IOP Institute of Physics

Juno Good Practice Checklist
Department of Physical Sciences
The Open University

The Juno Good Practice Checklist is a tool for departments to use in developing their applications for Practitioner status. It is designed to initiate honest discussion and reflection in order for departments to establish where they are in relation to the Juno principles. It could be a useful first task for the Juno committee, and the different perceptions of staff may provide an ideal starting point for discussion and provide initial ideas and evidence for the department to develop its Practitioner action plan. For maximum value, comments should be included to qualify, clarify and support the tick box response.

The tool is based on the Royal Society of Chemistry Good Practice Checklist.

Departments will be asked to submit their Good Practice Checklist as part of their application for Practitioner status. The Good Practice Checklist will also be used as part of the visit for Champion applications.

There is one criterion for each of the key assessment criteria in the Juno principles. The grading system is as follows:

A = **embedded**: reviewed/reported/benchmarked/adds value
B = **adopted**: expected/accepted/well organised/measured
C = **developing**: understanding/processes/pockets of good practice
D = **compliant**: enough for compliance/not fully understood/inconsistent practice
E = **not in place**: no interest/not yet

Principle 1 A robust organisational framework to deliver equality of opportunity and reward		
1.1	**Establish organisational framework**	
1.1.1	The Head of Department, or another senior academic, leads and champions good practice for women in science initiatives and programmes. Senior staff generally are committed to making change happen and 'owning' the action.	
	In 2011 the Faculty was restructured to create DPS from the merger of two previous departments: the Department of Physics and Astronomy (P&A) and the Planetary and Space Sciences Research Institute (PSSRI). DPS retains three academic disciplines: a) Physics, b) Astronomy and c) Planetary and Space Sciences (PSS). Membership of the JUNO Athena SWAN (JAS) self-assessment team (SAT) was constructed to ensure all staff categories within the DPS academic and research staff base were represented, balancing gender, age, discipline, expertise and experience. The team is led by Liz Whitelegg (DPS/Physics, Senior Lecturer) and Victoria Pearson (DPS/PSS Lecturer, Deputy Associate Dean for Equality & Diversity). The other members of the JAS team are: Prof. Ian Wright, Head of Planetary and Space Sciences (PSS) Discipline Dr Matt Balme, Senior Research Fellow (PSS) Dr Louisa Preston, Postdoctoral Research Associate (PSS) Dr Stephen Lewis, Senior Lecturer (PSS) Miss Elena Nickson, PhD student (Astronomy) Dr Carole Haswell, Senior Lecturer (Astronomy) Dr Silvia Bergamini, Lecturer (Physics) Dr Sam Eden, EPSRC Career Acceleration Research Fellow (Physics) Miss Louise Hobbs, DPS Administrator Mrs Tracey Moore, JAS SAT Administrator. Membership of the JAS SAT has an agreed workload allocation for staff, and student representation has agreement from supervisors. There is strong support from the Head of Department (HoD) Prof Monica Grady (see attached letter) who sits on the University Athena SWAN team. JAS submissions and action plans have been agreed by the Department Management Team (DMT) and the Faculty Management Team (FMT), including the Dean.	**A**
1.1.2.	Members of staff (post holders/individuals) and committees are identified as being responsible for taking action, reporting progress and communicating within the department.	
	The JAS SAT has been formally constituted and Terms of Reference have been developed. Each member of the team has contributed to the JAS submissions and has named responsibility for the tasks in the action plans. Progress on JAS work is reported as a standing item in monthly departmental	**A**

	newsletters and has been discussed at every department meeting since April 2013. The co-chairs of the DPS JAS Team are members of the University Athena SWAN (AS) team and report to this team quarterly. They have also met regularly with members of the Mathematics and Statistics Department AS SAT to co-ordinate data gathering at University level. Submission to JUNO is a commitment of the University's AS Action Plan and the University's Equality Scheme (2012-13).	
1.1.3	The department allocates resources (time, admin support, facilities and funding) to support its women in science activities, initiatives and programmes.	
	Membership of the JAS team carries a workload time allocation. Secretarial and admin support have also been allocated to this work from both the department and faculty. The appointment of temporary assistance (a Nuffield student) to support the presentation of data in our JAS submissions and proofreading assistance was supported by the Head of Department (HOD). Other women in science activities, such as editorship of the Int. J of Gender, Science and Technology, membership/chairing of external IOP, RAS and STFC Diversity and Women in STEM committees is allowed for in individuals' workload plans.	**A**
1.2	**Monitoring and evidence base**	
1.2.1	The department collects, monitors and reports data, including staff and student profiles, by gender. Information on male and female differential representation and progression (at all levels from undergraduate entrants to Professors) is analysed. This data is benchmarked against UK figures and against cognate disciplines within the university, where available and where appropriate.	
	1. Student data **(i) Undergraduate degrees** Because of the interdisciplinary nature of OU qualifications, data on taught undergraduate and postgraduate students is collected at university level but scrutinised at department and faculty level. Until October 2012 most students constructed their degree profiles on a module-by-module basis then when they had achieved 360 points at undergraduate level, the majority claimed a BA (Open) (consisting of a range of subjects, sometimes from different faculties) or a more specialist, possibly named degree (i.e. a BSc in Physical Sciences or BSc Natural Science (Physical Sciences pathway)). At masters level, they could claim a degree when they had accumulated 180 points. Although some students formally signalled their intention to study for a particular degree during their years of study, many did not and all were at liberty to change their degree goal at any point. This system made monitoring progression towards subject-based named degrees impossible. Since October 12 undergraduate students must register for a qualification on entry to the University, so monitoring of progression by qualification will become standard practice. The OU has only offered a named undergraduate physics degree (B27: Physical	**C**

Sciences) from 2003 and this has now been discontinued so although students are still studying towards this award, it is no longer open for new registrations. Table 1 gives registration and award data by gender for this degree. (Note: the OU has an open entry policy so students do not require previous qualifications to gain a place on our degrees, so although students are advised on level of study, anyone applying will be accepted. Hence the registration data is used to compare against benchmarking data on acceptances.) Over three years the average percentage of female students registering and being awarded B27 is 24% and 23% respectively, which is higher than the most recent benchmarking data for female students accepted onto bachelor's degrees in physics of 18.6%[1] and the same for those awarded bachelor's physics degree of 23%[2]. This slight decline in the percentage from registration to award is unlikely to be significant and is probably a feature of the small numbers completing the degree.

B27: Physical Sciences	Female as % of total registered	Female % awarded	Male % awarded
2010	22%	26%	74%
2011	24%	20%	80%
2012	28%	24%	76%
Average %	***24%***	***23%***	***77%***

Table 1: Registration and award data for the B27 Physical Sciences degree 2010-2012 by gender.

Classification data for B27 is shown in Figure 1. Table 2 shows classification data for B27 compared to national benchmarking data[3]. (Benchmarking data is only available for 2004/05 to 2009/10 so comparisons have been made between the overall figure for these years and the latest OU data.)

[1] IOP (2012). Accepted Applicants to Degree Courses in UK Higher Education Institutions. London, Institute of Physics.

[2] IOP (2012). Physics Students in UK Higher Education Institutions. London, Institute of Physics.

[3] IOP (2012). Physics Students in UK Higher Education Institutions. London, Institute of Physics.

