ATHENA PROJECT

Getting There

'The Athena Surveys of Science Engineering and Technology (ASSET)
a survey of the career progression of over 6,500 scientists in UK HE and research - the whys and wherefores and using the findings

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Over 6,500 UK scientists in forty five higher education (HE) and public sector research organisations took part in the Athena surveys of science, engineering and technology 'ASSET' which ran in 2003 and 2004.

Before we look at the survey findings it is important to place Athena's surveys of science engineering and technology (ASSET) in the context of the Athena Project, what the project achieved in its first six years, why Athena undertook the surveys, how buy-in was achieved, and the value of the survey outcomes in deepening the understanding of how women and men have different experiences and perceptions of career progression in science in HE.

Then we will then explore some of our most interesting findings around the three key career stages –

> Getting in (the first big career move from a post-doctoral position to a first lecturer post)
>
> Getting back (returning after career breaks), and
>
> Getting on (progressing up the ladder and enjoying a successful and sustainable career at a senior level)

Finally we will look to the future and how the issues and findings emerging from ASSET are contributing to Athena's work programme through to 2007.

THE ATHENA PROJECT

The aims of the Athena Project are:

> *"the advancement and promotion of the careers of women in science, engineering and technology in higher education (HE) and research and to achieve a significant increase in the number of women recruited to top posts."*

The beliefs underpinning the Athena Project and its work are that:

> The advancement of science, engineering and technology (SET) is fundamental to quality of life across the globe
>
> It is vitally important that women are adequately represented in what has traditionally been, and is still a male-dominated area
>
> Science cannot reach its full potential when half the population is excluded from its activities

Athena was launched in 1999 as a free-standing four year initiative. In April 2001 it became part of the Equality Challenge Unit (ECU) which promotes equal opportunities for all those who are employed or seek to be employed in UK higher education. In November 2003 Athena moved to the Royal Society, where it continues to work with the ECU, the science professional and learned societies.

The impetus for setting up the Athena Project in 1999 was the unacceptably small number of women making it to the top of science. At Athena's launch, Lord Sainsbury, Minister for Science, expressed no surprise that in physical sciences and engineering, women represented only 97 out of 3,092 professors, or that in civil engineering, with 18% female graduates, there were no female professors. However, what alarmed him was that in the biosciences less than 10% of the professors were women, despite the fact that women represent around 50% of biology undergraduates.

THE ATHENA WORK PROGRAMME

The focus of Athena's work programme has been to encourage, support, develop, identify and disseminates good practice. This good practice is often simple and low cost, some of the changes in themselves are small but build up to make a difference at organisational and departmental levels.

Athena Phase 1

In the first phase of Athena's work, from 1999 to 2001, the Project encouraging good practice with small grants to twelve universities and five Local Academic Women's Networks (LAWNs). In the first year the focus was to build the Project's repute with some 'quick wins' mentoring, networking, and career development programmes. In the second year grants were given to initiatives that tackled the more difficult areas, changing the processes, practices and culture of universities and of science.

Athena Phase 2

In its second phase Athena 'recognised' good practice, with its Royal Society Athena Awards in 2002 and 2003 which celebrated the achievements of seven universities in the advancement of women in SET. And in 2003, Athena celebrated its first four years of successful work with the publication of Report 22 a comprehensive guide to good practice.

Athena's final phase

Good projects, like good stories, have a start, a middle, and an end. The Athena Project is now at the beginning of its end. Its final phase started in 2004 and will continue into 2007.

ASSET and the use of its findings underpins this final stage by the end of which the stakeholders (the main professional scientific societies and, most importantly, the universities and research councils who as employers of the science workforce carry the responsibility for good practice) will have the understanding, the informed commitment and the toolkit to work towards Athena's final target when the percentage of women at each career level reflects the percentage at the level below (including the undergraduate intake).

Critical to Athena's success has been its partnerships with the universities (as employers of the science workforce), whose activities and programmes are helping to make a reality of Athena's aims -

60 universities have contributed to one or more Athena programme

27 Reports on good practice in HE published, available on www.athenaproject.org.uk

40 universities and over 4,000 male and female academics participated in ASSET

LEARNING FROM ATHENA'S GOOD PRACTICE PROGRAMMES

What is clear from Athena's work is that whereas good practice benefits all – men and women, staff and students alike and the quality of the science that results – bad practice is incrementally prejudicial to the career progression of women and those with care responsibilities. In the best universities and science departments there is much good practice. Many of the changes in practices and procedures that they successfully introduced were not expensive, but required understanding and planning, for example:

- rotating administrative and support duties and having an open allocation system to prevent women taking on too many support roles
- head of department holding open meetings at the beginning of each promotion round to clarify procedures and criteria

In retrospect, changes like these now seem simple and make common sense to those who made them, they are now just 'how we do things round here'.

