

Athena SWAN

Charter for Women in Science

Measuring success 2011



Foreword

Earlier this year the Athena SWAN Charter steering committee approached me to be the first Athena SWAN Charter patron. I had been involved in the Athena project from its very beginning and I was very concerned that after the project formally ended its legacy was carried forward and developed.



Professor Dame Julia Higgins

One of the important legacies of Athena has been the SWAN awards so I happily took on this role to support and promote the Charter. I am very happy that ECU and the UKRC are carrying on the good work started in 1995.

The findings of this research study clearly evidence the impact Athena SWAN has had, and continues to have, both at an institutional level and for individuals. Within universities and departments change is happening: organisational structures and practices are being improved, there is a greater awareness around culture and gender equality, and the importance of good communication is being highlighted. For individuals, Athena SWAN has been valuable in encouraging aspiration, identifying and exemplifying role models, and illustrating potential academic career pathways and opportunities.

The challenges that continue to remain for women in science, engineering, and technology are perhaps not surprising: this report alone identifies issues such as the transparency of committees, influence of heads of schools, opaque promotions processes, cross-campus culture and communications, and the long-hours culture, that still need to be addressed. However we are confident that as the Athena SWAN Charter continues to evolve, more universities and departments take up and advance the agenda, and the culture of collaboration and sharing good practice further grows, these issues will be raised and innovative solutions will be found.

Through ECU and the UKRC, we have committed to ensuring the long-term effectiveness of the Athena SWAN Charter. For now, this report documents the success of the Athena SWAN Charter within the study institutions to date. We are sure that there are many more 'good news' stories among Athena SWAN Charter members, and we look forward to hearing these as we continue to monitor the impact of Athena SWAN. Most importantly we must aim for more and more universities and departments to take up the SWAN challenge.

Contents

Executive summary	1
The research	2
Key findings on the impact of Athena SWAN	2
Increased representation	2
Formalising and focusing processes	3
Cultural change	3
Continuing challenges	4
Conclusions and recommendations	4
1 The Athena SWAN Charter	5
2 Research aims and methodology	9
Focus groups and interviews	10
Data analysis	11
3 Impact on institutions	13
Impact of Athena SWAN on organisational structure and practices	14
Increasing visibility of senior women	14
Providing a focal point and formalising processes	17
Better data and understanding of staff	19
Impact of Athena SWAN on culture	20
A catalyst for change	21
Better communications	24
4 Impact on individuals	25
Greater encouragement	27
Good practice activities	28
5 Continuing challenges	31
Gender equality	32
Challenges of the Athena SWAN awards process	33
6 Conclusions and recommendations	35

Executive summary

The Athena SWAN Charter is a scheme that recognises excellence in science, engineering and technology (SET) employment for women in higher education. Participating institutions and departments can submit for Athena SWAN awards at various levels.

Equality Challenge Unit (ECU) and the UK Resource Centre for Women in SET (UKRC) commissioned a study to understand how the Athena SWAN Charter has made an impact on the number and level of women in SET in higher education since it was launched in 2005.

At the time of writing, 134 UK higher education institutions are eligible to join the Athena SWAN Charter. Current membership of the Athena SWAN stands at 61 members, which equates to 45.5% of eligible institutions.

The research

This impact study was conducted through interviews and focus groups in five Athena SWAN award holding institutions across the UK: University of Edinburgh, University of Nottingham, University of York, University College London, and Queen's University Belfast.

A range of areas were investigated as part of the research:

- reasons for why individuals, institutions, and departments engage with Athena SWAN
- the changes brought about by the Athena SWAN process
- the impact of Athena SWAN on institutions and departments
- the experiences of individuals within institutions and departments

In addition, data from these five institutions gathered through their previous award submissions were analysed and compared to national data. Trend data from each institution could be gathered, but challenges with comparability and data gaps meant that only limited analysis between institutions and at a national level could be made.

Key findings on the impact of Athena SWAN

The research found that taking part in the Athena SWAN awards process had institutional, departmental, and individual impacts.

Increased representation

Renewal submissions from 2009/10 have highlighted changes experienced within institutions and departments since their original Athena SWAN awards were achieved, most notably in relation to the proportion of SET female students and academics, the representation of women at higher academic grades, and the number of women applying for promotion.

This echoes comments from the interviews and focus groups which highlighted increasing numbers of women in senior posts and engaged in decision-making; more female academics in SET schools and departments generally and increased visibility of these women; and improvements in the transition from postdoctoral researcher to first academic post. However, it was raised that there needs to be more women as heads of schools/departments in SET.

Formalising and focusing processes

Interviews at all institutions evidenced that universities were generally aware of and responding to issues of gender equality in academia and activities to support this were high on the agenda before Athena SWAN. A number of initiatives were identified, with similar practices taking place across all institutions to support career development and flexible working, and improve organisational culture. Many commented that activities were already taking place before Athena SWAN. However, undertaking Athena SWAN helped to provide a focal point and formalised and embedded many informal processes, or had lead to better communication of the opportunities available to staff. Further improvements can be made in relation to promotions processes, long-hours culture, appraisal, and female speakers at events.

Cultural change

Focus group participants and interviewees at all institutions spoke at length on the impact of Athena SWAN on the culture of their institution. Many noted that Athena SWAN had been a driving force in bringing about

greater awareness of gender equality and career progression issues, and that the communication in schools and departments around possible opportunities had improved. Representatives from all the institutions highlighted how Athena SWAN had influenced a culture of collaboration, by better sharing good practice and providing wider networking opportunities with women from other parts of the institution.

All those interviewed commented that Athena SWAN had added considerable value to their institutions. Many identified their Athena SWAN work as encouraging for current staff and students, and that some appointees had pointed to the award as a reason for applying to the institution. Some participants commented on the pride associated with the award and how good it is to be involved in an institution trying to change things. Individuals identified the strength of Athena SWAN in working towards specific outcomes, such as supporting submissions to the Research Assessment Exercise (RAE) and the Research Excellence Framework (REF) and membership of the Concordat. In addition some institutions highlighted how lessons learned from the Athena SWAN process in SET disciplines were being applied to other parts of the institution. Finally a number of comments were made by interviewees as to what Athena SWAN had done for their institutions and the main benefits

of being part of the Charter. Overwhelmingly comments centred on it providing a method with which to implement action and bring about change, in a way that perhaps would not have happened, or would not have happened as quickly or effectively, before Athena SWAN.