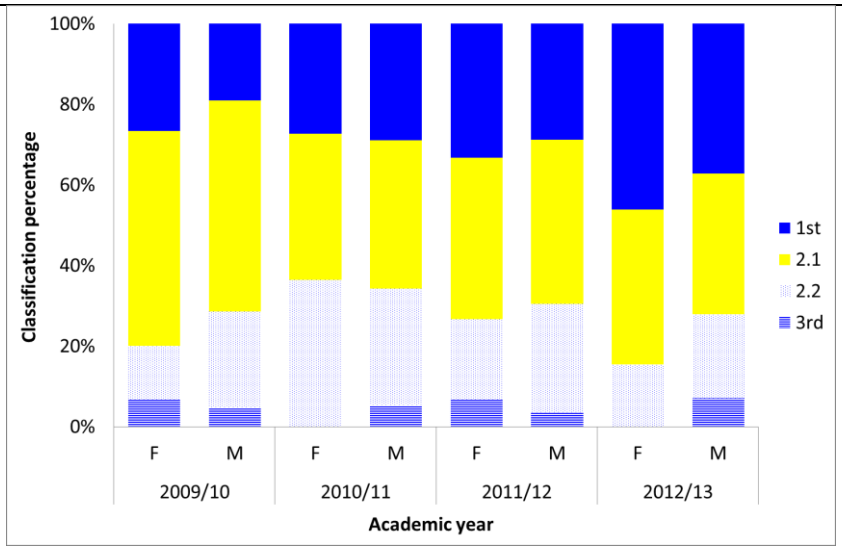

Figure 1 – Classification of B27: Physical Sciences degree by gender and academic year.

Bachelor's degree class	Benchmark male % 2004/05 to 2009/10	OU male % 2012/13	Benchmark female % 2004/05 to 2009/10	OU female % 2012/13
1	18.6	37.2	23.9	46.2
2.1	29.0	34.9	35.3	38.5
2.2	32.6	20.9	27.8	15.4
3	16.7	7.0	10.3	0
Unclassified	3.1	0	2.7	0

Table 2: Comparison of classification of B27: Physical Sciences degree with national benchmarking data by gender

The classifications of the OU degree by gender shows a similar pattern to the benchmarking data with a higher percentage of women than men being awarded first and upper second class degrees and a lower percentage of women being awarded lower second and third class degrees. There are no unclassified awards for this OU degree.

In addition to B27, our physics and astronomy modules could be counted towards our interdisciplinary Natural Sciences degree (B64), where students could choose to study a Physics pathway. Table 3 shows the data for this degree pathway.

B64: Natural Sciences (Physics pathway)	Females as a % of total registered	Female % awarded as a % of total awarded	Male (%) awarded as a % of total awarded
2010	21%	0	100%
2011	27%	25%	75%
2012	24%	69%	31%
Average % over 3 yrs.	***24%***	***59%***	***41%***

Table 3: Registration and award data for the physics pathway on the B64 Natural Sciences degree 2010-2012 by gender.

Averaged over 3 years, 59% of women who completed all the modules for this degree were awarded the degree compared to 42% of men. This Natural Sciences degree started in 2010 so the award data in Table 3 is based on very small numbers. In its first year a very few students could claim it straightaway by retrofitting their modules to its specification. The small numbers do not enable classification data to be analysed sensibly. (This degree has now been replaced by a new qualification. It is too soon for any students to have graduated from this.)

ACTION POINT:
Ensure registration and award data for the physics and astronomy pathway of the new qualification is produced, by gender, for monitoring by the SAT, the Qualification Pathway team and Science Programme Committee and compare with historic data.

Many mature OU students withdraw from study before completing their module. The 2011/12 withdrawal survey of (n=1250 male, 2430 female) students found the most influential reasons for withdrawal were pressure from family life and events, and unexpected illness. Men also cited employment issues. These reasons for withdrawal far outweigh other factors related to their study. The withdrawal survey also showed that women who withdrew were more satisfied with their teaching materials than men (82% satisfaction *cf*. 79%), but were slightly less satisfied by their Associate Lecturer[4] (AL) support (73% satisfaction *cf.* 78%). Research at school level[5] has found that supportive teacher-student relationships are more important for female than for male students, particularly in science. This suggests that analysis of withdrawal data for physics-related modules may be revealing. Levels of satisfaction with the OU study experience are very high (92% in a 2013 survey), even amongst those who withdraw. The OU has been in the top five UK universities in the National Student Satisfaction Survey since first inclusion in 2005. There were no differences in satisfaction ratings between male and female respondents.

A new study support system (Student Support Teams) is being rolled out, which will provide greater opportunities to support students differentially, taking any gender

[4] Associate Lecturers are part-time staff who support students locally throughout the year (see p.13).
[5] Murphy and Whitelegg, (2006) 'Participation in the physics classroom', London, IOP

differences revealed by engagement in the JUNO and Athena SWAN process into account.

ACTION POINTS:
- Obtain and analyse withdrawal data for physics-related modules by gender.
- Discuss good practice in supporting female physics students with the new Student Support Teams.

Because the degree-level data is based on small numbers for the reasons explained above, additional data at the module level has been examined to provide a richer picture.

(ii) Access and introductory level 1 modules

Access and introductory level 1 modules are not discipline-based, but cover generic skills for OU study in science (S154: *Science starts here* – access module) and cross-disciplinary study in all the sciences (S104: *Discovering science* – level 1 module). Nevertheless, because these are gateway modules, we have examined the data for these interdisciplinary courses (Table 4). This data reveals that the October start for the level 1 module is more popular with women than the February start, possibly because they prefer to avoid studying over the summer.

	% of women registering	% of men registering	% of women passing	% of men passing
S154 (access module)	53%	47%	56%	44%
S104 (level 1 module)	47%	53%	48%	52%

Table 4. Access and introductory level 1 module registration and achievement data by gender for 2010-2012.

ACTION POINT:
Carry out further investigation into differential registration patterns by gender.

(iii) Level 2 physics-based modules

Data for the four level 2 physics-based modules averaged over three years (2009-11 or 2012)[6] is shown in Table 5. Note that the percentages in columns 4 (and 5) are given as percentages of female (and male) students passing as a percentage of female (and male) students starting the module. The percentages of female (or male) students passing as a percentage of the total passing are given in column 6.

Module	Module title	% of	% of	% of	% of

[6] S207 starts in October each year and data for 2012 was not available at the time of request so the data given here is for 2009-2011. Other modules start in February and data covers 2010-2012.

code		females registering	females completing & passing	males completing & passing	females passing as a % of total passing
S207	The physical world	29%	46%	57%	26%
S282	Astronomy	26%	46%	48%	26%
S283	Planetary Science and the search for life	36%	61%	66%	34%
SXP288	Practical Science: Physics and astronomy	23%	71%	70%	24%
All physics-related level 2 modules combined & averaged over 3 years[7]		***30%***	***52%***	***56%***	***28%***

Table 5: Percentage of female students registering and passing four level 2 physics-related modules over 3 years (2009-2012)

Averaged over all four modules and over three years, 30% of students on physics-related level 2 modules are female and 52% of female students who start, complete and pass the level 2 modules compared to 56% of men. For all four modules over 3 years, 28% of those who complete and pass the modules are female. This is better than the benchmarking data for physics degrees. This data is based on 5498 students for all four courses over three years.

The gender differences for S207 and S283 are larger than for the other two modules, but the percentages of women completing and passing both these modules have increased annually and the gap has narrowed over the three year period. We recognise the importance of investigating the gender gap further, particularly for S207 since it is a 'gateway' module for physics study. This module is currently being re-written so attention can be paid to ensuring the module material is gender inclusive.

ACTION POINTS:
- Alert the relevant module teams to the gender differences and identify strategies to narrow the gender differences in the completion and passing data.
- Compare with data for other level 2 science 'gateway' modules.
- Work with the Student Support Teams to raise awareness of good practice in supporting female students.

The registration data for the level 3 modules is higher than the benchmarking data (18.6%), but the award data is slightly lower than the 23% benchmark figure. Nevertheless, Table 6 shows that a higher percentage of women complete and pass each level 3 module compared to men. Women's success at level 3 will be communicated to female students, tutors and student support teams in order to

[7] SXP288 is a new module so data for 1 year only has been included.

motivate female students.

