

# ATHENA PROJECT

## Report on the 1999 Development Programme





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# THE 1999 DEVELOPMENT PROGRAMME

## FOREWORD

I am pleased to introduce this report on the first year of the Athena Project's development programme. The Athena Project's aim is the advancement of women in science, engineering and technology in higher education. To achieve its aim, Athena works with Higher Education Institutions (HEIs) to develop, share, encourage and disseminate good practice. This report brings together the good practice and key learning and findings from our 1999 grants:

- Bolton Institute - Mentoring Women in Set
- University of East Anglia - ResNet2000
- Imperial College – Might Mentoring Help?
- Nottingham and Loughborough Universities – Early Career Skill Acquisition and Mentoring
- The Open University Report - Beating Barriers and Constraints in HE Careers
- Sheffield Hallam University - *PROGRESS* developing a mentoring training programme

All the projects contributed to an improved understanding of the under representation of women in science, engineering and technology (SET) in HE, the differences between the academic careers of women and men, and the choices and constraints women face in balancing their careers and caring commitments. What comes through clearly is the value of:

- mentoring - for the mentees, mentors and their HEIs
- development opportunities for women to build confidence and skills awareness
- networking for women working in relative isolation and male dominated environments

The wealth of material and creative ideas from the projects is daunting; some of the best you will find in our report. However, if you want to get the full flavour of all that they achieved, you should go to the Athena website [www.athena.ic.ac.uk](http://www.athena.ic.ac.uk) for short reports on all six projects and links to their websites for further detailed information. Our thanks go to the project teams. They showed outstanding goodwill, commitment and enthusiasm. Without them, Athena would not be celebrating the success of its first year's work. We look forward to continuing our association with them in:

- evaluating the longer term outcomes of their work
- following up the careers of the women in SET who participated
- bringing to fruition their longer term objectives
- disseminating the learning and good practice they developed

In summer 2000 we awarded six more development grants and in the autumn five Local Academic Women's Networks (LAWNs) were set up, which include four of the HEIs involved in our 1999 programme.

Our thanks must also go to the UK funding and representative bodies and the DTI Office of Science and Technology, without whose funding and support it would not have been possible for Athena to achieve so much since its launch in February 1999.

This report has been prepared for our sponsors, Heads of HEIs, Heads of SET faculties and departments, academics responsible for research staff and their careers, women working in SET and colleagues in personnel, equal opportunities and staff development; all of whom can help to make a reality out of the ideas that we hope our report will spark.

**Professor Julia Higgins**  
**Chair Athena Project**  
**February 2001**

The report draws together the results of the 1999 Athena development projects which started in autumn 1999 and were completed by autumn 2000. It starts with an introduction to the projects, what drove them, what they did and what made them successful. This is followed by sections on mentoring, staff development, networking and career choices, barriers and constraints. Each section considers why the particular strategies were chosen as the way to tackle the under representation of women in SET, the benefits for the participants, the learning and key findings from their work and their institutional impact.

**Mentoring** Four projects used mentoring as a strategy - Bolton, Imperial, Sheffield Hallam and Nottingham/Loughborough. There were significant institutional benefits. Mentors' and mentees' motivation improved. Management, leadership, interpersonal skills and communications between different levels of staff and departments were improved. The HEIs recognised the institutional impact of senior academics becoming mentors- they saw their institution through different eyes, realised the differences between the culture and attitudes of different departments and started to understand the challenges young women faced in progressing their careers.

**Staff development** Nottingham/Loughborough ran a development programme for post-doctoral women in SET. Imperial and the UEA offered less structured development as part of their programmes. The content was well received, but initially they all had difficulties in recruiting to their programmes. The conclusion was that a significant number of SET men still needed a wider appreciation of the problems that women encounter, and which may lead to their dropping out of SET (a lack of role models, the long hours culture and balancing family and professional commitments). The HEIs recognised that the existence of equal opportunities policies and commitments to being family friendly was not enough to ensure that the (mainly male) heads of SET departments grasped the problems and dealt with them effectively and sympathetically.

**Networks** The University of East Anglia ran a self-sustaining network for post-doctoral research staff. Its programme and activities included a careers survey, which substantially increased senior managers' awareness of the career issues for junior staff. UEA concluded that successful networks were hard work and needed a concrete task to give them a clear purpose but could be enjoyable and provide a significant learning experience for all involved. As a result of their own projects, Sheffield Hallam established a network of senior women, Nottingham/ Loughborough recognised the value of networking between senior and junior women and Imperial decided to hold an annual networking event for all women academic teaching and research staff.