Continuing challenges

There continue to be challenges to gender equality. From the research, it was highlighted that further improvements can be made in relation to the transparency of committees, decision-making processes around promotion, the influence of heads of school or department, and communications and cultures between divisions in schools/ departments and split sites.

The Athena SWAN awards process also continues to have challenges, and the main ones identified were: problems with data collection; difficulties in getting buy-in and senior level support; admitting flaws and recognising career progression issues; and the workload involved.

Conclusions and recommendations

The Athena SWAN Charter provides a method with which to implement action and bring about change, in a way that perhaps would not have happened, or would not have happened as quickly or effectively, before or without Athena SWAN. It is important that this impact, both in terms of changes to organisational structure and culture, continues to be monitored as the Charter develops.

1

The Athena SWAN Charter

Founded in 2005, the Athena SWAN Charter is a scheme that recognises excellence in science, engineering and technology (SET) employment for women in higher education. The Charter was previously jointly funded by ECU and UKRC.

In addition to ECU and UKRC funding, in 2011/12 funding has also been provided from the Higher Education Funding Council for England, the Royal Society and the Biochemical Society.

Any university or research institute embedded within a university that is committed to the advancement of the careers of women in SET can become a member of the Charter, accepting and promoting the six Charter principles:

- Addressing gender inequalities requires commitment and action from everyone, at all levels of the organisation
- A change in cultures and attitudes across the organisation is required to tackle the unequal representation of women in science
- The absence of diversity at management and policy-making levels has broad implications which the organisation will examine
- The high loss rate of women in science is an urgent concern which the organisation will address
- The system of short term contracts has particularly negative consequences for the retention and progression of women in science, which the university recognises
- There are both personal and structural obstacles to women making the transition from PhD into a sustainable academic career in science, which require the active consideration of the organisation.

There were ten founder members of the Charter in 2005; to date there are 61 members across the UK.

Once Charter signatories, universities and their SET departments are encouraged to submit for Athena SWAN Charter recognition awards. The Athena SWAN Charter recognition awards assess a number of areas including:

- knowing the baseline and SET academic profile
- providing positive support for women at key career transition points
- changing the culture and gender balance in decision making
- work-life balance practices, their introduction and uptake
- champions, responsibilities and accountabilities

There are three levels of award: Bronze, Silver, and Gold. Universities must achieve a Bronze award before individual SET departments can submit for Bronze, Silver, or Gold awards. Once a number and range of SET departments at an institution hold awards, universities can then submit for a Silver award, and so on. Awards are only valid for a period of three years, after which institutions and departments must submit a renewal award application, or submit for the next level award.

Bronze university awards recognise that the university overall has a solid foundation for eliminating gender bias and developing an inclusive culture that values all staff.

Bronze department awards recognise that in addition to university-wide policies, the department has identified particular challenges and is planning activities to address these for the future.

Silver department awards recognise that in addition to university-wide policies, the department has a significant record of activity and achievement and has identified particular challenges, has implemented activities and can demonstrate the impact of these activities so far.

Silver university awards recognise a significant record of activity and achievement by the university in promoting gender equality and in addressing challenges across the full range of SET departments within the university. Universities should demonstrate that Athena SWAN is well embedded, with strong leadership in promoting the Charter principles and evidence of the impact of Athena SWAN activities.

Gold department awards recognise a significant sustained progression and achievement by the department in promoting gender equality and to address challenges particular to the discipline. Gold departments should be beacons of achievement in gender equality and should champion and promote good practice to the wider community.

The first Athena SWAN Charter awards were presented in 2006 to universities in recognition of their excellent practice and commitment to the career progression of female academics and researchers in their SET departments. That year there were 13 successful award holders. The following year saw the first and only Athena SWAN Gold department award achieved to date (the Department of Chemistry, University of York). Since then there has been an increasing number of award submissions with each year's awards round and by the end of the awards 2010 there were 77 award-holding institutions and departments. Having completed the first awards round for 2011, there are now 87 award holders.

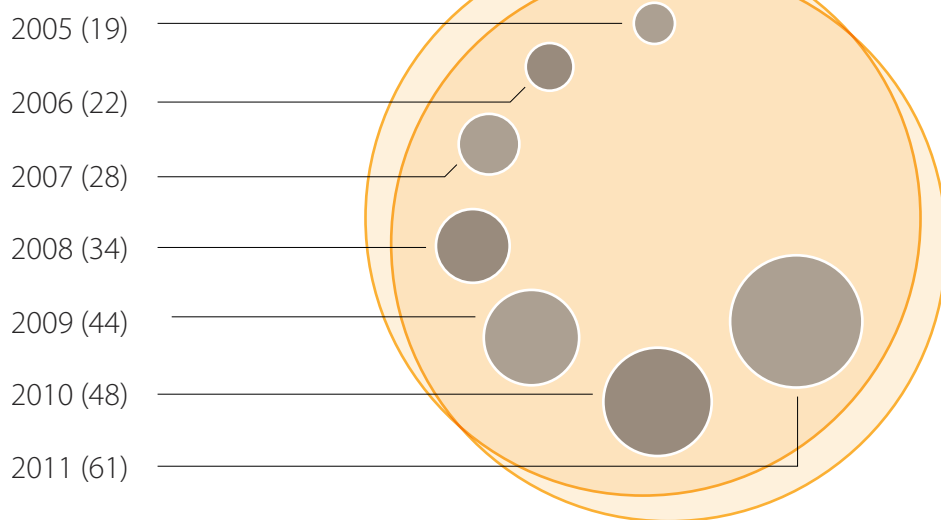
To be considered eligible to join the Charter, a UK higher education institution has to have full time equivalent academic staff based in SET cost centres as reported by HESA in 2008/09. From this report, 134 UK higher education institutions have been identified as being eligible to join the Charter.

Current membership of Athena SWAN stands at 61 members, which equates to 45.5% of eligible institutions. This also highlights the potential for future expansion of the Charter.