Module code	Module title	% of females registering	% of females completing & passing	% of males completing & passing	% of females completing & passing as a % of total passing
S382	Astrophysics	19%	65%	58%	21%
S383	The relativistic universe	17%	60%	52%	19%
SM358	The quantum world	20%	60%	61%	20%
SMT359	Electromagnetism	20%	55%	49%	21%
SXP390	Science project course: radiation and matter	23%	71%	70%	31%
All physics-related level 3 modules averaged over 3 years		***20%***	***61%***	***56%***	***21%***

Table 6. Percentage of female students registering and passing all level 3 physics-related modules over 3 years (2010-2012). 61% of women who start the modules complete and pass compared to 56% of men.

ACTION POINTS:
- Investigate women's greater success at level 3 to reveal any good practice that can be implemented throughout the physics curriculum.
- Communicate women's achievement to module teams, pathway tutors and students in order to build women's confidence.

(iv) Taught Postgraduate (MSc) qualification data

There is only one physics-based taught MSc, F50: *Medical physics.* (The University is no longer admitting new students on this qualification, but there are students still studying for it.). Table 7 shows data for this degree.

F50: MSc in Medical physics	% of females registering	% of females completing & passing
2010	32%	31%
2011	37%	47%
2012	36%	47%
Average (%)	***35%***	***42%***

Table 7: Percentage of female registered for and awarded F50: *Medical Physics* MSc degree 2010-2012. Classification data is given in figure 2.

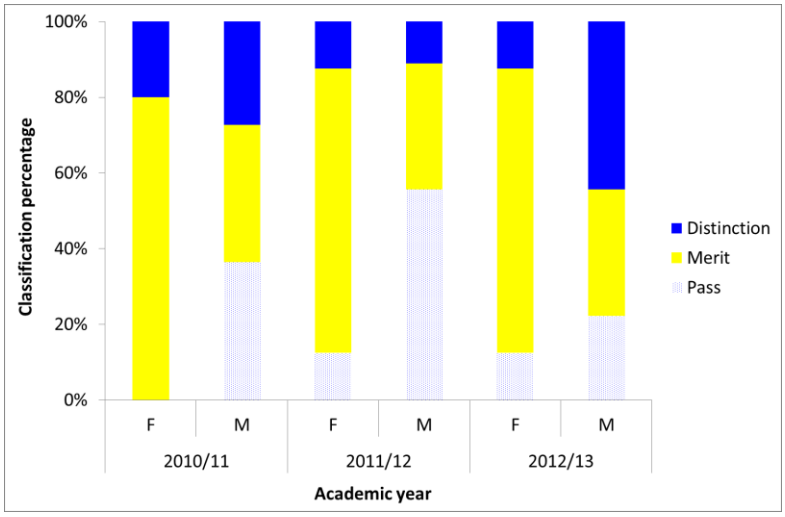

Figure 2 – Classification of taught MSc degree F50 by gender and academic year

Female students are proportionally not achieving as many distinctions as male students on this degree but taking the merit and distinction classifications together, as a percentage they achieve better than male students. We have started to examine data for this degree at the module level but so far have only examined one of the component modules S809: *Imaging in medicine*. Data for this module (Table 8) shows that the same or higher percentage of female as male students complete and pass this module and that averaged over 3 years, 73% of women who started completed and passed the module compared to 67% of men. Further analysis needs to be undertaken to understand the reasons for lower percentage of women achieving distinctions on the medical physics degree, but it this hasn't been prioritised because the degree is ending.

S809: Imaging in medicine	% of females registering	% of females completing & passing	% of males completing & passing
2010	40%	74%	64%
2011	36%	80%	76%
2012	36%	62%	62%
Average	***38%***	***73%***	***67%***

Table 8: Percentage of female and male students and passing S809

Physical Science students may also study for the interdisciplinary *MSc in Science* (F12), and the *Science and Society MSc* (F48). Over the three year period (2010-12) a higher percentage of female students (73%) compared to 67% of male students have completed and passed the *MSc in Science* (F12).

Taken together, the MSc data suggests that these taught masters degrees are popular with female students and they complete and pass these degrees at a higher or similar rate to the male students.

ACTION POINT:
Further analyse MSc data to identify module specific patterns of achievement by gender.

(v) Postgraduate Research Degrees

In March 2013 there were 56 PhD students registered in DPS (18 women). The number of PhD registrations is dependent on funding, and annual intake numbers since 2011 have remained relatively static (Table 9). Two postgraduate tutors oversee the recruitment process but it is often directly handled by individual academics. Hence, there is a variable approach to record keeping for recruitment, which is addressed in our Action Plan.

Department/discipline	% of women FT PhD registrations	Benchmarking data[8]
DPS	27%	36%
Physics	17%	22%
Astronomy	30%	30%
Planetary and Space Science	27%	Not available

Table 9: Percentage of female full-time PhDs registered in DPS, and split by discipline for Physics and Astronomy only, averaged over 2011-13. Benchmarking data for DPS are for all Physical Sciences. Benchmarking data for disciplines are for those subject areas.

Table 9 shows that the percentages of women registered are below benchmarking data, apart from Astronomy. The numbers of students are too small for any trends to be statistically significant, however this data will be distributed to the new postgraduate tutors for consideration in the 2014 recruitment period.

The October 2013 FT intake includes only two women (14% of intake), but this is consistent with the 2011 intake. In 2012 the intake included six women (50% of intake); the reasons for an increase in 2012 are not clear, but will be investigated further to identify any good practice that can be built on. Owing to this, as yet unexplained anomaly, data for the 2011-13 period is discussed as an average. There are currently three part-time (PT) PhD students (two male, one female), which is lower than the UK benchmarking data for PT study in physical sciences (33% *cf.* 47% for UK average[9]). However, numbers are too low for comparison to be useful. There are also three students (two men, one woman) who are part-time as a result of change of registration status beyond their four year FT studentship period. Again, numbers are too low to determine if there is any gender bias relating to completion within four years, but completion data will be sought for our Action Plan.

[8] 2011/12 HESA Student record: Postgraduate research students in SET subjects by mode of study, SET subject and gender.

[9] 2011/12 HESA Student record: Postgraduate research students in SET subjects by mode of study, SET subject and gender.

Initial expressions of interest from potential candidates can be *ad hoc*. Thus, 'applications' (Table 10) are those that were considered serious (not mailshots) and considered for interview; this distinction is still subjective and leads to discrepancies in the data presented here.

Table 10 shows that applications to FT study in DPS from both men and women have risen since 2011, and applications from women are in line with benchmarking data for physics and astronomy. Applications to PSS from women are much higher, yet this does not translate into higher percentages of women appointed.

Department/discipline	2011		2012		2013		Average % 2011-13
	F	M	F	M	F	M	F
DPS	7	35	12	39	25	49	26
Physics	1	6	1	11	4	8	19
Astronomy	2	7	3	6	8	21	28
Planetary and Space Science	4	22	8	22	13	20	49
Total applications to DPS	42		51		74		

Table 10 Number of applications to full time PhDs in DPS by discipline and average % over three years

To investigate this further, Table 11 shows the numbers of interviewees. The numbers of both male and female interviewees have increased since 2011. The percentage of women interviewed is greater than the percentage of women applicants. This same trend is seen in the Physics and Astronomy disciplines, but not in PSS. Therefore, it is possible that there is some attrition of women relating to the interview process (either selection, or in acceptance of interviews) for PSS candidates.

Department/discipline	2011		2012		2013		Average % 2011-13
	F	M	F	M	F	M	F
Total DPS	7	29	12	25	19	29	31
Physics	1	4	4	6	1	4	30
Astronomy	2	7	3	6	10	14	36
Planetary and Space Science	4	18	5	13	8	11	29
Total interviews in DPS	36		37		48		

Table 11 Number of interviews for full time PhDs in DPS split by discipline

DPS acknowledge a need for a more robust recruitment process and a better system of monitoring of applications through to registration. Our action plan highlights the interview process as a first step towards improving the numbers of women PhD students registered, but also intends to collect data on offers declined

to investigate that as a source of attrition.

