

## **Developing research potential through a structured mentoring program: issues arising**

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**Abstract.** Changes in higher education have meant that academics originally in institutions without a strong research culture are now being called upon to raise their level of research activity. These institutions have implemented a range of strategies to support their academic staff making this transition. One program to develop research potential of staff is reported in this paper. It involved matching inexperienced researchers with experienced researchers who acted in a mentoring role. The individual mentoring was supplemented with a two day workshop covering research skills and also providing an opportunity to focus on the issues, questions and projects of the participants. An evaluation of the program revealed that participants benefited from the support provided by their peers in the program as well as from the support provided by the mentors. The mentors assisted the participants with specific aspects of their research and also with the social and political aspects of research involvement. The program legitimated the helping relationship established between participants and mentors.

### **Introduction**

There is a wide literature which describes the value of senior staff acting as mentors for junior or inexperienced staff members to help them develop their career potential. Much of this literature arises from a business or industry context, but there has been some documentation of mentoring in the higher education context (Cullen and Luna 1993; Harnish and Wild 1994; Healy and Welchert 1990; Ross-Thomas and Bryant 1994). Sands, Parson and Duane (1991) have claimed that mentoring has become a “buzzword” in higher education over the past two decades (p. 154). Mentoring is a term used to convey the more formal relationships established to achieve career support, as well as those relationships which involve role modelling or various forms of informal support and encouragement. Darling (1985) has used a very wide definition of mentoring as “a process by which you are guided, taught, and influenced in your life’s work in important ways” (p. 42). Wunsch (1993) has argued that successful academic careers “can be facilitated by colleague guides who provide assistance, sound advice, and astute insight into the political processes of the institution” (pp. 353/354). Although the value of mentoring is generally accepted and advocated within an extensive body of

literature, the ways in which mentoring relationships are established and the precise ways in which they benefit the involved individuals have been less well explored. This paper begins with a brief description of a formal mentoring program which attempted to develop the research potential of university academics and follows with an analysis of the benefits and difficulties of the mentoring process which formed the basis of this program. The paper will conclude with a more general analysis of some of the issues which arise in mentoring junior academics in their research careers.

In Australia and the UK, the 1990s have marked a period of dramatic change for higher education institutions and the academics who are associated with them. In both countries, these changes have been brought about by government pressures for a simplification of the higher education system with a view to leaner, more competitive and more accountable operations. In Australia, the historic Green Paper presented by Minister Dawkins (1987) heralded a revolutionary change of the previous binary system of colleges of advanced education and universities into a unified national system of universities. For many colleges, this meant undergoing a process of amalgamation and for others at least a change of name and function. The colleges of advanced education had previously been established to provide applied courses and, although some staff had been engaged in research activity, this was not a major part of their role and the institutions were not specifically funded to conduct research (Bowden and Anwyl 1983; de Rome, Boud and Genn 1985). In the 1990s, the staff of the former colleges of advanced education now found themselves in new institutions with new expectations. Perhaps the most significant and stressful change was a pressure to perform in research (Harman and Wood 1990; Mahony 1990; Ramsden and Moses 1992).

In recognition of the adaptation required of staff, many of these newly formed or renamed universities implemented specific strategies to raise the research profile of the institution as a whole and to develop the research skills and confidence of staff. The Commonwealth Staff Development Fund was set up to support such strategies and institutions were invited to apply for funding for staff development programs which would assist staff in this transition. Substantial funding was distributed to institutions for programs to release staff to up-grade skills and gain higher qualifications, to bring in consultants and to implement various programs for staff development. One of the specific categories for funding within the program was the development of research skills and opportunities. The University of Canberra, which had moved from college to university status in 1990, was one such institution to take advantage of these funds. At the University of Canberra, funding from this source was used for several initiatives, one of which was a program for developing research potential of academic staff which involved a process

of matching less experienced researchers with more experienced researchers who acted as mentors. A separate program at the University of Canberra attempted to address the issue of postgraduate supervision through enhancing skills of new and experienced supervisors.