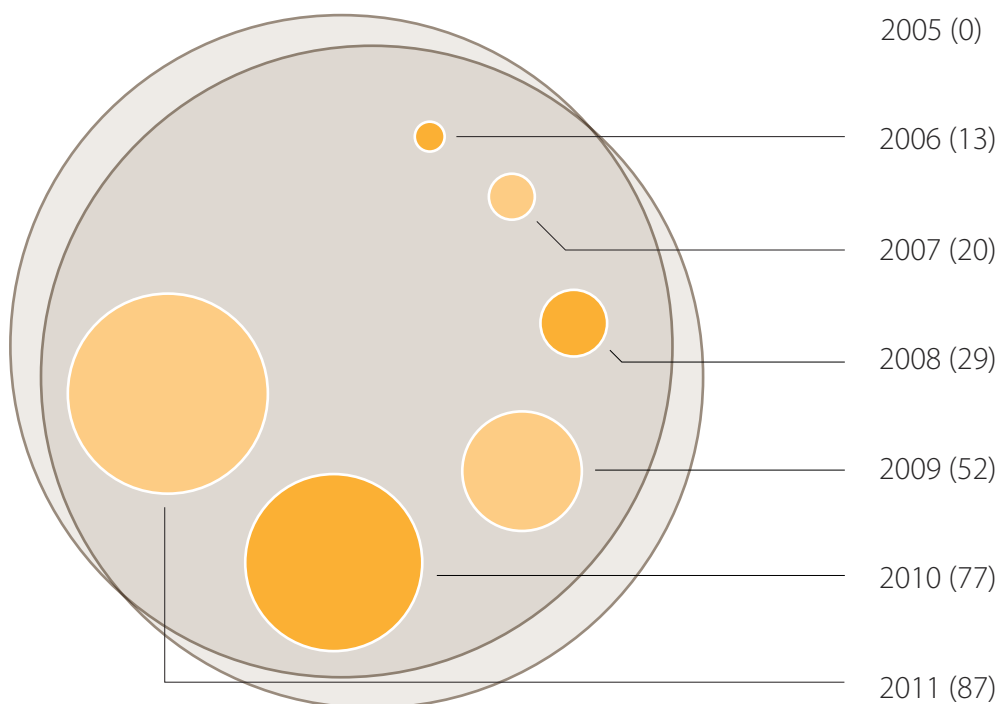
It is also important to note how membership of the Athena SWAN Charter has grown since it was first launched in 2005 with just ten members. By 2007 membership had increased to 28 institutions, 44 institutions had signed up to the Charter by 2009, and new members are expressing their interest in the Charter regularly. A full list of members can be found on the Athena SWAN website: www.athenaswan.org.uk

Timeline of Athena SWAN

Number of members



Number of award holders



2

Research aims and methodology

Founding organisations and joint funding partners ECU and UKRC undertook this research in order to understand how the Athena SWAN Charter has made an impact on the number and level of women in SET in higher education since its launch in 2005.

The main questions for the research to consider were:

- What has been the reach of Athena SWAN?
- How successful have Athena SWAN award holders been in addressing the original Charter principles since 2005 and also in comparison with their peers?
- What impact has Athena SWAN had on individual institutions? What changes have been brought about with membership and the awards process?
- What are the experiences of individuals within the institution or department?
- What is the potential for future expansion?

Focus groups and interviews

The central tenets of Athena SWAN focus on breaking down barriers and bringing about culture change in organisations. To help understand how this has occurred, a series of 29 interviews and seven focus groups were convened with vice-chancellors, pro vice-chancellors, heads of faculty, school or department, Athena SWAN Champions, equality and diversity practitioners, and academics and researchers in SET disciplines at five institutions across the UK:

- University of Edinburgh
- University of Nottingham
- University of York
- University College London
- Queen's University Belfast

These institutions were selected based on their duration of membership and award activity, which made it possible to see how Athena SWAN was developing across institutions and being embedded into SET departments. The research with institutions aimed to examine what difference Athena SWAN has made to individual institutions and help to determine the impact this has had on the experiences of individuals working in the institutions and SET departments.

A range of questions were asked relating to: reasons for why individuals, institutions, and departments engage with Athena SWAN; the changes brought about by the Athena SWAN process; the impact of Athena SWAN on institutions and departments; and the experiences of individuals within institutions and departments. The findings from all institutions have been anonymised.

Data analysis

In addition to the interview and focus groups, data related to women's recruitment, retention, and progression, covering a number of institutions and SET disciplines from several awards rounds were collated and analysed. By comparing them with national data, it was hoped that it would be possible to draw some conclusions as to how Athena SWAN universities and departments compare with other institutions and departments. However, a number of challenges were encountered:

- Comprehensive staff data was only requested from 2007 as part of Athena SWAN
- There was inconsistency in grade systems among member institutions with almost no consistency in the way researchers were grouped
- Some institutions had data gaps in certain academic years making trends hard to discern, and others presented charts and graphs without giving actual numbers
- New SET departments were added to renewal submissions, which made figures non-comparable (for example, some institutions did not count medicine or nursing and

midwifery in their original submissions but as the SET definition for the purposes of Athena SWAN widened, institutions added this data to their renewal submissions)

- From the 2008/09 HESA report academic staff data was no longer disaggregated by grade (researchers, lecturers, readers, professors) but instead by salary ranges, which would mean making (inaccurate) inferences from the national data to map back onto a grade structure.

It was possible, however, to get some interesting statements relating to changes and trends in the data from institutions and departments renewing their awards in 2009/2010, which are included in this report. As more renewal submissions are made, it will be possible to continue to add to this as evidence of change.

3

Impact on institutions

Through the research it became evident that by participating in the Athena SWAN Charter and awards there has been institution-wide impact, although impact was greatest within the departments that had achieved awards.

Impact of Athena SWAN on organisational structure and practices

A number of interviewees at all institutions identified that their university was generally aware of and responsive to issues of gender equality in academia so some activity to support this was in place before Athena SWAN. However, taking part in the Athena SWAN award process helped to improve the visibility of such activities, and continued to keep gender equality high on the agenda.

Increasing visibility of senior women

At an institutional level, many individuals highlighted increasing numbers of women on senior management teams, as deans and pro vice-chancellors, and that a lot of senior women are engaged in decision making, thus sending out a loud and clear signal of a supportive institution. One institution commented that there were more women than ever before holding middle-management positions. However, it was also evident at some institutions that while lots of women were also in senior management posts, there was an underrepresentation of women in senior academic management posts, and as heads of school or department in SET.

