. First case submitted in 2021 with further mentees now approaching this stage.	Guide and timeline produced in 2022. Support provided from 2022 onwards	Chair of M&S Promotion Group	At least one woman and one man promoted to professor in the next 5 years.

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5.6	Record and analyse data on staff rewards by gender and staff grouping, introducing new actions if appropriate.	Current records show women are more likely to receive rewards – there is a need to monitor this situation long term and understand the reasons behind this.	Annually in the autumn.	School Senior Manager	Gender balance of staff receiving rewards matches the gender balance of the pool of staff.
5.7	Establish mechanism for annual collection of training needs	Training needs are recorded in appraisal forms but can only be accessed by appraiser.	Request initiated in 2022	School Senior Manager	Process implemented. Training sessions facilitated by the School when several staff have the same need.
5.8	Organise career development training sessions as needs identified, including on: Getting involved in external committees	This topic was suggested in our 2021 AS survey. External committee work has played a key role in the promotion cases of female members of staff. Our APD sessions have had very positive feedback – particularly from women.	2022 onwards	Scholarship Lead (who is responsible for the APD seminars)	Staff survey results show at least 60% of staff find APD sessions helpful, and also show impact of training – eg improvements in average score for level of engagement with activities such as external committees.
5.9	Train up new mentors and appraisers, giving a better gender balance amongst staff taking on these roles: <ul style="list-style-type: none"> List of existing mentors to be consulted when allocating new mentors to ensure workload is 	There is currently a high proportion of women amongst appraisers and mentors. The workload can be significant. The Faculty has a new mentoring scheme providing training.	2022 onwards	HoS	Gender balance of mentors and appraisers matches gender balance of staff group.

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	<p>spread round and gender balance is improved</p> <ul style="list-style-type: none"> Gender balance of existing appraisers is taken into account when allocating new appraisers Staff encouraged to access new Faculty mentoring scheme 				
5.10	Remind appraisers of the importance of encouraging appraisees to apply for (deputy) leadership roles.	Survey feedback showed that CAs were less likely than STs to encourage staff to consider applying for deputy roles. These roles have been useful for improving the gender balance in leadership roles.	Annually at appraiser briefing from 2022 onwards.	HoS	<p>Topic included in appraiser briefing paperwork.</p> <p>All staff groups applying for (deputy) leadership roles.</p> <p>Gender balance amongst leadership roles is maintained.</p>
6. WORKLOAD ALLOCATIONS					
Section Leader: Head of School					
6.1	Establish annual meetings of the HoS and Group Leads to discuss workload allocations – informed by actions below	This approach was trialed in 2021 and was valuable in improving parity across different groups of staff.	Annually in April – before deadlines for appraisals and workload plans.	HoS	Surveys show at least 10% of staff reporting an improvement in fairness of workload allocations.

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	and: <ul style="list-style-type: none"> • Workload planning sheets • School objectives • Career development needs 				
6.2	Ensure that staff are aware of the process for allocation of workloads, and that the process is fully linked to objective setting in career development appraisals	Survey feedback showed that some staff were not aware of the process. Many members of staff are involved and there is a need for co-ordination.	Run briefing session in School meeting in 2022 to explain workload allocation process. March 2022 - add this topic to notes for appraiser briefings. Annually from 2023 – include short briefings in School meetings / appraiser briefings to remind staff of process.	HoS	Staff briefing implemented and topic added to appraiser briefing notes in 2022. Staff report good level of awareness of workload allocation process in 2024 survey.
6.3	Improve the gender balance of teaching teams at different stages of study: <ul style="list-style-type: none"> • Include review of module teams by gender in workload planning meeting 	We currently have higher proportions of women teaching on teams for introductory UG modules and higher proportions of men at MSc level. There is a need to provide a variety of role models to support	Include consideration of gender, with long term planning in mind in action 6.1 from 2022.	HoS	Increase proportion of male module chairs at stage 1 to at least 35% and proportion of female module chairs at MSc to at least 30% by 2024.