The idea behind this particular program for developing research potential came from the University of Technology, Sydney, where Professor Ingrid Moses had implemented a similar program in previous years. Balint et al. (1994) have provided a description of another program using mentoring to develop research skills which also grew from this Sydney model. In recent years in Australia, there has been a steady growth of university staff development programs which utilise mentoring, most of these focusing on general career development, particularly for women (Butorac and Rowland 1996; McCormack 1996). Although mentoring has long been used as an informal process of building a research culture and inducting newer researchers in academic departments, programs which use mentoring in a more formal way for research development are less common (Maxwell, Hughes, Sorensen and Owen 1995).

### **A description of the program**

The program for developing research potential at the University of Canberra began in 1994 with calls for expressions of interest from staff who were invited to be involved in one of two ways. Those staff members with some basic research background such as a higher degree and who were keen to increase their research activity or perhaps resume their research involvement after some years of inactivity were invited to apply as participants. Although the call for expressions of interest was extended through a staff notice to all full-time academic staff of the university (approximately 400 in total), encouragement was particularly given to those areas of the university in which female staff formed the majority and in which there was not a strong research tradition. A second type of involvement was invited from experienced researchers with a track record in publishing and applying for research grants who would act as mentors in the program. A small amount of funding was offered to mentors and participants so that they could gain some additional time for their involvement in the program by being released from some of their teaching duties.

Fifteen inexperienced researchers, nine women and six men from across the university, joined the program as participants and eight experienced researchers volunteered to act as mentors. The inexperienced researchers included academics from nursing, business studies, landscape architecture, construction management, sports studies, industrial design, computing,

accounting, psychology, education and biomedical sciences. While five held doctoral qualifications, some were in disciplines for which a doctoral qualification was not common. The experienced researchers, four women and six men, held appointments mainly at associate professor or professorial levels, with two at the senior lecturer level. All held doctoral qualifications and were active publishers and recipients of research grants. With science an area of research strength within the University, five of the mentors came from the Faculty of Applied Science with the remainder representing a range of other disciplines.

The first activity for the program was a meeting of participants and mentors before which a small booklet was distributed providing details about the research interests of the potential mentors and a statement about what they were willing to contribute to the program. At this meeting, participants and mentors were introduced and there was a period of social mingling and discussion. After the meeting, the program co-ordinator undertook a period of negotiation to match participants and mentors in a way that was acceptable to individuals in both groups. Some participants deliberately chose mentors away from their own disciplinary areas while others chose people they knew in their own area.

The next stage of the program was a two day workshop, held off-campus, at which the mentors and other experienced researchers in the university provided input about a range of topics such as choosing research questions, finding time for research, deciding on research methods, applying for grants, writing for publication and managing research projects. Presenters were encouraged to draw on their own research to provide examples and to model the type of research activity in which they were engaged. During the two day program, there were quite lengthy periods allowed for small group discussion relating to the research projects and questions of the participants. Participants were encouraged to come to the workshop with specific areas on which they would work, such as questions, ideas about potential research projects, drafts of research proposals or drafts of articles intended for publication. The aim was to leave the workshop with some plans for furthering their own research activity. The discussion with the mentors during the workshop was intended to provide the basis for further contact and support after the workshop.

In the period following the workshop, there was another research seminar with a visiting speaker as well as the circulation of written material relating to research. Participants and mentors were supposed to keep in touch, with participants being assisted to work on their own research projects during that time. For some mentors and participants, this meant formal meetings which were planned and structured to discuss a particular issue or aspect of a project. Others met more informally over lunch or coffee, or discussed their research

through telephone conversations and electronic mail. Those who worked in close proximity sometimes met on a casual basis such as unanticipated encounters in a corridor. Some maintained minimal contact. A final meeting for the program, six months after the first meeting, was a session at which participants used a poster format to explain to the whole group their research achievements and plans. In 1995, the program was repeated in a similar way, but extended over a ten month period with monthly research seminars replacing the more intensive two day session held in 1994. The 1995 program attracted a very similar number and composition of participants and mentors.