Athena recognised that for change to happen and to 'stick' in a university a tripartite approach was key to success, senior managers must be publicly committed and involved, Heads of departments and research groups who lead by example, and determine the workplace culture, and women scientists need to expect more of their departments and universities and take more responsibility for their own careers.

Athena identified three key steps in improving women's career progression and representation in science in universities:

- Starting well - senior management commitment, building on previous work and establishing the base line (statistics and surveys)
- Supporting career progression – appointment and promotion procedures and providing positive career support to women academics- mentoring, networks and role models
- Succeeding – the really difficult bit, making changes that stick, the organisational and workplace structures processes and culture

The Athena Project identified as precursors to getting started:

- Significant involvement of, and senior management commitment, at the highest levels of the organisation, to give visibility and credibility to what is done and communicate interest and support
- Building on previous work, for example a university committee which regularly reviewed their employment statistics
- A firm understanding of the baseline through surveys and statistics
- Repeating surveys, monitoring and reporting on statistics regularly to (i) provide the basis for measuring success, reviewing progress and determining what next, and (ii) help sustain interest and keep the issue of women's career progression, retention and representation on the management agenda)

WHY ASSET?

Work by Athena's university partners in the first phase of our work showed the importance of :

> establishing an understanding of the differences (in reality and perception) of men and women's approach to, and preparation for, job applications and promotion, as a first step in making the procedures, practices and criteria fair and open, and in enabling women to position themselves to compete equally with men
>
> hard information, to engage the attention of Vice Chancellors, and senior managers, and against which they could compare their institution and its progress in UK terms.

The surveys undertaken by individual universities had been relatively expensive. Numbers were small and the results could only be read-across with caution. Where women were in small numbers and were potentially identifiable, there was a degree of caution in replying to internal surveys.

By 2002, when we started planning ASSET, Athena's work with universities, and the contacts at all levels, had built Athena's reputation and we had the necessary independence. Of the 23 universities who took part in the 2003 survey, ten had received development grants from Athena and ten of the others had taken part in one or more previous Athena initiatives. We were also well positioned at the ECU, where we could get circulars and emails onto the desk tops of the Vice Chancellor, Dean of Research , Science and Engineering , Head of HR and Diversity in every UK University.

From earlier work, particularly the survey undertaken by the University of East Anglia Survey Office for ResNet one of Athena's local academic networks, we knew what we wanted to ask and we knew how we wanted to use the information as a lever for action. The ILRT at Bristol University had developed the survey software for CROS, their contract research staff online survey which they adapted for Athena.

ASSET gave us the way to check the evidence from Athena's previous work with the perceptions and experiences of a wider community and to make sure that Athena continues to address today's not yesterday's issues.

ABOUT ASSET

The ASSET survey was the first of its kind in the UK. It provides detailed, real-life information about career pathways in science, the experiences, expectations and perceptions of scientists about what contributes to successful career progression. It explores how those at the top got there, their views on what helped them en route, and what is important for those on their way up. At its heart is the interaction of perception and practice, expectations and experience: it is about people, rather than statistics.

ASSET offered a UK survey, which required relatively little effort and no direct costs for the participating HEIs, with results which could be used locally, and nationally, to raise the profile and awareness of the issues of career progression for women in SET.

ASSET was designed to

raise awareness of the issue of women's career progression in SET

illuminate differences between men's and women experiences of SET in HE (reality and perception)

develop the evidence base to underpin action planning, implementation and evaluation

enable HEIs to measure their progress/benchmark it against the UK position

ASSET QUESTIONS

The areas covered by ASSET were those which employers can control and where changes at the workplace level can make a difference and where the findings can inform and influence action by SET professional societies. 6,726 scientists (over 60% male) gave twenty minutes of their time to complete the survey. They were asked about their:

- career pathways – how they got to where they are now, length of time with their current employer, interview panel composition, promotion achieved within organisation or by external application, encouragement to apply for senior posts, career breaks and difficulties returning
- Responsibilities and Participation – roles beyond teaching and research; committee memberships at institution/company and departmental levels; external activities and contributions to professional societies
- Aspirations and Expectations – ambitions; the extent to which these had changed, critical career success factors and knowledge of promotion criteria and procedures
- Perceptions – value departments place on individual's contributions; equality of opportunity on promotion, salary, access to career development, to departmental funds, office and lab space, administrative and office support

In some ways the organisations who participated in ASSET had little to do, except encourage as many of their scientists as possible to compete the questionnaire. However what was asked of them was that they would commit themselves to use the results to further Athena's aims. The most successful response rates were achieved in universities where there was both high level endorsement and a key person available to oversee and promote the survey email distribution and reminders.

THE FINDINGS WITH RESPECT TO THREE KEY CAREER STAGES

Respondent Profile

The scientists who participated in ASSET were divided roughly 2:1 between Universities and Research Institutes with women representing 37% of respondents. The percentage of women, of course, varied across organisations, subjects and grades, but the findings reported here will be presented in aggregate form.

The distribution across grades differs between type of organisation with a much greater concentration amongst the lower grades within the Research Institutes. Respondents include 130 female professors (16% of all Professors) and 11 female Research Directors (19% of all Research Directors). With respect to nationality, the majority of respondents were British, 7% European and 6% from the Rest of the World.

Figure 1: Respondent type

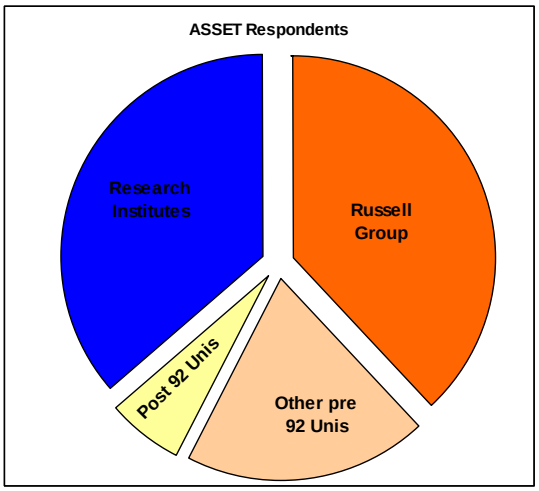


Figure 2: Age Profile

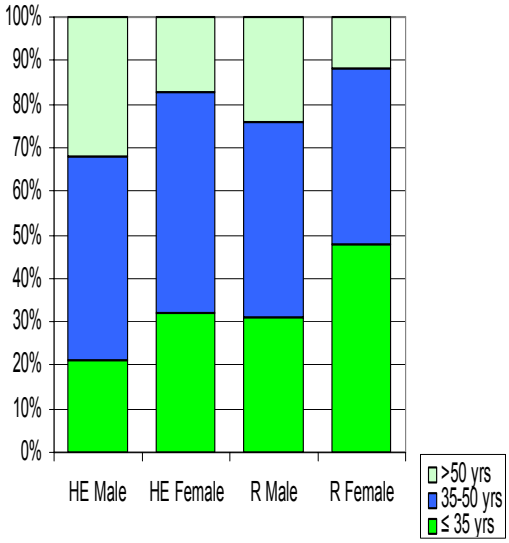
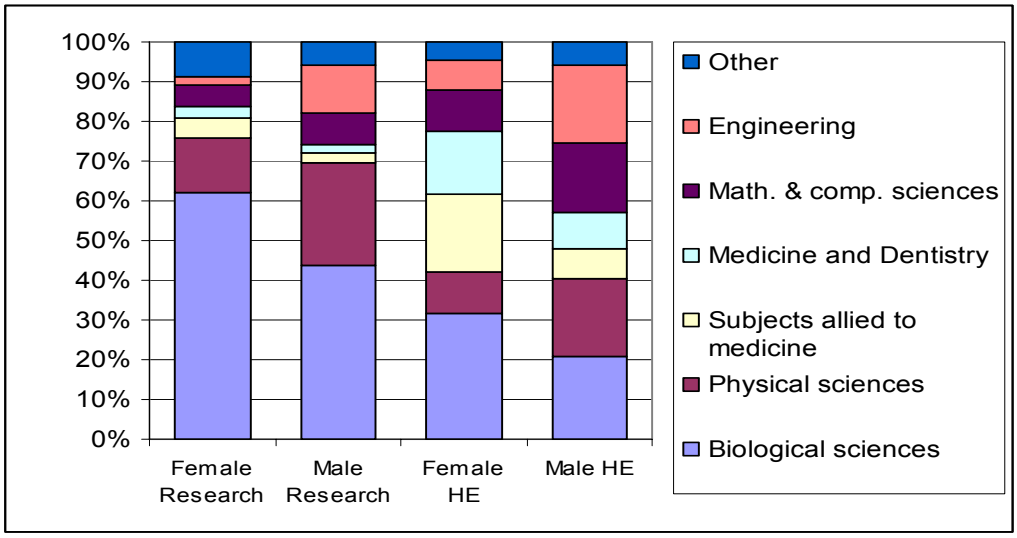