ACTION POINTS:
- Initiate annual gender monitoring of PhD applications by discipline through application to registration stage, including supervisory teams and interview panels.
- Ensure a robust and consistent interview process e.g. consistent structure and generic questions.
- Ensure interviewers undertake Effective Recruitment training
- Collect data, by gender, on offers declined to establish whether female applicants are being offered positions but are rejecting them.
- Obtain data, by gender, for the completion of PhDs within and outside 4 years.

1. Staff data
Academic staff are divided into two categories, central and regional, with different contracts, offering different amounts of time for research and different promotion criteria. Central academic staff are based at the campus in Milton Keynes and regional staff, known as Staff Tutors (STs), are based in 13 centres throughout the UK. Staff tutors also contribute to teaching and some do research, in addition to holding line management responsibilities for part-time ALs who support students throughout the year, sometimes on a local basis. DPS STs, (n=6, 5 women) are appointed at faculty level and manage 130 ALs. Of these ALs, 46 are employed to support students on physics-related modules, and 12 (26%) are women. Since many ALs also have substantive roles within other organisations, the issues relating to their career progression are complex and beyond the scope of what is possible here. However, in 2005 the Athena Project funded the study of the careers of female ALs in the then OU Science and Technology Faculties[10]. The research found that due to its flexible employment patterns and professional development opportunities (that ALs are paid to attend), the University offered unparalleled employment opportunities for female STEM professionals that restored women's confidence in their abilities and actively developed their careers in HE to enable them to progress to other posts within the University and elsewhere[11].

The merger in 2011 between P&A and PSSRI to form DPS meant the staff base rose by 119% from that presented in previous JUNO submissions for P&A only. This constitutes a rise of 46% in academic staff (26 to 38) and 416% in research-only staff (6 to 31). Restructuring did not initiate substantial changes to the gender ratio. This dropped from 2.2:1 to 2:1 post-restructuring (representing 31% female academic/research staff in 2011 in P&A compared to 33% in 2013 in DPS). The percentage of women in DPS (and of P&A previously) is above the available UK benchmarking data (2011) for academic staff in physics departments of 17.5 %.

The small change in gender ratio post-restructuring can be explained by an influx of

[10] Associate Lecturers in Science (ALiS) project. Available at http://www.athenaforum.org.uk/reports/Report05.PDF
[11] Donovan, C., B. Hodgson, E. Scanlon and E. Whitelegg (2005). "Women in Higher Education: issues and challenges for part time scientists." Women's Studies International Forum, **28**(2-3): 247-258.

male academics from the previously male-dominated PSSRI (male to female ratio was 8:1 for PSSRI academics in 2011) and an increase in the number of female researchers (post-restructuring, the gender ratio for researchers fell from 6:1 to approximately 3:1). Research staff are predominantly (but not exclusively) employed on fixed term contracts as PDRAs or as independent fellows; the reason for an increase in the number of women in this job role is not evident from Table 12. 32% of academic/research staff in DPS in 2013 are women, which is above the UK benchmarking data (17.5%) for physics departments.

	Mar 2012			Mar 2013		
	Total number of staff	Number of women	% women	Total number of staff	Number of women	% women
Professor	10	1	10%	9	1	11%
SL (central)	11	4	36%	13	5	39%
SL (ST)	3	2	67%	3	2	67%
Reader	2	0	0%	1	0	0%
L (central)	10	3	30%	8	3	38%
L (ST)	3	3	100%	3	3	100%
Researcher	28	6	21%	31	8	26%
TOTAL	67	19	28%	68	22	32%

Table 12: DPS staff data by gender and job role since restructuring. SL is Senior Lecturer, ST is Staff Tutor and L is lecturer. (N.B. HR data reporting point is March so this does not include 2013 promotions.)

More senior academic job roles are filled by men (only one in nine professorial staff is female) but this is above the UK benchmarking data (7%), albeit based on low numbers. However, 39% of central academic SLs are female, consistent with the rest of the faculty and well above the UK picture (13%), so this is not an area of concern. To address disparity at professorial level, several initiatives are being developed to improve promotion rates of women as part of the University's Equality Action Plan and University-level Athena SWAN action plan.

Two in three SL STs are female, also above the UK picture for those on teaching-only contracts (29%), the best comparator with this staff group. The percentage of female researchers in DPS (26%) is above that of the UK benchmarking data for physics departments (19%), however these are mainly employed within PSS, a discipline that has no directly comparable UK data. Indeed, the vast majority of DPS research staff are clustered in PSS, reflecting its previous guise as a research institute prior to restructuring and a number of large external grants that enable PDRAs to be recruited there.

ACTION POINTS:
- Receive and scrutinise annual staffing reports, by gender and job role to monitor the gender ratio of DPS staff.

	- Raise the profile of University career development initiatives and encourage DPS staff to participate. **- Monitor uptake of new initiatives to improve promotion rates of women.**	
1.2.2	The department accesses and uses qualitative data gained from staff surveys, discussions, focus groups, etc.	
	The University undertakes its formal Staff Survey approximately every two years, and shorter surveys (Pulse surveys) are undertaken on an annual basis covering all aspects of University life. The gender split of respondents reflects the University's staff base (69% female), and women consistently report higher job satisfaction and lower levels of intention to leave. Staff Survey data is disaggregated by Faculty and formally reported to all staff by email, intranet and presentations. Faculty Management Team is required to respond formally to the results of these surveys. HODs are provided with results disaggregated down to department level, however this information does not require formal response, nor is it disseminated to staff and is not disaggregated by gender or job role at either Faculty or Department level. Compared to the University average, DPS staff reported higher levels of work-related stress, higher work intensity and poor work-life balance. In addition, dissatisfaction with the Faculty and University management was significantly below that expressed by the University average. Whilst disappointing results, it should be noted that this survey was undertaken shortly after Faculty restructuring and during the implementation of major changes to the University's curriculum and focus, in light of changes to fees structure and other external drivers; these activities generated significant short-term increases in workload for most staff and uncertainty about the University's future. DPS responses were not atypical of other departments in the Faculty. The Academic Leadership Programme has been central to the (re)training of senior academic staff to improve the management of the University. The Merit Award Process, Workload Planning and CDSA (Career Development and Staff Appraisal) processes (See Principle 3.1.1) have been improved, and key competencies developed to which staff should be mapped during appraisal (Valued Ways of Working or the Leadership Competency Framework). Vulnerable staff are also encouraged to engage in formal Stress Risk Assessments, with the help of their line managers. FMT have refocused their weekly meetings and the Dean has increased communication with Faculty staff via email and implementation of Facul-tea (coffee-time opportunity to speak to FMT and all Faculty staff). In 2013 within DPS, after one full year of change implementation, a pilot survey has been initiated by the HOD to all DPS staff to determine the success of the Departmental management structure. Results of this and the 2013 PULSE survey are forthcoming.	**C**

	ACTION POINTS: **- Analyse results and success of pilot DPS staff survey** **- Initiate annual DPS staff survey in May/June for results to be reported at summer annual all-staff meeting** **- HoD to send weekly message to staff regarding outcomes/decisions from DMT and FMT meetings (also see Principle 4.1.1)** Positively, the 2012 Staff Survey showed that DPS staff were above the University average for satisfaction with their opportunities for promotion. This is detailed in Principle 3.1.	
1.2.3	The department's action plan and its development is informed by outputs from its quantitative and qualitative data.	
	The action plan has emerged from the data interrogated for this submission. The draft submissions and action plans and data have been discussed by the JAS team, the DMT and FMT. JAS activity has been discussed at every departmental meeting and reported in monthly departmental newsletters since April 2013.	**A**

