School of Information Systems, Computing and Mathematics David Gilbert, Head of School, Professor of Computing Martin Shepperd, Head of Information Systems and Computing, Professor of Software Technologies & Modelling Steven Noble, Head of Mathematical Sciences



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Athena SWAN Equality Challenge Unit Queen's House 55-56 Lincoln's Inn Fields London WC2A 3LJ

29th April 2014

Dear Athena SWAN Coordinator,

RE: Application for Athena SWAN Silver Award

I am extremely pleased to give my full support to my department's application for the Athena SWAN silver award. Following the university's lead, we seek to provide opportunities that enable all staff to fulfil their potential for excellence in every aspect of their roles. Good employment practices and commitment to equality are key to achieving this. Looking at the national picture in mathematics emphasizes the need for action within individual departments.

To prepare our application, a self-assessment team with membership representing the full range of staff and post-graduate students was set up under the leadership of Dr Veronica Vinciotti and supported by the department, to review our current position and establish immediate actions to be taken. Staff have been aware of our strengths and weaknesses, but the application process has helped in formalizing this process.

Our department has a strong commitment to advancing equality. Together with my personal observations over many years of the relative success of staff in dealing with their varying workloads, this led me to set the establishment of a fairer and more transparent workload allocation as my most pressing objective when I started as HoD in 2012. Before then, proper account was not made for large administrative tasks, some of which had been carried out by the same staff for many years, and loads were very unequal. A key component was a consultative stage where staff were asked to estimate the proportions of their time spent on different duties. The outcome resulted in a significant shift in the allocation of duties with a new female Director of UG Studies and a new female admissions tutor. To ensure that staff are working in the most appropriate role for their skills and preferences, I have encouraged all staff to discuss their roles and how to achieve their career aspirations with me. These discussions have determined some key decisions.

The department has an internationally recognized research profile. Consequently the preparation of the REF environment document, led by Dr Jane Lawrie, was an important task. We began by preparing a new research strategy, informed by Dr Lawrie's vision of working closer together. This

led to a reorganisation into three large research groups, incorporating mechanisms to provide mentoring, replacing the previous fragmented groups.

A key issue is the lack of women at reader/professorial levels within the department, in particular internal promotions. Recently, the lack of available mathematics funding has made it difficult to write a compelling case for promotion, meeting the University's criteria, and only one (male) applicant has been promoted to reader or professor in the last five years. More positively the successful candidates in our current appointments round, comprising three lectureships and a chair, were all women.

We view this application as a stage in an ongoing process. Our planned actions are designed to focus on areas that will enable us to build on our successes. Staff are fully committed to the process and in time we hope to apply for a gold award.

Yours faithfully,

300 La

Dr Steven Noble Head of Mathematical Sciences

[495 words]

1. The self-assessment process: maximum 1000 words

a) A description of the Self Assessment Team (SAT)

There are seven members of the team (five females, two males). The team was selected to provide a range of staff experiences and career stages within the department. The members of the SAT are listed below in alphabetical order:

Dr Carolyn Chun is a full-time postdoctoral research fellow in Combinatorics who joined the department in 2012. In her spare time, she writes, runs a creative writing group at her church and has published two books of experimental fiction.

Ms Carol Elliott is the school planning manager. She joined the department in 2006, taking on the broader school role in 2007. She is single and balances her working life with supporting her elderly mother, who has developed severe short term memory problems.

Ms Layal Hakim graduated in mathematics at Brunel University in 2010. She then stayed in the department for a Ph.D., which she is expected to complete in 2014. Her eldest brother suffers from cerebral palsy while her youngest brother has autism and she shares in their caring responsibilities.

Ms Kay Lawrence is deputy school manager. She joined Brunel in 1989 and the department in 1999 as a departmental administrator. She is married with two grown-up children and two grandchildren.

Prof Sergey Mikhailov is Professor of Computational and Applied Mathematics, who joined the department in 2006. He is married and balances his working life with bringing up his three children.

Dr Steve Noble is Head of Department and a Senior Lecturer. He has worked in the department since being appointed as a Lecturer in 1998. His partner lives in Manchester and, with the agreement of the Head of School, most weeks he works one day per week from home in Manchester.

Dr Veronica Vinciotti (Chair of team) is a Senior Lecturer in statistics. She joined the department in 2007 as a lecturer. She is married with three children and works full-time, benefitting from flexible working to fit in with childcare.

b) An account of the self assessment process

In June 2012, the department participated in a survey organised by the London Mathematical Society (LMS). Thirty mathematics departments across the country took part in this survey, which had the aim of understanding current practices in mathematics departments and identifying examples of good practice. A report of the findings, "Advancing Women in Mathematics: Good Practice in UK University Departments", was published in February 2013 and individual feedback was given to each participating department, with a summary of the department's ratings and recommendations for action. The Mathematics Department at Brunel scored very highly compared to the other departments, as shown in Section 5. A general recommendation was made to set up a working group for reviewing current student and staff profile/development using quantitative and qualitative data. This encouraging result and useful recommendation has formed the basis of our decision to apply for a silver Athena SWAN award. In September 2013 the SAT was established and formally started to work on the Athena SWAN submission and action plan.

During the preparation process, the department has maintained close links with LMS. On the 31st of October 2013, the LMS organised a Good Practice Scheme workshop in London, whereby numerous mathematics departments across the country had the opportunity to share best practice and gain an insight in compiling successful submissions for Athena awards. In November 2013, our department became a supporter of the scheme, which we now publicise on the departmental webpage. The department has since shared useful information with other members of the scheme in preparation for the Athena submission. For example, a template of an online survey was provided to us by a member of the scheme and has been used as the basis of a survey sent to the staff in our department. This survey was circulated to all 48 staff members within the department in January 2014 and yielded a staff response rate of 54.2%.

The team has also had contact with other departments. One member of the team attended the Athena SWAN regional network meeting of London and South Region on the 20th of May 2013, and discussed our forthcoming application and the application process itself with delegates from other five institutes based in London and Oxford.

There was regular contact between members of the SAT during the preparation process, with the team formally meeting on the 9th of December 2013 and the 31st of March 2014. There have also been frequent meetings with HR, the Department of Computer Science at Brunel (which is also preparing its own submission to Athena) and SAT members, for the collection and analysis of student and staff data. The aims of Athena SWAN and the self-assessment process were communicated to the department at departmental meetings, and the application was circulated to the department by email before being finalised.

c) Plans for the future of the SAT

The team will meet quarterly and will write a progress report. Any significant issue, progress or suggestion for change will be reported and discussed at the following staff departmental meeting, where Athena SWAN will now be included as a standing agenda item (Action 1.3). We will also set up a link in our departmental webpage, to publicise the achievements and evidence progress against the action plan. In view of the planned restructuring of the university into colleges and research institutes, we will also find opportunities to disseminate our progress to other departments, with the aim of coordinating Athena SWAN action plans and of sharing good practices across departments.

The SAT will monitor progress against the action plan, assessing evidence in a number of ways. Firstly, there will be regular and efficient collection/analysis of quantitative data from students and staff. VV will be in charge of coordinating and monitoring the action plan and will be allocated time for this as part of her administrative duties. Secondly, online surveys will be conducted each year to evaluate staff perceptions and awareness of new initiatives and to monitor their impact.

[996 words]

2. A picture of the department: maximum 2000 words

a) A pen-picture of the department

Since 2004, the Department of Mathematical Sciences has belonged to the same school as the Department of Computer Science, creating a vibrant and talented research, teaching and learning community. Currently, in the department, there are 38 academic and research staff (14 female, 24 male), 10 administrative and technical support staff (8 female, 2 male), plus 112 Foundation, 466 UG, 8 PGt and 35 PGr students.

The department teaches a variety of maths undergraduate courses (single and joint honours) and a foundation course. All the undergraduate teaching is overseen by a (female) Director of Undergraduate Studies, who is responsible for dealing with student issues and assessment, and a (male) Director of Teaching, who is responsible for curriculum design and strategic issues. The department also provides postgraduate taught courses. Up to 2013, the department has offered two MSc courses: Computational Mathematics with Modelling (CMM) and Modelling and Management of Risk (MMR). This year the department has offered a new MSc in Financial Mathematics in addition to MMR.

The department has recently been restructured into three research groups: Computational and Applied Mathematics; Financial Mathematics, Operational Research and Statistics, and Mathematical Physics and Combinatorics. These groups are loosely formed and many staff are members of more than one group. The group structure is mainly to describe and advertise the department's activities rather than to fulfil any particular management function. The groups have a nominated leader who oversees their activities. The current re-structuring was developed in preparation of the recent REF environment document and was led by a female senior lecturer in the department.

b) Student and staff data for the past three years

Student data

Figures 1 and 2 summarise the student data for the last nine academic years as reported by the university to HESA on 1^{st} of December 2013.