Figure 3: Respondents' Subject area by organisation and gender



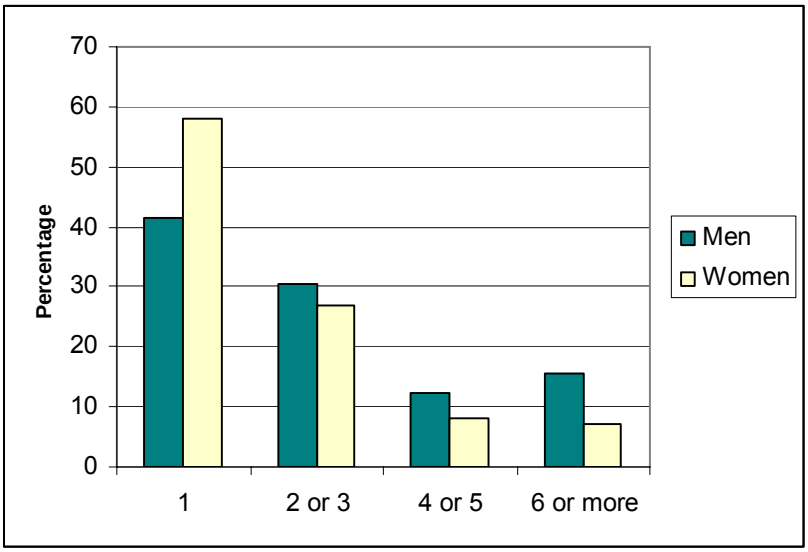
Getting In

In HE, the transition from a postdoc/contract research post to a lectureship is one of the key stages in an academic career bringing with it, for the majority, a transition from fixed term appointments to a permanent or indefinite contract. Amongst the ASSET respondents working at lecturer level, 60% of those aged 30 or under had a permanent/indefinite contract, rising to 70% amongst the 31-35 age group.

The situation is different within the Research Institutes, where the majority (62%) of respondents working at scientist level (equal to postdoc) are on permanent contracts.

A higher percentage of women (58%) than men (42%) were successful with their first application for a lecturer post .

Figure 4: Applications for first lecturing post by gender (current lecturers)



Mean number of applications: Men 2.6, Women 1.99

Interview Panels. For current lecturers who had been in post for 2 years or less, a greater proportion of men (33%) than women (25%) had encountered an all male interview panel. Does this mean that male panels are more likely to appoint men? Or are female candidates less likely to accept job offers from an all male panel?

In HE it is common to move for a lecturer level post (60% did so) – and there is no variation between the experience of men and women here. However, within the Research Institutes a lower percentage move to obtain a senior scientist position (equivalent to lecturer level), but disproportionately fewer women did so – 18% compared with 27% of men.

Getting Back

Overall, around 46% of respondents were parents and 36% had children aged 16 or under. The male/female percentages with children aged ≤16 were 40:36 within HE and 35:28 within the Research Institutes.

More women than men take career breaks and higher proportions of women report difficulties when returning to work. This was the case in both HE and Research Institutes.

Responses to the question "what would help the transition back to work?" varied according to organisation type and sex (Table 2). It is interesting to see the importance given to mentoring in this context by both men and women in the Research Institutes. Conversely, flexible working is high on the list for women in HE, but low for women in Research Institutes.

Future analysis of the qualitative data collected on this topic will undoubtedly identify examples of good and bad practice and contribute to the development of the Good Practice Guide. An initial read through of the free text comments suggests problems caused by lack of work load cover while away, difficulties with the attitude of colleagues/managers and lack of flexibility in choosing the number of hours worked with some respondents unable to find full time work and having to settle for part time, while others would like to work part time but were unable to do so. Protected research time is suggested by some HE respondents as beneficial to aiding the transition back to work.