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	<ul style="list-style-type: none"> Improve gender balance of module team members / deputy chairs to provide experienced pool of staff to take over as module team chairs Explore ways in which the gender balance of ALs teaching at different stages can be improved under the new AL contract. 	students as they progress through their studies, and to provide a variety of experience for staff development. Targets have been drawn up based on the current gender breakdown of staffing groups.	In 2023 review the process of appointing ALs to module teams under the new contract and identify ways of improving the gender balance.	Lead Staff Tutor	<p>Maintain the current balance of at least 40% module chairs are female and at least 40% are female at stages 2 and 3.</p> <p>Plan in place for improving the gender balance of ALs at different stages of study.</p>
6.4	Obtain annual breakdown of committee membership by gender and identify any actions needed.	This is an ongoing action which has led to big improvements in the gender balance of our committees. We need to maintain this oversight.	Annually in March	School Office Manager / EDI Lead	Gender breakdown of School committees matches that of the School.
6.5	Obtain annual analysis of workloads showing the balance between teaching, research and scholarship, and administration, by gender and staff type, and identify any actions needed.	<p>The present provision of data needs refining since, for example, scholarship tasks appear under the teaching category.</p> <p>Current workload analysis of time spent on research and scholarship shows</p> <p>a) Time for female CAs is approximately 70% of that for male CAs.</p> <p>b) Time for most STs is lower than their entitlement.</p>	<p>Workload analysis to be carried out in July each year.</p> <p>Improved workload data available routinely from 2023.</p>	School Senior Manager, HoS, DoR	<p>Detailed workload data available, enabling easy analysis.</p> <p>Analysis of workloads shows that, by 2024, average time spent on research and scholarship</p> <p>a) differs by less than 15% by gender for CAs.</p> <p>b) Is at least 90% of entitlement for STs</p>

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6.6	Continue discussions with the Deanery on the need for the University to consider the implication of new initiatives on staff workloads and to provide proper support.	Survey feedback showed that many staff were concerned by the impact of university initiatives on their workloads. Staff Tutors (with a high proportion of women) are particularly affected by the implementation of the new AL contract.	Ongoing	EDI Lead/ HoS	Survey feedback shows that staff feel supported by School leadership regarding the impact of new University initiatives.
7. RESEARCH AND SCHOLARSHIP					
Section Leader: Director of Research					
7.1	Embed the new Research Directions Group into the School structures, with formal reporting and ways of working, to lead on providing support to staff	There is a gender imbalance amongst Central Academics in time spent on research and a need to provide support implementing 7.2-7.4. A new gender-balanced group with research leads from each area was formed in 2021.	Group established as subgroup of Research Committee in late 2021. Formal reporting and ways of working to be developed through 2022.	DoR	Actions 7.2-7.4 successfully implemented. Research Committee and subgroups include at least 40% women and 40% men. Targets set for research and scholarship time in action 6.5 are met.
7.2	Introduce a Back to Research Scheme to support mid-career Central Academics.	Several mid-career M&S Central Academics (particularly women) record small amounts of time spent on research. Some would like to increase this time.	Discussions with staff through 2022 and scheme in place by 2023, reviewed in 2024.	DoR	At least one in three CAs who wish to re-invigorate their research careers submit at least one new publication by end of 2025.

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					Survey feedback shows staff are happy with their workload allocation for research and School support.
7.3	Establish six monthly review meetings between DoR and group of research-active Staff Tutors to identify actions that could be implemented to support them in developing their research.	Staff Tutors have very limited time in their contracts for research/scholarship, with most using this time for scholarship. We have successfully supported two research-active female STs to develop their research. In 2021 we appointed 5 new research-active STs (2F,3M) and there is a need to identify appropriate actions to support them in developing their research.	Initial meeting set up by summer 2022.	DoR/ST rep on Research Committee	STs who wish to be research-active provide positive feedback on support. Target set for research and scholarship time for STs in action 6.5 is met.
7.4	DoR to work with Group Leads to ensure time is allocated to staff appropriately in workload allocations for bidding for grants.	Staff often report difficulties in finding time to write grant applications – especially early career staff with caring responsibilities.	DoR to provide formal input to workload planning process from 2022 onwards – trialed in 2021.	DoR	At least 80% of men and 80% of women with significant responsibility for research have submitted a grant application / held a grant in the period 2021-2025. Survey feedback shows staff are happy with time allocated.

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Action	Description of Action	Rationale	Timescale	Responsibility	Success Measure
7.5	Develop a Productive Researcher Framework to support staff with maintaining a research / scholarship profile.	Many staff report difficulties in spending productive time on research/scholarship alongside the demands of teaching/admin. Strategies explored by an external consultant in a workshop were welcomed.	Focus group meetings held in 2022/23 to identify any structural changes that would help support staff. Framework in place by end of 2023.	DoR / Scholarship Lead	Targets set for research and scholarship time in action 6.5 are met. Survey feedback shows staff are happy with time spent on research and scholarship.
7.6	Build on successful scholarship work, using experienced staff to mentor staff new to scholarship.	Several staff have developed an expertise in scholarship – this has formed the basis of several successful promotion cases under the teaching profile. Engagement is high across the School – particularly amongst women. Several new members of staff have just been appointed.	Workshop run in November 2021. Annual call for scholarship projects with offers of mentors.	Scholarship Lead	Maintain a level of at least one in three staff participating in a scholarship project. Scholarship projects contribute to successful promotion cases to SL for at least 2 women and 1 man in the next four years.
7.7	Build on successful scheme to support Senior HEA Fellowship applications through organized peer support groups.	Very high proportions of Staff Tutors (and consequently women) have supported each other to obtain SFHEA Fellowship. The scheme is starting to be rolled out amongst Central Academics. This is helpful for promotion on the teaching profile.	Annual call for staff to join groups applying for HEA Fellowship	Scholarship Lead	Proportion of Central Academics with SFHEA status or above increases from 25% to at least 33% over next four years. Proportion of Staff Tutors with SFHEA status or above is maintained at over 70%.