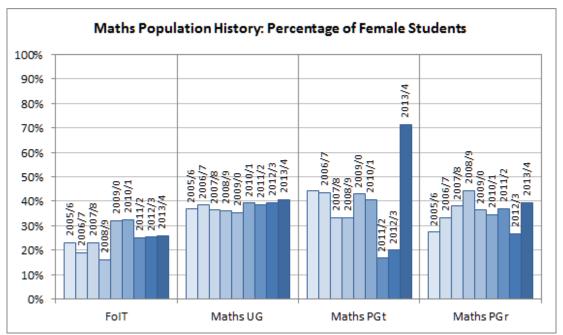


Figure 1 Percentage of female students in the Mathematics Department for the last nine academic years on all levels: foundation course (FoIT), undergraduate courses (UG), postgraduate taught courses (PGt) and percentage of female PhD students (PGr).

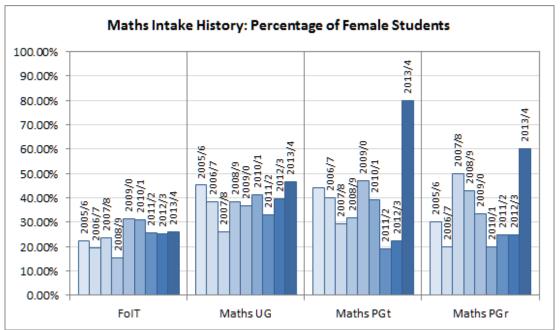


Figure 2 Percentage of female students at intake in the Mathematics Department for the last nine academic years on all levels: FoIT, UG, PGt and percentage of female PhD students (PGr).

(i) Numbers of males and females on foundation courses

The left panels of Figures 1-2 show the percentage of female students in the population of students and on intake, respectively, on the foundation course for the last nine academic years. The percentage has remained fairly constant throughout

the years around an average of 25%. Figure 3 shows further that in 2012/13 there was a larger percentage of FoIT female students progressing to UG programmes than male students, with a similar percentage of female students progressing to Computer Science and Maths programmes, respectively.

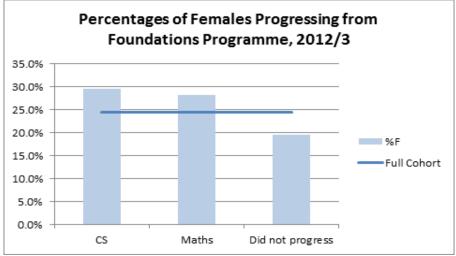


Figure 3: Percentage of female FoIT students out of those progressing to a Computer Science (CS) UG programme, to a Maths UG programme and not progressing at all, compared to the overall percentage of female FoIT students in 2012-13 (horizontal line).

(ii) Undergraduate male and female numbers

The second panels of Figures 1-2 refer to undergraduate students. The figures are in line with the national figure for the discipline according to the LMS report (40% of female students in 2010-11) and according to the latest figures extracted using HESA's data extraction tool Heidi (Figure 4 for 2012-13, similar figures for previous years). The figures reported refer to full time students. A part-time mode of study does not exist in the department, due to lack of demand.

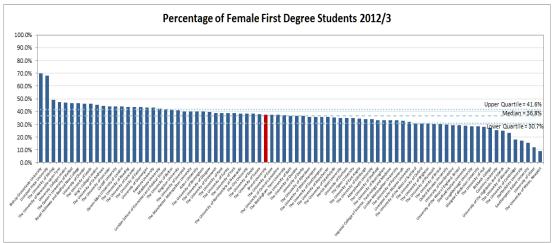


Figure 4 Percentage of female first degree Maths students at Brunel compared to other UK maths institutions in 2012/3.

There have been some recent changes in the department in terms of high profile roles: since 2010 there has been a female admission tutor and a female senior tutor, and since 2012 there has been a female Director of Undergraduate Studies and a female level one coordinator. This has been beneficial in attracting female

students to Brunel and in supporting them during their studies. Furthermore, we have a lively recruitment team, with a mixture of female and male members of staff, who organise a number of outreach events, such as visiting secondary schools, in order to attract more applicants. Although these events are generally not tailored to female applicants, the figures on intake show a significant increase in female applicants in the last three years, with females accounting for nearly 47% of undergraduates starting maths programmes at Brunel this year.

(iii) Postgraduate male and female numbers completing taught courses

The third panels in Figures 1-2 refer to postgraduate taught students. There is a high variability in the percentages here, with 21.7% (5/23) of female PGt students in 2012-13 (below the national median of 39.8% from HESA) and 66.67% (4/6) in 2013-14. The latter is lower than the figure reported in Figure 1 (71.43%) due to one female student transferring to a different course at the beginning of the year. Note that there are also two male Erasmus PGt students not counted in the HESA figures. The fluctuations in the figures are mainly a result of the low number of students overall in these courses. New courses and advertising venues are currently being explored to attract more students in general to our postgraduate courses. Recently, we have organised an event in the department for final year students interested in postgraduate studies.

(iv) Postgraduate male and female numbers on research degrees

The last panels in Figures 1-2 refer to PhD students. The 2012-13 percentage of 26.67% was just below the national figure in the discipline (29.3% from HESA, Figure 5). Since September 2013, eight PhD students have joined the department, seven of whom are females, bringing the percentage of females at intake up to 87.5% (the 60% figure in Figure 2 is as of December 2013) and the current percentage of PGr females to 40%. More students are going to join soon: in June 2014 we will have 15 new Ph.D. students who will have joined since July 2013, 60% of whom are female.

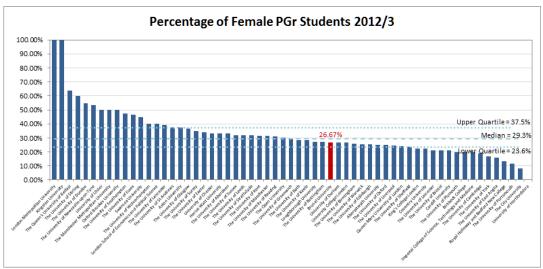
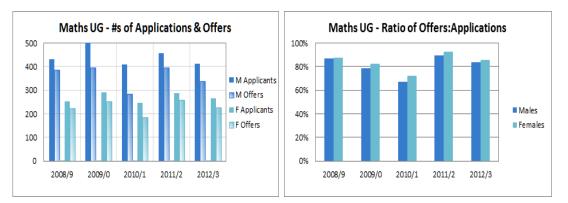


Figure 5 Percentage of female PhD students (FTE) at Brunel compared to other UK maths institutions in 2012/3.

As with PGt courses, a number of initiatives are currently being explored to attract more PhD students to the department. Among these: we have restructured the departmental webpage to clearly show research highlights and research topics of members of staff; we are in the process of recruiting more staff in the areas of operational research and statistics, which historically have attracted more PhD applications, and we continue to encourage undergraduates with relevant qualifications to apply for postgraduate studies in our department. One of our current PhD students, who is also a member of the SAT, was one of our own undergraduates.

(v) Ratio of course applications to offers and acceptances by gender for undergraduate, postgraduate taught and postgraduate research degrees

Figure 6 shows the data on applications, offers and acceptances on all UG courses for the last five academic years. Overall, there is a natural fluctuation in offers for both males and females (top left panel) and similar ratios of offers to applications between male and female students, with females' success rate higher than males' success rate (top right panel). This supports the work of the department in increasing gender parity. The bottom panel shows how in the five academic years between 2008-09 and 2012-13 the percentage of female's applications/offers/acceptances has been consistently around 40%, although Figure 2 showed an increase to 47% on intake for this academic year.



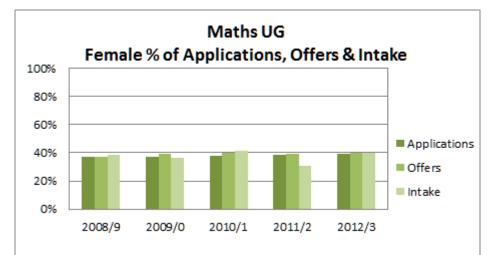


Figure 6 Number of male and female applicants and offers on UG courses for the five academic years from 2008-09 to 2012-13 (top left panel), ratio of offers to applications for male and female students (top right) and percentage of females' applications, offers and acceptances (bottom).

The results are consistent across the two main cohorts of undergraduates, Straight Maths and Financial Maths, as shown in Figure 7. For Straight Maths, we observe an increase in number of applications/offers over the years.



Figure 7 Number of applications and offers and ratio of offers:applications for male and female students, broken down for Straight Maths (top) and Financial Maths (bottom) UG programmes.