Table 1: Career breaks and difficulties in returning

Taken career breaks	**HE**	**Research**
Men	6%	4%
Women	31%	32%
All	*15%*	*15%*

Difficulty when returning to work	**HE**	**Research**
Men	19%	14%
Women	32%	29%
All	*28%*	*25%*

Table 2: What would help the transition back to work? (respondents who had taken career breaks)

HE Men	**N=144**	**RI Men**	**N=61**
Contact with dept	49%	Peer networks	44%
Flexible working	31%	Mentoring	31%
Peer networks	30%	Contact with dept	26%
Childcare	25%	Training	25%
P/t building up to f/t	25%	P/t building to f/t	23%
Mentoring	18%	Shorter hours	23%
Training	17%	Flexible working	21%
Shorter hours	13%	Childcare	8%
Other	5%	Other	5%

HE Women	**N=457**	**RI Women**	**N=312**
Flexible working	81%	Mentoring	84%
Childcare	77%	Contact with dept	78%
P/t building up to f/t	59%	Shorter hours	66%
Contact with dept	56%	Peer networks	57%
Shorter hours	38%	Childcare	33%
Mentoring	30%	Training	22%
Peer networks	28%	P/t building to f/t	19%
Training	18%	Flexible working	16%
Other	8%	Other	7%

Getting On

Appointment and promotion procedures, support and encouragement play their part in contributing to successful career progression and equality of opportunity. ASSET results, however, indicate that experience and perceptions differ in these areas between men and women in HE. There is also some evidence to suggest that activities and experience identified by senior academics as contributing to success are undertaken by junior men in higher proportions and earlier in their careers than their female colleagues.

- *Moving for promotion*

The majority of respondents had experience in working in more than one type of organisation, however when it comes to moving for promotion there are some differences. It is less common to move institution to move from a lecturer to a senior lecturer post, but a significantly higher percentage of women currently working in pre '92 universities had done so: 29% (f), 10% (m).

- *All male interview panels*

For senior lecturer posts, the results show that higher percentages of men appointed to this level within the last two years were interviewed by all male panels: 40% (m), 27% (f). These differences however, are not evident at professorial level but the proportion of all male panels was relatively high at 45%. The numbers of respondents appointed at Principle Scientist level and above in Research Institutes in the last two years is small and approximately half were interviewed by all male panels.

- *Encouragement*

There were notable differences in the proportions of men and women who received invitations or encouragement to apply for promotion:

Current grade:		
Lecturers who received encouragement for senior lecturer posts	29% (m)	20% (f)
Senior lecturers/readers who received encouragement for Prof posts	41% (m)	27% (f)

The story is similar within the Research Institutes, where 28% of men compared to 16% of women working at Senior Scientist level reported that they had been invited or encouraged to apply for their post. There were no differences between men and women at other levels.

However, once at a more senior level, men and women have received similar levels of encouragement to get there: senior lecturers/readers – men 62% and women 61%, and at professorial level – men 89% and women 88%. The percentages are similar for the equivalent Research Institute grades.

The correlation between encouragement and success is high and suggests that for those who were successful there was no difficulty in recognising encouragement (it has been suggested that men's and women's perceptions of encouragement are different) - so is it that women don't recognise the tap on the shoulder, hear the words of encouragement or notice the positive vibes? Or is this encouragement absent?

- *Knowledge of promotion procedures and criteria*

If women aren't encouraged to go for more senior positions, how much do they know at the start of their careers about promotion? It is a concern so many junior women, and to a slightly lesser extent men, know nothing about the procedure or the criteria for promotion (Table 3). On this basis how well are they able to prepare themselves for progression or to decide if they are in the right career and how does this reflect on those who carry the responsibility for the career development of junior colleagues?