### **Outcomes of the program**

Evaluative data regarding the program and its outcomes were collected in a number of ways. In the three months after the 1994 program, each of the participants and mentors was interviewed individually by a project officer who had not been directly connected with the program's implementation. Interviewees were asked about how the program had operated for them, its outcomes, benefits and weaknesses, and about suggestions for ways in which the program could be improved. All those involved in the 1995 program were surveyed in the two months following its conclusion, with written responses required for open-ended questions similar to those asked in the 1994 interviews. Furthermore, in mid-1996, all participants were surveyed again to ascertain the levels of their on-going research activity, any continuing involvement with their mentors and their perceptions of benefits of the program some months after it had concluded. All responses to the interviews and written surveys were confidential, with collated summaries of data distributed to those involved in the program for their information.

All participants reported positive perceptions about the program at its conclusion and these perceptions continued some time after their involvement in it. Benefits gained from the program included the acquisition of specific skills and, even more importantly, contact with people who proved to be helpful to their research careers in a range of direct and indirect ways. The participants indicated that they had received assistance in such areas as improving their writing skills and in the preparation of grant applications. Some had seen their mentors as people to "bounce ideas off", people who gave them ideas about how to manage time and how to integrate their teaching and research. Other participants reported their mentors as providing specific information such as how to target a particular journal or how to apply for promotion. Mentors had been seen as giving participants support and encouragement, assisting them to make contacts with other researchers or pinpointing weaknesses in research design. Some participants described their mentors as role models

and others mentioned how the mentors had passed on knowledge about what was going on in their faculties or in the university more widely.

The relationships which developed between mentors and participants in this program had resulted in all four forms of mentoring assistance identified by Sands et al. (1991) – role-specific modelling and teaching, encouraging the dream, organisational socialisation and advocate (p. 178). At different times in the program and in different mentor-participant relationships, all four forms of assistance had been enacted. Furthermore, in a similar way to the type of mentoring studied by Madison, Knight and Watson (1993), mentoring in this program had resulted in more than assistance with scholarly endeavours – it had assisted newer researchers to understand and break down political and social barriers to research within the university and within their academic units.

Some of the participants were able to report specific outcomes from the program such as successful grant applications, conference papers or publications, while most reported very positive perceptions generally about the support and network opportunities provided during the program. The more personal outcomes for participants included feelings of being able to focus, consolidate and set goals. The program had given participants the time to think about their research and to reflect on their progress and future. A more detailed discussion of some of the elements of their involvement in the program follows.

#### *A legitimated helping relationship*

Those participants who received most benefit from the program highlighted how it had enabled them to ask for help and advice from someone when they would normally have felt uncomfortable doing so. In other words, the formality of the program had legitimated the helping relationship and overcome the barriers these participants felt about approaching and asking for help from some of the more experienced researchers in the institution. The program also provided easily accessible assistance when participants had particular problems in their research and this suggests that such assistance is not usually readily available for inexperienced researchers. The experienced researchers of an institution are often very busy people, heavily involved in the full range of university activities. The participants in the program indicated that they would be unwilling to make demands on the mentors' time without the formal structure of the program to encourage them and legitimate their requests for assistance. In a sense, these inexperienced researchers were in a more disadvantaged position than postgraduate students. Through enrolment in postgraduate studies and the formal allocation of one or more supervisors, postgraduate students feel they have a legitimate right to assistance and there

are formal channels for them to seek such assistance. In other words, the legitimated helping relationship which is absent for many academic staff who are inexperienced researchers can be contrasted with the legitimated helping relationship established for postgraduate students.