Similarly, Figure 8 shows how the ratio of PGt offers to applications is favourable for female students. The figure shows an overall decline in PGt offers in recent years. As a new MSc course is currently been delivered, we will continue to monitor closely the percentage of (female) students on these courses (**Action 5.1**). Ideas are also currently being explored for setting up new MSc courses, such as an MSc course in statistics, which is currently attracting many students in other universities. These subjects have also a tradition of attracting a large proportion of female students. For example, in our department, final year projects in statistics are traditionally popular among students: currently there are 28 final year students doing a project in statistics, 18 of whom (~68%) are female.

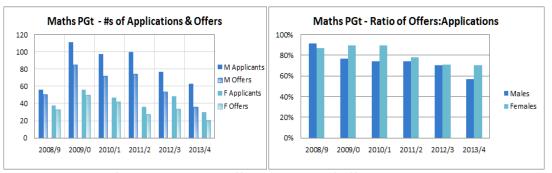


Figure 8 Number of applications and offers and ratio of offers:applications on PGt courses for the last five academic years.

Figure 9 shows how the ratio of PhD offers to applications is also favourable for female students. Most of the applications that we currently receive are in the area of statistics and operational research and therefore converge to a small percentage of staff, two of whom have recently left. This lack of supervisory capacity, together

with the introduction of tightening criteria for the acceptance of offers, is the main reason for the decline in offers throughout the years. As well as emphasizing the other areas of research more in our re-structured departmental webpage, the department is currently appointing four academics in the areas of statistics and operational research. This will offer a higher capacity in terms of PhD supervision in those areas where we receive more applications.

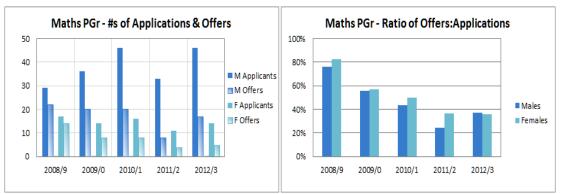


Figure 9 Number of applications and offers and ratio of offers:applications for PhD studies for the five academic years from 2008-09 to 2012-13.

(vi) Degree classification by gender

Figures 10-11 show the difference in the percentage of female and male students attaining an award in each of the eight possible classifications for all mathematics UG programmes excluding FM, and for FM only, respectively. Overall, there is a larger percentage of females in the higher awards than in the lower ones, with a striking difference between the first and 2:1 class, and the 2:2 and 3rd class. So women outperform men in achieving higher awards. This is the case for all UG programmes, with some difference in the 2:1 and 2:2 profiles between the financial maths programme (Figure 11) and the rest (Figure 10).

Figure 12 shows the difference in the percentage of female and male students on our MSc courses attaining an award, for each of the five possible classifications. A fluctuation around zero is observed across the academic years, showing a similar level of attainment between female and male students.

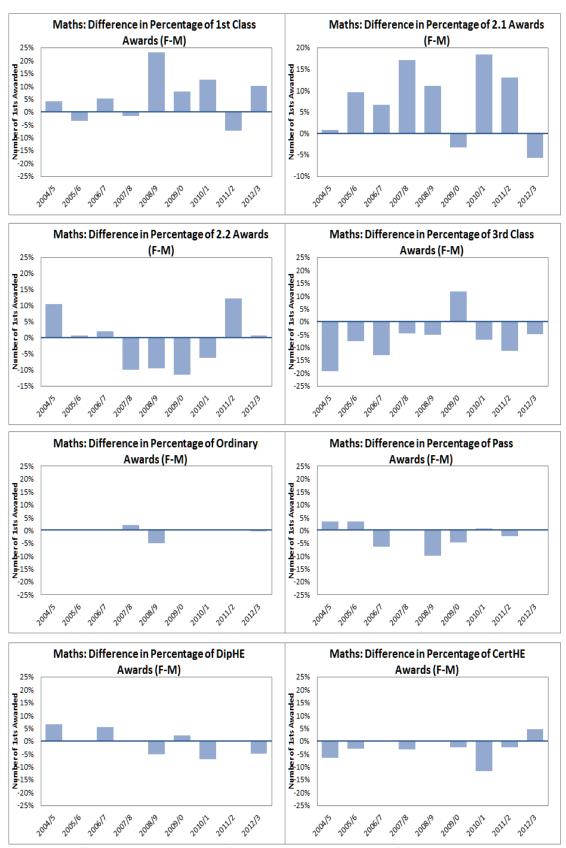


Figure 10 Difference in percentage of awards to undergraduate female students and male students, for all degree classifications and for the nine academic years between 2004-05 and 2012-13. The population of all students, except Financial Maths students, is considered for these figures.

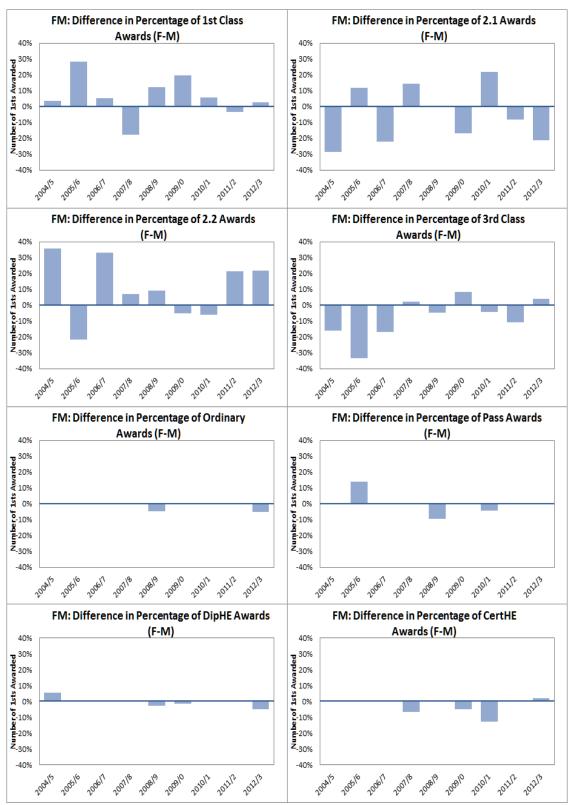


Figure 11 Difference in percentage of awards to undergraduate female students and male students, for all degree classifications and for Financial Math students only.

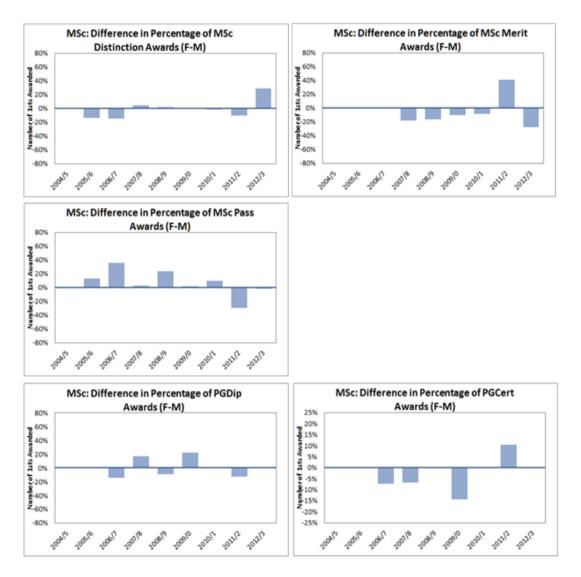


Figure 12 Difference in percentage of awards to PGt female students and male students on both CCM and MMR MSc courses for the nine academic years between 2004-05 and 2012-13.

Staff data

(vii) Female:male ratio of academic staff and research staff

Table 1 shows the numbers of staff in the department for the last three years, broken down by gender and category. Figure 13 summarises these figures by showing the proportion of females out of the total for each category.

| | 2011-12 2012-13 | | 2013-14 | | | |
|----------------------|-----------------|------|---------|------|--------|------|
| | Female | Male | Female | Male | Female | Male |
| Temporary | | | | | | |
| Hourly Paid Academic | 4 | 4 | 7 | 6 | 6 | 2 |
| Total (Temporary) | 4 | 4 | 7 | 6 | 6 | 2 |
| Fixed Term | | | | | | |
| Professor | 0 | 1 | 0 | 1 | 0 | 2 |
| Research Assistant | 1 | 0 | 2 | 0 | 2 | 1 |
| Total (Fixed Term) | 1 | 1 | 2 | 1 | 2 | 3 |
| Permanent | | | | | | |
| Professor | 0 | 5 | 0 | 3 | 0 | 3 |
| Reader | 0 | 4 | 0 | 4 | 0 | 4 |
| Senior Lecturer | 1 | 8 | 2 | 8 | 2 | 8 |
| Lecturer | 5 | 5 | 4 | 4 | 4 | 4 |
| Total (Permanent) | 6 | 22 | 6 | 19 | 6 | 19 |
| Grand Total | 11 | 27 | 15 | 26 | 14 | 24 |

Table 1 Number of staff on temporary, fixed and permanent contracts in each level by year and gender.