**Career choices barriers and constraints** This section explores the projects which looked behind the staff profiles and low numbers of women in SET, and at the institutional practices and procedures, which might act as barriers to women's career progression and women's perceptions of those barriers. Their findings were supported by the OU report which describes women's experiences in SET in HE outside the OU and how the OU has overcome these barriers to become the employer of choice for large numbers of women in SET. UEA concluded that it 'is too easy for all parties to collude in the fiction that for the majority of research staff a long-term career in research is a viable option. This is despite the evidence of a massive exodus of women researchers in their thirties from HE. The beneficiary and exception is the Open University where 42% of part-time science associate lecturers are women.'

**Conclusions** The report concludes that the commitment of senior HEI management was the prerequisite to the projects' success. This section includes suggestions on good practice for HEI management, working with heads of SET departments and women academics and starting with the assessment of the impact on women of their policies, practices and procedures.

The introduction, the conclusions and the boxed text in the sections, provide a useful summary.

# INTRODUCTION TO THE 1999 DEVELOPMENT PROJECTS

The projects supported by Athena were those seen to offer the best potential contribution towards the achievement of the Project's aim - the advancement of women in science, engineering and technology in higher education and a significant increase in the number of women recruited to the top posts. The projects focused on the key issues

identified in initial discussions with senior managers and women working in SET in HE: institutional culture, values, attitudes and behaviour; organisational policies, practices and systems, research staff and their progression, and the personal factors which shape or constrain career choices and outcomes.

## The Drive Behind The Projects

There was, for all the HEIs involved, a clear institutional drive:

- Bolton-170 SET staff, 35 women none above Principal Lecturer level
- UEA –to increase the number of women going into academic careers, 41% of their research staff were women, but women represented fewer than 10% of academic staff
- Imperial College – recognised that compared to HE generally women were under-represented, with 35% SET students women, but only 6% of professors in SET
- Nottingham/Loughborough - only 47 women out of 359 academic staff in SET at Nottingham, and 33 women out of 331 academic staff in SET at Loughborough, very few women rising to senior grades and the greatest loss at post doctoral level
- The OU, with 55 % of its lecturing staff women, wanted to explore how the development opportunities and flexible working it offered impacted on women at varying stages in their SET careers and whether OU good practice was transferable to other HEIs
- Sheffield Hallam –only 3 women teaching staff to 93 men in engineering, rising to 33 women to 77 men in computing and management

The project teams were all clear what made their programmes successful: high level commitment, enabling support from Athena, and building on previous work.

High level support, involvement and commitment were critical; to give visibility and credibility, and to communicate interest and support for the project to men and women in SET. Also important were:

- 'support from Governors ensuring wide dissemination and interest from senior managers'
- 'woman lay members of Councils who chaired project steering groups and were willing to speak their minds'
- 'the involvement of school directors in shaping the project, this gave them ownership and they supported its aims and disseminated information'
- 'senior managers who saw the mentoring programme as a positive step towards the promotion and encouragement of women in SET'

Enabling support from the Athena Project was a major factor:

- 'the Athena banner enabled new doors to be opened within our institution and raised awareness at the highest level of the low representation of women in SET'
- 'the funding provided was quite small but we made it go a long way. More importantly it had considerable PR value because it was external funding and it had been achieved through a bidding process. We could wave the Athena banner'
- as a participant commented 'Athena is a breathe of fresh air to sustain our days. It is great to hear that universities have procedures in place to support us, but as we all know on the ground floor we are still fighting. It is a very difficult path we tread, and Athena has provided us with vital support'

Building on previous work was an important precursor to success:

- ‘the university’s longstanding commitment to staff development and senior managers who had consistently supported the work of the centre for staff and educational development’
- ‘following the Bett report, the university human resources committee had looked at the employment statistics on research staff and actively supported the project’
- ‘successful personal/career development initiatives eg *Springboard* for over 200 women’
- ‘a Rector’s committee had commissioned a report identifying a number of barriers to women’s career development’

**Bolton Institute** set up a mentoring scheme based on the development and use of personal development plans for mentees. Women with successful SET careers in industry and academia (external to the Institute) mentored both staff and students. The project team now hopes to build on its experience, its contacts with local HEIs and industry and support from its mentors to establish a regional mentoring scheme.

**The University of East Anglia** developed a support network for women post-doctoral research staff, which included the Norwich Research Park. The network has now been extended to other disciplines. Their programme of activities was successful in helping the participants to develop knowledge, confidence and skills. The network’s survey of research staff produced a wealth of information on SET researchers, their views, careers, aspirations and perceptions. It has substantially increased senior management’s awareness on research career issues.

