

MENTORING WOMEN IN SET



The Bolton Institute project, supported by the 1999 Athena Development Programme, was to set up a mentoring scheme for women in science, engineering and technology (SET) based on the development and use of personal development plans for mentees. The project's aims were to:

- raise the profile of women staff and postgraduate students in SET within the Institute
- enhance mentees' development and enable them to realise their full potential
- increase self-confidence and reduce feelings of isolation in a male-dominated environment
- help women become more able to cope with the 'laddish' culture of some SET departments
- increase the number of female postgraduate students in SET
- encourage women researchers to submit more bids for research grants
- encourage women academics to apply for / take on more senior / managerial roles
- raise students' awareness of postgraduate opportunities and provide support for those embarked on postgraduate degrees

The project team's decision to have all women mentors was a positive choice, on the basis of:

- having a mentor of the same sex would help mentees to be more at ease and therefore develop a better mentoring relationship
- the perception of women who combine work and domestic responsibilities was that a mentor who had coped with similar circumstances would have greater insight and empathy with their situation and the life/work balance issues faced by women

'the project has been a huge help to me and I have been able to see how my mentor has achieved success in her job- how she copes with some situations at work and also how she fits this together with having a family. I think it has also shown me a human side to a person who would perhaps otherwise have appeared to be a long way from me'- mentee

The project invited women with successful careers in SET, in industry or academia to be mentors. The mentors were all external to Bolton Institute. Again this was positive decision so that there would be no mixed agendas for the mentors.

'the project is very useful and critically important for the development of women in SET. It should be implemented in every university and at all levels'- mentor.

BOLTON INSTITUTE

Bolton Institute is the largest provider of technology education in the non-university HE sector. The Institute has 3,678 students in SET, of whom 28% are women. In SET it has 170 staff, only 35 of these are women, and at the start of the project none was above Principal Lecturer Level.

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Websites www.bolton.ac.uk/technology/news/mentor.html
www.athena.ic.ac.uk



BACKGROUND

Prior to Bolton submitting its project bid, the new five-year plan for the Faculty of Technology included the introduction of personal development plans for staff, for which the project would provide a pilot. The Institute had also recently established a Women in SET Group with the aim of addressing its under-representation of women.

From the beginning, the Principal of the Institute was committed to the Athena Project and its aims. The Principal was instrumental in her communication of that interest and support to the senior management. She has also introduced 'Athena' prizes, awarded each year to outstanding women graduates in SET, or women who have succeeded despite difficult circumstances.

THE PROJECT

Recruitment and matching of mentors and mentees

In September 1999 around a hundred women were invited to become mentors. Invitations were issued to all women staff, postgraduates and final year undergraduates to become mentees. Those who were interested were asked for brief personal details. Although there were potentially some forty mentors and mentees, matching was not easy. The criteria used were:

- subject area
- travelling time/costs
- the relative ages of the pairings
- mentees' preference for an industrial or an academic mentor
- mentors' preference for a staff, postgraduate, or undergraduate mentee
- family responsibilities

It was not possible to accommodate all mentees' preferences. The project started with 16 pairs. The mentors from 5 universities included six professors. There were six mentors from industry.

Mentee information meetings

Short meetings were held for the mentees covering the structure/time-scale of the scheme and:

- personal development plans- to be completed as a basis for their first meeting
- skills audits
- the mentoring contract to be signed by both parties to guarantee confidentiality
- documentation for monitoring and evaluation and to structure the mentoring
- mentees' expectations - what they hoped to achieve by participating
- how to prepare for meetings with their mentor – a guidance sheet was provided

Mentor training

Two one-day workshops were offered. Thirteen mentors attended at least one of the workshops. A learning resource pack was sent to mentors unable to attend. The training was considered essential by those who took part. It set the scene and provided assurance as to the support available. This initial networking was seen to be valuable.

The mentoring process

Brief details and contact information were given to mentors and mentees on their 'partners'. Mentees were asked to get in touch as soon as possible and then left to their own devices. Most pairs met once every six weeks. The length of their meetings varied between 45 minutes and 3 hours with additional contacts by telephone and email.