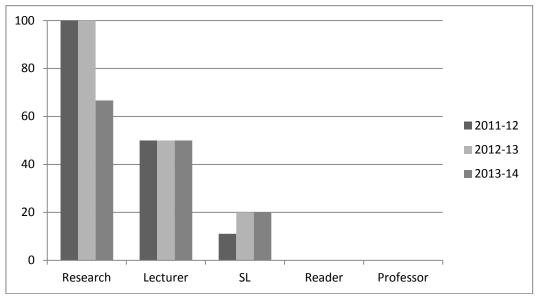


Figure 13 Percentage of female staff in each level by year and gender.

The large proportion of women in fixed-term research contracts is mainly a reflection of the very low numbers in this category (Table 1). For example, there are currently three research fellows/associates in the department, two of whom are female. Figure 13 shows a decline in the percentage of females across the levels, with no female readers or professors in the department. This is also observed nationally. According to the LMS report, in 2010-11, 6.3% of professors were female. Given that there are currently five professors in the department (if we consider both fixed and permanent contracts), the expected number of female professors according to the national figure would be 0.315. An increase of one female professor would bring the percentage of female professors in the department to 16.67%, well above the national figure.

As for the other categories, 50% of lecturers in the department have been female for the last three years and 20% of senior lecturers in the department have been

female in the last two years, with an increase in 2012, when one female member of staff was promoted to senior lectureship. In total, just over 33% (6/18) of lecturers or senior lecturers in the department are currently female. This is higher than the benchmark national figure of 28.3% given by the LMS report for 2010-11.

As discussed in detail in Section 4, we will continue to monitor our figures for promotion/recruitment and to make improvements to our current procedures where necessary, with the aim of addressing the gender imbalance that is shown by the data. In particular, we will evaluate the current appraisal process in view of strengthening individual cases for promotion.

(viii) Turnover by grade and gender

Six members of staff have left the department in the last three years: one male lecturer has left for an academic position in his country of origin, one male professor has moved to a research group which is more aligned to his research interests, one male reader and two male professors have retired, and one female research assistant has left at the end of her contract. Overall the turnover is lower for women than men.

[1966 words]

3. Supporting and advancing women's careers: maximum 5000 words

Key career transition points

a) Job application and promotion figures

| | | AP | APPLIED | | SHORTLISTED | | APPOINTED | |
|------|--------|--------|------------|--------|-------------|--------|------------|--|
| Year | Gender | Number | % of Total | Number | % of Total | Number | % of Total | |
| 2011 | М | 38 | 82.61 | 7 | 70 | 2 | 66.67 | |
| | F | 8 | 17.39 | 3 | 30 | 1 | 33.33 | |
| 2012 | М | 48 | 77.42 | 11 | 91.67 | 1 | 50 | |
| | F | 14 | 22.58 | 1 | 8.33 | 1 | 50 | |
| 2013 | М | 30 | 90.91 | 5 | 83.33 | 3 | 75 | |
| | F | 3 | 9.09 | 1 | 16.67 | 1 | 25 | |
| 2014 | М | 88 | 82.24 | 11 | 61.11 | | | |
| | F | 19 | 17.76 | 7 | 38.89 | | | |

(i) Job application and success rates by gender and grade

Table 2 Number and percentages of females and males who applied, were shortlisted and were appointed to positions in the Mathematics Department, respectively.

Table 2 provides the data on recruitment for the last three years, broken down by gender. There is a gender imbalance at the level of applications, with more male applications than female. However, with the exception of 2012, the level of imbalance decreases progressively from applications to appointment figures. This corresponds to a higher proportion of women shortlisted/appointed than men. For example, in 2013, 16.6% of male applicants were shortlisted compared to 33.3% of

female applicants and 60% of the male shortlisted were appointed compared to 100% of female shortlisted.

In order to gain more insight into the possible factors underlying the gender imbalance at the level of applications, Table 2 includes also the latest data on four vacancies in the department: two of these positions are at the Reader/Professor level and two at the Lecturer/SL level (one in mathematics and one in statistics at each level). There is a less pronounced imbalance at the level of applications and shortlisting in 2014 compared to previous years, although the difference is minor when compared to 2011. However, Figure 14 shows a significant difference in the figures between the mathematics and statistics positions, regardless of the level, with a larger percentage of females shortlisted for the statistics positions compared with the mathematics positions. This is probably a reflection of the fact that this branch of mathematics is usually more popular amongst females than other branches, as observed in other institutions. Furthermore, this result goes some way in explaining the imbalance in the percentages of applications for males and females observed in the last three years (the current positions were the only ones in the last three years purely on statistics) and offers some evidence to the fact that the process of recruitment and shortlisting in the department is fair with respect to gender.

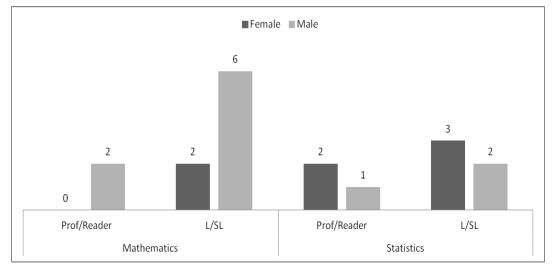


Figure 14 Number of shortlisted people in 2014, broken down by gender, level and subject (mathematics and statistics).

The interviews for these positions have just taken place. The successful candidates for the appointments, comprising three lectureships and a chair, were all women.

(ii) Applications for promotion and success rates by gender and grade

Table 3 shows the number of female/male staff members who have applied for promotion during the last three years and the success rate. Although the numbers in the table are quite small for statistical analysis, they generally show a balance between females and males in terms of applications for promotion and success rate.

| | | APPLIED | | | APPROVED | | |
|---------|--------|---------|---------|--------|--------------|--|--|
| Year | Gender | Number | % Total | Number | Success Rate | | |
| 2010-11 | М | 3 | 20 | 2 | 66.67 | | |
| | F | 0 | 0 | 0 | 0 | | |
| 2011-12 | М | 4 | 22.22 | 1 | 25 | | |
| | F | 1 | 16.67 | 1 | 100 | | |
| 2012-13 | М | 1 | 6.25 | 0 | 0 | | |
| | F | 1 | 16.67 | 0 | 0 | | |

Table 3 Promotion data for the last three years. For each year, the table shows: the number of male/female staff members who have applied for promotion (first column), the percentage of male/female who applied for promotion out of all male/female academic staff who were eligible to apply (second column), the number of applications that were successful (third column) and the success rate (fourth column).

The potential for promotion of individual members of staff is regularly discussed during the annual appraisal, which takes place a few months before the promotion round. If there are gaps/weaknesses in candidates' CVs in the consideration for promotion, suitable advice is offered to the candidates during the appraisal process. Furthermore, the HoD will take such gaps into account in the annual workload allocation procedure. In some cases, promotion is discussed in one-to-one meetings with the HoD, particularly in the case of strong candidates, who are approached directly by the HoD.

b) Recruitment and support of staff

(i) Recruitment of staff

The department follows the university policy in terms of recruitment, so that consistent procedures and fair criteria are used to appoint the best person that meets the requirement of a vacancy.

The wording of all advertisements is carefully checked for gender impartiality at the university level. Further particulars of the job advertisement are approved by the HoD and they provide a comprehensive description of the department activities. All shortlists are monitored by the HoD and equality issues are carefully considered. In addition, the HoD carefully monitors the membership of appointment panels. In the majority of the cases, unless specific knowledge makes it difficult, the appointment panels consist of both male and female staff and this has been the case in recent panels. In addition, the university provides interview training, which is mandatory for panel chairs.

The data in Table 2 show a lower percentage of female applications in recent years. In order to address this gender imbalance, we plan to:

- Include more images/videos of female students and staff on our departmental webpage (<u>http://www.brunel.ac.uk/siscm/mathematical-sciences</u>) (Action 1.1).
- Include information about Athena SWAN and its logo on our departmental webpage (Action 1.2). Information is already included about the department being a supporter of the LMS Good Practice Scheme.

- Include the Athena SWAN information and logo in our future advertisements (Action 2.2).
- Be proactive in approaching women working in the relevant field to draw their attention to the vacancy (**Action 2.2**). This is already happening with a Search Committee of male and female members of staff, actively looking for suitable candidates to open positions.

(ii) Support for staff at key career transition points

Support is provided to all staff in different forms during their stay in the department. New academics are automatically allocated a mentor upon their arrival. The HoD will appoint the mentor that most naturally fits with the characteristics of the new academic, although academics will also develop their own natural links with other members of staff and ask appropriate colleagues for specific advice when needed. Furthermore, there is a formal mentoring programme that is centrally run for probationary members of academic staff who are undertaking the Professional Development in Academic Practice (PDAP) programme. The PDAP is compulsory for all academic staff joining the institution who have not completed a similar programme in another UK institution. In addition, the department is planning to participate in the university gender mentoring scheme, which is soon going to be available.