'In the last few years the number of senior women has increased, and there has been a shift in women as directors of research and education.'

'It is changing, slowly but surely it is changing. When I joined in 1993 there were ten female professors, you could name them; this year we appointed seven female professors, seven out of fourteen appointments.'

'The next head of department is going to be a woman, the first female head of physics at the institution.'

'There are more senior women as heads of school at the institution generally, but we need to address this in the sciences in particular.'

'Someone once said to me that I was the first female head of school and the current head of school that you handed over to is a woman as well, and that speaks volumes!'

Both interviewees and focus group participants commented on seeing more female academics than before in SET schools, and that there was more visibility of female senior academics.

'I was an undergrad here and there is a notable shift in terms of the gender balance over a period of seven years. It does change; you are seeing people who you have seen as a lecturer move up the scale to a professorship. You see that that is a possibility.'

'I do see more women moving through the system. As you get more senior women in positions of influence you then tend to find that they will suggest female colleagues for things.'

'The numbers of female staff in senior roles has increased dramatically due to increases in the number of women applying for promotion.'

'Undoubtedly it has helped us gain a critical mass of female academics in the place; we've got chairs, readers, senior lecturers, lecturers and fellows that are women.'

'There is a huge difference at this institution in terms of female academics in the department; at my previous institution where I was an undergraduate student there weren't any women. It's really obvious there are women here, which has a huge effect on students.'

Some comments were made that more women are represented on committees and becoming more involved in the school in such a way that junior staff can clearly see women role models. In addition it was identified that some changes could be seen in the transition from postdoctoral researcher to first academic post, with the encouragement of applying for fellowships and increasing numbers of women hired at lecturer level, with more women also being seen to move through the system.

'Certainly what has been fantastic to see is that we're now almost at 50% male:female at our lecturer level. People have told us they see [our institution] as a female friendly place, applicants have told us they saw the Athena SWAN logo and thought it was good.'

'By collecting the statistics we were pleased to see how well women had been represented on most of the committees. Where they hadn't we were able to do something about it. But it has very much become embedded in our culture, and I think that's because key people on key committees are also part of Athena SWAN.'

One interviewee also noted that a good proportion of women are among the researchers that hold very big grants.

'[I've had a] very different experience here; I was one of four new hires this year, [the only man] the other three were women and I haven't experienced that since PhD level.'

'When I think about researchers holding very big grants – multi-million pound grants – there are a good proportion of women, so I think from the point of view of senior academics we are beginning to see that population increase and become more visible.'

'We look at the staff that go out on post-graduate field trips, so that postgrads can see female staff and that female staff can get the right experience.'

Department of Chemistry, University of York

Since 2007, when the Department of Chemistry first achieved an Athena SWAN Gold department award, there has been a major change in the number of female staff at the higher academic grades: 69% of the female academic staff are on senior grades, which is now comparable to male staff at 68%. There is also little reduction in female representation through the academic ranks from lecturer (26%) to senior lecturer or reader (31%) to professor (22%); marking the department out amongst UK academic SET departments in addressing the 'leaky pipeline' of the decreasing numbers of women through the academic career stages. Also over a five-year period the department has a hundred percent success rate amongst all staff in promotions, including seeing an increasing number of women applying for promotion since 2005, which the department has identified as a direct result of identifying and encouraging women to apply for promotion.

Department of Biology, University of York

The Department of Biology first achieved a Silver department award in 2007 and since then there has been a year-on-year rise in the proportion of female academic staff, from 29% to a current level of 35%. The largest increase has been at lecturer level. In 2010 women accounted for 45% of lecturers, compared to 30% in 2007. There have also been slight increases in the proportion of female senior lecturers or readers and professors. In their renewal submission the department also reported that recent female appointees had identified that the Athena SWAN logo and related work had encouraged their interest in making an application to the department.

Queen's University Belfast

At Queen's University Belfast (QUB), 11 of the 20 schools in the university are SET schools. Currently five hold Silver department awards and two hold Bronze department awards.

Since QUB achieved their first university award in 2007 they have seen a positive impact in SET schools with increased proportions of women in the undergraduate and postgraduate populations and research and academic staff, with favourable comparisons with UK figures. There has been a steady increase in the proportion of SET female academic staff from 30% in 2005 to 34% in 2009, the number increasing by 47. The proportion of non-SET female academic staff has remained constant during this period, at approximately 38%.

The university also reports a significant increase in the number of female SET staff at lecturer grade, with a 1:1 ratio of female and male staff. The relative numbers at senior lecturer or reader grade falls to approximately 1:3, however the last five years has seen a rise to this level from a ratio of less than 1:4, a trend which is highly significant. Women's presence in the professoriate and senior management at QUB has also improved considerably. In recent promotions and appointments, four of the five professors and two out of five heads of school were female.

Providing a focal point and formalising processes

A number of participants identified that Athena SWAN had helped to bring focus, awareness and recognition for good practice already being undertaken in some schools or departments and the university as a whole.

Some interviewees and focus group respondents questioned whether this more embedded awareness and recognition would have happened without engagement with Athena SWAN.

'We've always been doing this in some form, but it's in people's minds now perhaps more than it was before.'

'In terms of perceptions, Athena SWAN [gets] people involved. I do equality action planning with departments and we do SWAN with departments. It's almost the same thing but [the academics] will go for SWAN but they won't go for the [action planning]... SWAN makes things happen, it's the most consistently supported and celebrated.'

Many commented that as practices were sometimes informal, there were difficulties in making new staff aware of supportive environments. Some interviewees noted that Athena SWAN had been a way of raising awareness that schools or departments do offer support and assistance for staff.

'One of the biggest things we've found is that we do a lot of stuff but it's not written down or part of a certain structure, and therefore

particularly if you're a young member of staff perhaps you don't know that we do this. A lot of it has been about formalising our processes rather than changing everything.'

'There are so many things that can be arranged on an ad-hoc basis. People that have been here a long time know pretty much what you can do, but we have a high turnover and lots of new people start without knowing how things work.'

'It's listening to people that the organisation is now really starting to do, we've got lots of good policies here but it's actually about how the policies are lived in the organisation.'