Table 3: Percentages of junior scientists with no knowledge of promotion criteria/procedure

Postdoc/Scientist	Criteria	Procedure
Male HE	35%	43%
Female HE	39%	50%
Male RI	27%	30%
Female RI	31%	36%

Lecturer/Senior scientist	Criteria	Procedure
Male HE	8%	18%
Female HE	11%	21%
Male RI	9%	10%
Female RI	10%	13%

- *What contributes to success?*

Male and female senior scientists have similar views on what is important for career progression. Research publications top the lists, not surprisingly, but after this there are differences between respondents from HE and the Research Institutes. In HE the high profile/visible individual activities feature, whereas Research Institutes encompass a wider and more 'collaborative' range of activities

Table 4: Contributing factors to career progression, the view of senior scientists

In HE			In Research Institutes	
Research publications	90%		Research publications	81%
Obtaining ext research funding	77%		Working on high profile projects	73%
			Obtaining ext research funding	63%
			Initiating/contributing new projects	55%
			Collaborative working – externally	45%
Attracting new PhD students	41%		Collaborative working – internally	41%
Conference keynote speaker	41%		International experience	41%
			Coordination of research projects	40%
			Meeting targets/delivering on time	37%
			Networking outside Res Centre	36%
Editor of academic journal	27%		Project management experience	34%
Member of editorial board	22%		Conference keynote speaker	33%
Innovative teaching	21%		Networking within Res Centre	33%

Conference keynote speaker features fairly high on the HE list, but it is evident that men have higher conference participation in general at lecturer, postdoc and senior scientist level.

Table 5: Conference participation as session chair or specialist / breakout / keynote speaker

	Professor	Sen Lect/ Reader	Lecturer	Postdoc
Male HE	95%	77%	65%	46%
Female HE	98%	78%	56%	39%
	Research Dir	**Principle Scientist**	**Senior Scientist**	**Scientist**
Male RI	87%	85%	66%	43%
Female RI	91%	91%	57%	43%

In terms of research related activity, a greater proportion of male senior lecturers/readers and lecturers are members of department research groups, undertake professional consultancy and are Research Council assessors. In HE, men and women however appear to be equally ambitious, but men may set their sights high earlier on, for example similar percentages of male and female senior lecturers and readers hope to achieve professorial status, but at lecturer level a much higher percentage of men aspire to become professors: 63% (m), 47% (f).

Within the Research Institutes, higher proportions of men at principle and senior scientist level represent their centre/council at specialist meetings, are selected to manage special projects and have responsibility for sign offs. Amongst senior scientists, higher percentages of women are involved with staff supervision and training, project management and external research collaboration. With respect to stated ambition, the story is similar to that in HE, with men identifying their aims at an earlier stage.

- *Perceptions of equality and support*

Women's perceptions of equality are startlingly different to those of their male colleagues. In both HE and RI, notably higher percentages of women at all levels stated that they perceived women to be disadvantaged in the equality of treatment within their departments with respect to promotion, career development, salary and visibility to senior management (RIs only). Table 6 gives the aggregate figures: the differences are even more pronounced when disaggregated by grade/level.

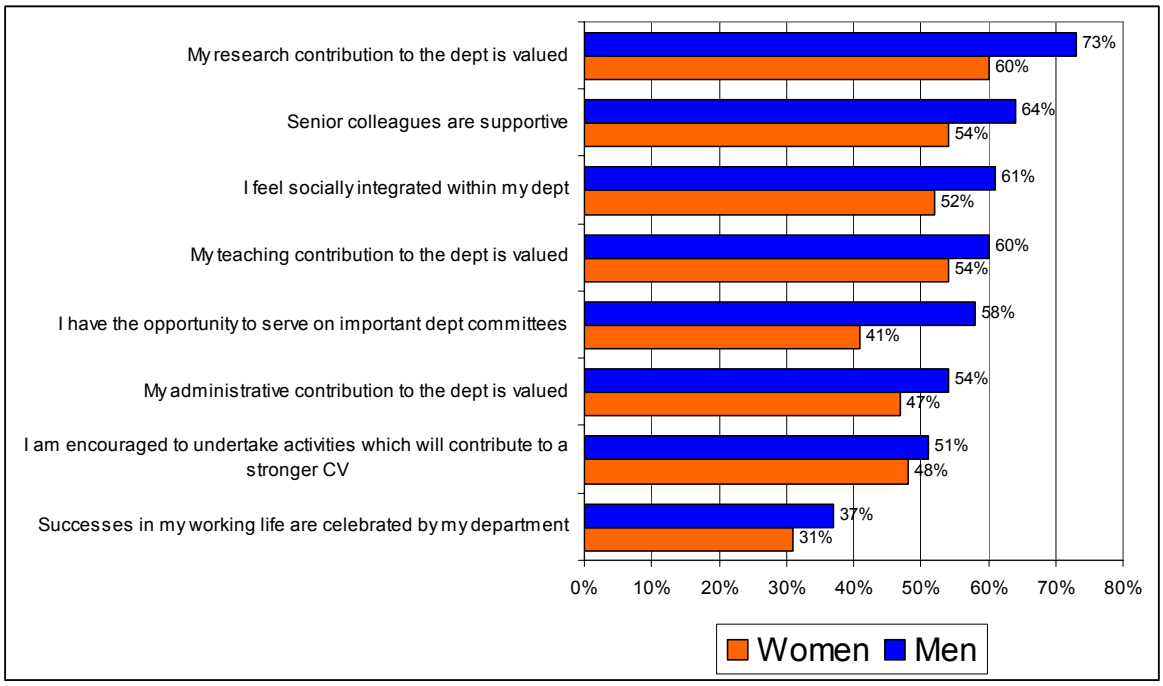
Table 6: Perceptions of equality of treatment in your department : percentages responding "women disadvantaged or significantly disadvantaged"