There are numerous opportunities for staff development within the department and the university. There is mandatory staff development training for all staff on Equality and Diversity, PhD supervision and Work Placement Tutoring. Other optional training courses are offered by the university on personal development, such as training on grant application, journal article writing, teaching, mentoring and communication skills. Figure 15 shows a high level of staff awareness and participation to the different training opportunities, as measured by our staff survey. The percentages shown are out of the 19 academic staff who took part in the survey and for whom all training opportunities are applicable. The percentage of participation varies from programme to programme, with 68.42% (10/19) attending training on teaching skills, and 86.92% of these finding it useful, and 5% (1/19) attending training on journal article writing and finding it useful. Overall, this picture is to be expected, given the different individual needs. The HoD receives a report on individual participation to the training programmes and a dialogue takes place during the appraisal process to identify the development opportunities. The HoD and appraisers will continue to encourage staff participation to staff development programmes and, where necessary, to tailor it to individual necessities, particularly in view to strengthening staff cases for promotion (Action **3.1**). The department is also planning to apply to the Leadership Foundation Aurora scheme, a new initiative promoted at the university level and aimed at women.

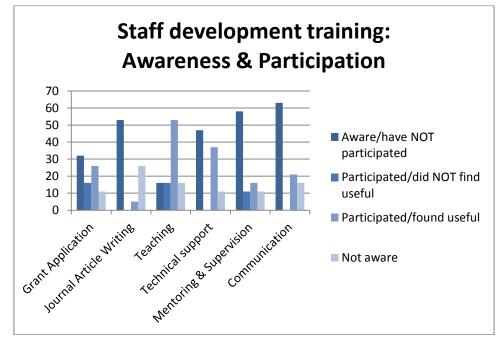


Figure 15 Summary of survey in terms of staff awareness and participation to staff development programmes offered by the university.

In terms of networking, all members of staff are encouraged to attend external research conferences, both to disseminate their research results and to keep abreast of the latest development in their field. Funding for this is provided from a variety of sources, including an individual departmental budget for travel. At the university level, of particular notice are the Brunel Research Initiative and Enterprise Fund (BRIEF) awards. These offer a maximum of £15000 and are intended as pump-priming funds for new members of academic staff below the level of Senior Lecturer and within the first three years of their appointment, to enable them to start research projects and to write grant proposals. In particular, the funding can be used to purchase equipment, to employ teaching assistants, or to contribute to the cost of travel for the purpose of research. Since 2004, seven members of staff in the department (four males and three females, two of whom form the two case studies in this application) have obtained these awards and have made use of them in the early stages of their career and in view of strengthening their cases for promotion. In fact, two of the seven (one male and one female) have subsequently been promoted to senior lectureship and are currently still in the department. The HoD will encourage early career members of staff to apply for these awards (Action 3.3).

Career development

a) Appraisal, promotion and induction

(i) Promotion and career development

All staff undergo annual appraisal and are required to comment on their contribution to three main areas: research and knowledge transfer, teaching and learning and collegiality and management. Administration, pastoral work and outreach work would all fall within the collegiality and management category. The form that needs to be filled in by the appraisee has recently been re-designed and

is now structured in a similar format to the form for promotion, highlighting the close link between appraisal and promotion. A natural balance between quality and quantity of work is expected, although the focus is more on quality rather than quantity. For example, staff are encouraged to work towards four A* publications for the next REF. Training is provided for all appraisers, to make sure that the appraisal process is as useful as possible to the appraisees. Furthermore, appraisal participation is monitored in an extremely careful manner in order to make sure that all appraisals take place. One outcome of the appraisal is a strategy to meet the appraisee's development needs and the appraisees are asked to reflect on their career development for the next five years. The progress of this strategy is discussed in the next appraisal. Figure 16 shows the perception of staff about appraisal, as gathered at the staff survey: 41% of staff agreed/strongly agreed on the appraisal being useful and valuable, whereas 42% disagreed/strongly disagreed on this. The percentages are equally split between female and male. Further action is planned to investigate the reason for the disagreement and where possible for suggesting possible improvements (Action 3.2).

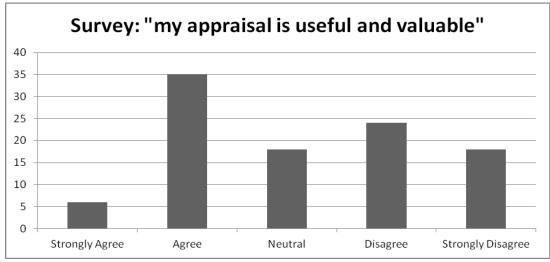


Figure 16 Staff perception of the appraisal process, as gathered by the staff survey.

The promotion criteria are based on the same three areas described above for the appraisal. Communication about promotion and promotion criteria is produced at the university level and circulated to all staff in an effective and timely manner, at the beginning of promotion rounds. The HoD, as part of a school panel, recommends candidates for promotion to the university, which then collates extensive information on equality. Individuals who are preparing their cases for promotion are helped by senior members of the department, typically the appraisers, the HoD or a recently promoted member of staff, so that they can present themselves and their cases in the best possible ways. The latter was found particularly useful by recently promoted members of staff, so we plan to formalise this system in future (**Action 3.4**). Further support is provided by the university, which runs a workshop on promotion in preparation for the application. In addition, a specific "Coffee Morning" event is organised by the university for women who are considering applying for promotion.

Unsuccessful candidates are given useful written feedback and offered verbal feedback. A discussion with a senior member of the university promotion panel is

available for all unsuccessful applicants. The feedback received, in terms of experience and skills that are needed for promotion, is also discussed with the HoD and appropriate action is taken to strengthen future applications.

(ii) Induction and training

A comprehensive induction programme takes place for all staff both at the department and at the university level. The HoD receives full information on this. All new staff are provided with an induction pack from HR with information on HR policies and details about the induction. This information is also included on the departmental intranet webpage, for academic and non-academic staff. An Equality and Diversity training workshop is compulsory for all new staff within the first three months of their appointment. Furthermore, every new member of staff is supported through the PDAP programme, as described in Section 4(b)-(ii). The induction pack also contains information about childcare vouchers and career breaks. We plan to check whether information about flexible working is directly transmitted in the pack and act accordingly (**Action 4.1**).

Newly appointed staff are allocated a mentor upon arrival. The HoD will introduce the new member of staff to the department and will have a meeting with him/her, explaining the key policies and priorities in the department and how he/she can contribute to them. Furthermore, new members of staff are routinely given lower teaching and administrative load in their first two years, so that they can settle into their new environment.

(iii) Support for female students

A number of activities have been recently organised in the department in order to effectively induct and support new students. Since 2012 the department has introduced a mentoring scheme, whereby each student is allocated a mentor, who is another student from one of the years above. Each student is also allocated a personal tutor upon their arrival. This can be changed to a female personal tutor upon request. Various activities are organised during induction week and during the first year of studies in order for the students to establish a close link with their personal tutors. For example, for the first time this year, first year undergraduates were split into small groups, led by their personal tutor, and met every two weeks to work on four allocated projects.

The students have various means of reporting possible issues to members of staff during the course of their studies, for example via their school representatives. Currently, five undergraduates (three females, two males) are school representatives. In case of special circumstances, such as pregnancy complications/terminations or childbirth, special arrangements are made with the individual student.

PhD students are supervised by a first and second supervisor, with the first supervisor having the more central role in supervision of the research project and the second supervisor having more the role of an advisor/mentor. The supervisors offer their students various possibilities to present their work at national and international conferences. The department also runs a student research symposium

at Brunel twice a year, which is organised by the Director of Research. At the symposium, the students have the chance to present their work to other fellow PhD students and members of staff. The importance of presenting at seminars/conferences and of writing research papers is conveyed to the students by their supervisors. At the end of the PhD studies, if the student is interested in an academic career, open positions would be drawn to his/her attention. One of our current female lecturers, who is also a case study to this application, did her PhD studies in our department and then progressed onto a lectureship. One of our finishing (female) PhD students, who is part of the SAT, has recently been shortlisted for a lectureship position in the department. She is also the school representative for postgraduate students.

Organisation and culture

a) Female to male ratio on committees and per category

| | Committee membership in 2013-14 | | |
|--------------------------------|---------------------------------|------|--|
| | Female | Male | |
| Recruitment/Outreach | 4 | 3 | |
| Teaching/Curriculum Committee | 4 | 4 | |
| Student Experience/NSS Team | 4 | 8 | |
| Mitigating Cirmumstances Panel | 2 | 2 | |
| Search Committee | 2 | 6 | |
| Departmental Management Group | 3 | 5 | |

(i) Male and female representation on committees

Table 4 Breakdown of current committee membership by gender.

