

## **Three Women and a Research Project: An experiential approach to cooperative research and partnerships in educational research.**

*For the past three years a group of researchers from Yooroang Garang: The School of Indigenous Health Studies at the University of Sydney, has been involved in a study of students' experiences during their progress through the Diploma of Health Science: Aboriginal Health and Community Development. The team comprised one experienced qualitative researcher and two members of staff who had no previous experience implementing a research project. The project grew out of a shared interest in educational outcomes for Indigenous students in our school.*

*The research process can be daunting for beginning researchers. For the inexperienced members of this team the research project provided the opportunity to learn valuable research skills experientially. This paper focuses on the experiences of the team involved in the project. The paper provides a description of the research process, including how the research project developed and was implemented in a team. Although the team included one experienced researcher, we were all new to the process of researching cooperatively. During this project we learned that there are both benefits and challenges to the team approach.*

### **Introduction**

For the last three years we have been involved in a collaborative research project at Yooroang Garang: School of Indigenous Health Studies, Faculty of Health Sciences, University of Sydney. The project was a qualitative study of students' experiences during their progress through the Diploma of Health Science: Aboriginal Health and Community Development. At the beginning of the project two of us were novices when it came to research and the third member of the team, who had recently completed a PhD, filled the role of mentor. The inexperienced team members had previous theoretical education in research methodology through undergraduate and postgraduate tertiary programs but no practical experience of carrying out a research project either independently or as team members. They had not previously applied for research grants, completed publications, conference presentations or ethics applications. The experienced team member had completed her doctoral training during which she implemented pilot studies and an independent, large-scale research project, with the guidance of postgraduate supervisors. It is significant to note that during the three years of the collaboration two members of the team gave birth and consequently had periods of maternity leave before returning to work on a part-time basis. The other team member has three school aged children.

During the course of our partnership we have not only developed significant research skills but have also gained insights into the collaborative research process. This paper will describe how we conducted the research as a team, as well as our reflections of challenges and strengths of the collaborative process and the ways in which collaboration provided an environment for research skills development. We will also describe the very personal reflections of our experiences as three women who are not only researchers but also mothers, friends and teachers. We hope that our experiences will resonate with others who are also juggling the competing demands of teaching, research and families.

### **The genesis of the project and the research team**

This project and our research team arose because of a shared commitment to teaching, our concern about the retention of students in our program and a need to be actively involved in research. The momentum for the project developed through many hours of fruitful tea room discussion, sharing our enthusiasm for teaching and learning and pondering ways in which

our programs might best meet the needs of our particular student group. In our individual roles within the organisation we each had a responsibility for teaching as well as to conducting research. Sally as Student Support Coordinator was responsible for providing academic, administrative and personal support for students within Yooroang Garang. Sue, the Indigenous member of the team, was coordinator of the first year of the Diploma program and responsible for teaching within the program as well as associated administrative tasks. Kristie, as research fellow, contributed to school research projects and developed a research skills development program for academic staff in the school. In addition, because of her research and administrative experience in student affairs, she was involved in school planning for student support. Our initial general discussion became focused on issues related to student progression and retention within the Diploma program.

The group also came together because of the imperative to research. Financial incentives encourage universities to be "comprehensive research institutions" (Kemp:2000). The energies of our relatively new School had been devoted to teaching rather than research and thus Yooroang Garang was aiming to develop its research resources. Many of our staff however were inexperienced in the area. Discussions at School level resulted in a number of strategies in the area of research skills development, including research seminars, the appointment of a research fellow and a small grants scheme to enable staff to practice the grant application process as well as receive a small amount of money to begin a project.

### **The Way We Worked Together**

Throughout our collaboration we have worked closely together at every stage of the research process. This style of collaboration has meant that we have developed and grown as an effective research team. Our model of collaboration resembles "complementary collaboration" (Smart and Bayer:1986, cited in Austin and Baldwin: 1992) in which researchers with common interests and qualifications work closely on a joint endeavour. This model has worked well for us to facilitate research skills development of the inexperienced members of the group.

The collaborative project with the diploma students was a qualitative study which involved semi-structured interviews with first year diploma students in which participants were asked about the factors they believed contributed to their successful study. During the initial phase of the research we did most of the major tasks together so that the inexperienced team members could learn the process as they went along. These tasks included early preparation such as developing a research focus, completing ethics process, developing consent forms, preparing information sheets for participants, and preparing interview schedules.