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Action	Description of Action	Rationale	Timescale	Responsibility	Success Measure
7.8	Use writing group to support staff with developing scholarship into educational research.	The group (led by the Maths Education Lead) has been helpful for staff development, with good levels of engagement from women – current membership from M&S is 9 women and 5 men.	Annual call for new staff to join group – with pro-active encouragement.	Maths Education Lead	By 2024, at least 80% of the members of the writing group have produced at least one paper/article on educational research.
8. PROFESSIONAL AND SUPPORT STAFF					
Section Leader: Senior Manager, Qualifications (Grade 8 member of support staff)					
8.1	Contribute to feedback on the online CDSA system, suggesting further ways in which it can be improved.	Although staff feedback on appraisals has improved, some staff commented in the survey that the form could be streamlined.	Continuing discussions with Faculty Management.	Senior Manager, Qualifications	Positive feedback in the 2024 P&S staff survey on the appraisal process
8.2	Hold discussions with Faculty Management to address the impact of secondments and short-term contracts.	Over the last few years, several staff have been successful in securing short-term secondments which have been good for their career progression. The frequent changeovers, with a consequent requirement for time spent on training, and gaps between staff appointments have, however, created some challenges.	Discussions held in 2022.	Senior Manager, Qualifications/ HoS	Grade 8 P&S staff linked to M&S are happy with the level of staffing in their area.

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Action	Description of Action	Rationale	Timescale	Responsibility	Success Measure
8.3	Promote the MS Teams 'Staff Room' to Professional and Support staff as a way to look for development opportunities.	This is a new resource which should facilitate staff development. Initial feedback is positive.	Annual reminder of resource from 2022	Senior Manager, Qualifications	All P&S staff informed of resource. Positive feedback in P&S staff survey.
8.4	Continue to promote School-wide activities to all grades of P&S staff, ensuring that managers give them the time where possible to attend events that interest them and to provide input to new initiatives.	Although P&S staff involvement with School activities has increased significantly since 2016, some staff expressed uncertainty about attending and also noted that it was not always possible to attend. As the School explores new ways of working, it is important that all staff groups are able to contribute to discussions.	Ongoing, with reminder to line managers in 2022.	Senior Manager, Qualifications	Increased engagement of P&S staff with School-wide activities – evidenced by attendance and survey data.
9. WAYS OF WORKING					
Section Leader: Deputy HoS					
9.1	Ensure that staff are consulted, listened to, supported and comfortable with new ways of working (homeworking and campus based) through actions including: <ul style="list-style-type: none"> New Ways of Working Lead for M&S to act as main liaison between School and Faculty 	Uncertainty about the University's plans for future ways of working was one of the main concerns raised by staff in our 2021 survey, with an awareness that different groups of staff have different needs and preferences. Meetings of HoS with Group Leads were established	M&S New Ways of Working Lead appointed in summer 2021. Different ways of working to be trialed in late 2021 / early 2022.	HoS / New Ways of Working Lead	New ways of working trialed and established. Positive feedback to Group Leads and in staff surveys.

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Action	Description of Action	Rationale	Timescale	Responsibility	Success Measure
	<ul style="list-style-type: none"> Two-monthly meetings of HoS and Group Leads to provide oversight of staff wellbeing and concerns. 	during the pandemic and provided a useful forum for sharing staff concerns and ideas for providing support.	New ways of working to be formalized during late 2022.		
9.2	Develop good practice for using online, face-to-face and hybrid settings for seminars, meetings and social events.	There is a need to maintain the equality between homeworkers and campus-based staff of online meetings, alongside benefits of face-to-face.	Different styles of meetings / use of equipment to be trialed through 2022. Guide for good practice produced in 2023.	New Ways of Working Lead / HoS / DoR	Good levels of attendance and engagement with seminars, meetings and social events from all groups of staff, evidenced by qualitative and quantitative data collected by action leads and by data from surveys.
9.3	Produce a list of the working patterns of part-time staff and take these into consideration when planning School meetings, seminars and social events.	Survey feedback showed that some part-time staff were unable to attend some social events / seminars due to days worked. There is very little knowledge of staff working patterns.	List produced in spring 2022 and updated annually.	School Senior Manager	Part-time staff able to attend key events. Specific survey question included to gather feedback.
9.4	Establish a new Health and Wellbeing Group.	To improve the welfare of staff, foster positive relationships among staff, and reduce inequalities between groups of staff (such as academics and support staff). Covid has presented diverse wellbeing issues; the group will listen to and support staff.	New group established in 2022. Review group for effectiveness in 2023 and annually thereafter.	HoS Health and Wellbeing Group Leads	Positive survey feedback for School support for health and wellbeing.