Despite the low number of women in the department, Table 4 shows overall a good balance between male and female members of staff in terms of committee membership. The Director of UG Studies, who is a female, sits on three of the six committees, and the HoD, who is a male, sits on four of the six committees. The other members vary per committee.

With regards to how potential members are identified, the guiding factor to this decision is who is best for the job and who has administrative roles that fit naturally with the job. The only exception is the teaching and learning committee where the department ensures that there is expertise covering every level and most areas of what we cover.

(ii) Female:male ratio of academic and research staff on fixed-term contracts and open-ended (permanent) contracts

Figure 17 summaries the numbers in Table 1 in terms of percentages of females and males for each sub-category, out of the total number of academics on fixed and permanent contracts. In the case of fixed-term contracts, every opportunity is considered towards the end of the contract to either extend it, for example by applying for new grants, or to offer opportunities for a permanent contract.

As for permanent contracts, Figure 17 shows that there is a larger proportion of females in the lectureship category than males, whereas the reverse is observed for higher levels, particularly at the level of reader and professor. Furthermore, the figure shows how the majority of females in the department are lecturers, whereas the majority of males are senior lecturers. This imbalance is addressed by actions with respect to promotion and recruitment, as discussed in other points of the application (Actions 2 and 3).

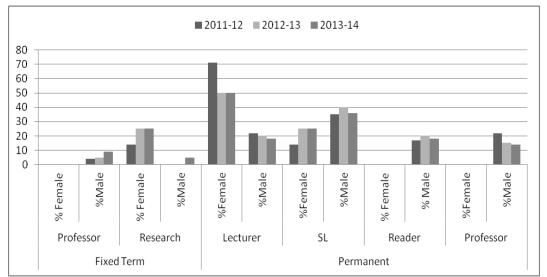


Figure 17 Percentage of female and male members of staff on fixed and permanent contracts, broken down by level and years.

b) Workload and culture

(i) Representation on decision-making committees

Table 5 provides information about the decision-making committees. In most cases, membership is decided ex-officio and gender is not considered. As women are well represented in the department in terms of administrative roles, this guarantees a good gender balance at the committee level and female representation in all decision making committees, with the exception of the School Executive committee.

| | Decision-Making Commitees | | | | |
|----------------------------|--|---|--|--|--|
| Committee | Selection of Members | Members from Department | | | |
| School Executive | ex-officio | HoD only | | | |
| Departmental Management | ex-officio | 3 females and 5 males from the department | | | |
| School Management | representative of university functions | Head-of-School (HoS), deputy HoS, school manager, deputy school manager, HoDs, a representative from each department (currently a female for maths) | | | |
| Senate | by election | Currently no members of the department | | | |
| Search Committee | senior representatives from key subject areas | 6 males and 2 females from the department | | | |
| Teaching committee | mostly ex-officio, anyone who wants to join is welcome | 4 males and 4 females from the department | | | |

 Table 5 Selection criteria of members of decision making committees and number of members from the department broken down by gender.

(ii) Workload model

The HoD carefully monitors teaching and administrative roles. An accurate workload allocation model, that measures the teaching and administrative loads of academic staff, was put in place in 2013 and was implemented for the first time during this academic year. The model is very detailed and assigns a weight to individual activities. For example, new courses, large courses with a heavy assessment load and large administrative jobs are given a high weighting in the model. Time paid for by grants or for making a large research grant application is also included in the model, as well as the coordination of the Athena SWAN team. Similarly, smaller activities, such as school recruitment visits, are also included in the model because of their importance and because they are undertaken by a small number of staff, for whom repeated visits become a significant load. In contrast to this, some activities such as work placement visits and personal tutoring are omitted because they are equally spread across all members of staff. The output from previous years is used to inform decisions for the following years and is discussed at the annual review meeting with the HoD.

Historically, some roles have not been rotated often enough in the department. With the appointment of the new HoD in 2012, this has changed significantly and is a key input into the allocation process. Similarly, individual situations and family constraints are considered in the workload allocation. For example, some administrative roles involve more presence during school-holidays than others or more attendance at meetings than others. One example of this is presented in the case studies and involves our current (female) admissions tutor. The department plans to continue implementing this workload model and to follow these good practices in the allocation of administrative duties (**Action 4.3**).

Figure 18 shows the results of our survey in terms of how strongly the academic staff believe that workload is allocated openly and fairly. Out of the 14 academics who had an opinion on this subject, 71% agrees/strongly agrees that the workload is allocated openly, 57.14% agrees/strongly agrees that the workload is allocated fairly, 29% of staff are neutral with respect to the two questions and only 14% (2/14) disagree that the workload is fairly allocated.

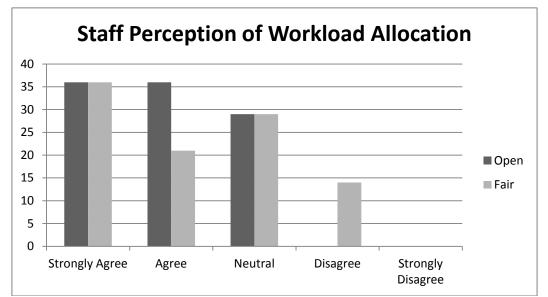


Figure 18 Results of the staff survey, showing the percentage of staff who believes that the workload is allocated openly (dark grey) and fairly (light grey).

(iii) Timing of departmental meetings and social gatherings

The department promotes meetings being held within the core hours of 10am and 4pm. The current departmental calendar has no meeting scheduled to start at 4pm or later, two meetings are scheduled to start at 3pm and all other meetings start at 2pm or earlier. If a meeting is scheduled outside the departmental calendar and involves only a small number of people, then every effort is made to ensure that a time is set that can be met by everyone and that fits within everyone's schedules.

As for departmental seminars, the three research groups run different series of seminars. The Applied Mathematics and Analysis and the Statistics, Optimization and Stochastics seminars have traditionally been on Thursdays at 2pm, whereas the Mathematical Physics and Combinatorics seminars are usually on Tuesdays at 4 or 5pm. The latter is mainly due to constraints on timetabling.

Since last year, it was decided to hold one Applicant Day and one Open Day on a Saturday. This has been beneficial in terms of participation from students and their parents. The attendance of members of staff at these events is on a voluntary basis, but it can also depend on their administrative role. In the case of the admissions tutor, due to her family commitments, she was replaced by another member of staff at these events (please see the case study for more information).

(iv) Culture

The department has a friendly and open environment, with informal interactions happening in the coffee room and at social gatherings. The foyer of the building has recently been refurbished and provides a place for students to gather and discuss their work informally. Recently, the students have set up a Brunel University Mathematics Society (<u>https://brunelstudents.com/societies/Mathematics/</u>). The current organising committee is made up of three female and four male students and organises events for mathematical students. The society was launched in February 2014, with an event attended both by students and staff. Events are also organised to facilitate interactions between PhD students. Given that many of our new overseas PhD students are women and are reluctant to join social events with fellow doctoral students, due to reasons related to cultural upbringing, religious constraints and concerns about food, 'bring-a-dish' lunches for PhD students were organised in December 2013 and April 2014 in the department's own seminar room. This initiative was led by one of our female PhD students and was extremely well received by the students. Finally, events are organised to facilitate research collaborations between members of staff: for example, in December 2013, there was an informal event, attended by staff and postgraduate students, where a number of staff members gave short presentations about their research.

There is significant respect for high standards of behaviour in the department, with no occurrence of poor or intimidating behaviour. We have attempted to measure the level of belonging of people and the general atmosphere in the department, by a number of questions in our survey. Figure 19 summarises the results of the survey with respect to the general perception of staff about working in the Mathematics Department. For each category the percentage is with respect to the total academic and non-academic respondents for whom the question is applicable. The feedback received was overall very positive and encouraging: staff feel valued and supported.

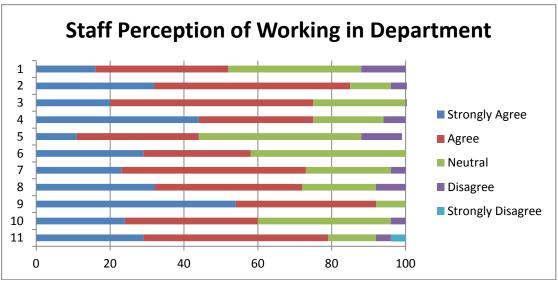


Figure 19 Staff perception of working in the department, with respect to the following points in the survey: 1. I'm encouraged to take activities that contribute to my career; 2. My teaching is valued; 3. My administrative work is valued; 4. My research is valued; 5. The department values my external professional activities; 6. The department resources/finances are allocated openly and fairly; 7. The working environment is friendly and colleagues cooperative; 8. Department communication is good; 9. Senior department staff are accessible; 10. Senior colleagues are supportive; 11. I have a supportive line manager.