**Imperial College** piloted three mentoring approaches. Imperial now recognises the value of mentoring as a strategy to support young women in SET. Imperial plans to continue with both a mentoring scheme and development workshops. The College now recognises that despite their increasing representation, some women still feel isolated. It is planning to organise an annual networking event for women.

**Nottingham and Loughborough Universities** developed a programme for post-doctoral women in SET to provide them with the skills and confidence to embark on a long-term career in SET. The programme included staff development, a self-help network and a mentoring scheme. The programme will be offered regularly by both universities, who will also develop their mentoring programmes and track the future progress of participants, to determine whether their career progression has been enhanced. They are now addressing a range of equal opportunity and research career development issues, working with heads of schools to tackle the perceptions and attitudes of male academics in SET to the career development of women colleagues and the different choices women make in balancing family and career commitments.

**The Open University** study recognised that women seeking to establish academic careers face a number of barriers and constraints- the detrimental impact of career breaks, relatively low publication rates and concentration in low status/lower paid short-term contract work. It explored why the OU was more successful than HE generally in recruiting women into SET, and was the employer of choice for women with family commitments. Their report showed how OU helped women to overcome the barriers by flexibility combined with training and development opportunities. The OU is now considering development possibilities, with other HEIs, including returner initiatives, for retraining women who need to update both teaching and research skills, and to enable women on career breaks to keep up to date in their field. They are also exploring the future of distance learning and ‘virtual’ teaching for women (and men) taking career breaks.

**Sheffield Hallam** developed a mentoring training programme to improve the retention and career progression of women in SET. Their approach was interventionist, challenging the institution’s culture and attitudes detrimental to women’s career progression, and targeting senior managers in order to foster a more supportive and collaborative team culture. A women’s forum has been established. The mentoring training course is now incorporated in the staff development programme. The university has recognised the need to set up an organisational structure which makes directors of schools responsible for mentoring.

# MENTORING

Four projects included mentoring. Sheffield Hallam developed a mentor training programme. Bolton's 16 women mentors were all external and came from both academia and industry. Nottingham and Loughborough offered female mentors to the 25 participants

on their staff development course. Imperial's 32 mentors were male and female. The mentoring relationship lasted some six to nine months and most pairs met between two and seven times.

## Why Mentoring?

The projects saw mentoring as the way to tackle the under-representation of women and to:

- encourage more women to continue SET careers/apply for/take on more senior roles
- provide women with opportunities to discuss the problems they feel they face
- offer women informed advice about their personal career development
- raise the profile of women staff in SET
- enhance women's development and enable them to realise their full potential
- increase self-confidence/reduce isolation in a male-dominated environment
- help women become more assertive/able to cope with the 'laddish' culture of SET
- encourage women to submit more research grants bids
- challenge institutional culture

## Why they took part - Mentors

volunteered because of concern about the issue of women in SET, because it was a good idea, they thought they could help and because they were asked. At Imperial a letter from the Rector encouraged men, in particular, to take part. Mentees participated because they wanted to talk about balancing their career and their family, to explore whether an academic career was for them, to build their profile in their HEI, or were just curious. Imperial questioned some of the women who had turned down the invitation to become mentees, among their reasons were:

- already had adequate support
- were clear about their career direction
- too busy for another commitment/ it was not a good use of their time
- uncomfortable about discussing personal issues with a stranger
- because it was a women only scheme

**Matching** mentors and mentees was not easy. A mentor described it 'as like Blind Date'. The reservations expressed about mentoring mostly related to poor matches. But surprisingly similar success rates were achieved by random and considered pairings.

The project teams agreed:

- mentees and mentors should be allowed to express preferences about their 'partner'
- if mentor and mentee do not get on, they have to be able to say sorry it won't work and there has to be someone to say this to
- personal chemistry matters - different people have different needs and preferences
- a critical matching criterion is career focus – research, management or teaching
- mentors and mentees should not be too far apart in terms of hierarchy or age

**Mentors' attributes** - the projects were clear that mentors need more than altruism. Willingness to commit time, interest and enthusiasm, good people skills, the ability to listen, friendliness and approachability were essential, as were:

- relevant experience/knowledge/success
- ability to identify and offer challenges, to motivate and encourage
- openness/willing to share something of themselves/confidence to share their experience
- honesty and ability to keep confidences
- ability to give constructive feedback and problem solving skills

**Mentees' preparedness** – was important, mentees needed clear personal and professional goals (Bolton's mentees undertook skills audits and personal development plans) and to be open-minded, self-aware, able to recognise their own weaknesses, willing to learn and confront challenges and able to give and receive feedback.