Principle 2 **Appointment and selection processes and procedures that encourage men and women to apply for academic posts at all levels**		
2.1	**Ensure that processes and procedures are fully inclusive**	
2.1.1	The department has a clear policy on how career breaks are considered in relation to appointment and selection.	
	Evidence for the department's policy and attitude to career breaks is provided by our recent appointment of two Daphne Jackson Fellows who were very positive about the support given by the department throughout the application and appointment process. They said: *"My return to work was proactively supported by the OU through the guidance provided by academic and admin staff and payment of any expenses incurred during this process including childcare. I was regularly invited to join DPS activities*	**B**

	(academic and social) before officially starting my post and even attended a conference partially funded by the OU". and: *"I recently returned to research as a Daphne Jackson Fellow after a 6-year career break. Returning after such a long break seemed daunting at first, but my experiences have been very positive so far and I owe it a lot to my mentor who has been very supportive and understanding. I think that it is essential for returners to have strong mentor support"*	
2.1.2	The department ensures that all staff who interview have undertaken appropriate equality and diversity training so that those who make decisions are aware of male and female differences and unconscious bias.	
	All staff new to the University are advised to undertake equality and diversity training as part of their induction via the Diversity Compliance eLearning module, provided by the University's Equality and Diversity Team since January 2012. Completion of the module is recorded via the University's Learning Management System (LMS) and monitored by the Faculty's staffing team. Additional diversity training is available from the University's HR Staff Development Team. Since 2011, five members of DPS staff have undertaken formal equality and diversity training, although none have completed the new Diversity Compliance eLearning module. An Effective Recruitment course is recommended for all staff undertaking recruitment activities to ensure fair selection is achieved. Diversity is embedded in the University's Recruitment and Selection Guidelines; for example, the University provides guidance on the wording of job specifications and the gender balance of interview panels, and interview panel chairs are expected to ensure the panel is appropriately trained, and that includes ensuring interviewers have undertaken diversity training. **ACTION POINTS:** **- To encourage all staff to complete the Diversity Compliance eLearning module and monitor engagement.** **- Identify academic staff who have not completed effective recruitment training within the last two years and have this included in their CDSA (Career Development and Staff Appraisal) objectives.** **- Investigate feasibility of holding a dedicated training day within DPS for all staff.** **- Create DPS-specific guidance on best practice in interviewing.** **- Obtain annual reports on the gender ratio of interview panels for DPS recruitment for monitoring.**	**B**
2.1.3	There is a departmental induction programme that introduces departmental practices and procedures to all staff, including post doctoral researchers.	
	This year the University published a guide to best practice for induction, including a checklist of induction activities. Based on that, the Department Administrator welcomes all new starters at an initial meeting and provides a general induction to	**B**

	DPS. This is divided into four sections 1) Department Arrangements 2) University Policies and Practices 3) Health and Safety 4) Your role (this is typically discussed with the Line Manager). A Survival Guide is also given to all new staff, which is intended to help new members of staff find their way around DPS. **ACTION POINTS:** **- To review the DPS survival guide to ensure it is up to date.** **- To review the DPS induction process and implement improvements, if required, based on best practice from other departments.**	
2.2	**Take positive action to encourage under-represented groups to apply for jobs**	
2.2.1	The department collects monitors and reports data on recruitment and appointment by gender.	
	Data are collected, by gender, on recruitment and appointment at Faculty and University level, but has not previously been regularly reported or scrutinised at department level. Between March 2010-13 there have been 15 competitive vacancies for academic/research positions (that is, those excluding research fellows that attract their own funding, or contract renewals). 26% of applications were from women (approximately two applications per vacancy, compared to five applications from men). 24% (9) of those interviewed from 2010-13 were female. 14 of the vacancies since 2010 were for research positions with fixed terms; the remaining vacancy was for a permanent academic position (Senior Lecturer). A woman was recruited into this position and 47% (5) of the applicants for that post were female. Of those appointed, three were female (27%) including the SL appointment. This is above the UK average for all academic appointments in Physics departments (22.7%). However, for those appointed to research positions, only 14% were female, below the UK average for research positions (22%). **ACTION POINT:** **To receive annual reports on DPS recruitment by gender from the Faculty staffing team for analysis by DPS Management Team.**	**C**
2.2.2	The department encourages both women and men to apply internally for appointment and there is evidence that department actively attempts to identify and attract appropriate external male and female candidates.	
	During 2010-13, of the 15 competitive vacancies available in DPS, there have been 12 internal applicants (six male, six female); four of the internal female applicants were for a single position (Research Investment Fellow, RIF) and a female internal candidate was appointed to this position.	**A**

	Staff within six months of their contract end date (or at risk of redundancy) are given prior consideration for any vacancies available across the University. Vacancies are advertised via the University's vacancy page. Since 2010, of 94 external applications for the 15 competitive vacancies available, 24 (25%) were from women (four for the Senior Lecturer position and five for the RIF position); a female external candidate was appointed to the SL position. Of 74 applications to external fellowship schemes that were supported by DPS, 26 (35%) were from women (including seven applications from existing female staff). For external calls where the institution is limited in the number of submissions it can support, an internal selection process overseen by the PVC (Research) is implemented. All fellowship applications are read by Associate Dean (Research) and feedback provided. Five research fellows have been appointed within DPS since 2010 – two male, three female. Two of the women were external applicants to the Daphne Jackson scheme, the third was an internal applicant to the UKSA's Aurora Fellowship scheme. **ACTION POINT:** **Review the informal networks available for advertising appointments to ensure that women in STEM networks are reached in addition to the formal recruitment channels.**	

Principle 3 **Departmental structures and systems which support and encourage the career progression and promotion of all staff and enable men and women to progress and continue in their careers**		
3.1	**Transparent appraisal and development**	
3.1.1	All staff, including researchers and PDRAs, are regularly appraised. Staff are clear about what happens to appraisal documents and what follow-up action should be taken, where necessary.	
	The University has a clear and robust career development and staff appraisal (CDSA) process, which is compulsory and thus adopted by all departments. CDSAs occur on an annual basis for all staff (including PDRAs), usually during May-July when staffing workloads are also under consideration for the coming academic year (see Principle 4.2). Staff are informed of their appraiser during induction, and	**B**

	encouraged to seek feedback from colleagues to inform the appraisal process. Line managers are usually CDSA appraisers unless staff request otherwise. Following CDSA, electronic copies of appraisal documents are signed by staff member and appraiser, and sent to the Deanery for filing. CDSA completion (submission of completed appraisal documents) is thus monitored by the Faculty, and the Dean is required to report to the University on an annual basis about the percentage of staff who have completed CDSA. The expectation is that CDSA completion should be 100%; for the last CDSA round (1st Oct 2012-13), 75% of staff were appraised. Of those staff that were appraised, only 40% are recorded as complete, where completion is the submission of CDSA paperwork to the Faculty. The reason for this is unclear and there is, however, no evidence of a gender bias in the data on CDSA completion. The CDSA process is under continuous review by the University. **ACTION POINTS:** **- To improve DPS engagement with CDSA towards 100% of all staff.** **- To include the 'benefits of CDSA' in the DPS survival document.** **- To use the DPS staff survey to understand why staff engagement and completion is lower than University expectations.** The University's Research Degrees Team and the Deanery formally monitor the progress of PhD students, on a 6-monthly reporting cycle. Progress reports are completed by students and supervisors and signed off by the Faculty's Director of Postgraduate Studies. Copies of the reports are held by student, supervisor, Deanery and Research Degrees Team.	
3.1.2	The department has a career development/mentoring scheme in place, and suitably trained individuals/post holders are made responsible for career development and career advice for research staff, including PDRAs. The department encourages all staff (i.e., trains them and provides them with guidance) to become mentors or mentees and to mentor researchers (including early career staff). Researchers, in turn, are encouraged to mentor postgraduates.	
	All academic staff have five days protected in their annual workload for career development activities. Career development is discussed during CDSA and training needs identified. All staff are encouraged by their line managers to access training and development from a number of University Units (e.g. HR, Library, Research Career Development Support Team). DPS does not offer its own training or career development activities because of the expertise available elsewhere in the University, except for training on laboratory equipment, which is *ad hoc* depending on requirements. Within DPS, new academic and research staff (but not PDRAs, which appears anomalous) are allocated mentors. In addition the University provides on-line resources to support the mentoring process and a new University mentoring guide has recently been produced. However there are no clear guidelines on the	**C**