Throughout the research, a number of good practice initiatives were identified. It was generally noted that many of the activities were already taking place before Athena SWAN but that the process had improved and formalised them, or had lead to better communication of the opportunities available to staff.

'... in terms of improving practice SWAN has had an effect. Within the university we didn't have the mechanisms for sharing good practice; Athena SWAN has been the agent.'

There was some praise for Athena SWAN as a method for working towards specific outcomes, with its value in part because of

its impartiality as an external recognition scheme. A number of heads of schools or departments commented on their use of Athena SWAN in the RAE and that they would be reporting on it for REF as well.

'As an institution we wouldn't have been recognised as a Top 50 Employer if we didn't have SWAN. We used our work on SWAN as one of our case studies in the submission. If we didn't have the whole SWAN story to tell we would not have got the award. I don't think we'd have had the confidence to go forward for it either.'

'We've signed up to the Concordat and because we do Athena SWAN there's lots of things in place that we already know are in there. We've got the EU Excellence in HR award and again it was easy to do because we had done Athena SWAN.'

'For the RAE (2008) we put several statements in that we were an Athena SWAN Silver and that we held that dear to our hearts and that was one of our principles in taking it forward. I think we mentioned it on page one, highly put up there, and we plan to mention it in the REF as well.'

'It made writing the RAE returns much easier, having the Athena SWAN award. And feedback from the panel said because you have the award it made it easy for us to assess it.'

Better data and understanding of staff

Those interviewed commented that undertaking the Athena SWAN process had enabled them to reflect on current practices, in particular what was being done well and what could be improved. One head of school also commented that when forming their Athena SWAN committee they became aware of staff experiences within the department that they had never known about before, such as a PhD student that had started a family as an undergraduate.

'Athena SWAN lies in a lot of what we already do. One of the really positive things about Athena SWAN is the data collection; being required to actively go out and solicit this information has been a really good opportunity for us to reflect on things we did well that we perhaps haven't realised, as well as things that weren't quite as we thought. It highlighted good practice but was also good at highlighting where we could improve.'

Many identified how useful the process was in terms of data collection and analysis and asking questions that ordinarily would not have been considered. In addition, a number of interviewees commented on Athena SWAN as good practice rather than equal opportunities and highlighted the business

case for participation in the Charter: reducing barriers to research in order to be the place where the best people come.

'[There has been a] sea change in terms of the university level having more detail on statistics... awareness at the university level that these are important issues.'

'If we're to attract the best then we need the best environment, the best practices, and to be able to demonstrate this through hard data and be able to compare with others.'

'We saw it as good practice rather than an equal opportunities activity – reducing the barriers to research. We made a business decision; we don't want to lose our best staff. We really do aspire to all this good practice being business as usual; you can get the badge for it, but we're doing it because it provides the best environment, it provides an interesting place to be, and the right kinds of support for our academics.'

'We wanted to send a message to the staff that we took them seriously and we wanted to work at conditions that would make them perform to the best that they could, that the conditions were not inhibiting what they did. It was easier then to go for the award as there was something concrete to base action on that [could be seen] as measurable.'

Some interviewees noted that it had taken some time to get their schools or departments to embark on Athena SWAN, particularly where the head of school or department wasn't leading on the project and where senior staff members were not aware of the challenges that women face. However, the same people also noted that going through the award process had made a huge difference, with their schools or departments becoming much more aware and supportive.

'The support of senior colleagues in the respective areas is essential. Without it you can't really get things to happen on the ground.'

'To start with it did take a while to persuade [the department], more from a time perspective... not against it in principle and not aware that there was a challenge. The head of department wasn't leading the way but again wasn't against it... the process of going through the Charter was what made the difference.'

Impact of Athena SWAN on culture

Both interviewees and focus group participants at all institutions spoke at length on the impact of Athena SWAN on culture, perhaps indicating that changes in organisational structure would happen over a longer period of time.

'The big impact of SWAN has been to allow for a significant awareness of the importance of having a gender equal culture in the university as a whole.'

'Athena SWAN helped to change the working environment for everyone... and it helped to move from a culture which had been perhaps very traditional and hierarchical to a more lateral approach, with more flexibility about how you combine working life with busy family lives, however those are constituted.'

'SWAN is important because it works at the departmental level, and that's where the culture is set. There isn't a culture at the university as a whole. It happens at the departmental level and you need to work with the heads of department.'

A catalyst for change

Many commented that the Athena SWAN award process had been a good driving force and that many schools or departments had undergone a process of evolution rather than revolution. Almost all interviewees commented on a greater awareness around gender equality issues, for example highlighting a greater understanding of the necessity for improved support on return from maternity leave, and taking into account career breaks in appraisal, promotion, and recruitment processes.

A number of focus group participants noted how many more women were on show and the impact this had on students and seeing women progress through the system.

'I think culture has improved a little bit as generally we are more aware, the whole process of going through Athena SWAN meant conversations were had that weren't had before.'

'On promotions committees [there is] much more overt acknowledgement of the impact of maternity leave, for example on numbers of papers.'

'When we see terms of reference that come out from the registrar for new committees being set up, where appointment to the committee is by role we will often argue that it shouldn't be done by that; there's been a big shift in how we think.'

'The visibility of women's careers is one of the most important things to recognise and address: visibility in terms of how they can progress and how they do progress, and the idea of role models.'

Overwhelmingly comments about the main benefits of being part of the Charter centred on it providing a method with which to implement action and bring about change, in a way that perhaps would not have happened, or would not have happened as quickly or effectively, before Athena SWAN.

'Athena SWAN speeds up the process of self assessment. You get to the point instead of having to think about thinking about something, you're already thinking about something, so you're spotting things ahead of the time you would have done if we'd not had Athena SWAN.'

'The whole principles of the Charter were absolutely what we as an institution wanted to happen... the Athena SWAN approach has been a catalyst for change really, it's provided a framework, an opportunity, a sense of here are ways we can address these things, share collective knowledge, and get recognition for it.'

'It's difficult to put your finger on any one thing, but what I would say is that the department enjoyed its best ever period of success when we were embracing Athena SWAN and all that it entails.'

'That process of examining the subject area against the criteria that are set begins the work of change essentially and raises awareness; it provides some insight that may not have been there previously.'