**Male or female mentors?** - the arguments in favour of male mentors reflected the male domination of SET, and the need for women to learn male strategies to succeed 'in male clubs'. The arguments for women mentoring women were many:

- mentoring is a powerful one to one relationship and open to abuse
- women have different experience of the life work balance
- women perceive a glass ceiling which men do not recognise
- men and women have different learning styles
- women who have coped with similar circumstances have greater insight/ provide role models
- it is easier to talk to another woman and develop a sister relationship

**Internal or external mentors?** - the decision depends on circumstances and practicalities such as institution size and the scheme's aims. The main argument against external mentors was that they would not be familiar with the constraints and opportunities in the mentee's HEI. The arguments for external mentoring included:

- confidentiality not a problem
- networking opportunities/provides wider horizons/experience of different environments
- mentors have no preconceptions about their mentees
- no internal politics, no mixed agendas for the mentors and careers advice dispassionate

**Mentors' training** sessions provided information on: the scheme's approach, the support available to mentors and mentees, the mentoring process, how to structure initial and subsequent meetings. It gave the opportunity to role play mentoring scenarios and discuss their own experiences of mentoring, the expectations of mentors and mentees and the

anticipated benefits of mentoring. The training covered what mentoring is, how it differed from coaching and counselling, the mentoring relationship and the importance of:

- mentors not getting involved between the mentee and their line manager
- recognising that lack of time and commitment on either side will get in the way
- balancing professionalism and friendship
- the mentoring contract which provides the ground rules for the relationship

The sessions led to the development of informal mentors' networks, and, as Bolton found, a number of potential problems never got as far as the project manager, they were resolved in conversations between mentors.

## MENTORING - BENEFITS FOR PARTICIPANTS

The benefits for **mentees** included practical advice and information on:

- career progression, CVs, interview, oral/ written communication and publication skills
- interpersonal skills and assertiveness
- managing workplace demands and stress, prioritisation and time management
- gender issues in management - people, politics and power
- women's experiences in the mentor's field
- balancing career and family
- how things work/insight into other departments/fields/industry

Mentees rated highly the networking, support and guidance, and having someone (impartial) to talk to, who helped them improve their self-confidence/belief/awareness/ skill recognition, and who encouraged them to do things to further their careers that they would not have done otherwise. Bolton asked mentees what tip from their mentor they valued most. These included:

- 'stop doing start thinking'
- 'if you don't ask you don't get'
- 'do research, don't put it off'
- 'publish'

For **mentors** it was looking in the mirror, with their mentees going through the same problems as they had - the importance of power, politics and personalities had not changed. They reported:

- improved listening skills and learnt (mainly IT) skills from their mentees
- networking/reduced isolation
- satisfaction and pleasure in seeing skills transferred

- a sense of achievement when mentee overcame problems where they had stumbled
- seeing things from a different perspective
- being able to reflect on their own past experiences
- increased self-awareness, encouraged self-reflection and renewed self-confidence

## Mentoring - Learning and Key Findings

The projects were clear that:

- mentoring costs money and absorbs resources, most particularly time
- for mentoring to succeed mentors and mentees need to be committed
- having a mentoring scheme signals the commitment of the institution to its women staff
- mentoring should be voluntary- it is better if women want to be involved from having seen it working around them and if they can opt in or out
- there is no ideal time to offer mentoring
- mentoring is active listening/ finding out what is really being said
- the mentoring relationship should either be time limited or end when either partner feels it is no longer of value
- personal chemistry is key to an effective relationship with support by a mentor who is friendly, easy to talk to and with the capacity to inspire trust
- men can successfully mentor women if the matching is right
- the role of mentor needs to be distinguished from line manager or academic supervisor
- mentors need feedback on their impact
- mentor training is essential a day should suffice for mentors with life skills
- mentees benefit from the same training content as mentors but delivered separately
- mentees should review their progress against the objectives they set at the beginning
- drawing up action plans after meetings is valuable for mentees
- skills audits/personal development plans give clarity on what mentees can get from mentoring
- young women in SET are under enormous time pressures and will only give up precious time for activities which they see as clearly offering 'added value'
- mentoring reduces isolation and can provide a powerful support mechanism for some women
- potential mentees may lack the confidence to participate and those who get missed out are often those who need it most

## INSTITUTIONAL IMPACT

Although the impact of mentoring on staff retention and progression could not be evaluated in such a short time, the project HEIs were clear on the institutional benefits. Apart from enhancing their reputations as caring employers there were significant institutional benefits. Mentors and mentees motivation improved. Management, leadership, interpersonal skills and communications between different levels of staff and

departments were improved. The HEIs recognised the institutional impact of senior academics becoming mentors – 'they saw their institution through different eyes, they realised the differences between the culture and attitudes of different departments and understood the obstacles that young women face in progressing their careers.'