	mentoring process, duration or the expectations of the mentor/mentee and this practice is not formalised within DPS. For existing staff the process is less robust and few appear to have mentors, so improvements are needed here. The University Athena SWAN action plan includes development of a coaching and mentoring programme to focus on women in senior roles, including specific development support in preparing cases for promotion. In addition, the University provides free access to the Employment Assistance Programme, an external programme offering support and counselling for life events. PhD students are allocated a third party monitor as standard, and dates of meetings are reported as part of the 6-monthly progress report process. Students are not obliged to draw on their third party monitor. DPS management have actively encouraged all staff to engage in new development opportunities particularly PhD students and PDRAs for whom teaching experience is key career development, to engage with the production of MOOCs (Massive Open Online Courses). Staff have also been encouraged to engage with OpenPAD, the University's formal academic teaching programme to obtain HEA accreditation. **ACTION POINTS:** **- Lobby faculty to establish a mentoring scheme for all staff (including PDRAs) informed by the University's mentoring guide and the outcomes of the University Athena SWAN action plan.** **- DPS HoD to actively encourage women to apply to the Leadership Foundation's Aurora programme.** **- Investigate the effectiveness of the third party monitoring system.**	
3.1.3	The department encourages all staff to access careers advice, and monitors the appropriateness, value and uptake by all staff (from post-docs to professors) of the career development training, advice and appraisal that is available to them.	
	All staff are encouraged to seek career development opportunities, and needs are identified at CDSA. Because of the large number of units offering training, interrogation of the LMS[12] system only provides data on take up of a small number of opportunities. Staff are instead asked to keep personal training records by regularly updating their record on the Workload Management System. Any PhD researcher or postgraduate student can access the University's Careers Service. The Careers Service provides its 'Career Planning and Job Seeking Workbook' at their induction sessions. The OU Research School fund a number of career workshops and access to a careers' consultant for researchers throughout the year. A dedicated service is not provided for staff although they can access any of the	**B**

[12] LMS = Learning Management System

	Careers Service's extensive online resources. The Careers Service has recently helped with content for the new 'Virtual Research Environment' website aimed at Research Students, which includes a 'training zone'. **ACTION POINT:** **To raise awareness of the University Career's Advisory Service among DPS PhD students and staff.**	
3.2	**Transparent promotions processes and procedures**	
3.2.1	The department takes action to ensure its appointment and promotion processes, are open and transparent, that there is a clear policy on how career breaks are considered in the processes and that those who take decisions have undertaken appropriate equality and diversity training. Feedback is given to unsuccessful applicants.	
	Principle 2.1.2 outlined the University's equality and diversity training and access to Recruitment and Selection Guidelines on offer to all staff, including those sitting on interview panels. Promotion is driven by a University-wide process, however academic promotions are currently under review and new procedures and criteria are likely to be introduced in 2014. Academic and research staff promotion cases are considered annually and approved by the Academic and Research Staff Promotions Committee. Cases are sent to the committee following selection by Faculties. For all promotions, with the exception of promotion to Chair, the Dean, with support from Department Administrators, asks Heads of Department (HoDs) to recommend staff for promotion. HODs discuss potential cases with Heads of Discipline (HoDis) and other senior staff in the Department before making their recommendations to FMT. FMT then makes the final recommendations to the University Promotions Committee. Line managers support candidates with their applications throughout the process. Candidates are identified for promotion by their position on the salary scale or through appraisal. It is recognised that this process may not identify all potential candidates, particularly when staff rise through the salary scale via annual increments, but it may identify those that need additional responsibilities or shift in workload focus to complete their CVs in preparation for a promotion case. Staff are able to pro-actively identify themselves for promotion and submit cases directly to either FMT of the University Promotions Committee, however some women may be more reluctant than some men to do this. The evidence presented here does not indicate a gender bias in the promotion data at the lecturer and senior lecturer grades. Feedback is provided to candidates at each stage in the process. Since 2010, 16 promotion cases have been progressed - four were from women.	**B**

Table 13 shows two cases of these were progressed to the University Promotions Committees (33% of DPS cases progressed). The University Promotion Committee, in the same time period (including 2013 promotions), awarded three promotions to DPS staff: two (one male, one female) from Lecturer to SL and one (male) from Research Fellow to Senior Research Fellow. This promotions data is consistent with the DPS academic/research staff base over the last three years.

	Male	Female
Cases progressed to faculty	14	4
Cases progressed to University Promotions Committee	4	2
Promotions awarded	2	1

Table 13 Promotion cases progressed from DPS to Faculty Management Team (FMT), then subsequently progressed to the University Promotion's Committees.

The University's Chair & Readership sub-committee considers cases on a rolling basis three times a year. Any cases submitted to the Dean are sent to a professoriate panel (AD Research, HoD plus two other professorial staff) for comment. Candidates are then invited to a 1:1 with the Dean for feedback before submission to the sub-committee.

The University's Equality and Diversity team have identified a number of barriers to progression for women academics to senior levels and the criteria for promotion are currently under review.

ACTION POINT:
- Investigate feasibility of all academic and research staff submitting CVs annually for consideration.
- Obtain and interrogate promotion data by candidate career age[13] to establish if women are promoted at a career age equivalent to that of men.
- Obtain and interrogate salary data by age for all staff to establish if a pay gap exists in DPS.

Merit award data for 2013 has also been sought (Table 14) and is consistent with the DPS gender profile.

Merit awards	Nomination	Faculty Awards Committee	Awards made
Men	9	9	7
Women	6	5	4

Table 14 Numbers of staff nominated for merit awards in 2013. Instead of receiving a merit award one man was recommended as a potential promotion case

All staff are encouraged to undertake equality and diversity training, but monitoring shows a number of staff have yet to do the most recent Diversity

[13] Career age = number of years at a career stage.

	Compliance eLearning module. (See action in 4.1.2)	
3.2.2	The department's promotion processes and criteria for nominating and supporting candidates for promotion are well communicated, consistent, fair in application and transparent. Staff in the department are supported through the process with, for example, help in the preparation of the application and mock interviews.	
	Principle 3.2.1 outlines the University's promotions process and how DPS staff are supported through the process.	**B**
3.2.3	The department ensures that guidance is provided to all potential candidates to support and encourage them through the promotions process.	
	The Dean circulates a memo to all academic and research staff in January of each year to launch the promotion round. This memo outlines the process to be followed with deadlines for completion. The process is detailed in Principle 3.2.1. The candidate, line manager, HoDi and HoD are supported in the completion of the promotion case and guided through the process by the Department Administrator (DA). The DA co-ordinates the Department submission(s) to the FMT/Professoriate panel and ensures timely feedback to candidates.	**B**

Principle 4 **Departmental organisation, structure, management arrangements and culture that are open, inclusive and transparent and encourage the participation of all staff**		
4.1	**Promote an inclusive culture**	
4.1.1	The departmental structures for its management, organisation, operations and decision-making are clear, transparent and accountable to all its staff. The department has clear values and expectations of the behaviour of individuals to each other (staff and students) and these are communicated to all staff.	
	The DPS Management Team meet on a weekly basis, with the HoD also sitting on the Faculty Management Team, which also meets weekly. Academic staff meetings are held quarterly, and 'all staff' meetings annually. It is not practicable to hold either type of staff meeting more regularly and sometimes change happens too fast to be discussed by relevant groups. Further communication strategies need to be put in place cope with the rapid pace of change. In addition not all categories of staff are present at the relevant meetings, in particular PhD students are represented at academic meetings, PDRAs/Fellows and academic-related staff are not. This needs changing.	**B**

