

# **THE ATHENA PROJECT -**

## **Its aims, achievements to date and plans for the future**

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### **INTRODUCTION**

This paper describes the background, aims, programme and achievements to date as well as planned initiatives for the Athena Project which had its formal national launch in the UK in February 1999. The project's overall aim is to encourage strategies, promote good practice and offer incentives to improve the access, participation and promotion of women in science, engineering and technology (SET). Its focus is primarily directed towards increasing the number of women engaged as postgraduates, research staff, lecturers through to professors, and to facilitating initiatives which ensure their retention and progression in the Higher Education (HE) sector. Through discussion at the presentation, an aim will also be to learn from the experience in the US and elsewhere on successful strategies and implementation programmes.

UK statistics show that even in the biological sciences, where in 1997/98 61% of undergraduates were women, only 15% of full time (FT) senior lecturers and researchers and 7% of FT professors in these disciplines were women. In the physical sciences the corresponding figures were 37%, 7% and 2% respectively and in Engineering and Technology the figures were 15, 5 and 2%. Whilst time effects can offer some possible explanation, particularly in the last case, in the first two fields we should expect to see greater percentages of women at the higher levels.

A Government White Paper 'Realising Our Potential' (1) highlighted the importance of SET for the country's future economic growth and together with the findings of a subsequent report 'The Rising Tide' (2) concluded that 'women are the country's biggest single most under-valued and under-used human resource in SET' and that there is massive potential for attracting more women into SET. Consequently, the Government established a Promoting SET for Women Unit within the Department of Trade and Industry (DTI) to address the areas of attracting more girls into SET subjects at school; encouraging women into HE courses; identifying ways of improving women's chances of progression up the academic career ladder and encouraging women into careers in industry and at all levels of academic qualification.

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In 1995, the Scottish Higher Education Funding Council (SHEFC) established a 'Winning Women' initiative which aimed to encourage the development, dissemination and adoption of good practice in relation to women in SET. One of its outcomes was the publication of three guides to good practice in improving access to, participation in and subsequent progression through careers in SET for women in higher education institutions (HEIs). The Athena Project is building on this experience and findings.

The project is part of the Committee of Vice-Chancellors and Principals' (CVCP) Commission on University Career Opportunity's (CUCO) action agenda to remove the barriers to discrimination for women at all levels across HE. It is core funded by the Higher Education Funding Council for England (HEFCE) with support from the other UK HE Funding Councils and DTI. Core funding until 2003 has recently been secured. To achieve its aims the project is required to raise further funds through sponsorship for programme implementation.

A sister project, launched at the same time, is the Women in HE Register. The register's core business is the collection, analysis and dissemination of information on women in HE, collectively and individually. Whilst the Register will be open to all women in HE, it will initially concentrate on women in SET. The Register will therefore provide data and information analysis and IT support for the Athena Project which in turn will respond to identified needs and issues through the development and delivery of its programmes and through direct communication to the women via the WWW and email.

## ISSUES FOR THE SECTOR

The HE sector in the UK has been the focus of many changes in recent years and, like many other sectors, has had increasingly to respond to its many stakeholders including Government and its diversifying student base. Whilst **finance** is an obvious important factor for HEIs with the need to broaden their income base, a critical driver is **quality**. Institutions are differentiated through quality and hence their ability to attract quality students and staff. Research, teaching and professional development are all indicators of quality with the weightings dependant on the individual HEI's desired strategic positioning in the marketplace. Both potential students and faculty are attracted by the perceived quality of education and 'does it seem friendly to me' ie. the culture of the department and institution. Qualities sought in 'best staff' include those who are most active in research/teaching etc., those who motivate and inspire students who then stay and also promote their department and institution externally and those who offer continuity and commitment to the HEI. **Modes of learning, widening participation, continuing and life long learning, new technology** are all impacting on the sector with implications for flexible study and working modes. These are supported by the Government's agenda for raising the profile of family friendly policies and indeed promoting best human resource practice. Women undoubtedly have much experience, both technically and socially, to contribute to addressing these issues. The Athena

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Project and its aims are therefore directly congruent with the key HE sector drivers and hence the achievement of institutions' strategic and business goals.

