

ATHENA PROJECT



The Athena Project 1999 to 2007 - Making a Difference

Based on a presentation made by Caroline Fox, Athena Programme Manager at the American Association for the Advancement of Science Annual Meeting in Boston February 2008, at a joint seminar with the the National Science Foundation's ADVANCE Program, and Science Foundation Ireland's Institute Development Award Program - *Looking Across the Ocean: Increasing Science and Engineering Women Faculty in the United Kingdom, the United States and Ireland.*

Caroline Fox was one of the small group, including Professor Dame Julia Higgins, and Dr Nancy Lane, who originated the Athena Project, which was launched in 1999. Caroline was a member of the Athena Committee through to December 2007 when the project closed, Athena Programme Manager from 2001 to 2007. She is now advisor to the Athena Forum, consultant to the Athena Partnership and a member of the Athena SWAN Charter Steering Committee.

Introduction

The presentation describes key aspects of the Athena Project, which was set up in 1999 to make a difference to the career progression of women in science in UK universities.

The people, the members of the Athena Committee, who 'made' the Athena Project, where they positioned Athena, and why it was different from other UK women and science initiatives.

The way Athena made a reality of its aim

To advance and promote the careers of women in science, engineering and technology in higher education and research and to achieve a significant increase in the number of women recruited to top posts in the UK

was by working in partnerships with universities and leading professional and learned science societies. This work identified, developed, encouraged, disseminated, celebrated, and measured the good practice that made a difference to women progression in academic science.

Athena's achievements - some 80 UK universities (over 70% of those with any significant science faculties) took part in one or more of Athena's programmes. Athena kept women's career progression in science on the agenda of university management. The project focussed on what could be done, the good practice that was in place and working in universities and science departments. Most importantly Athena removed the excuses for not doing anything. Athena's reports and case studies provided examples of good practice, and Athena's Surveys of Science Engineering and Technology (ASSET) provided hard evidence on which action could be based.

Athena's legacy, what is in place for the future and what still needs be done to achieve Athena's aim.

The People who ‘made’ the Athena Project

Athena's Steering Committee were, in the main, distinguished women scientists, who were personally committed to Athena's aims. They had worked in the right places, they knew the right people, and were more than prepared to use their influence, connections, and personal networks, on behalf of Athena. As a group, and individually, the committee created, recognised, and took opportunities, and they recognised, celebrated and cherished the successes of the groups and organisations with whom they worked.

What none of the committee had was time to waste on bureaucracy, or standing on ceremony. And, their steely determination ensured that Athena did nothing to take the responsibility for action away from those who held it, the professional and learned societies - the science policy and decision makers, and universities as employers, and the gatekeepers to serious science careers.

What the committee wanted was action, not research. Before Athena was set up in 1999 considerable energy had gone into identifying the issues and the problems of women's career progression in science; but much less into taking 'practical' action to address them. Given that Athena's initial funding (from the Higher Education Funding Council (HEFCE) and the Office of Science and Technology at DTI) was for just four years, Athena needed action and success in a short time frame.

Why Athena was different

The Committee's own power base was the science community. The problem of women and science lay within the science community as a whole. The delivery of change had to be via that community, science had to own the changes that were necessary, and if science did not own Athena, the project was not going to work. The committee knew how easily scientists could demolish, steam roller, or just ignore initiatives which came from central university management, from HR, equal opportunities, diversity or staff development.

The committee had seen a lot of 'worthy' schemes, which had engaged early career women scientists, had taken their time, but had not changed the system, challenged the culture, or made any lasting changes to the workplace environment. So, Athena engaged with Vice Chancellors, Pro Vice Chancellors, Deans of Science, Engineering, and Research, and senior university managers. Athena appealed to universities and scientists competitive instincts. It became a niche brand, recognised and valued by Vice Chancellors and for women scientists it gave a national validation.

Athena made a difference, it gave leadership. Athena was successful. It was independent, and free to deliver what its committee saw was needed. The committee listened to experts, colleagues in the scientific bodies, universities, and departments, who were at the leading edge of good practice. Athena disseminated what it learned from its partners, published reports and disseminated good practice through the network of individuals, universities and departments who took part in Athena's programmes.