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9.5	Improve awareness of ways to support and include non-binary staff.	The School recognizes that some members of staff identify outside a gender binary. Trans and non-binary staff within the School can be better supported through measures such as use of appropriate pronouns. Pronouns should not be compulsory to avoid forced disclosure but greater awareness and acceptance of them will create a more inclusive environment.	2022 – remind staff of the option to include pronouns in signatures 2023 – consult with non-binary staff on additional actions	EDI Lead	Consultation with non-binary staff on initiatives taken provides positive feedback
9.6	Organise a workshop led by an external provider on bullying in the workplace and explain OU procedures to staff.	Survey feedback showed some uncertainty about how bullying would be dealt with.	Organise workshop in 2023.	HoS	Workshop has taken place. Survey feedback shows improved confidence and understanding in procedures around bullying.
9.7	Produce short guide on maternity leave, signposting resources, appropriate documentation and good practice established within the School, and publicise to staff.	The university documentation and checklists can be hard to find and are not currently automatically sent to staff by People Services. A short guide would ensure current good practice is maintained and support staff and line managers.	Produce guide during 2022 and highlight annually during EDI slot at School meeting, reviewing as appropriate.	EDI Lead / Deputy HoS	Guide produced and on the School intranet by the end of 2022. Consultation with staff and line managers following maternity leave provides positive feedback on support and information provided.

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9.8	Ensure staff are aware of School paternity guide and work with the University's Gender Equality Steering Group (GESG) to improve provision around paternity leave.	Our previous action plan resulted in a paternity guide for staff. Consultation revealed satisfaction with M&S support but concerns about some aspects of the current university systems, which are being addressed through the GESG.	Highlight guide annually from 2022 during EDI slot at School meeting, reviewing as appropriate. University actions to be developed through 2022/23.	EDI Lead/ Deputy HoS	Survey feedback shows good staff awareness of paternity guide. Consultation with staff following paternity leave provides positive feedback on level of support and information provided.
10. ROLE MODELS AND OUTREACH					
Section Leader: EDI Lead					
10.1	Review and update externally facing School website annually for diversity, including: <ul style="list-style-type: none"> • Pages on women in maths and stats • Student stories across all taught qualifications • PhD student stories • Research highlights 	Prospective students and staff are likely to form an impression of the School based on the presentation of the website. We aim to make all groups feel welcomed and valued.	Annually in July.	EDI Lead and School Office Manager	Website content is up to date and features a diverse range of staff and students. Positive feedback from students – eg through student voice week. Positive survey feedback from new staff.
10.2	Organise annual event for staff and students to celebrate women in maths.	M&S staff have been actively involved in a range of successful internal and external activities of this type. Feedback from the 2021 Student voice week	Identify a suitable time of year in 2022 and organize events annually thereafter.	EDI Lead	First event organized and feedback mechanism established.

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		was positive about the value of such events. It would be good to have a systematic plan for the future.			Events attended by at least 50% of staff and at least 20 students, with positive feedback.
10.3	Improve the collection of feedback and data on attendance from outreach events.	We currently have limited data by gender on attendance at some outreach events, especially online events.	2022: explore mechanisms for robust data collection from online events. 2023: implement the identified solutions.	Engagement Lead	Robust mechanism established for collection of information on attendance + feedback at outreach events.
10.4	Promote our new asynchronous online engagement activity 'Code Break' through links with schools, colleges and social media platforms, with a particular focus on rural and remote communities and schools with high levels of deprivation.	This will improve access to our engagement activities for those who are least able to access face to face events. It aligns with the OU's Access and Participation Strategy in reaching out to those in the lowest quintile of the index of multiple deprivation.	Promote via social media and general channels in 2022 in preparation for launch in autumn/winter 2022. Develop targeted promotion to specific groups in 2023.	Engagement Lead	App is accessed on average at least 1500 times per year, from a diverse cohort.