A Wise Person at Last!

Lyn Brodie

University of Southern Queensland

Australia

SUMMARY: The process of attracting funding for a Women in Surveying and Engineering Officer at University of Southern Queensland (USQ) has been a long and frustrating task demanding persistent effort over a considerable time period. At last, however, the Faculty's first Women in Surveying and Engineering (WISE) Project Officer has been appointed and commenced work in March 1998. This paper outlines the process undertaken to compete for funding for this position against other existing University funding priorities.

INTRODUCTION

The University of Southern Queensland is a small regional university located in Toowoomba on the Darling Downs. The Faculty of Engineering and Surveying has approximately 2000 students, the majority of whom study by distance education. It also has traditionally has one of the lowest female participation rates in Australia (Cobbin 1995). The National equity target set for women in engineering courses in higher education (NBEET 1990) was to achieve and increase in the proportion of women in engineering courses to 15 percent by 1995. In 1995 the number of women in engineering by the Faculty as a percentage of the total enrolment of DEET funded students, was 7 percent. This figure has remained relatively constant over the last few years. This compares with a national average figure of 13.5 percent (NBEET 1996). This recent National Board of Employment, Education and Training (NBEET) report Equity, Diversity and Excellence: Advancing the National Higher Education Equity Framework notes that, “The participation goal for non traditional fields other than engineering has been exceeded...but the engineering target of 15 percent has not been reached”.

The Faculty of Engineering and Surveying is committed to increasing female participation in its courses. As noted in the Williams report (Williams 1988), increasing women’s participation in engineering is not merely an educational equity issue but serves to address and anticipated future shortage of technologists and engineers in the industrialised world. The Faculty also believes that there is a need for diversity of representation in order to enrich the professions of engineering and surveying.

THE PLAN

A Faculty Access and Equity Committee was initially formed in 1996. This committee looked at the then student profile and prioritised issues to be addressed. These issues focused on the Faculty’s geographical location, its emphasis on distance education and the nature of the under-represented groups in the student body.

The University is located within a rural region, but also in reasonable proximity to the large campuses of the major Queensland universities (Queensland University, and Queensland University of Technology). Toowoomba is a major educational centre for rural Queensland with several private and boarding schools servicing a large area, however the majority of students tend to enrol in the Brisbane Universities. Hence the majority of our students are serviced by distance education. These factors combine and the result is that the Faculty has traditionally had a very small percentage of women and students from a non English speaking background enrolled in its courses.

The Faculty has initiated a number of projects designed to increase female participation in its courses and since 1991 there has been an increase of 71.6 percent in the number of women enrolled in courses offered by the Faculty. This compares with an increase in total enrolment of 22.9 percent over the same period. However the efforts of the Faculty to date have been largely sporadic and the level of female participation remains very low compared with faculties of engineering at most other universities.
STEP ONE

The limited success of initiatives undertaken by the Faculty is believed to be directly associated with the lack of appropriate human and financial resources within the Faculty and with the scarcity of research findings that are applicable to the situation at this University. The Faculty of Engineering and Surveying at the University of Southern Queensland is unique in Australia in that the majority of its students are enrolled in distance education programmes. It is likely that females encounter barriers to admission to these programmes that are quite different from those associated to conventional engineering courses. Most distance education students are employed in some way in the field in which they study for example an electrician or drafts person undertaking an Associate Degree or a Bachelor of Technology; a technician changing a qualification with a Bachelor of Engineering. As most of the fields are still non traditional areas for women and participation rates are still low there are still significant barriers to identify and overcome for women to enter distance education from these fields.

The initial proposal for funding was for two positions for a limited term of one year each. It contained a research and development component as well as an administrative part. It was the intention that the research officer would identify potential sources of female students, investigate the barriers that prevent these students from enrolling and develop strategies to overcome them given the Faculty's unique student profile.

The administration officer would undertake the following tasks:

- Promote the courses offered by the Faculty
- Prepare appropriate publicity materials
- Maintain and develop links with the community, industry and relevant employers
- Assist with the development of gender inclusive material in the courses offered
- Provide encouragement and advice to female students currently enrolled

It was envisaged that this appointment would likely be an engineering or science graduate and would serve as a role model for female secondary students as well as currently enrolled students.

FUNDING RATIONALE

The Faculty Access Committee put forward a submission (supported by the Equal Opportunity Office) to the University Equity Committee for an allocation of funds from the University’s Higher Education Equity Provision (HEEP) funding. The budget for this initial project totalled some $80,000 with an additional $32,000 being provided by the Faculty. The budget allowed for not only salary items but also teaching support for Faculty staff, promotional materials and travel/accommodation and meals.

Traditionally HEEP funding at USQ has been used for the maintenance of mainstream equity activities. It is not made available on a competitive bids basis. The committee argued that the funds should be allocated by the Deputy Vice-Chancellor, in consultation with the Student Equity Committee on the basis of a competitive bidding process which would ensure that monies are made available to undertake projects with clearly defined outcomes by people who are committed to the task.

The rationale for this funding included:

- The gender equity performance of the Faculty is a major factor in the assessment of the University's achievements in equity provision by national authorities
- The proposal would be viewed favourably by DEET when reviewing the University’s equity plans as the issue of women in non traditional careers is expected to maintain a high profile.
- The Faculty is committed to improving female participation rates in its courses and should be supported in its endeavours.
- The University would benefit greatly from the good publicity that would stem from the adoption of this project.
However, despite women in non traditional careers being the first priority of the University Equity Committee, funding for this project was not made available.

**STEP TWO**

In view of the importance of the issue the chairperson of the Faculty Access and Equity Committee with the support of the Student Equity Committee approached the Vice Chancellor with a modified project seeking support from discretionary funding, which would be matched by further Faculty funds, with the total funding sufficient for a part time position of HEW level 5 for a period of two years. This would allow a long term cohesive plan to be formulated and at least partially implemented and sources of alternative or additional funding identified and approached. This gained the necessary support from the Vice Chancellor and the Faculty.

The position description (the initial administration assistants position) was amended to include duties associated with the USQ Girls in Maths and Science Summer School which is a University project and listed the following identifiable outcomes:

- Raising awareness of our courses at schools and with in the regional community which would increase enrolments generally, not just of female students
- Programs in this area would greatly enhance the publicity received by the university and also the services offered to its students (both male and female)
- The position would support both academic and general staff in the area of promotion of the faculty and its courses
- It would provide an avenue for new and continuing female students to seek support and encouragement from with in the faculty in a way which does not exist at the moment.

Whilst these outcomes are valid and useful some of the significant aspects of the original project can now no long be fulfilled. The research component, identifying barriers that women face in distance education and some programs aimed at increasing retention of existing students do not have the resource base to be attempted and maintained. This is unfortunate as this would have been useful data given the current educational trend to distance education. However at start has been made and initial funding successful and these issues will be raised again in the projects strategic plan.

The final step in the process was to follow appointment procedures, but given the position description, this was not to prove as easy as it sounds.

**SUMMARY**

The position has been created and filled and the task of increasing awareness of the role that engineers play in our society and hence encouraging under represented groups to take up this career option has begun. A strategic plan is being written and programs prioritised according to desired outcomes and available funding and resources. However nobody has fooled themself by under estimating the size and complexity of this role, or its likely outcomes. Unfortunately continued funding and support of projects like these always rely on the same question "has it made a difference?". Given the importance of the issue not just to the Faculty but to the Engineering profession in general perhaps the question should be asked of this project and the many other similar projects "can it afford not to?"

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**REFERENCES**