	Values and expectations of staff are not explicitly defined, but staff are encouraged to work (and be appraised) within the University's Valued Ways of Working (VWW) framework that defines professional behaviours, and/or the Leadership Competency Framework. **ACTION POINTS:** **- Invite representatives from other staff groups (e.g. PDRA/Fellows and academic-related staff) to all academic meetings.** **- HoD to send weekly message to staff regarding outcomes/decisions from Department and Faculty Management Team meetings.** **- Determine a DPS 'values and expectation' statement linked to the university's VWW framework.**	
4.1.2	The department ensures that all staff undertake equality and diversity training, as part of their induction or their career development.	
	All staff new to the University are encouraged to undertake equality and diversity training as part of their induction via the Diversity Compliance eLearning module, provided by the University's Equality and Diversity Team. Completion of the module is recorded via the University's Learning Management System (LMS) and monitored by the Faculty's staffing team. Additional diversity training is available from the University's HR Staff Development Team. Since 2011, five members of DPS staff have undertaken formal equality and diversity training, although none have completed the new Diversity Compliance module. This is an area for improvement. **ACTION POINT:** **Encourage all staff in DPS to complete the Diversity Compliance eLearning module and monitor participation.**	**B**
4.1.3	Social activities are encouraged and involve all staff including part-time and non-academic staff as well as staff on sabbaticals, career breaks, long-term sick leave and maternity leave. All staff are encouraged and supported to network at faculty, university, regional and national levels.	
	DPS social activities are organised by Hooke Soc. All DPS staff and PhD students are members of Hooke Soc., but organisation of events is led by an elected committee of PhD students (two women, one man). Although Hooke Soc. is fairly new, they have already organised a number of events (e.g. quizzes and a murder mystery evening). They have recently initiated a staff survey about the types, timing and cost of events staff and students would prefer. Results of the survey are forthcoming. The department also holds a summer BBQ and a Christmas meal for staff and PhD students, and these are held during working hours minimising disruption to home-life. A female member of staff has independently started a lunchtime networking	**A**

	event for any DPS staff with very young children, called 'nappy chat'. DPS participates in all the intra-University sports tournaments with 2 teams in the football league each year, a cricket team and at least 2 relay teams for the annual campus race. Most teams are mixed gender. **ACTION POINT:** **- Invite a Hooke Soc. committee member to become part of the SAT, with the approval of their supervisor.** **- Hooke Soc. to informally monitor attendance at events by gender and job role (to ensure events are attractive to all staff categories).** **- Hooke Soc. to implement a 2 week minimum advance notice period for any planned event to allow planning for childcare etc.** **- Promote University Athena SWAN networking events within DPS.** Attendance (and presentation) at external academic meetings is strongly encouraged and PhD students, in particular, are actively encouraged to seek bursaries for such events for both networking and career development opportunities (e.g. proposal writing and budget management). All staff and PhD students are invited by email to attend weekly Facul-tea to interact with FMT and their peers, and the location of this rotates by Faculty department. There was good participation from female DPS staff at the first University Athena SWAN networking event held in June 2013.	
4.1.4	The departmental image (publicity, photographs, newsletters, job particulars, and prospectus) reflects the contribution of women and under-represented groups.	
	The University's publicity materials, including its website, reflect its philosophy of openness and equality. Where possible, images of our own students, staff and alumni are used, rather than library shots, and care is taken to represent the diversity of the OU community. However, the DPS web presence features very few images of any individuals (male or female), except within news items and instead uses science-themed images, which may lead to the impression that few people are engaged in research and other campus activities, and project an unwelcoming image. A photograph of the HoD (Prof. Monica Grady) accompanies her monthly newsletter on the website but this only goes to staff and students. The newly formed Hooke Soc. also lacks any web presence, despite their contribution to the DPS culture. DPS have recently installed a staff photoboard at the entrance to the department, however this is incomplete. Several improvements can be made here. **ACTION POINTS:** **- Include active images of DPS staff members on the DPS web pages, where appropriate, and in addition to portrait-style photos on staff profiles.**	**C**

	- Hooke Soc. to investigate possibility of a web presence on the DPS website. **- Ensure the photoboard is complete for all staff members.** **- Devise a public 'quick find' guide detailing the location of staff.** Because of the modular and cross-disciplinary nature of OU study, departments do not have their own prospectus; however University marketing ensures there is an equitable representation of people with different genders, ethnicities; dis/abilities and ages on all marketing material.	
4.1.5	Junior staff, women and under-represented groups, including PDRAs, are encouraged to raise their profile internally, e.g. by contributing to departmental research seminars and presenting to research sponsors. The department aims to ensure that speakers from under-represented groups are actively sought. Gender monitoring of speakers at departmental seminar programmes and other similar events is collected and reported on.	
	There are three main types of seminars: journal club talks; research group seminars and weekly CESPAR seminars. In addition there are IoP evening talks open to the public. All staff, both male and female, are encouraged to give presentations at the weekly journal club; PhD students and PDRAs are particularly encouraged to present. Research group meetings within DPS (e.g. Cosmochemistry Research Group) also encourage presentations from early career staff about their research progress on a weekly or fortnightly basis. All PhD students are required to give an end-of-year presentation to all staff in CEPSAR (research centre for physical and environmental sciences) as part of their progress monitoring. Weekly seminars are held by CEPSAR (jointly with DPS where relevant) and internal or external speakers are invited to present. IoP seminars are also hosted in the evenings. Some research groups also invite their own speakers independent of the DPS/CEPSAR programme. There is currently no central record of all of these profile-raising activities and no overall gender monitoring or reporting currently in place. (DPS seminar lists are kept on a wiki, CEPSAR seminars on a website and other ad hoc seminars are not recorded. Journal club speakers are recorded by the organiser (usually a PhD student). However, using the records available, over the last 3 years, 23% (13) of the journal club speakers have been female; in 2013 to date, this figure is 37% (7). It is expected that the demographics of journal club would reflect the DPS staff base or that of the PhD student profile, but this figure is marginally higher than both of those groups (33% female staff and 28% female PhD students in 2013). Over the last 3 years, 20% (26) of DPS/CEPSAR speakers have been female. This reflects the UK average academic staff profile for physics (17.4%). In 2013 to date, 24% (9) of the speakers have been female, which is above the UK average female staff profile.	**C**

	Since 2011, 26% (5) of the IoP speakers have been female, and this percentage is consistent for each year. This is also above the UK average academic staff profile for physics departments. These records, although inadequate, suggest that female staff and students contribute to these profile raising activities at an appropriate level. An improved recording system will enable further progress to be made. **ACTION POINT:** **Devise a central DPS system for recording and monitoring all relevant seminar speakers by gender and under-represented categories where possible.**	
4.2	**Transparent workload allocation model**	
4.2.1	The department has fair and open systems for allocating workload (teaching, administration and research) and this is reviewed regularly. The department ensures that the systems are inclusive and fully recognises and rewards all types of contributions (including administration, mentoring, pastoral work and outreach). Departmental roles and responsibilities, including committee memberships, are rotated for staff to gain experience / exposure.	
	A comprehensive workload management system is used by all academic and research staff across the University. Staff allocate their duties in consultation with their line manager (following CDSA) for the forthcoming academic year, taking into account individual requirements and institutional strategy. Workload plans are organic and can be updated as activities change, with approval from line managers. Every task carries a tariff (including outreach, work on JUNO and Athena SWAN, service to external bodies), which is set at Faculty or University level. Each member of academic staff is expected undertake approximately 100 days of teaching (unless they have research funding that allows them to be bought out of some or all teaching) and 79 days research within their 217 working days. These norms have been determined to allow adequate balance of research time and other activities within an individual's workload. These norms do not apply to staff tutors who also undertake regional duties (that can include teaching) that constitute up to 60% of their allocated time. The remaining 40% is for central work, which can also include teaching plus study leave and other tasks. Non-standard tasks are also built into the system and a tariff has been devised for these. At the end of each academic year, staff are also asked to complete 'actuals' for the previous year. From this, approximate information about teaching:research split can be identified. Prior to restructuring, the old Physics & Astronomy department had a workload split between teaching and research for central academics that was approximately 50:50 for men, but 75:25 for females, biased towards teaching. In 2013, the recorded workloads at the end of the first full year of DPS (12/13 academic year) were 36:64 for males and 50:50 for females. This reflects an influx of staff (including a single female academic) from the former PSSRI (a research	**A**

institute) where the teaching:research split was 25:75 because staff were working on external research grants. In addition, six female members of staff have departmental/faculty positions of responsibility (Table 15) that impacts on the teaching/research balance.