It is worth noting, however, that at this stage the experienced researcher also did much of the work of managing the research project, for example, developing timelines, monitoring deadlines, making sure that materials such as tape recorders were available for interviews and employing a transcriber. For the inexperienced researchers the value of being involved in the major research tasks but being relieved of the 'leg work' was that we were able to learn the essentials of the process but not get bogged down which at each stage may have made continuing difficult.

Once each set of interviews was completed and transcribed each member of the team read the transcripts in order to identify significant units of meaning from the data. Further data analysis then became a team activity, during which we worked together at the computer to discuss, organise and make sense of our data - the students' experiences. There was always vigorous discussion about categories we used in analysing our data. This process was vital for the new researchers, allowing them to become immersed in the data and also

true participants in the research process. For the inexperienced researchers, confidence began to grow as they learned to justify their interpretation of the data. Through the unitizing and coding process, overarching themes began to emerge from the data. Then, discussion of how the individual themes converged or diverged led to the development of cognitive maps for understanding the participants' experiences (Miles & Huberman, 1994).

After the initial data collection and analysis was completed we wrote our first paper. Again we chose to work closely together, with all members of the team composing the paper around a computer. This allowed the inexperienced team members to gain first-hand experience of progressing from data analysis to writing for publication. Now, interestingly, we continue to work closely together when writing, despite the inexperienced researchers enhanced capabilities.

The evolution of our collaboration has been influenced by several factors. Most importantly in the beginning our group comprised two inexperienced researchers and one experienced member. A significant change during our work together has been the development of new skills and confidence for the inexperienced researchers. Also during the life of the collaboration our work and personal circumstances have changed to accommodate growing families and altered work participation. These factors have meant that the way we have worked has evolved over time and has always been a work-in-progress.

## REFLECTIONS ON OUR COLLABORATIVE RESEARCH

In order for us to reflect on our experiences as members of a collaborative research team we followed a process of qualitative inquiry, in which we were the respondents. The questions for our reflective inquiry were; 1) What things did we do as a research team and how did we work? 2) what were the strengths of the collaborative process? and 3) what were the challenges? Since one of our members is living overseas, we decided a written survey would be the best way to allow each of us to reflect on the collaborative research process *individually* before we came together to *collectively* process those reflections. Working on her own, each team member answered the questions on the survey then reviewed her team members' surveys to identify common themes or comments of interest. Only after this individual 'homework' did we discuss the reflections as a group and begin the writing process. As with our previous research, we view this method of reviewing the topic and the data separately before convening to discuss the 'findings' as essential to providing a rich understanding of the experience being studied. Some highlights from our findings related to the strengths and challenges of collaboration and partnerships in educational research.

### Strengths of the collaborative process

For our group there have been a number of strengths to the collaborative process. These include research skills development, quality research findings, a sense of personal achievement and friendship, enhanced research productivity and effective advocacy for student learning.

#### Research skills development

Embarking on research can be daunting for academics. Teaching commands attention because students have to be faced. The research imperative however is more subtle and the considerable obstacles of teaching and administration can, for a time at least, provide useful diversions to progressing in the research area for the uncertain novice (Little &

Heffernan: 2000, Devos, Wilcox & Penfold: 2000). The inexperienced members of our team recall the stomach-churning anxiety provoked by staff discussions about ways to get people researching. Those anxieties centred not only around how to find the time but also how to begin what seemed like an insurmountable task for which we felt underprepared. In common with others we felt overwhelmed by the challenges of stepping onto the research bandwagon (Daniel DiGregorio & Devonshire:1999).

The real strength of working collaboratively, particularly with an experienced researcher as mentor, is that it was possible for the inexperienced researchers to begin without having to feel responsible for the whole process. For the inexperienced researchers it was possible to allow the process to unfold without being overwhelmed at the first big hurdle. One of us noted that without the group, I'd still be panicking. The experienced researcher had already completed a research project and knew the process. Her guidance allowed the inexperienced researchers to be involved at all stages without necessarily having to be concerned about the next stage. This short-circuited fears about their ability to continue. So, initially the mentor was able to make the research process explicit but was also skilled at ensuring that the parts of the process where the inexperienced researchers were involved were essential at the time. The inexperienced researchers were able to be involved in meaningful research tasks, right from the beginning, but at a level consistent with their abilities and confidence. As one of the inexperienced researchers reflected,

to get beyond the beginning point to actually doing interviews was great; then we were actually doing research. We could fly with a safety net.