## **ISSUES PERTINENT TO THE PROJECT**

The following are some of the factors, which are familiar to many in this field, that have arisen through consideration of research documents, conference proceedings and indeed from women in the system as well as from initial interviews undertaken with Vice-Chancellors, representatives of professional institutions and bodies, Research Councils and Trusts, industry, Government Departments and other stakeholders.

### **Culture, Attitudes and Behaviour**

It is recognised that there is an accepted 'laddishness'/macho culture in many of the male dominated SET disciplines and departments. This often results in behaviour and indeed management styles that are not conducive to encouraging women to join or stay in the institution. This behaviour can be consciously or unconsciously appreciated by the men involved.

### **Institutional Policies, Systems and Practices**

Recruitment and development procedures and practices may inhibit women applying and progressing. Are job specifications too rigid? Are job shares and fractional appointments considered? Are interviewers conscious that women frequently undersell themselves and trained accordingly? What arrangements are in place to support the management of dual career/career break/family caring responsibilities? Are they flexible enough and capitalise on the potential for using new technology? Are women encouraged and developed for senior posts? Do management and other development programmes incorporate equal opportunity/gender issues and the benefits of consensus management behaviour and skills which are more typically demonstrated by women and often dismissed in strong macho cultures as weak? Are statistics collected and monitored to indicate areas for concern such as imbalances between women undergraduate and women staff populations in different disciplines, are women not applying for positions? Are women encouraged and assisted to apply for research grants? Are areas for concern followed up for more qualitative feedback? Is there gender bias in teaching and assessment?

### **Research Staff and their Progression**

A study of peer review scores for postdoctoral fellowships at the Swedish MRC demonstrated that women had to be 2.5 times more productive than their male colleagues to get the same peer review rating for scientific competence. The Wellcome Trust in the UK have audited their decision making on grants and demonstrated that there is no evidence of sex-discrimination in the awarding of project grants, programme grants or Senior Research Fellowships in Basic Biomedical Science. However, there is evidence that women do not apply to the Trust for project or programme grants in the proportions that would be expected from the number of female academics working in UK

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universities. Together with the major Research Councils in the UK they have commissioned a research study on gender differences in grant application behaviour.

Senior, well qualified women are also increasingly being sought by programme evaluation committees for research and other public bodies. Identification of suitable candidates is an issue as well as encouraging organisations to actively seek women candidates.

### **Personal and Career Issues for Women**

The following, whilst not specific to every individual, are accepted as having general applicability: isolation issues particularly for women 'survivors'; loss/lack of self confidence; acquiring general career and personal development skills and knowledge; availability of networking, role models and mentoring schemes; development for higher professional recognition eg. FRS, F.Eng; managing careers and family; addressing the macho culture; awareness and marketing of SET careers in academia to different target groups.

Addressing many of the above, which are not exhaustive, would benefit men as well as women and lead to more competent people and institutions which are adopting best practice human resource and organisation development approaches. It may also help to identify why women are not applying for SET research and academic positions as well as grants.

## **ATHENA PROJECT'S ROLE AND PROGRAMME**

In response to the issues identified the Athena Project is focussing on three primary areas:

### **1. Personal and organisational development**

- Training and Development programmes for individuals
- Culture and institutional practices

### **2. Facilitating and funding initiatives**

- Development Project Grants to HEIs
- Addressing cross-sector issues
- Special projects
- Awards

### **3. Collecting, analysing and disseminating information**

- Information conduit
- Research and Consultancy
- Monitoring and responding to initiatives

To date, it has concentrated on the first two but work is starting on the last. In May 1999, HEIs were invited to bid for funds to undertake action projects which addressed Athena's

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aim and in particular the key issues for women in SET identified within the sector. Given the short timescale allowed, of necessity, for submission and also the relatively modest amount for the grants the calibre and number of responses was very encouraging. Twenty six bids were received and projects in the Bolton Institute, Imperial College, Nottingham and Loughborough Universities in a joint project, Sheffield Hallam and the University of East Anglia received Athena Project Development Grants. Each project had to demonstrate the support of their senior management, potential for development of good practice for dissemination to the sector and have matching funds from their universities.