'Athena SWAN is a systematic method for working towards certain outcomes and I don't think that that aspect of it should be underestimated. This is necessary if one is to get beyond words alone; it produces actions and actions count. That I think is one of its great benefits.'

'Athena SWAN keeps it going, keeps it there. It's not just the gender duty being revised or there's a new bit of legislation trendy for a year. It keeps it on the agenda. It will make people convert ideas into action and makes it credible to academics.'

Focus group participants and interviewees commented on how positive it is to be involved in an institution trying to change things and that processes are being carried out in a more transparent manner. Many commented on the pride associated with achieving the award, what good practice has been implemented, and how this set them apart from other institutions.

'It is good being in a department that wants to be involved in Athena SWAN; even if they aren't perfect it shows they want to improve.'

'[A] positive thing that has come out of SWAN is the sense that things are being done in a more transparent manner, that loose ends are being tied up as they've actually sat down and thought about things rather than just "this is how things are done".'

'It has made us feel quite pleased and proud about what we have done and realise that we are doing things perhaps better than we thought. That was satisfying to see, that a lot of things we took for granted were having a good effect. That comes from getting the data and seeing what we do, being forced to reflect and look in on yourself.'

'Athena SWAN gives the staff confidence to say "I want to/can we explore doing things differently". It gives ground rules, the staff understand it and look it up and can take it forward. That's what you want; people to feel comfortable about coming to you to discuss these things. We hope that everybody recognises and realises that.'

'Cultural change is important but also the achievement of the award itself gives greater credence to the importance of these issues. The credence that's given to the award is partly dependent on who has achieved it. Good institutions achieving it are much more likely to motivate disciplines to do it.'

'It makes a place exciting to work in, feel that it can do anything really, when you've got change happening and people challenging, that new ideas are supported, I think that gives an institution the edge.'

While the Athena SWAN award was valuable to the departments taking part, it was also seen as a wider catalyst for change within institutions, sometimes using the awards process to benchmark their work. Some interviewees noted the signal sent out from successful award-holding schools and departments both to their own institution and to other universities, and that this put pressure on others to implement and gain recognition for good practice. In addition, when awards had come up for renewal this had prompted other schools or departments to get involved.

'To have the award in a sense is important as it's about the signalling that we make to other people. It would be very frustrating if someone were more successful because they had the seal of approval and we didn't.'

'One of the things that was interesting was seeing [other departments] and what things they were doing – it's interesting to look at their statistics and find out why theirs are so different to ours.'

'I think our achievements have been a spur to some others to do it. The other spur is not always to look internally but to look externally; where your discipline has done it at another

good institution and that motivates. It's partly internal but I would also say the external reference point, the calibre of the other institutions, is also important.'

'I think psychologically Athena SWAN is quite important. It's often quite difficult to bring about desirable change within an institution when it is an entirely internal promoted idea. It is quite useful to have an external venture that has a competitive element to it as well. The epitome of this is the Research Assessment Exercise and I guess Athena SWAN is in a similar sort of class in that you think "if university X can get this and we are much better than they are, then surely we can". But it also subjects our inner processes to external scrutiny, which is not a bad thing.'

In addition, reference was made to individual institutions using the lessons they had learned from Athena SWAN and extending their experience in SET departments to other areas of the institution.

'Athena SWAN has fitted in nicely; it's part of a way that we're trying to operate across the organisations so other schools are using best practice from what they see in the SET schools.'

'A lot of the stuff we do on our gender policy-making is to do with our work on SWAN. A lot of it is transferable beyond SET, and we use a lot of it in terms of how we look at data in other diversity strands.'

Better communications

A number of individuals felt that communication had improved as part of Athena SWAN, although this could be taken further. It was also highlighted that Athena SWAN had influenced a culture of collaboration. Before undertaking Athena SWAN the impetus to discuss practice across schools or departments was lacking, but now best practice is shared between successful award-holders and other parts of the institutions. In addition many highlighted how good it had been to meet and network with women from across their own institution as part of the Athena SWAN process.

'Improved communication between schools and faculties and the women between them – this has been a marked change. I know the women professors across different faculties. I don't think that would have happened.'

'One thing I would directly attribute to Athena SWAN is a much better knowledge of women around the university. We know a lot more about other people in schools. It's performed a role of which there is no equivalent at the university.'

4

Impact on individuals

As a starting point to understand the impact on individuals involved in Athena SWAN, the research sought to understand how they had first become involved and their motivation to do so. A number of interview and focus group participants across all institutions had first heard of Athena SWAN and related activity through other projects and professional bodies such as Women in Science, Engineering, and Technology groups, Cambridge Women in Science, Engineering, and Technology Initiative, Athena Survey of Science, Engineering, and Technology, Royal Society of Chemistry, and the Institute of Physics.

'I like the way Athena SWAN has been backed by the disciplinary bodies associated with it; because of that it provides a context which the vast majority of individuals in a disciplinary area are able to identify with and accept the authority to offer guidance as to how the discipline might progress. If it hadn't had the degree of professional support and recognition, there would be the chance that you were working against the grain.'

'I got involved through work with the Royal Society of Chemistry; I took it to the head of department and said I think it's what we should be doing as it sends the right message to people. He told me to take it forward, and when we went for it I was then head of department which made it easier.'

Greater encouragement

Some interviewees commented that Athena SWAN could be a valuable tool in encouraging women to have higher expectations and ambitions.

'[Our first female professor] gave her inaugural lecture which made a huge impression on the female members of the department. They came up to her saying "we wish we could achieve what you've done". She was shocked that many of the women didn't feel they could be successful female academics. We spoke to some of the postdocs that we felt should be going for fellowships, partly some of the blame on their line managers, but most of all they never expected it of themselves, that they could achieve a fellowship.'

'Biggest challenge for us is encouraging aspiration and we see SWAN as being able to contribute to this. Definitely think there are gender based differences in aspiration and expectations. Think we can increase expectations of our female PhD students so they can expect to have good careers in academia.'

Some interviewees highlighted that Athena SWAN is helping them to make sure current and prospective staff and students can see that they have a future at the university. The process is enabling role models and ambassadors to show that there are opportunities to achieve. In addition, some participants highlighted that they had applied to the institution because of its Athena SWAN work.

When asked about the value Athena SWAN has added, many commented on the power good practice has on encouraging the best people to apply to, and to stay at, the institution.