The Nottingham and Loughborough project was the only one which offered a significant personal and professional development programme (a five-day course, 25 participants, held off-campus with women mentors for all

participants). As part of their project programmes, Imperial and the University of East Anglia also offered less structured development opportunities for the same group, post-doctoral women in SET.

## Why Staff Development?

The rationale for staff development, as a way to encourage women to stay in and progress their careers in SET, was similar to that for mentoring:

- men frequently benefit from the advice/support of senior colleagues, but women often do not have that support
- women may be working in an environment with few senior women role models
- lack of self-confidence and lack of adequate mentoring are barriers to advancement
- women tend to hold back when opportunities arise/wait too long before applying for promotion
- women assess their skills more critically than men
- women need to focus on goals
- it would help create an environment where women would fulfil their potential by raising the awareness of the problems faced by women in SET

In the longer term (5-10 years) Nottingham and Loughborough anticipate:

- more job applications, grant applications, promotion applications by women and more women members of University Committees
- fewer women leaving a research/academic career
- a gradual change in the culture of laboratories and research groups as women become more effective at exerting their influence

**The Nottingham and Loughborough course** targeted post-doctoral staff, where their loss of women was greatest. It was designed to encourage participants to progress their research and academic careers and indirectly to influence institutional culture, attitudes and behaviour.

Among the topics covered were:

- writing grant proposals
- managing a research team
- applying for jobs.
- being effective on committees

The course included small group work, videotaping participants, role playing and, importantly, talks by women achievers in SET. These last were enthusiastically received. The strategies adopted in career development by successful women gave the participants significant encouragement.

## STAFF DEVELOPMENT - BENEFITS FOR PARTICIPANTS

Initially Nottingham/Loughborough had difficulties in recruiting participants. This difficulty was shared by Imperial. Women were concerned at being associated with a gender specific activity, and the perceptions of their male colleagues. However, the content of what was offered was well received by participants. As one of them commented 'at the end of the day it will be the quality of research which allows you to progress, and that can't be taught. However I should now be able to make the most of the opportunities which come my way.' All the participants were clear that the course had empowered them by:

- helping them to clarify their personal and professional goals
- preparing them to create/take advantage of opportunities for career enhancement
- identifying their strengths, abilities and opportunities for professional and personal growth

- enriching their performance in their present job
- giving them confidence in expressing their opinions
- improving their assertiveness
- getting them to start networking effectively
- discussing situations, finding they were common and could be overcome

In the longer term the careers of programme participants will be tracked. Participants will be expected to notify, in confidence, details of positions applied for/grant applications made and applications for internal promotion will be monitored. One year after the programme end participants will be surveyed on the impact of the programme on their career.

## Staff Development - Learning and Key Findings

Nottingham and Loughborough agreed that:

- career development courses specifically for women are particularly valuable
- lack of adequate childcare facilities / support from colleagues is a major problem for women at the post-doctoral stage
- HEIs need to provide active support for part-time working and job sharing
- shared experience and mutual support networks are important for women in male dominated environments and put problems in perspective
- the courses demonstrated the potential for developing research collaborations
- the course created a strong network among senior women and post-doctoral research staff which provided the basis for advice and counselling among women in SET
- the difficulties in recruiting women onto the programme were linked to the perceptions of male colleagues
- the reservations of potential participants were a reflection of the significant number of men in SET who need a wider appreciation of the particular problems which women encounter and which may lead to their dropping out of SET
  - the lack of role models
  - balancing family and professional commitments

## INSTITUTIONAL IMPACT

The longer term effect on staff retention and promotion cannot yet be predicted, however there are some immediate institutional results. As a result of the difficulties they initially experienced in recruiting women onto the course, Nottingham/Loughborough have recognised the need to address a range of

equal opportunity and research staff career development issues. They are working with heads of school (most are male) to develop a better awareness of the realities of equal opportunities and family friendly practices, and an understanding of the career development needs of those who have to balance family and career commitments.

The University of East Anglia (UEA) developed a low cost self-sustaining network of SET women post-doctoral researchers which included the Norwich Research Park. Their programme of activity was designed to provide information,

develop confidence and skills, and influence attitudes, with workshops, visiting speakers, successful women role models and peer support.