Some questions in the survey asked participants about their perception of the treatment of males and females in the department with respect to a number of issues. Figure 20 shows how most of the participants believe that there is no difference in the treatment of males and females in the department. In addition, the department has a supportive culture with regards to flexible working, with various members of staff making use of flexible working arrangements.

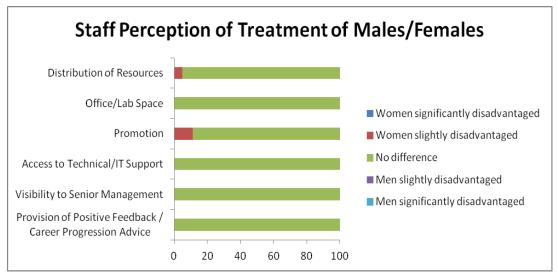


Figure 20 Staff perception of the department's treatment of males and females with respect to a number of issues. The percentages are shown out of all people who participated to the survey and who expressed an opinion on these questions.

The department celebrates all successes, for example PhD vivas or staff achievements. The current application will help to raise awareness in the issues addressed by Athena SWAN. We plan to include the Athena SWAN logo on our departmental webpage. Furthermore, if the application is successful, it will be celebrated by all. We will include the application on the webpage, so that everyone can familiarise themselves with our current achievements/weaknesses and future plans (Action 1.2 and 1.3).

(v) Outreach activities

The department has a vibrant programme of recruitment and outreach activities. We participate in Brunel's 'STEM days', where both a female and male member of staff each present stimulating activities involving maths to GCSE pupils, with the intention of encouraging them to choose maths for their A-levels. We also run several outreach events to local schools and colleges every year. Of particular relevance here is a 'What Can I Do With Maths?' presentation given to a group of thirty-eight year-10 girls. These events feature both male and female staff members, and our principal recruitment staff team comprises three females and two males. We encourage our final year students to give presentations on UCAS Applicant Days and ensure that both genders are equally represented. Furthermore, to encourage our own students to think about their careers, we have instigated an annual 'Life After Brunel' event where an alumnus gives a presentation of their career since graduation. Two have so far been held, with one male and one female alumnus (see for example the latest event at http://people.brunel.ac.uk/~icsrsss/LifeAfterBrunel/KatharinaSchwaiger-9-Jan-

<u>2014</u>). The intention is to retain an equal gender mix in these events as we go forward. Similarly, we have organised an event in the department for final year students interested in pursuing postgraduate studies.

We are in the process of including more photos/videos of female undergraduates and postgraduates on our departmental webpage, as an extra venue for attracting more female students to apply (**Action 1.1**).

Flexibility and managing career breaks

a) Paternity leave

(i) Maternity return rate

In the last 17 years, three women have taken five maternity leaves between them while working for the department on a permanent basis. In all cases, they were supported by the department to return to working as full-time staff, which they still are to this date.

(ii) Paternity, adoption and parental leave uptake

HR has a record of one parental leave throughout the last three years.

(iii) Numbers of applications and success rates for flexible working by gender and grade

The open culture of the department in terms of flexible working means that many staff work on flexible arrangements. This is often through informal agreement with the line manager. Only one current member of staff has applied formally for flexible working on her return from her third maternity leave. The details of this case are reported in the case study.

b) Flexible working and support on return from maternity leave

(i) Flexible working

In our department, flexible working takes one of three forms: working from home, working on flexible hours and working part-time. Currently, there is only one permanent member of staff, who works 80% of full time: initially this was to balance her working life with bringing up her three children, now it is to care for her elderly parents. From our survey, 84.6% (22/26) of staff have found that the availability of flexible working has contributed positively to their career. In most of these cases, informal arrangements are made with the line manager.

The university has a flexible working policy and there is a formal system with which staff can apply for flexible working. The information on the policy and application form is contained on the HR intranet webpage, under Family Friendly Policies. This policy is eligible only for people with caring responsibilities. It does not cover circumstances requiring flexible working patterns for those with non-caring responsibilities. One plan is to make this information more transparent and to also include it in the induction pack (**Action 4.1**). One member of staff has made a

formal request for flexible working on her return from maternity leave. In other cases, informal arrangements were made with the line manager. By providing information about the Athena SWAN submission, we will advertise two case studies in our department for whom the availability of flexible working has made a significant difference to their work-life balance and career progression (**Action 4.2**).

(ii) Cover for maternity and adoption leave and support on return

The HR webpage contains information on the maternity leave policy and a link to the flexible working policy. Arrangements are made prior to the maternity leave for covering work during the absence. Research staff on fixed-term contracts, funded on external research grants, have effectively the length of their contracts extended. For academic staff, teaching is usually covered by colleagues in the department. Similarly, administrative roles are normally reassigned to academic colleagues on a temporary basis. This is discussed in a meeting with the line manager prior to the start of the maternity leave. At the meeting, a discussion also takes place about how to keep in touch during the maternity leave, how to use KIT days and how to keep updated with the latest developments in the department/university during the leave. Two females in the department have returned to work full-time following a maternity leave and have made use of flexible arrangements, as discussed in the two case studies. In future, at any stage in the process, whether it is prior, during or after the maternity leave, the member of staff will be connected with other members of staff who have recently returned from parental leave to obtain further information/mentoring (Action 4.4).

Last year, the university launched Athena SWAN Research Awards to support academic staff who have recently returned from a period of maternity leave in the continuation of their research career. The funds are competitively awarded on the basis of a submitted research proposal and can be used for a number of purposes specifically related to research including: purchasing equipment, employing research assistants, or, where appropriate, to 'buy-out' staff teaching time. The requirements are in fact very similar to those of the BRIEF awards, which have been discussed earlier and which are aimed at early-career researchers. This type of funds encourages placing more focus on research at crucial times, such as the start of an academic career and the return from maternity leave, when heavy teaching and administrative duties would be detrimental to career progression. The HoD will promote these possibilities to members of the department who are eligible to apply (**Action 3.3**).

Staff are also encouraged to apply for external fellowships to support their research after career breaks. One of our female hourly-paid lecturers has recently been awarded a fellowship by the Daphne Jackson Trust, to carry out research part-time in the department for the next two years.

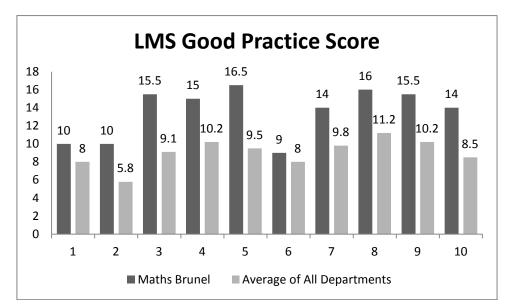
[4989 words]

4. Any other comments: maximum 500 words

In 2012, the department took part in a survey organised by the London Mathematical Society (LMS), together with twenty-nine other mathematics departments across the country. The 30

departments are in 27 universities, which are now all members of the Athena SWAN Charter and 25 of whom currently hold a bronze award. Of the 30 departments, three hold a bronze award and two a silver award.

Individual feedback was provided by LMS to each participating institution and figures were produced comparing our department with the other twenty-nine in terms of good practice for advancing women in mathematics. The survey consisted in a Good Practice checklist, made of 90 good practice statements, for which each department had to provide supporting information. The 90 statements were divided into 10 sections and the results reported per section. Each section was then given an average score between 0 (very poor) and 18 (very good) for good practice and between 0 (no evidence) and 9 (clear evidence) in terms of the evidence provided. Figure 21 shows the rating of our department compared to the other participating departments.



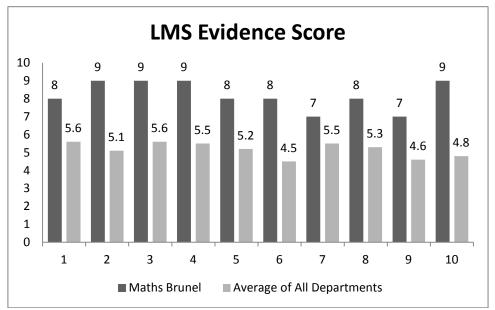


Figure 21 Good practice (top) and evidence (bottom) scores from the LMS survey, on 10 sections: 1. Organisation for action, 2. Evidence base action, 3. Appointments and promotion processes, 4. Levelling appointments and promotion fields, 5. Career development provision, 6. Career development activities, 7. Effective management, 8. Culture and ethos, 9. Flexibility and sustainable careers, 10. Career breaks and interrupted careers.

Overall the department scored very highly compared to the average score of all departments and was encouraged to provide qualitative and quantitative data to support these results. This was addressed by this application.

[214 words]

5. Action plan

See attached.