*“Someone cares”*

One of the most frequent comments made by the participants in the program related to the overall message they received by the existence of such a program. To them, the program meant that university cared about them and that it was doing something to help them develop their careers. It seemed to be easy for these more junior academics to feel very insignificant in terms of the institutional goals. In contrast, the program had directed attention to their needs and helped them to feel more valued members of the university community. As a result, they reported new attitudes to their own work and a heightened sense of self-competence. One participant commented how the program had helped her realise that her work “was worth doing”, while another had been assisted to see that she was “a competent researcher”.

*Some time devoted to research*

Although the participants still complained of problems with lack of time to research, the program did provide some dedicated research time and the incentive to use that time for research related activities. As with many academics, the participants in this program reported conflicting demands on their time and pressure for more urgent demands such as teaching and administration to detract from time available for research. However, the funding associated with the program was in some cases used to secure release from duties associated with teaching or marking student work. Furthermore, the workshop program and the meetings with mentors ensured some time was set aside specifically for research. There was an additional incentive provided by the need to report on progress to the mentor and, through the poster session, to the other participants and mentors in the program. Although the time provided by the program was small in amount, it did encourage some focused thinking about research and it did give some motivation to continue that research activity through finding additional time.

*Networking and mutual support*

One of the other clear outcomes for participants in the program was the opportunity it provided for networking and for receiving support from colleagues. The program had brought together a group of like-minded academic staff

who were able to share common problems and support each other in finding solutions. A significant outcome reported by the participants was a reduced sense of isolation. "I think one of the reasons that I never got started with any research was because I felt isolated and it was a case of, 'Where do you start? What's the first step?' – just being able to talk with other people about their experiences was very helpful." "We're all in the same boat". "You know you're not alone". As with other programs which bring together participants from across the university, one of the valuable outcomes had been that the participants met and then kept contact with colleagues from other parts of the university. They described how the program engendered a "feeling of community in the university". "It made you feel you were part of a community, rather than on your own".

### **Issues arising from the program**

Although mentoring formed the basis on which the program was built, one major source of benefit to the participants was the opportunity the program provided for interaction with other inexperienced researchers. Here the benefits came in the form of feeling part of a community and receiving support from their peers. The success of the program in terms of reducing isolation and providing peer support was largely an unintended outcome. The comments made by participants suggested that many inexperienced researchers and more junior members of academic staff within a university feel a very great sense of isolation. Becher's (1989) description of academic life stresses the sense of belonging to a disciplinary community and the collegial relationships that characterise academia. However, Becher's (1989) work is based on active, successful researchers and research departments. The experiences of novice researchers within universities and departments where there is a less established research ethos appear to be very different from Becher's portrayal. In our newer universities where research strength occurs unevenly, in 'pockets' throughout the university, new staff may experience some difficulty in seeking out collegial support for their research interests.

The picture painted by the participants in this program is more like that associated with newer academics who are reported as experiencing isolation and a lack of collegial support on entry into the academic field. Olsen (1993), in her work on academics in their first and third years of appointment, described "the demands for research productivity as driving a wedge" between newer staff and their colleagues (p. 467). She claimed that the ethos of competition and the time pressures have eroded collegiality and have created a situation which is far removed from the "community of scholars" many academics expect when they choose their career (p. 467). Unlike the

sense of belonging and collegiality described by Becher (1989), the situation for newer, less experienced researchers is more likely to be characterised by loneliness, intellectual isolation and a lack of collegial support (Boice 1991 and 1992a). Sorcinelli and Austin (1992) have even noted that newer academics experience a lack of opportunities to meet colleagues at similar stages of their careers, an observation which would explain the positive reaction of participants to the peer relationships formed in this program.