However, once we had written one paper together the inexperienced members of the team were able to function more as equals. One of us recalled,

"after Adelaide (our first conference), it seemed like we all knew what was going on, what we were doing and we were equal partners in the research part of our work."

For the new researchers the significant aspect of this collaboration has been the opportunity to develop research skills experientially.

### **Learning from each other**

A major benefit of working with a team is that one plus one and one is greater than three (Coulon, Mok & Anderson: 1996). The individual strengths each person brings are amplified by the group process and in our case have been complementary. Although our team included two inexperienced researchers we each brought significant skills to the process. As Glesne (et al.:1989:2) suggests, the collaborative experience provides the opportunity to "learn from each other's experiences, scholarship and skills". Clearly the experienced researcher brought a working knowledge of the research process. However she also was willing and more importantly able to provide the necessary guidance, not so much as the team leader but as a *research friend*. Parenting our children has taught us the acute delicacy of this position. The temptation is to just do the task because you are in a hurry, more skilled or just lack patience. Alternatively standing back, allows the opportunity for mistakes to be made, but risks failure and loss of confidence. To maintain the balance requires patience and assuredness. It also helped that the mentor was a bit of a taskmaster and kept the team focused by setting deadlines, arranging regular meetings and creating realistic timelines. She was also exceptionally well organised, thorough, patient and willing to learn about the Indigenous context.

The inexperienced team members knowledge of Indigenous health and education proved invaluable throughout the research process in understanding the educational context and

the experiences of the students, many of whom were working in Indigenous health. They were also familiar with the university, faculty and school, as well as being familiar with the students which facilitated access. The inexperienced team members acted as cultural translators for the mentor who was unfamiliar with both the Australian university context and Indigenous student issues. The mentor reflected, 'I learned everything I know about Indigenous students from you guys (and from the students in the study)'.

As well the Indigenous member of the team provided a necessary cultural perspective. She raised issues about the ethics of researching Indigenous people, use of language, and interactions with students. 'Making a difference for the people who are being researched' was one of the points she reminded us of most. As well she reminded us of the importance of publishing our findings in journals which would be accessible for Indigenous readers as well as the more highly valued academic journals.

A perennial challenge in qualitative research is distilling mountains of rich data, for example, to a handful of overarching themes that accurately represent the experiences of the respondents or to theory or models that can inform practice. One team member brought to this task an affinity for and deep skill in condensing complex and dense material into cognitive maps. This process helped the team conceptualise what our students were experiencing and taught invaluable skills in deciphering interrelationships and connections within data.

We also learned and grew from each other's personal strengths. Those with an eye for detail learned from those who *could* see the forest for the trees. Some of us were able to teach the team how to have the confidence to start and others taught us how to sustain the energy to finish. Some of us needed to learn the benefits of interdependence from those who were already believers while team players developed the confidence to assume a new-found independence. 'Feelers' learned the benefits of thinking through aspects of student experiences while 'Thinkers' enhanced their understandings of student experiences through their colleagues deep empathy. Taskmasters expanded their sense of humour whilst those who always had a 'new joke' learned to contain chit-chat to the first few minutes of research meetings.

### **Improved quality of the research**

Other collaborative researchers stress the value of multiple researchers for the research outcomes (Whitt & Kuh: 1989, Coulon et al.:1996). The variety of perspective's meant that we debated rigorously the 'meaning' of our data. This process maximises investigator triangulation (Denzin, cited in Patton, 1990) as analysis of the data was thorough and rigorously debated. This 'peer debriefing' (Lincoln & Guba: 1985) heightened our understanding of our personal perspectives and their impact on the findings. A team approach can also strengthen claims to validity through detailed discussion of possible reasons for different interpretations (Lupton:1995).