'As people see more women in senior positions and in science in particular, it is such an achievement. These are great role models and ambassadors for us. We should be shouting it from the rooftops that you can come here and achieve.'

'Certainly from the perspective of trying to look at what we are doing to both promote and support women, Athena SWAN and the work that takes place in connection, is a very tangible, practical example to see that we encourage an environment that is conducive to women progressing their work.'

'Because the school deliberately went out and got Athena SWAN, it does put it in people's minds. Having the award has brought it to the attention of potential applicants.'

'One thing that has been amazing is that we said we were going to advertise Athena SWAN in all of our job adverts and one of our recent appointees said that that was one of the things that attracted her to apply.'

'One of the things that drew me [to the department] was the award. I was looking for a good move and a supportive environment to come to, I did a lot of asking around and the fact the university had this award and that male members were forthcoming saying

it was a great place to have a family, women were saying the same thing, all the arrows were pointing in the right direction.'

'We certainly had research fellows saying "I see you've got Athena SWAN – can we bring the fellowship to you because we understand you've got the award and we understand from talking to people that you do take it seriously"... I think it's things like "do you have the Athena SWAN award and will you make it easy for me to be a woman in the department" that are on the wish list. I think it's a desirable for many. I haven't yet come across anyone where it's been an essential, the main driver, but I've had several that have had it as a desirable.'

Good practice activities

Throughout the research good practice initiatives were mentioned, some of which related to activities to support career development. Such activities include:

- annual appraisals for all academic and research staff, including postdoctoral researchers
- postdoctoral forums and symposia
- encouraging and mentoring applications for fellowships
- mentoring schemes for individuals at academic and research grades
- career and CV support
- induction sessions for new staff
- women's networks
- dedicated workshops on achieving promotion
- role models
- advertising Athena SWAN membership and awards during recruitment
- outreach work with schools

'The postdoc forum is an example of something we have implemented. If we'd thought about it we'd have been aware that postdocs didn't have a voice, but frankly we just didn't think about it! This became

immediately obvious as soon as we started thinking about it through Athena SWAN.'

'Much better for postdocs – now there are all these initiatives and mentoring schemes to support us, [such as the] postdoc forum and relevant workshops. Just in terms of the communication of these, things are better.'

'We've had Wellcome VIP funding which we've used to support 12 month fellowships. Felt there was a lack of opportunities for postdocs to demonstrate they had the potential to be an independent researcher... we now run an independent fellows day where we advertise for people who may be interested in holding an independent fellowship here and we then mentor applications for fellowships. We also have the opportunity for postdocs to competitively apply for a small amount of money to employ a student to do a summer project through the summer students' scheme, where they apply independently of their principal investigator. This helps our postdocs and also our students to get interested in doing a PhD.'

'We're very proactive in encouraging applications for competitive fellowships. Once we've got people on this level we can mentor them and build up the numbers of women this way.'

'I have instituted a hard line on appraisal now and it is formally expected for all postdocs to get an annual appraisal. There has been a lax attitude in the past to give appraisal to postdocs.'

'Bringing in new role models [is] really going down well with the students. It's important to have these role models to bring that cohort [of students] through, to see an area they can move into, a path already there.'

Some examples of current activities to support flexible working and career breaks include: rescheduling meetings and seminars to take place in core hours (between 10am and 3pm) and to avoid half terms; more support for staff returning from maternity leave, including encouraging applications to relevant fellowship schemes, and schemes reducing teaching loads on return from maternity leave for a period of time; and flexible working for all, including recording this in an online diary.

'[I have] consciously tried to give young academics admin that suits their career progression, and in particular admin that they can do that is compatible with flexible working or working from home.'

'SWAN gives a sort of institutional legitimacy to claims that we support family friendly working – as a dad I've benefited from it, I've had to run off and feel the department would always tell me to go.'

Some examples of current activities to improve organisational culture include addressing gender imbalances in committee membership, transparent workload models, improved websites for equality and specifically for women in SET, notice boards detailing grant opportunities and childcare provision, and social events where families are welcome.

'Workload modelling has been challenging; without the Athena SWAN process we probably wouldn't have grappled with it.'

'When websites get written we check for images, in publications we automatically think about it. It's not just about gender balance; it's what they are doing. We [have had] comments that there are men and women in the publications but the women are all lounging on the grass and the men are in white coats!'

5

Continuing challenges

The impact that Athena SWAN has had, both on institutions and individuals taking part, has been demonstrated above. However, throughout the interviews and focus groups several continuing challenges were raised, some in relation to gender equality, and others specifically to the Athena SWAN process.

Gender equality

Some of the challenges identified related to the transparency of committees and the possibility of committee overload.

'I think there are issues around transparency and making sure it's well understood how committees work and how decisions are made. Going back ten years this was an issue and there still is a perception of some problems with this.'

'It's not transparent who sits on what committee. We're a small department and committees are informal. The head of department asks for volunteers mostly. Really it should be a question of looking at it strategically.'

Given the relative autonomy of the higher education sector, it was unsurprising that challenges noted included the influence of heads of school on culture and promotion, communications between divisions in schools and departments, and the culture in schools and departments spread over multiple sites.

'Unfortunately so much is dependent on your head of department, particularly if they aren't aware, or they have a personality that's a little bit different, or they don't make sure that they look at everyone equally. Heads of department change and a whole character of a department can change. I've become aware of this in academic life; how important the head of department is in terms of how everyone underneath them might progress in their academic career.'

Huge challenges in terms of structure with divisions, schools, faculties, and being split over various locations. Working within divisions often means we're not integrated that well with other parts of the school. When using facilities in another site I felt there was a lot more of a community culture: doughnut day, Friday cakes... it seems much more friendly, which we feel separate from being split site.'

Some areas that can still be improved further were highlighted by a number of interviewees and focus group participants from all institutions. These primarily concerned promotions processes, long hours culture, appraisal, and female speakers at events.

'One of our actions was to look at the appraisal process [and we] had a meeting to make sure that everything was much more explicit. We're getting some feedback that people still felt it was not consistent across different appraisers, so we will be coming back to that.'

'It's really obvious that there are women here... but there are still limitations in the numbers of women presenters and invited guest speakers at seminars and events. This could be much better.'