ACTION POINT:
Further investigate workload allocations by job role, career stage, and gender and ensure teaching:research allocations are balanced equitably for women and men.

Positions of responsibility are available for rotation, and are openly advertised. All positions carry an allocated workload tariff and staff are strongly encouraged to apply for these positions, regardless of gender. Some roles (Dean, Associate Deans, HoDs, Research Centre Directors) also come with additional remunerations. Table 15 shows the distribution of DPS staff into positions of responsibility as part of the total numbers of positions in the Faculty, and the gender of those who occupy them currently.

	Male	Female	DPS male	DPS female
Dean & Director of Studies	0	1		
Head of Departments	1	2		1
Heads of Disciplines	7	1	3	0
CEPSAR director	1	0		
CEPSAR Deputy Directors	3	0	3	
Biomedical Research	1	0		
Associate Deans	4	1		1
Deputy Associate Deans	1	2		2
Associate Programme	2	5	1	
Academic Conduct officers	0	3		1
Science Research Committee	6	1	3	
Director OpenScience Lab	2	0	1	

Table 15. Distribution of positions of responsibility within the Science Faculty, and posts held by DPS staff. CEPSAR is Centre for Earth, Planetary, Space and Astronomical Research.

DPS has a good representation of women at HoD, Associate Dean and Deputy Associate Dean levels, positions that help to build a strong CV. Lack of female leadership of the disciplines and on research committees (CEPSAR and Science Research Committee) is of concern, however.

ACTION POINT:
Monitor the appointment of staff to positions of responsibility to maintain the healthy representation of women from DPS who hold these positions and actively encourage women to apply for research-related responsibilities.

4.2.2	The department communicates the model it uses to determine the workload allocation to all staff.	
	All academic (and research) staff across the University use the same Workload Management System. Members of staff are emailed instructions on how to access this system, which is hosted online and accessible with the individual's password. The period of workload planning for the next academic year is communicated, although the workload planning system is also used as a real-time record of individuals' activities and therefore subject to update and change. Line managers and HoDs can access staff workload planning records for approval and staff are notified when the workload planning round has been completed. Deans are obliged to report that their staff have complied with this.	**A**

Principle 5 **Flexible approaches and provisions that enable individuals, at all career and life stages, to optimise their contribution to their department, institution and to SET**		
5.1	**Support and promote flexible working practices**	
5.1.1	There is clear support from the head of department for flexible working, evidenced by personal take up by senior staff. The department's management and operational arrangements reflect the department's understanding of, and commitment to, a good work-life balance for all its staff.	
	The OU recognises that flexible and part-time working arrangements can provide benefits to both employer and employees and there is strong support from the HOD who is a mother and part of a dual career couple and recognises the flexibility that the OU offers herself. It is committed to enabling members of staff (both male and female) in all parts of the institution, including STEM areas, to achieve a good balance between work and home, whilst balancing this with operational needs. The University has a clear Flexible Working Policy which states that it will give due consideration to any formal request for flexible working, where operationally feasible. Examples of flexible working include home-working and as well as job-sharing. As a UK-wide distance learning institution, which makes extensive use of e-learning and remote communication and conferencing facilities we are in a particularly strong position to enable staff to work flexibly; this is particularly valued by staff with caring responsibilities. Academic and research staff also have no defined working hours, allowing them to work off campus as they prefer. Flexible working, particularly home working is thus embedded for all academic and research staff.	**A**

	A change in circumstances (part to full time or vice versa) are not recorded by HR. This information can, however, can be identified at faculty level. Since 2012, there have been no requests for change of circumstances from full time to part time, however two part time members of staff requested that their hours be increased to return to their original working pattern after a period of part time work, and this was agreed.	
5.1.2	The department's policy and practice on flexible working is transparent and consistently applied. The department monitors the take-up of flexible working options for both male and female staff.	
	Formal requests for flexible working have only been recorded by the University's HR Unit since 2012 and this only records headcount and unit; in 2012 there were only 12 formal requests for flexible working across the University. This may be because of the embedded flexibility of OU academic work and that flexible working requests are often informal by negotiation with line managers. DPS have not received any formal requests for flexible working in the 2010-13 period. Monitoring requests by gender would promote transparency and encourage equity. **ACTION POINT:** **Flexible working requests to be recorded and monitored by gender by the faculty.**	**B**
5.1.3	The benefits of flexible working for the individual and the department are clearly promoted to all staff and embedded throughout the department. For example, department meetings are timed to take account of caring/family responsibilities, work allocation discussions are held with new staff to pick up work-life balance issues, and changes in caring responsibilities are dealt with in a supportive and practical way.	
	Departmental meetings are scheduled during core office hours, between 10am and 4pm; any staff (including those working at home, at conferences or in Regional Offices) are also able to join by video or conference call. There is no expectation that all staff must attend campus for meetings. Staff have access to a range of technologies to facilitate remote working, which is commensurate with our core business as a distance-learning institution. The University's flexible working practices are outlined in Principle 5.1.1.	**A**
5.1.4	The department proactively manages arrangements in advance of, and during, career breaks or maternity leave and provides the support and flexibility to allow returners to get back up to speed, e.g. enabling individuals to focus on their research initially and/ or work part-time with teaching duties limited in the first year after the break.	
	The reallocation of teaching and research duties as cover for those taking parental leave will vary from case to case depending on the individual's role. If the leave is substantial, duties are either shared out to appropriate staff (with their own workloads adjusted), a backfill appointment will be made, or their contract is paused (for PDRAs where funding rules allow). Staff also make use of ten paid	**C**

	'Keeping in touch' (KIT) days during periods of leave. Staff covering will either have their hours increased (for part time staff), and/or the additional workload recorded at CDSA. This practice needs further investigation. When staff return from a substantial period of parental leave, they have a return-to-work interview with their line manager. This includes discussion of the support needed to allow them to return to their original duties. Staff who have taken maternity leave are normally allocated a reduced teaching load on their return, but this is discretionary. Formalising this is part of the University Athena SWAN Action Plan. A recent returner said: **"***When I came back from maternity leave I was given a light teaching load, it only picked up few months after my return to work. My line manager has been very understanding and helpful and so were many of the colleagues. However, whilst some individuals were quite understanding, I didn't feel some established practice was in place throughout the department/faculty."* The Science Faculty advises mentoring for women returning from maternity/adoption leave, however in practice this is not always initiated. **ACTION POINTS:** **- Investigate the use and effectiveness of KIT days.** **- Lobby the faculty to formalise a norm for a reduced teaching load for returners from maternity leave.** **- Investigate how cover for maternity/adoption leave works in practice.** **- Monitor the return to work process including: encouraging line managers to complete and submit return-to-work interview paperwork, and ensure DPS returners are allocated a mentor.**	
5.1.5	There is clear support and understanding from all members of the department, including the head, for parental and other caring leave.	
	New fathers are strongly encouraged to take their allotted paternity leave. Since 2010, three male academic/research staff have taken paternity leave (one lecturer, one PDRA and one research fellow). There have not been any formal requests for adoption or parental leave in DPS in the last three years. Compassionate leave is also available for sudden life events. The system is flexible and straightforward.	**C**