### **Enhanced research productivity**

Both qualitative research and collaboration can be time-consuming. However for this group, our time investment has been amply rewarded by research outcomes which we feel would not have been achieved individually. Together, over three years we have completed more than ten publications, including conference papers, journal articles for both refereed and non-refereed journals. We have also presented our research findings at a number of national and international conferences as well as Sydney University and Yooroang Garang presentations. As well we have had two successful grant applications. Our relative inexperience means that it is still hard to 'wipe the smiles off our faces when we are

awarded a grant or are accepted for publication. We feel a great sense of achievement. Another reason for enhanced productivity is that mutual obligation motivates us to meet deadlines but also provides us with the support necessary to achieve those outcomes. Also as a trio it was possible to maintain the momentum of the project through two periods of maternity leave and to accommodate two part-time workers. It is unlikely that any one of us individually would have been able to continue the project.

### **Advocacy for student learning**

An important objective for our research is to ensure that there are benefits for Indigenous students. We were interested primarily in the factors which affected Indigenous students learning in our block mode programs. The project arose from concerns by Yooroang Garang staff about students' difficulties progressing in the program. We took a variety of opportunities to share and discuss our findings

with our colleagues, both in 'formal' presentations of our research at school planning meetings and by informally offering what we were hearing from students when our data was pertinent. There are a number of examples where, with the support and involvement of our colleagues, the findings of this study have been translated into curriculum changes which have the potential to improve educational outcomes for Aboriginal and Torres Strait Islander students. One team member explained the enhanced effect of the team approach to advocacy,

As a team I think we were probably better able to advocate for change based on our research findings better than had we been individuals doing the research. Not only were we able to do presentations to staff jointly but were able to individually seize more opportunities as they arose.

### **Friendship**

One of the added dimensions of collaborative research can be the development of friendships. In our case, as the research project has evolved, so too has our friendship. Whilst it may not be necessary for collaborative research, friendship can be an added benefit of working together and we believe has sustained the momentum of the project. Being friends has meant that the team has withstood challenges, external and internal, that other teams that were not composed of friends may not have. For us it has made the process especially rewarding. One of us noted that we look after each other and cut each other slack when necessary. For us as researchers this has proved invaluable particularly as babies were born and work changed to part-time for two of us. We each have families. Having colleagues in whom it is possible to confide about personal dilemmas as well as work concerns helps allay the anxieties associated with juggling family and work responsibilities. It also means that the show can go on even when one person is distracted or unavailable.

### **Challenges of collaborative research**

Working collaboratively can be greatly rewarding but also immensely challenging. The challenges lie in finding time for research, developing successful ways to communicate, managing workload equitably, making decisions about authorship and mentoring.

### **Time management**

Qualitative research takes time (Whitt & Kuh:1989). The dual responsibility of teaching and administration mean that there is never as much time as seems necessary. We continue to

struggle to find enough time to manage the research process. These are not uncommon challenges among academics, but when research time requires the convergence of three different schedules this challenge can seriously impede the progress of the research. Our difficulties were intensified initially by the necessity of all group members working closely together on tasks so that the inexperienced members could develop research skills. In addition, we each have a range of other responsibilities including teaching, administration and management of the particular needs of block mode students, who require considerable 'incidental' communication time due to the intensive nature of their study mode. Time management also became a greater issue when two team members changed to part-time employment on return from maternity leave.

## **Communication**

Through our collaboration we have each gained insights into our personal styles of communication and how they effect the group dynamic. Wasser & Bressler (1996, cited in Potter, 1998) suggest that for successful collaboration, each participant will negotiate their presence within the team. We would suggest that negotiating presence within a group is dependent on each team member knowing their own strengths and limitations and being able to communicate them. In a group it is essential to be able to make your individual needs explicit. In the beginning of the collaboration we were more tentative about making our needs explicit. During our work together we have learned more about each other and ourselves, which has facilitated our communication. Friendship is also a factor which has effected on our communication. Whilst we believe that our growing friendship is a real strength of the collaboration, it has also, at times, impeded honest communication when team members have been reluctant to express their own needs in deference to common good .

## **Workload distribution**

Austin and Baldwin (1992) suggest dividing the labour and establishing the work guidelines are two key steps in the collaborative process. Whilst this process may seem logical, our collaboration has definitely not followed such discreet steps. During each stage of the research process we have spent time working out how that particular task would be approached. For us the division of labour and work guidelines have been fluid. What commonly occurs is that for a particular project, for example writing a paper, one person will emerge as the team leader. The team leader would then organise meetings, "chase" the others and delegate tasks if necessary. However this sometimes leads to one person doing all the worrying for a particular project. One of us noted,

"it sometimes seems like one person naturally takes responsibility for one of our projects and the other two can sometimes slip into junior roles."