## Why a Network for Research Staff?

UEA's rationale was that women do not lack the ability to do a job but often lack the confidence to take themselves seriously as applicants; so the more women understood about the processes at work, the better they would be able to manage their career development, make conscious choices, and improve their chances in the HE job market:

- researchers are:
  - critical to the success of research in universities
  - one of the most invisible and disenfranchised groups of staff in HE:
  - highly focused on immediate tasks; commitment is often measured by hours 'at the bench'
  - unless they are looking for a career change, unresponsive to the training offered in HE
- a network would:
  - raise awareness of the current situation of women scientists
  - provide a forum where common concerns could be explored
  - encourage women to expand their views of their career in science
  - increase the visibility of women in SET
  - enhance and encourage communication, the exchange of ideas and contacts

**The UEA network** was defined as 'a voluntary meeting to bring together people with common interests for mutual help, support and contact.' It was not seen as lasting forever, but as becoming sufficiently embedded to continue for several years. The network was linked to UEA's Centre for Staff Education and Development. A project officer provided guidance, administration and support for the co-ordinating group of women researchers. Membership of the group was itself developmental, and was to be time limited, with members actively 'growing' the next cohort.

The programme of ten events, attended by some 300 women, recognised the importance of role models. Women speakers, many with a science background, shared their experiences. The events were chosen, organised and hosted by the co-ordinating group of research staff, who gained confidence from the experience. The sessions, mostly at lunch times to fit round work, included:

- life of a female education correspondent
- joint career development - is it possible?
- career development for women scientists - a research council perspective

- the presentation of the career survey results to senior managers
- opportunities for women in the EC – fifth framework funding
- managing your manager

The network members wanted to influence management, create change and increase the visibility of women in science. They were advised that, if they wanted to be more than a marginal group, and to win a mainstream hearing, they would need evidence - data not anecdote, intuition and ideology. They undertook a survey of perceptions of career development at UEA and the Norwich Research Park. *(their findings are included in the section on careers)*

**Email networks** – Two projects set up successful electronic discussions. The UEA email network had a 54% success rate and was a valuable means of communication. The OU set up an electronic conference for its associate lecturers to contribute to their survey and as an open forum. Imperial hoped its email group might 'net' the most isolated women, who did not want a mentor, might not be interested in workshops, and who did not like/wish to be seen

to participate in gender specific activities. Imperial, like Nottingham/Loughborough who set up a self-help network, with email bulletin boards for mentors and mentees, found that little use was made of them.

## NETWORKS - BENEFITS FOR PARTICIPANTS

All the 1999 development projects involved networking, and their participants recognised networking as a positive benefit. The UEA network has now been expanded to other subject

areas. UEA participants were clear about the personal benefits of their involvement, they:

- welcomed research staff issues being taken seriously by their university
- used the survey information locally to improve their departmental situation
- benefited from belonging - being part of the university and having greater visibility
- found where to go for information on their rights
- enjoyed the contacts and the shared learning
- recognised that their eyes had been opened to the realities of research careers

## Networks - Learning and Key Findings

UEA concluded that women are too willing to believe that the answer lies in training, when what they need is to remind themselves of their existing capabilities and have the confidence to actively pursue their own development needs. This makes it important to raise awareness and to politicise, as well as to inform. Only when individuals take responsibility for their own careers, can they properly take advantage of the training opportunities provided. They also found that:

- researchers want to focus on mainstream research issues not just issues affecting women
- issues of self-esteem and self-confidence are not peculiar to researchers but to all women and the needs of women early in permanent academic appointments are similar to those of women researchers
- their network succeeded because it built on an existing programme (*Springboard*)
- the programme developed by the research staff themselves was more imaginative and appropriate to their needs than the more generic events that had previously been offered as part of the staff development programme
- it is easy to underestimate the organisational experience gained by the co-ordinating group - the skills are transferable and build confidence, but take time to develop
- networks need an 'umbrella', to give administrative support and guidance
- research staff only have limited time and should not be expected to take on additional administration
- networks are not unions, there is a tightrope to tread between campaigning, development and influence
- the focused nature of research work and the way research staff are employed makes them a difficult group to reach, they do not find it easy to take time out for their own development
- women researchers do not want a feminist network but value the opportunity for discussion and to ask questions in a single-sex environment

The findings on the use of email discussion groups were less positive

- they take time to establish and it's important to keep circulating regular information
- in some cases they were more likely to be seen as another burden rather than support
- an email discussion does not help women who feel isolated- it does not help them to network

## INSTITUTIONAL IMPACT

UEA senior management's awareness of career issues for junior staff was significantly raised by the network's survey. Their results provided a wealth of information on the profile of UEA research staff community: their views, careers, aspirations, expectations and perceived obstacles. Sheffield Hallam has established a network of senior women as a

result of their project. Nottingham/Loughborough and UEA are founder members of two of the Local Academic Networks established in autumn 2000. Bolton has joined another of the Networks and Imperial is will be organising an annual networking event for all its female academic teaching and research staff.