The focus of Athena's work

The Athena Committee did not want to reinvent the wheel, nor did it want what Athena had worked for to disappear when the project ended. They needed to be sure that the changes made by universities and departments would not unravel, as people moved on/changed jobs. But, first, Athena had to identify, the good practice that was 'out there', before it could encourage, disseminate, or celebrate it. And, Athena had to ensure its legacy – the task could not be completed within the lifetime of the project.

Identifying, Developing and Encouraging Good Practice

In practical terms, quick wins were needed, to develop and then to consolidate the Athena 'brand'. The project had ring fenced funding from the HEFCE for grants to universities. For the first two years competitions were held, open to all UK universities, for good practice development grants. The grants were small (the largest was £10K), the universities that received them had to commit matched funding, and their Vice Chancellors were asked to endorse their bid, with a statement as to how what was proposed would contribute to the universities' academic missions.

Year one university development grant projects 1999/2000

Seven universities ran women's mentoring, networks and career development programmes. The projects made, and continue to make a difference to the individuals, both men and women, and to the universities which took part, and to others who learnt from them. They gave Athena its first good practice case studies to disseminate, they showed what could be achieved in a year, and built grass roots support for Athena.

Year two university development grant projects 2000/2001

Having occupied the lower ground - supporting women in a man's world, Athena's sights were raised - to changing the culture. The five universities awarded development grants, choose to do this through changes in key processes - promotions and committees. The networks that evolved through the year one projects were so successful that they were continued and new ones were funded. The networks adopted the name coined by one of them – 'Athena Local Academic Women's Networks' (Athena LAWNs), some of them are still active in 2008.

The university projects involved some 15 very different universities (from an HE College to the 'golden triangle', and from Plymouth to Saint Andrews) and the universities who received the development grants became Athena's ambassadors. They provided a support network for each other, and role models for other universities who were interested, but uncertain where to start, what to do, and how to do it. Some of the universities also made major contributions to Athena's successes later on.

Athena's first two years showed how small, simple changes could make a difference. Individual changes were low cost, other than in people time, but built together they started to influence the processes and cultures of academic science. The development projects were successful but effectively emptied Athena's coffers.

Celebrating, Disseminating and Measuring Good Practice

The Royal Society stepped in with three years core funding and office space for Athena. For two years, 2002 and 2003, Athena celebrated and disseminated good practice with its Royal Society Athena Awards.

In 2003 the Office of Science and Technology, DTI, asked Athena to report on the state of good practice in UK universities, to complement the Athena's *Guide to Good Practice 1999 to 2002*. The guide was Athena's first formulation of the good practice approaches that worked, arrangements which encouraged good practice, and the commitments and leadership from university and departmental management that were necessary if good practice was to become embedded, and cultures changed.

For the DTI report a check list was designed, based on what Athena had learnt from the work of its partner universities. The checklist, completed by 28 universities, showed that at university and senior management level the 'right things' were being done, the policies were in place, however, follow up discussions, almost universally showed how little certainty there was at university, senior management level about what really happened in departments, other than that the picture would be patchy.

Athena recognised that the professional societies were the key to accessing departments and influencing behaviour in the workplace; so started work with the Royal Society of Chemistry (RSC) and Institute of Physics (IOP), both of whom were already actively engaged with women and science programmes.

Athena adapted its university good practice checklist, for a joint project with the RSC, which explored good practice in 25 UK chemistry departments. The resulting report on Good Practice, published in 2004, identified (three) key performance indicators for science departments, based on previous work by Athena, the RSC, and the good practice identified in chemistry departments. The indicators flagged the areas where action was needed if departments wished to become and remain employers of choice, and to provide an environment in which men and women could enjoy successful, sustainable and rewarding careers in science.