The other source of benefits which participants received from the program was the relationships with the mentors and the contact with the other experienced researchers at the workshop. Not only did the experienced researchers provide factual information, but they also shared their personal experiences and opinions and acted as role models for the less experienced researchers. Their input to the program demonstrated the human side to research of which many of the participants appeared to be unaware. The mentors spoke about the difficulties they experienced in maintaining their research in the face of competing priorities in their work lives. They shared how they achieved the balance which allowed them to maintain their research output. They were able to convey the passionate interest they had in their own research and how that interest sustained them when there were other demands being made of them. They told stories of how research had to “come from the heart”. These stories and others are not the ones which are conveyed in the research literature and they too readily remain invisible to neophytes in the field.

The close and personalised contact with the mentors in the program helped to demystify the research process for the participants. Not only did they learn more about involvement in research, but they also learnt more about the “system” which supports research and controls funding. The participants heard very honest accounts of how to apply for funding and how to have work published. They were told many of the unwritten rules about research and the processes of gaining support for research. Mentors were in a position to help the participants learn about both the formalised procedures associated with research and the informal, unwritten traditions and practices which are vital for effective socialisation into the academic culture (Tierney and Rhoads 1993). In the mentors, they found more powerful benefactors who were in a position to support their research, critique their work and even act as co-researchers or referees on applications for financial support. Support of this nature did not eventuate for all participants in the program, but the relationships between some mentors and participants have continued in this way.

One of the outcomes evident from the interviews with participants and mentors was the complexity of the monitoring relationship and the difficulty of establishing such relationships in the formal setting of a program such

as this. While the majority of participants spoke highly about the time and assistance their mentors had given them, a few of the participants reported quite negative perceptions of their relationship with their mentors. Some had little contact with their mentors beyond that in the two day workshop. For both mentors and participants, there had been some confusion about who should take the step of making contact and, because of this confusion, no contact had been made in a few cases. One participant expressed the concern that she had felt a "nuisance" to her mentor who continued to appear to her as always too busy to give time for discussing her research. In some cases, circumstances such as competing university commitments, illnesses, absences and other projects had detracted from involvement in this program and from the time required to establish a fruitful mentoring relationship.

Some of the mentors provided less direct assistance and reassurance to the participants than would be expected from their more senior role within the university. This leads to the question of whether mentoring relationships can be established in formal programs such as this. There are some writers who suggest that mentoring is a more informal and natural relationship which occurs when two people come together because of common interests and either mutually agree on a mentoring relationship or fall naturally into such a relationship (Merriam 1983, p. 171). On the other hand, Harnish and Wild (1994) have reported significant outcomes in programs similar to the one described in this paper, programs which involve formally establishing mentoring relationships with external assistance and support. The problem with leaving mentoring to chance is that often those most in need of support do not receive it. Perhaps there is a need to establish formal mentoring programs with the full expectation that not all the mentor-participant relationships will result in the desired outcomes. Such points are supported by Boice (1992b) who observed that mentoring pairs often did not flourish and that the success of mentoring did not rely on whether the pairs were formed through mutual negotiation or through arbitrary assignment.

A related issue is the lack of understanding of the mentorship role from both parties and the associated reluctance to take the lead by either asking for or giving support. The experiences of the program in its first year suggested that both participants and mentors needed preparation and guidance about their roles. Questions which needed to be addressed were how participants might determine who would be a suitable mentor, what each party could expect and how they should negotiate their respective roles. There was definitely an expectation from some of those involved in the program that once mentors and participants were named, mentoring would just somehow happen even if neither party made the effort to work out what mentoring meant for them and how it would take place. Mentors need to know that participants will feel

awkward about asking for help and taking up the time of busy people for their own research, while participants need to know that mentors will feel awkward about imposing help and advice when they are not sure it is wanted. Similar to the experiences reported by Harnish and Wild (1994), mentoring processes do not necessarily come automatically to mentors and participants even when they volunteer to become involved in a program with very clearly specified aims. Furthermore, observations by Boice (1992b) suggest that mentoring programs need considerable on-going support otherwise mentoring pairs stop meeting and, at best, work in a very narrow fashion. There is an obvious need for both mentors and participants to be prepared in a formal way for their involvement in such programs and to receive continuing support and guidance during the program.