A study has also been commissioned, from the Open University to identify issues and lessons arising for women in the progress of their careers in SET whilst in part-time employment in HE.

A workshop was held in November 1999 for all institutions which had made bids. Its aims included:

- sharing successful project proposals and plans with other HEIs
- providing a forum and opportunity for HEIs committed to Athena's aims to network and share experiences and ideas with the potential for the development of future projects and initiatives
- identifying good practice currently in the sector
- receiving feedback which will inform Athena's future strategy/activities, and
- exploring the potential and benefits of networking between HEIs and other organisations.

The successful 1999/2000 Athena Development Grants focussed on personal and career development projects, including mentoring and networking. A conference is planned for November 2000 to disseminate the findings and outcomes of these to the HE sector. Bids for the 2000/01 Awards are being invited to address institutional practices, systems and culture eg. making policy into reality, reviewing, benchmarking and developing good practice which facilitates sustained organisational change. Funding and sponsorship are being sought to support further Athena Development Grants and other initiatives to be undertaken at local and national level over the next few years. It is recognised that significant change and Athena's aim can only be achieved by working in partnership with others and sharing experience, enthusiasm, ideas and resources and that there are no quick fixes for changing culture, attitude, behaviour and systems.

Establishing the project in order that it can operate, be credible and effective at different levels to achieve its aim has been a primary goal and a challenge during the first year. Ensuring that the project could engage with and, hopefully, influence key policy and decision makers in their thinking as well as initiate and support projects both in individual HEIs and across the sector has been important. Champions at Vice-Chancellor level as well as supportive Members of both Houses of Parliament keep the issues raised on different agendas. Having HEFCE and the other UK HE Funding Councils, DTI, and CVCP as core sponsors and a respected steering group chaired by a leading female

academic Professor Julia Higgins has been crucial. There is already evidence that the Athena branding for projects is proving beneficial within the institutions that have received grants.

The Women in HE Register (WHERE) and the Athena Project recently supported the Parliamentary Office of Science and Technology (POST) by running an on-line discussion on Women in SET. A draft of the full report was given as evidence to the House of Lord's inquiry into the 'Science and Society'. Athena and WHERE are planning to progress the parts of the action agenda arising from the discussion which are relevant to the HE sector.

## **THE FUTURE**

Stimulating initiatives and disseminating the findings, outputs and good practice from Athena funded projects and elsewhere will be a priority. Building regional and local contacts and networks will facilitate this and be particularly helpful to establishing broader based mentoring schemes. Personal, professional and career development programmes will be developed and run subject to securing programme funds. These are planned in the areas of leadership, management and professional development and making EU Research Funding Applications. Closer links are being built with the European Union - Network of Networks for Women in SET and inputting into the debate arising from the ETAN Report 'Science Policies in the European Union: promoting excellence through mainstreaming gender equality' (to be published). Developing the capacity of electronic communication combined with the resources of the WHERE database of women in SET needs to be explored and exploited.

The author wishes to seek the input of other delegates and organisations and to learn from the experience in the US and elsewhere on successful, and indeed unsuccessful, strategies and implementation programmes.

The above aims to give a flavour of some of the initiatives planned which the presentation will expand upon.

## **REFERENCES**

1. Realising our Potential, A Strategy for SET (Cm2250), HMSO, London, 1993
2. The Rising Tide. A Report on Women in SET, HMSO, London, 1994

<http://www.athena.ic.ac>