Providing Evidence - Athena's Surveys of Science, Technology and Engineering (ASSET)

In 2003, Athena had a small sum left from its HEFCE development money; not enough for another development grant round, but which could only be spent in grants to universities. One of Athena's first networks, at the University of East Anglia (UEA), had undertaken a survey of post docs to provide hard evidence for their Vice Chancellor on the differences in men's and women's career progression. They raised extra funds, and their survey was professionally run and reported, by the university's survey office. The following year another university ran a similar survey as part of their project, and then asked Athena for funding to run a comparative survey in another university. The proposed outcome did not really justify the cost, but the idea was attractive. The problem was solved by the University of Bristol who had recently developed a web based survey for post docs. Athena used this as the basis for its ASSET survey of SET academics. Grants to Bristol to develop and run the survey and to UEA for the analysis of the results used the last of Athena's HEFCE funding.

The 2003 survey covered male and female scientists in 23 universities. The 2004 survey covered 17 more universities (and five UK's Research Councils), with a third open access in 2006, Athena had evidence of the views, experiences and expectations of the career progression of over 13,000 scientists and engineers working in the UK, including some 9,000 plus in higher education and research.

Recognition of Good Practice - Athena SWAN Charter and Award Scheme

One of Athena's local networks (LAWNs) tweaked the terminology to SWAN - Scientific Women's Academic Network. SWAN won a Royal Society Athena Award in 2003, for its interdisciplinary cross institutional network and its proposed National Charter for Women and Science. In 2004 Athena was offered European Social Fund support by the recently established UK Resource Centre for Women and Science (UKRC), to develop what became the Athena SWAN Charter. The Charter was launched in 2005, with ten founder university members included Oxford, Cambridge, Imperial and University College London. The first SWAN awards were made in 2006.

There are now 31 university members, three universities have received Silver SWAN awards (12 Bronze University SWANs) one SET department has received a Gold SWAN (3 Silver departmental SWANs). The future of the scheme is assured with core funding from UKRC and the Equality Challenge Unit (where the Athena SWAN office is based).

Athena's Legacy – The Athena Partnership

The Athena Partnership is a grouping of STEM professional institutions and learned societies that are committed to fostering good practice in higher education science, technology, engineering and mathematics as part of the legacy of the Athena Project. The founding members are the Athena Project, IOP, RSC and the UKRC. The main aim of the partnership is to leverage the existing work in good practice and diversity of these founding members by making the tools that they have developed available for use by a wider range of STEM professional institutions and learned societies in their work with university departments and elsewhere within their disciplines.

Membership of the Athena Partnership will enable professional institutions and learned societies to support higher education departments in their respective disciplines and Partnership members are committed to taking action to achieve the aims of the Athena Project, working on a collaborative basis, and supporting ASSET.

As membership of the Partnership expands more university departments will be able to look to their professional societies for encouragement and practical guidance, and as other professional societies adopt the IOP's Juno approach, information will be more readily available to potential staff and student as to which are the good practice departments.

More recent work to revise the joint Athena RSC Good Practice in University Departments, and work on with IOP on the development of their Juno Code of Practice for university physics departments has refined the previous three indicators into five:

- A robust organisational framework for action (to deliver equality of opportunity and reward) which includes evidence and data, plus leadership, management and resources)

- Appointment and promotion processes that encourage men and women to apply for academic posts at all levels

- Career progression arrangements and developmental activities that are managed and supported

Departmental culture and values, its organisation for decision making, resource and workload allocation, and communications that are open and inclusive

Flexibility across the working day, working year and working life to maximise individuals' contributions to SET at all life and career stages (including career breaks and returning)

The IOP Juno Code of Practice uses these indicators as the basis for its principles, and the indicators form the basis of the revised good practice checklist which will be published in the 2008 version of the Athena RSC Guide to Good Practice

Athena Legacy – Athena SWAN Charter

The Charter continues to grow and indications are that the number of applications for SWAN recognition awards will grow steadily. SWAN and the Athena partnership are committed to working closely together. It is anticipated that the SWAN Committee's 2008 review of the recognition scheme will align the SWAN key assessment areas with the five key indicators which provide the framework for work by the Athena Partnership, making it easy to use Juno supporter and champion status as preparation by departments for SWAN silver and gold recognition awards.