Generally, mentees' expectations and the objectives they set for meetings were realised - *'I did not expect my mentor to call in favours on my behalf'* The subjects discussed ranged from how to combine family commitments with a career in SET successfully to analysing differential equations and curve fitting. Common topics were:

- short and long term career aims and how to achieve them
- improving CVs and interview techniques
- interpersonal skills
- oral and written communication skills –publications
- assertiveness
- time management and prioritisation
- obtaining membership of professional bodies
- gender issues in management
- people, politics and power (the 3Ps)

Progress monitoring and evaluation

Documentation produced for project monitoring and evaluation included:

- meeting record sheets
- interim and final evaluation questionnaires
- skills audit questionnaire- one for completion at the beginning, the other at the end

Progress was also monitored by meetings with mentees and mentors held mid-way through the project, and at the end with a networking meeting of mentors and the project team, when some mentees gave presentations on how they had benefited from the scheme.

LEARNING/TRANSFERABLE MESSAGES

Mentoring is important where women are an isolated minority. Forming the Project Team brought together women within the Institute who had previously only passed in the corridor. The reduced feeling of isolation among the mentors was an unexpected benefit.

'the Athena Programme is a wonderful opportunity to help women in SET and also brings together a wide range of female specialists who under normal circumstances would never have the opportunity to meet and exchange experiences' – mentor.

And:

- both mentor and mentee need to be committed for mentoring to succeed
- a critical matching criteria is career focus – research, management or teaching
- mentors should not be too far up the hierarchical structure compared with their mentees – but less important with external mentoring- *'it was good to talk to someone in a similar field who was one step ahead of me in their career'*
- mentor training is essential - a day would suffice for mature mentors with sufficient life skills
- mentees' preparation- skills audits/ personal development plans provides clarity about what they can get from the mentoring relationship
- external mentoring has advantages and disadvantages - the positives outweigh the negatives, particularly in relation to confidentiality, dispassionate careers advice and *'it stops the culture closing in on you'*
- the role of mentor needs to be clearly distinguished from that of line manager/PhD supervisor
- the most useful sources of mentors were the WiTEC women experts list (www.setwomenexperts.org.uk/), AWiSE and personal contacts (most professional bodies were unwilling to provide members' names because of data protection concerns)
- drawing up action plans after each meeting is valuable for mentees
- the existence of such a scheme signals the commitment of the institution to its women staff *'I was surprised the Institute wanted to invest in me'*

OUTCOMES

The scheme worked extremely well, despite the tight time scale and the intense workload at the beginning. An 80% success rate was achieved with 14 successful pairings out of 16.

'as one of the few female lecturers in .. I found the network a marvellous experience and it certainly made my working life more fulfilling in the past year..... and from the point of view of mutual support we have found the concept excellent. In terms of the mentoring relationships, I am putting together an ERPSRC grant application with my mentee and she is currently applying for full membership of the Institute of Electrical Engineers with my advice'- mentor

The project team and most mentees and mentors agreed that it had been very worthwhile and:

- mentees have increased in self-confidence, self-belief and recognition of their existing skills
'I now care less about what people think about me and am no longer afraid of rejection' – 'I am more independent now and do not look for praise all the time' - 'I can cope better with knocks and set backs because of the positive support I have got from my mentor'
- mentees' research, personal and career development skills were enhanced *'I had seen myself, if I stayed on, becoming an unemployable research dinosaur. Now I see the skills I have developed in my research are those that employers are looking for'*-mentee
- mentees are doing things to further their careers that they would not have done otherwise
- brought about self-appraisal and career planning *'I had been allowing myself to be swept into unrealistic career aspirations. Now I have clear aspirations which I believe are achievable' 'I am learning to stop doing and start thinking'*

- mentors improved their listening skills and learnt (mainly IT) skills from their mentees
- mentors and the project team benefited from the networking/reduced isolation
- industrial mentors gave mentees a valuable insight into work in industry
- a data base of potential mentors and trained mentors for the future
- contacts with industry expected to lead to more female women lecturers who will provide role models
- undergraduates successfully encouraged to undertake postgraduate research

THE FUTURE

The Project Team wants to build on its experience and set up a regional mentoring scheme within the North West between HEIs and local industry. What has been achieved in the year provides a good basis from which to go forward and the team now has the contacts through its mentors with a number of HEIs locally. There is support for such a scheme among current mentors. Funding will be required. It would probably take the form of a joint venture between several HEIs and industrial organisations.