'The long hours thing is much more of an issue than flexibility here. I understand that its great you can work flexibly but this often means people working flexibly 12 hours a day – doing eight hours at work, putting the kids to bed then spending four hours responding to emails! Long hours culture is the thing you can't talk about here, it's a given that you have to do it and that

people who don't somehow aren't totally committed to their jobs.'

'[The institution] knows the percentage of female professors is much lower than that for men, but even so if you go to events it's all male professorial speakers. They might have a female but she's not a professor. There are many conflicting messages coming out.'

Challenges of the Athena SWAN awards process

There was recognition that taking part in the Athena SWAN awards process had benefits, but also required significant input. Overwhelmingly, those interviewed commented on how difficult it had been getting the data for their submissions, both in terms of access to the relevant information and in making sure the data had been gathered over a period of time.

'Biggest challenge has been getting the data... it has to be gathered in the appropriate format and by the right people... this hasn't always happened.'

'It did raise that there were some data that we couldn't get and there was no clear reason as to why not. Athena SWAN has been great at really bringing this to everyone's attention. If enough people badger for it we will get software that will allow us to do it.'

'Challenge in the award was getting the statistics in the right form. Sometimes the paper trail is embedded in the culture, people don't think about it, so it's hard to get the evidence for some things as they have just been done. But this is where Athena SWAN is good; I wouldn't like it to be so prescriptive that you just tick a series of boxes.'

Some interviewees commented on difficulties in getting buy-in from the whole school. Although once the award had been achieved people began to take it more seriously, it was

difficult to maintain momentum and continue with the action plan. This was linked to the difficulty in getting the community to admit where there were flaws, and also for disciplines with a large number of female undergraduates to recognise that there may be issues with career progression for women.

'If I'm realistic, once we'd applied for the award and got it, it has been very hard to keep it up on the agenda. Although we promised we would, it has been hard. There has been some resistance to doing things we said we would do.'

'The challenge inevitably when asking a community to focus on its functions and activities is that there is sometimes a reticence to accept that there might be anything flawed about them.'

Some concern was also raised with the workload involved in putting together an award submission and the difficulty in moving forward with it without senior level support.

'An entirely internal challenge comes down to the division of labour in order to achieve the award. The challenge of capturing attention to do it, it is competing with a range of other ways in which attention might be focused. However much people are supportive of the idea in general, to do it takes labour and somebody has to do that work, and if they are doing it they aren't doing something else or they are doing it as an extra. There is still an element in which it is not seen as wholly integral to the work of the unit, it's seen as an addition.'

6

Conclusions and recommendations

It is evident that since its launch in 2005, the Athena SWAN Charter and its membership is expanding, both in terms of the numbers of institutions signing up to the Charter each year, and the numbers of institutions and departments embarking on the process and achieving awards. With a current membership of 45.5% of eligible UK higher education institutions, there is potential for future expansion of the Charter, and ECU and the UKRC will continue to promote the scheme and the importance and impact of good practice in employment for women in SET in higher education.

A wide range of reasons for individuals, institutions, and departments engaging with Athena SWAN have been cited by research participants with common themes evident, such as being asked to participate due to having direct experience, and getting involved at the university level in the first instance then moving to the department context.

It was clear that many institutions and departments are using the Athena SWAN award as a framework for identifying current good practice and as a process in which to refine, improve, and formalise many policies and practices. This process has also led to much better communication of these initiatives to staff and students.

Interviewees also identified the success of other institutions and departments in gaining awards, both at their own institutions and at others, as motivation for their involvement in Athena SWAN, and this information will be used to better market and encourage membership of the Charter and award submissions.

It is encouraging to see that Athena SWAN is having an impact in these institutions and

departments, both in terms of organisational structure and culture. Although operating over a short period of time to date, some institutions are reporting changes in the representation of women within the academic grades, increases in the numbers of promotion applications from women, better representation of women on committees, some improvements in the transition from postdoctoral researcher to first academic post, and a greater visibility of female senior academics.

Culturally, perhaps the greater advances are being made; all interviewees and focus group participants spoke at length on the impact of Athena SWAN on culture and were able to point to many indicators of change. Overwhelmingly there is a greater awareness around gender equality and career progression issues, with an improved understanding of good working practices to support these.

An unexpected benefit has been the role Athena SWAN has had in influencing a culture of collaboration, with many interviewees expressing how effectively good practice is now being shared between successful award holders and the growing networking of women across

institutions in a way that was not supported or even in existence before.

This research did identify a number of areas that staff and students felt departments and institutions can continue to improve on and areas that still need to be addressed. It is hoped that as these institutions and departments continue to work on Athena SWAN, renew their awards and submit for higher level awards, they will do so, and ECU and the UKRC will maintain support for these through the awards workshops, guidance, and other relevant events and publications.

It is evident that those institutions and departments participating in the research clearly place value on the Athena SWAN Charter and the related work within their institutions. The credence of being a member and an award holder clearly does appeal to potential new recruits, and by working on Athena SWAN institutions are encouraging current staff and students to have a future academic career with them. Many institutions also commented how being an Athena SWAN award holder helps them to meet other goals, such as the RAE, the Concordat, and extending Athena SWAN beyond SET within their institutions.

Ultimately the Athena SWAN Charter provides a method with which to implement action and bring about change, in a way that perhaps would not have happened, or would not have happened as quickly or effectively, before or without Athena SWAN. It is important that this impact, both in terms of changes to organisational structure and culture, continues to be monitored as the Charter develops.

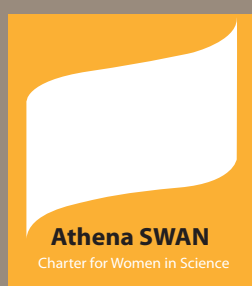
Some common challenges experienced as part of the process were highlighted, such as the difficulties of data collection, the workload involved in making an award submission, and getting adequate buy-in from senior staff. From this ECU and UKRC will look at what more can be done to better support institutions and departments to overcome these challenges through relevant speakers at the awards workshops and other seminars, and good practice guidance. ECU and UKRC will also consider what support and services can be offered to members as the Charter continues to develop, such as an online forum for members to aid networking and the provision of benchmarking data accessible through a members-only area of the Athena SWAN website.

Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



Equality Challenge Unit



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