Athena Legacy – Athena Forum

The Athena Forum's mission is 'to provide a strategic oversight of developments that seek to, or have proven to, advance the career progression and representation of women in SET in UK higher education and research.' The Forum will be the expert voice from within and for the science community. The Forum will, while exploring gaps and challenges, focus on identifying and commending national and international excellence in supporting women in STEMM (Science, Technology, Engineering, Mathematics and Medicine).

Athena Legacy – Athena Survey of Science Engineering and Technology (ASSET)

The potential value of ASSET for the STEMM higher education and research community is recognised by the Royal Society and the RS is committed to work with the Athena Forum to publish further reports on findings from the 2003, '04 and '06 surveys and to evaluate the use of the findings. Based on this work, the RS and the Athena Forum will decide whether and how future ASSET surveys might best be run to maximize participation and the use of the results to influence policy and action at both national and employer levels.

The Athena Project Reports and Case Studies are all available on www.athenaforum.org.uk

ATHENA REPORTS AND CASE STUDIES IN ORDER OF PUBLICATION

Publication	Date	Organisation	Title	Brief description
Report 1	2001	Bolton University	Mentoring women in SET	Short report on their 1999/2000 pilot mentoring scheme for undergraduates, post graduates and staff, all female external mentors. The pilot was the forerunner of the North West Universities Mentoring Scheme
Report 2	2001	University of East Anglia	ResNet	Short report on self sustaining low cost network for contract research staff at UEA and on the Norwich Research Park set up in 2000 with findings from their career perceptions survey (the forerunner of ASSET).
Report 3	2001	Imperial College	Might mentoring help	Short report on a range of mentoring strategies piloted in 2000. the scheme was later rolled out
Report 4	2001	Nottingham and Loughborough Universities	Skill acquisition and mentoring during early career stages	Short report on their 2000 support programme for post docs which aimed to provide the skills and confidence needed for along term career in SET
Report 5	2001	Open University	Beating barriers and constraints in HE careers	Short report-findings from their 2000 survey of their Associate Lecturers, exploring why the OU was their employer of choice
Report 6	2001	Sheffield Hallam University	Developing a mentoring training programme	Short report on the development of mentoring training programme in 200 based on the results of a survey
Occ. Paper 1	2001	Athena Project	Women scientists in higher education a literature review	34 pager review published June 2001
Report 7	2002	Athena Project	Report on the 1999 Development Programme	14 page report on Athena's 1999/2000 development programme initiatives which were focused on women at the beginning of their careers
Report 8	2002	Athena Project	Athena Development Programme 1999 Good Practice Guide	10 page report draws together good practice from the programme and from key reports published in 199/00-ETAN, Wellcome Trust, RSC, Parliamentary Office for Science and Technology (POST)by
Report 9	2002	Edinburgh university	Bridging the gap	Short report on the under representation of women at lecturer level and overrepresentation at post doc level – women's attitudes to and experience of applying for lecturer posts
Report 10	2002	Heriot Watt university	The development and retention of academic women	Short report on why women leave academic SET-examines career barriers and promotion processes
Report 11	2002	Luton university	Inclusive committees	Short report on the representation and participation of women on university committees and resultant changes made
Report 12	2002	Oxford university	Encouraging applications from women scientists	Short report on the barriers to womens application for lecturer appointments and resultant changes/ and positive action
Report 13	2002	Surrey university	Moving up	Short report on career progression and promotion and resultant organisational- university and department changes
Report 14	2002	Athena Project	Local Academic Women's Networks(LAWNs)	Short report on the aims and activities of five networks set up in 2000
Report 15	2002	Athena Project	The Athena 2000 Development Programme	14 page report on Athena 2000/01 development programme with focus on career progression organisational and SET culture and processes
Report 16	2002	Athena Project	Athena development programme 2000 good practice guide	12 page report explores the precursors to success, the action plans and how their success would be measured by the five participating universities
Report 17	2002	Athena Project	New research on women, science and higher education	Short report of key themes from the Athena Research Conference September 2001
Occ. Paper2	2002	Athena Project	Gender Equity in academia; Lessons from the MIT experience	Text of first Imperial Athena Lecture May 2001 given by Professor Lotte Bailyn, Faculty chair at the time the committee of women faculty in the school of science at MIT submitted its report <i>a study of women faculty in science at MIT</i>
	2002	Athena Project	New research on women, science and higher education	76 page report on the proceedings of the Athena Research Conference September 2001
Report 18	2003	Cambridge	Women in SET initiative (WiSETI)	Short report on work by Cambridge on women's career progression
Report	2003	Imperial	Challenging culture the	Short report on College committees work on women's