# CAREER CHOICES BARRIERS AND CONSTRAINTS

The UEA, Sheffield Hallam and the Open University surveyed their staff on career perceptions and progression. UEA, to understand why so many researchers dropped out in their thirties, the choices women made and whether they differed from those made by men. Sheffield Hallam, to establish what barriers there were to women's progress. Both used the results to raise interest

within their universities, present hard facts to senior management and to move the issue of women in SET higher up the agenda. The OU surveyed women associate lecturers' (ALs) career experiences, the barriers and constraints they had faced, the compromises and choices they had made to progress, mark time in, or exit SET careers in HE.

## Why Look at Careers and Career Choices?

Imperial's report gave short shrift to 'the explanations for the under representation of women which range from versions of women having the wrong brains to do SET successfully, to women rejecting SET because of its subject matter. To the women who had chosen science, such arguments are distant, and irrelevant, or border on the insulting. They tell women that they cannot succeed, or that there is something strange about wanting to do so. Notwithstanding these arguments different forces do seem to operate on women and men in SET: how else can the relatively greater drop out rate of women be explained?'

**The UEA research staff survey** results confounded expectations; there were no significant differences between women's and men's perceptions of career development, however:

- 71% of respondents accepted their first research post because they saw it as the first step to a research career, only 23% saw it as a stepping stone to an academic career
- longer term only 5% expected to move into academic posts, 34% were not interested
- 44% were dissatisfied with their career progress, only 24% saw it as fine or excellent
- men and women show similar preferences, but men seem to continue onto academic positions to a much greater extent
- women research staff start to lose out in salary terms after their mid twenties
- women recognise that to succeed they have to work harder at career progression than men
- becoming a parent makes a difference to career decisions, for women flexible hours became important, for men it was choosing safer options/financial stability/being less willing to move
- 33% of women rated the support from their principal investigator below average, compared to only 20% of men, 51% of women and 72% of men rated the support received above average
- 47% of men had worked elsewhere, compared with 26% of women
- 45% had contracts of 2 years or less, which

- they felt made it more difficult to publish
- researchers rated as the three most important factors in career development - performance in job, ability to write proposals, and publications record
- the tasks researchers undertook most frequently may have implications for career progression - analysis of data, fieldwork/ research experiments and menial/ housekeeping tasks
- about a third felt isolated/ill informed about the university and their own terms and conditions, 47% either did not have a job description/did not know if they had one

**The OU survey** explored ALs' perceptions of the effect on their careers of OU training and development, which allowed them to learn/update their teaching skills, widen their subject knowledge and become familiar with the use of new technologies. This was seen as a significant benefit to women who were new to HE teaching, wanted to re-start HE careers, to stay in touch during career breaks, or who had lost their confidence.

## SET CAREERS IN HE - THE DOWNSIDE

Many ALs had been employed in HE outside the OU. The OU report illustrates their experiences:

- full time research is not compatible with family responsibilities
- relocating with partner's work, or fitting in

- with their partner's career
- career breaks – SET expertise soon becomes outdated
- part-time work is scarce
- male domination – the hostile environment
- work culture/atmosphere – often reinforces male domination
- women feel they are not taken seriously as academics
- women experience exclusion in the present system

- women become child-carers, men will be the earners
- women are often expected to take on administration because they don't 'need' a career
- women's good will is used to give them a greater teaching load
- lecturing is more family friendly than research

Flexibility was the unsolicited word used by every other AL in her response.

## Careers and Career Choices - Learning and Key Findings

Career progression in SET is different for those who are single/childless, the choice of having children influences career plans/progression. The OU found:

- women had to choose between family and career because HE offers no middle ground
- the flexible part-time working and development and training opportunities that the OU offers point the way forward

The OU concluded:

- the barriers, compromises and choices involved in why many of their ALs are not currently employed in HE outside the OU, have significant implications for the retention of women in SET in HE generally
- other HEIs could increase the number of women they employ, by offering similar opportunities to those the OU has routinely provided for all staff including part time and short term ALs

UEA related its findings to the cultures of SET and HE employment:

- less flexibility in academia, compared to research, academic posts are usually full-time
- more women accept part time work/poorer pay in exchange for flexibility
- men at UEA do better in salary terms than women
- There is no management of researchers' work/career development by their Principal Investigators
- the SET bench culture of long hours demands a high level of presence as a measure of commitment - those who have the time can 'hang around' longer on weekdays and weekends
- the impact of the RAE - recent publications count more than publications over a longer time, less allowance for the quality of these papers/no allowance for slower career progression
- for researchers to make genuine/realistic career choices they need information/the active support of their managers, their institutions and the Research Councils
- research depends on large numbers of workers, career structures are necessarily limited, and women are likely to suffer more in career terms