In the second year of the program, more explicit attempts were made to prepare and support mentors and participants. Written materials about mentoring were prepared, collated comments about the previous program were distributed, discussion about the mentoring process took place in group sessions and correspondence during the program continued to raise issues about mentoring. Emphasis was placed on the need for both mentors and participants to take responsibility for initiating and maintaining contact and for ensuring fruitful outcomes from the program. However, comments from those involved in this second program indicated a similar number of disappointments with the mentoring relationship and of pairs which maintained minimal contact during the program. Even with more obvious preparation and support, successful mentoring relationships cannot be guaranteed. Ideas which might be worth trying include combinations of mentors and participants which rely on group support rather than pairs. Boice (1992b) suggests the use of mentoring committees which seem to increase the likelihood of successful, enduring mentoring.

### **Concluding comments**

The experiences of this program for developing research potential suggested some important issues to be considered when implementing strategies for helping academic staff increase their research involvement. Comments made by the participants in the program demonstrated that increasing research activity involves much more than gaining new skills and knowledge about research. There are clearly social and human dimensions to becoming a researcher within a university and these dimensions cannot necessarily be satisfied by recruiting staff with doctoral qualifications. The statements made by the participants in the program provide a strong indication that neophyte researchers, particularly in institutions or departments without a well devel-

oped research ethos, experience a great deal of isolation and loneliness in their endeavours to participate in research. In contrast to the portrayal of collegiality, belonging and support depicted by Becher (1989) in his study of strong research departments, the picture painted by inexperienced researchers before their involvement in this program is one of lack of support and collegiality. Associated with this isolation are feelings of incompetence and a perception of mystique associated with research endeavours. In other words, inexperienced researchers may feel very inadequate about their own research skills and their ability to understand and succeed in the research process of grant application and publication. Furthermore, although sometimes having close contact with experienced researchers in their departments, they feel uncomfortable about asking for help or advice from these very busy people. There is little doubt that the perceived barriers to a higher level of research involvement are very daunting to inexperienced researchers.

The program attempted to overcome the shortcomings of merely relying on mentoring relationships to form naturally among colleagues. Such naturally occurring relationships often mean that those most in need of support miss out because they are unwilling to seek assistance from potential mentors. Similarly, mentors feel uncomfortable about providing advice and support in case it is perceived as unwelcome or unnecessary. A program such as the one described in this paper allows the targeting of particular groups and individuals, such as women from areas without strong research traditions. It encourages the involvement of those unlikely to seek assistance on their own. A structured program provides scope for mentors and participants to receive formal preparation for their roles. The program relied on voluntary involvement by mentors and participants as well as a process of individual negotiation to determine the matching of mentors and participants. This was intended to acknowledge that mentoring relationships rely on personal qualities and interaction, overcoming to some degree reservations about whether it is possible to set up mentoring relationships in a formal program.

The structured program for developing research potential provided a number of avenues of relief to the inexperienced researchers who participated. Firstly, it demonstrated a level of institutional support and commitment to their individual development which they appreciated and which, alone, helped them strengthen their resolve and self-confidence. Secondly, the program provided them with a network of peer support through bringing together a group of like-minded academics from across the university. The group valued the opportunity to share experiences and gain some consolation from knowing that there were others with similar problems and concerns. Thirdly, the program provided the participants with access to a group of supportive experienced researchers who gave advice about research, showed the human side of

research and also dispelled some of the mystery associated with the political aspects of research funding and publication. Without the formal mentoring program, the inexperienced researchers maintained that they would have been uncomfortable about tapping into this valuable source of information and support. The program legitimated the helping relationship for both parties and attended to many of the social and human dimensions to undertaking research.

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