6. Case study [lightly edited to increase anonymity]: impacting on individuals: maximum 1000 words

Dr A (Lecturer in the Department of Mathematics)

Dr A joined the department in October 2002, as a PhD student. Her son was born during her PhD studies. She benefitted from flexible working patterns, supervision meetings arranged in accordance with her needs and she continued to be financially supported by the department until the end of her studies. After completing her PhD, she worked for more than a year as a KTP (Knowledge Transfer Partnership) associate in a project between Brunel Business School and an Uxbridge-based company, called Optirisk Systems. She was strongly encouraged to apply for a lectureship position at the department and in September 2007 she was appointed as a lecturer. Since then, she has benefitted from flexible working hours and from being able to perform a significant part of her workload from home. In 2008 she obtained a BRIEF award worth £14,000 which enabled her to undertake successful research collaborations with institutions abroad. In 2010 she was appointed Admissions Tutor of the department. Over the last couple of years, the number of recruitment activities held in the weekends and during school holidays has increased significantly. In view of the pressure that this put on Dr A as a single parent, she has been relieved from the duty of organising and participating in such events.

Dr B (Senior Lecturer in the Department of Mathematics)

Dr B came to Brunel in 2003 as a research fellow in the computing department, under a four-year Biotechnology and Biological Sciences Research (BBSRC) funded post. During this time, she received great support from her line manager, who strongly encouraged her to apply for a lectureship position towards the end of her contract. In 2007, she joined the Department of Mathematics as a lecturer in statistics. Soon after, she obtained a BRIEF award, which she used for buying a high-performance computer, travelling to conferences and visiting collaborators, and buying-off teaching time, so that she could concentrate on writing a grant proposal. Under the encouragement and support of collaborators and senior colleagues, she made an application to the BBSRC, under the new investigator scheme, and was awarded a grant in 2010 for a two-year research assistant. This was a major boost to her confidence and contributed significantly to her promotion to senior lectureship in 2012, where she was helped to present her promotion case in the best possible way by a senior member of the department, who had been recently promoted. During her time at Brunel, Dr B had three maternity leaves, in 2006, 2008 and 2010, each one lasting between 10 and 12 months. She came back to work full-time after each maternity leave and, after the third maternity leave, she applied formally for flexible working. Since then, she works from 6:30am to 2:30pm every day and makes extra childcare arrangements to attend afternoon meetings. The latter can be difficult on short-notice, but in most cases meetings are advertised in advance and Dr B is able to make childcare arrangements, thanks mostly to a supportive husband who also works in higher education. The department has also been very supportive of the flexible working time arrangement, despite the additional constraints that it puts on an already overly-constrained timetable for undergraduate teaching. Overall, the opportunity of flexible working has made a big difference to Dr B, since it has allowed her to find an appropriate work-life balance. Indirectly, it also had a positive impact on her working hours, with a more defined split between the early quiet hours, usually dedicated to research and teaching preparations, and the later hours, often busy with teaching and meetings.

| Objective | Current practice and identified priorities | Action | Timescal e | Lead | Success Measure |
|---|--|--|---|-------------------------------------|---|
| 1. PROMOT | TING A CULTURE OF GEN | IDER EQUALITY AND | FAIRNESS | | |
| 1.1 Improve departmental webpage | The webpage is in the process of being restructured in a number of ways, in order to increase the image and visibility of the department | Include more photos/videos of female students and staff to provide a more inclusive image of the department | By August 2014 | Recruitment Team & IT support | Increased gender parity in students' applications and job applications Increased % of PG applications |
| 1.2 Advertise the commitment of the department to Athena SWAN | Increase knowledge of the department's practices with respect to gender equality and fairness | Include Athena SWAN logo on the webpage, with link to the application | After the outcome of the Athena application | SAT | Interactions with other departments / universities/ LMS on good practices |
| 1.3 Disseminate the Athena action plan and the progress against it within the department | Increase knowledge of Athena SWAN activities in the department | Include a link of the action plan to the webpage and discuss the progress against the action plan at departmental meetings | After the outcome of the Athena application | SAT leader | Include Athena SWAN as an item ir the departmental meeting's agenda and write a report on the outcome of SAT meetings |
| 2. IMPROV | ING OUR RECRUITMENT | FIGURES FOR STUD | ENTS AND S | TAFF | |
| 2.1 Organise gender-balanced outreach activities | A number of outreach activities have recently been organised, some have only recently started, like the "Life After Brunel" series | Continue to strive for gender balance in future outreach activities | Ongoing | Recruitment Team | Increased gender parity in students' applications and increase in females aspiration for a future career |
| 2.2 Increase percentage of women applying to open positions in the department | Our recruitment data show a larger number of applications from males than females | Directly searching for, and contacting, women to apply for jobs Include Athena logo in future advertisements | Ongoing From 2015 | Search Committee | Increased percentage of females applying for jobs in our department |
| 3. SUPPOR | TING STAFF IN THEIR CA | | - | | |
| 3.1 Encourage participation in development training | HoD receives report on staff participation to training programmes and encourages all staff to participate | Encourage staff to participate to training programmes on an individual basis | Ongoing | HoD and Appraisers | Staff participation rate and perception of training programmes |
| 3.2 Collecting feedback from staff about appraisal process | Each member of staff gets appraised once a year. SURVEY: 42% of staff disagreed on the appraisal being useful and valuable | Collect feedback from staff about what is good and what can be improved about the current appraisal process | 2014 and survey in 2015 | SAT | Higher staff satisfaction about appraisal process |

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| 3.3 Supporting staff at key transition points | Comprehensive training programmes and mentoring for early- career researchers | Encourage early- career researchers to apply for BRIEF awards and women on return from maternity leave to apply for Athena SWAN Research Leave | Ongoing | HoD and Appraisers | Higher promotion rate, particularly from lecturer to senior lecturer |
|--|--|--|---|------------------------------|---|
| 3.4 Supporting staff applying for promotion | Colleagues are supported by HoD and appraisers to present their promotion cases Informally, colleagues can ask for help from senior colleagues, particularly those who have been recently promoted | Formalise the process, so that a member of staff applying for promotion is allocated a senior member of staff for guidance | By next promotion round (October 2015) | HoD | Higher promotion rate |
| 4. SUPPOR | TING WOMEN PLANNIN | G/RETURNING FROM | | FY LEAVE | |
| 4.1 Provide transparent information about flexible working | Flexible working policy applies only to people with formal caring responsibilities. The policy is not well- publicised. | Develop a section on the intranet on flexible working, e.g. entitlements, further links. Add this information to the induction pack | By December 2014 | SAT, IT support and HR | Information available on intranet and in induction pack |
| 4.2 Promote flexible working as an option for women returning from maternity leave | Individual cases in the department of women opting for flexible working and benefitting from it | By linking Athena SWAN application to the departmental webpage, the case studies will be publically available | After the outcome of the Athena application | SAT | More awareness of the opportunity for flexible working in the department, as measured by the staff survey and percentage of staff working flexibly |
| 4.3 Consideration of flexible working and family constraints in the workload allocation | There is now a transparent workload model in the department, which guarantees an equal spread of duties across staff | Consider family constrains and flexible working arrangements in the allocation of administrative roles and review the model yearly to ensure that staff are not disadvantaged | Ongoing | HoD | Staff satisfaction about workload allocation system, as measured by the staff survey |
| 4.4 Supporting women planning a maternity leave | Information on maternity leave is provided by HR and a meeting takes place with the HoD prior to the maternity leave | Connect women planning maternity leave with those who have returned from it for informal mentoring | From first available opportuni- ty | SAT Leader | Women making a smooth transition back into work and continuing successfully their career after maternity leaves |

| 5. MONITO | 5. MONITORING DATA ON STUDENTS/STAFF AND SURVEYING STAFF PERCEPTIONS | | | | | | | |
|--|--|---|------------------------------|--|---|--|--|--|
| 5.1 Monitor % females in UG and PG courses | Data are routinely collected on UG and PG courses | Continue to monitor percentage of females on our courses, particularly on PGt courses, where we expect to see an increase of offers in the next years | Ongoing | Admission Team and Administrators | Gender parity in applications and offers for UG and PG courses | | | |
| 5.2 Find efficient ways to collect/monitor data and analyse it at key transition points | Data collection/ monitoring and analysis has been taking place, especially in preparation for the Athena submission | Data collection/monitoring /analysis needs to be expanded and fully embedded in the department | Annually from 2014- 15 | SAT and department/ school administrators | An efficient and regular mechanism for collecting data | | | |
| 5.3 Distribute survey to staff | A survey was distributed in 2014 and the results analysed in this submission. The survey did not have enough space for staff to enter their own views on different topics | Distribute a modified survey, by shortening the current one and asking for individual feedback/suggestions for improvements on specific areas | Annually from 2014- 15 | SAT | Higher participation rate to survey and clear feedback on what is not liked/what could be improved on specific issues | | | |