UEA concluded:

- 'it is too easy for all parties to collude in the fiction that for the majority of research staff a long-term career in research is a viable option. This goes against the evidence of a significant exodus from HE of women researchers in their thirties. The beneficiary and exception is the Open University where 42% of part time science associate lecturers are women'
- 'although staff development can contribute to career progress, the real issue is the obstructions in institutional systems, which unintentionally discriminate against women'

## INSTITUTIONAL IMPACT

All the projects precipitated some serious management thinking on careers/career choices, and a recognition of the difficulties of balancing career and caring responsibilities. Imperial is addressing the issues it identified (such as long hours/expectations on performance) and will offer a programme of workshops on academic careers/balancing career and family. Nottingham/Loughborough recognised that many women

leave SET because of the lack of role models, insufficient support /mutual shared experience, inadequate child care facilities, and the lack of flexibility in work schedules and are working on this with heads of schools. The OU recognised that 'no research = no movement back to full time HE' and is now looking, internally and externally, at possibilities for developing research skills, update and refresher programmes.

# CONCLUSIONS ON THE 1999 ATHENA DEVELOPMENT PROGRAMME

The report provides examples of programmes that work; be they mentoring, networking or staff development, and of the ways such programmes can influence senior HEI management. The report offers some good starting points for HEIs, who want to increase the number and visibility of women staying in HE and progressing their careers in SET. The successes achieved by the projects, suggest a tripartite approach to improving the representation of women in SET:

- senior HEI management working with
- heads of departments/faculties/schools and in partnership with
- women in SET

**The commitment of senior HEI management** is the essential prerequisite to success. The first step is to assess the impact of their policies, practices and procedures on women. Then consider how to:

- retain those who become primary child-carers and offer more flexible employment terms, part time posts and job shares
- develop the careers of all staff, not just full-timers and permanent staff
- improve the management, motivation and career development of research staff
- find out what personal or professional development, management experience or skills training their women academics need
- assist women to switch between research and lecturing to allow for family commitments
- offer updating opportunities for women on career breaks and returner schemes and be more receptive to re-entrants who need to update their skills
- ensure that recruitment procedures are fair, equal, and transparent with a woman on the panels for all posts and monitor the outcomes
- clarify criteria for promotion and base progression on skills and excellence
- identify and address the structural blockages in their systems, the institutional policies, practices and procedures which unintentionally discriminate against women
- ensure proper job descriptions and advertisements for all posts
- audit pay differentials, gather data on recruitment and promotion in academic posts and share the results
- foster networks, mentoring and other support schemes

**Heads of SET departments** have a critical role to play in the implementation of policies and procedures and in appreciating the difficulties women face in a male-dominated environment. Their support is essential for the success of career development programmes for women and they will have to take their colleagues with them:

- principal investigators who have a major responsibility for the career progression of their research staff
- senior academics who may still see equal opportunities as political correctness
- women who do not see the need for/wish to be associated with women only activities/special treatment

**Women in SET** need to expect more of their heads of departments and their HEIs. This means talking less of luck, recognising their own value, believing in themselves, gaining confidence, being assertive, focusing on goals, picking up/creating opportunities for networking, mentoring, development and training and using opportunities for informing and influencing HEI policies, practices and procedures. Senior women need to understand their value as role models and recognise the benefits for all parties, including their HEIs, of mentoring and support networks.

Athena commends HEIs to consider including these suggestions for good practice in an action plan. Such a plan would be equally appropriate for all disciplines, not just SET. If followed through, these actions would also benefit men with caring responsibilities and all who find it difficult to achieve a satisfactory life work balance while enjoying their work and progressing their careers.

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The Athena Project was established in 1998 by the Commission on University Career Opportunity (CUCO) and since January 2001 is part of the Higher Education Equality Challenge Framework.

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Promoting SET for Women Unit, Office of Science and Technology, Department of Trade and Industry

## ATHENA 1999 DEVELOPMENT PROGRAMME PROJECTS

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### Athena Report No 1

Mentoring Women in SET

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### Athena Report No 3

Might Mentoring Help?

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### Athena Report No 4

Skill Acquisition and Mentoring During Early Career Stages

Nottingham and Loughborough

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### Athena Report No 5

Beating Barriers and Constraints in HE Careers

The Open University

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### Athena Report No 6

Progress-Developing a Mentoring Training Programme

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