Although there have been a number of discussions about workload distribution we have largely relied on our intuition, as well as honest communication to manage the balance of contribution.

## **Authorship**

Authorship has been a complex issue for our group. The primary decision to make related to authorship is whose name should appear first on a given publication. First authorship is the basis of citation for most indexes, and greater weight is assigned to a first authored publication for the purposes of promotion or tenure (Bond & Thompson: 1996). There are a number of issues to consider when deciding the order of authorship, including contribution, who is the team leader or the most senior team member and who wrote the

publication for example. In our case we have some additional criteria, including whose turn it is, who might have the greatest need, and expediency. We have attempted to ensure that each team member has been first author on a paper and that we share the second and third spots. However there have been times when one team members' need for publications has been foremost. For example, one team member was applying for promotion and the team felt that it would be useful for her to have a first authored publication. Expedience has also played a role. The Indigenous team members' name was put first on a grant application to an Indigenous funding body. Finally, this egalitarian approach to authorship relies on a non-competitive approach. If you're friends and not competitive, then you'll want to support each other as much as you want to support your own career

## **Mentoring**

For the experienced researcher, who filled the role as mentor, there was an initial struggle with ways to make explicit her personal ways of doing research. Working alone for three years required only having to explain herself and what she was doing in fairly general ways, as required by the 'methods' sections of research papers and the doctoral thesis. Methods sections, however, leave out a lot of the detail and certainly don't qualify as recipes for how to conduct a research project from the very start to completion. The mentor reflected,

"part of becoming a qualitative researcher is developing intuitive skills and it's not always easy to direct others through this process, particularly when you are not an experienced mentor".

Also, when the experienced researcher previously discussed her research with others, they were usually very familiar with qualitative methods, so there was a common starting point. With this research team, the common starting point was much smaller. It meant going back to the texts, to provide a bit of an 'audit trail' of how her own skills as a researcher had developed. There were two things to accomplish: first, convince the team that this approach made sense and establish credibility of the project as it was set out. Second, explain the process, step by step. All of this meant that there were 'readings' and 'handouts' given to the team, to bring us all to the same level of understanding, which is probably not a typical experience for most research teams.

## **DISCUSSION**

Our experience in a collaborative research team has taught us many things. Firstly it has demonstrated the value of collaboration for research skills development. It is clear that university teachers are being asked to work collaboratively, not just with their immediate colleagues but across institutions and industry (Kemp:1999). What is less clear is how this might best be done, particularly for new researchers, inexperienced in both research and collaboration. From our experience an excellent way for novice researchers to learn research skills is experientially in a supportive collaborative environment. The inexperienced team members of this group had both attended many seminars related to research skills development which are useful to build theoretical perspectives. However, this is not always helpful in facilitating the transition from 'knowing' to 'doing'.

Secondly our experience have enabled us to identify the qualities which made the mentor of the group particularly effective. Successful mentoring provides the opportunity to share professional and personal skills and experiences whilst growing in the process (Spencer:1996, cited in Tilbrook:1998). Clearly the benefits to the inexperienced researcher of having an effective mentor cannot be underestimated. A good mentor is :

"a communicator, counsellor, coach, adviser, broker, referral agent and advocate (Geiger-DuMond & Boyle: 1995, cited in Tilbrook:1998).

Most importantly, in our experience, a good mentor allows new researchers to be involved in the process at every step and appreciates that doing it for them won't help. This approach may be labour intensive but is worth the investment.

Another important message from our experience is the benefit of working with colleagues who share a similar perspective. We were passionate about the same things. We all cared deeply about the students and in a similar way. We were all working toward a better educational experience for the students. We each also appreciated the competing demands of family and work.

According to Bond and Thompson (1996) the most productive collaborations are based on similarity of some factors and complementarity of others. There were ways in which our skills were complementary. Some of us were visionaries, whilst others were better at details. Some of us had great ideas others could make those ideas reality.

In conclusion our collaboration has seen the team transformed from two inexperienced researchers and one experienced team member to a successful and productive research team with ten publications and two babies. The inexperienced team members are now capable of and more confident about working independently. This model of research skills development can be effective and we would recommend it as a wonderful way of learning new skills.

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