19		College	Rector's committee on academic opportunities	career progression and changing the college culture
Report 20	2003	Queens University Belfast	Addressing the gender imbalance	Short report on the university wide senior management led approach (listen, implement, embed) to tackling gender imbalance in all areas
Report 21	2003	University of East Anglia	ResNet 2002 the maturing network a powerful tool	Short report on the continuing success of the network for post- docs set up in 2000
Report 22	2003	Athena Project	Athena Guide to good practice 1999 to 2002t	34 page report which draws together the good practice developed by universities taking part in Athena's programmes between 1999 and 2002
Report 23	2004	London Metropolitan university	SWAN- Scientific women's academic network	Short report on work of the network from which the Athena Swan Charter recognition scheme developed
Report 24	2004	Loughborough university	Embedding gender equality and diversity	Short report on a decade of work in embedding gender equality throughout the university
Report 25	2004	Oxford Brookes university	European women in mathematics web based mentoring scheme	Short report on the development of and learning from a web based mentoring scheme for early career mathematicians
Report 26	2004	Athena Project	ASSET 2003 The Athena survey of science engineering and technology in higher education	30 page report on the findings of a survey in Spring 2003 of 2172 male and female scientists in 23 UK universities covering the links between the activities which influence their career progression, their career aspirations and perceptions and experience of practices which can act as barrier to career progression
RSC publication	2004	Athena Project and Royal Society of Chemistry	Good practice in academic chemistry departments	32 page report on joint work to identify, validate and disseminate the good practice which characterises a supportive department
Case Study 1	2004	Bolton University	Mentoring a regional scheme for women academics in SET	Short case study of the key features of the scheme which developed out of the pilot run in Athena first development programme 1999/00
Case study 2	2004	Edinburgh university	Career progression a range of complimentary initiatives from 1996 onwards	Short case study of ten years of university activities designed to support and promote equality of opportunity for women
Case study 3	2004	Athena Project	Update on Athena's Local Academic Womens Networks(LAWNs) 2004	Short case study on the activities of four local Networks in 2004
Case study 4	2004	Leeds university	Career progression- a review of the progression and promotion of women in the biosciences	Short case study on work in 2001/02 to identify why so few women bioscientists made the transition from post dos to lecturer and on into senior appointments and the changes needed
Case study 5	2004	Lincoln university	Career progression of women in HE management initiative	Short case study of Lincoln's 2002/04 initiative to equip women for senior management positions
Case study 6	2004	Oxford university	Career progression the university's career development fellowship scheme	Short case study on the university's positive action programme 2002 TO 2004 to develop promising staff at an early career stage and create amore diverse 'pool'of candidates for academic posts
Case Study 7	2004	Athena Project	SET good practice in higher education	6 page review of good practice in 28 UK universities based on a good practice checklist. Measures activity on mentoring, networks, appointment and promotion processes, organisation and culture progression
Occ Paper 4	2005	Athena Project	Getting There: The Athena surveys of the over 6,500 scientists in UK university and research institutions	14 page paper presented in September 2005 at the fourth European conference on gender equality in higher education
Occ Paper 5	2005	Athena Project	Maximising UK ASSETs	23 page report of Royal Society Equality Challenge Unit – Conference December 2005 Developing an action agenda to tackle the key issues identified by ASSET Athena Survey of Science Engineering and Technology
Report 27	2005	Athena Project	ASSET 2004	31 page report to the UK Research Councils and the Wellcome Trust Sanger Institute on ASSET 2004