	HE male	RI male	HE female	RI female
Promotion	16%	15%	46%	42%
Access to Career Development	12%	4%	36%	17%
Salary	11%	7%	36%	26%
Visibility to Senior Management	-	12%	-	36%

ASSET also sought to discover whether there were any differences in how men and women viewed their experiences of the support, opportunities and acknowledgement from their departments. Within HE, the number of areas where there are significant male/female differences increases with seniority. Figure 5 shows the areas for the 35-50 age group where the differences are statistically significant. The most striking is the difference in male/female responses in agreement with "I have the opportunity to serve on important departmental committees" and "my research contribution to the department is valued".

Research Institute respondents had just two areas where male/female respondents differed significantly: opportunity to serve on important departmental committees, m (48%), f (36%) and encouragement to develop CV, m (52%), f (44%).

Figure 5: Statements where male/female differences are statistically significant (HE respondents, aged 35-50)



ASSET ISSUES

The issues flagged by ASSET are not unique to the UK. Throughout Europe for women in SET 'the higher the fewer and the more lonely' is the norm but is not one that science and UKplc can afford to continue. From ASSET it is clear:

> Increasing the supply of well-qualified graduates, PhDs and post docs will not, on its own, solve the problem, if many of the women then 'languish' on fixed term contracts at the bottom of the career ladder with little chance of progressing, while their male colleagues are encouraged to 'go for it'. It is not surprising if many and perhaps some of the brightest and best output of UK science faculties are not content at such a career prospect and vote with their feet.
>
> Women are as ambitious as men, they are as academically active, but they do not make it to the top in the numbers that reflect their contributions to science and if they do get to the top, they still feel that they are less valued than their male colleagues and that women in general are disadvantaged in terms of salary, promotion and access to career development.
>
> Heads of departments and senior scientists need to do more to encourage, support and make sure that women take a full part in departmental and professional life, so that they can and do enjoy the full benefits of success in science and celebrating that success may prove a cost effective strategy. Much is for departments to organise and influence, but at the corporate/organisational level there need to be clear expectations, reporting and feedback mechanisms.

ASSET ACHIEVEMENTS

What has Athena achieved so far- ASSET has already achieved a lot. The 6,500 plus scientists (over 60% men) who completed the questionnaire, now know something about Athena, perhaps have an increased awareness of the career barriers facing women, and expect their employers to take action. Forty-five major public sector employers of scientists will be able to see where they stand and are committed to use the results.

During Summer 2005 Athena will find out what use the twenty three universities, who took part in ASSET 2003, are making of the findings.

There is a wealth of information for use at a variety of levels: by science policy makers, social scientists, head of institutions, faculty deans, heads of departments and individual scientists. And a wealth of data remains to be analysed

ATHENA'S HALF TIME REVIEW

But this is not enough. Half way through the Project's lifespan, in her introduction to the 2003 Athena Guide to Good Practice, Professor Dame Julia Higgins, then Chair of the Athena Committee flagged the continuing need for Athena to encourage and develop activities and methodologies which:

- challenged the culture and values of SET departments and HE
- increased, recognised and celebrated the contribution of women to their research success
- engaged principal investigators and heads of research groups whose support and understanding, or the lack of it, was critical to women's career progression

ASSET – its findings and using them to good effect underpins recent work by Athena and all the activities planned for the future.

ATHENA TOOLKIT FOR CHANGE

The Athena Toolkit builds on the outputs from ASSET and Athena's work to date:

- **good practice case studies** and checklists(www.athenaproject.org.uk)– and more being identified through the Athena SWAN Charter initiative and written up
- The **short medium and long term targets** for SET employers in HE and research – the targets proposed by Athena in in 2003 have been adopted by a number of employers:
  - Short term - the percentage of female applicants for academic posts/promotion to reflect the percentage of women at the level below (in their own institution and/or the 'pool' of institutions where they usually recruit)
  - Medium term - the percentage of newly appointed/newly promoted women in academic posts to reflect the percentages at the level below
  - Long term: the percentage of women at each career level to reflect the percentage at the level below (including the undergraduate intake

Key Performance indicators based on ASSET and work with Royal Society of Chemistry- In 2004 Athena completed its first 'departmental' initiative with the Royal Society of Chemistry, the report on this includes a description of the' University of Utopia Chemistry department', cram full of good practice, all taken from one or more UK academic departments. The report proposes key performance indicators for departments with quantitative and qualitative measures - again based on what some departments are already doing.

UK Universities Good Practice Recognition Scheme, the Athena SWAN Charter launched in June 2005 with the first recognition awards in March 2006 (www.athenaswan.org.uk) - The Athena SWAN charter is the means chosen by Athena to speed its progress towards the achievement by HE employers of Athena's aims. Membership of the SWAN Charter, with its bronze, silver and gold SWAN recognition awards, will help universities work towards sustaining equitable working environments and will enable universities to identify themselves as employers of choice, not only to their staff, but to students, funders, research councils and industry.

Benchmarks against which universities and departments can measure themselves and their progress based on all the above and on ASSET

ASSET THE FUTURE

And more specifically what does the future hold for ASSET? We are currently writing a report for the Wellcome Trust and the UK Research Councils on the five research councils which took part in ASSET 2004. A Royal Society Equality Challenge Unit Conference for Vice Chancellors in December 2005 will start to develop a UK action agenda. Further analysis on returners will be published in 2006 together with good practice guidance for employers, the SET professional societies and for individuals planning career breaks.

It is hoped to run an ASSET survey across the main professional societies membership which will include industry late in 2006 and possibilities for 'exporting ASSET to Europe will be explored within the UK Resource Centre for Women in SET ESF Equal programme

AUGUST 2008, A POSTSCRIPT

The Athena Project closed at the end of 2007, having run a further ASSET survey at the end of 2006 with 6,000 plus respondents working across universities, research institutes, the National Health Service and industry.

Three legacy organisations will continue to build on the work achieved during the Athena Project :

1. **The Athena Forum**. The members of the Forum, which is based at and supported by the Royal Society, are nominated by the UK's leading scientific professional and learned societies. Among the first publications in 2009 will be reports comparing and contrasting findings from the ASSET 2003/04 and 2006 surveys. The Forum hopes that ASSET will be run again, probably in 2010.

2. The continued development of the Athena Toolkit is now the responsibility of the **Athena Partnership**, a grouping of science professional societies, led by the Institute of Physics (IOP) and the Royal Society of Chemistry (RSC). The report *Planning for Success: Good Practice in University Science Departments*, the last joint initiative by the Athena Project and the RSC was published in July 2008. The report includes recommended key performance indicators for university science departments and a good practice checklist. The partnership is currently piloting a bench marking scheme based on the key

indicators, which it hopes to launch in 2009. The key indicators underpin the IOP Juno Code of Practice for UK Physics Departments, and from 2009 will form the basis for Athena SWAN recognition awards.

3. The **Athena SWAN Charter** and recognition Scheme was launched with ten university members in 2005. The scheme is the third Athena legacy organisation, it recognises good practice in university science departments. It now has 31 UK universities, and since the first recognition round in 2006, thirty awards have been made to universities and science departments, one gold to the chemistry department of York University, eight silver and twenty one bronze.

An ESRC grant funded an in depth analysis of the 2003/2004 ASSET surveys with respect to pay and career progression. Results have been presented at several UK and European institutions. Two papers are currently available:
Connolly, S. and Long, S., 2008, "Glass ceilings – thicker at the top? Evidence on career progression for scientists from the UK", University of East Anglia, Economics Research Centre Discussion Paper 2008-1.
Connolly, S. and Long, S., 2008, "Women in science – fulfilment or frustration? Evidence on gender pay gaps from the UK", University of East Anglia, Economics Research Centre Discussion Paper 2008-2.