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## **Informal peer mentoring during the doctoral journey:**

### **Perspectives of two postgraduate students**

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#### **Abstract**

Doctoral studies can be isolating for postgraduate students who do not have strong connections with peers within the department through which they are enrolled. Collaboration of doctoral students across disciplines represents an exciting opportunity to decrease isolation, build networks and maximise research output and development of research skills.

This paper reports on an informal peer mentoring relationship between two doctoral students at Flinders University in South Australia. The relationship developed through a university writing group in 2008. This progressed to a mentoring relationship built on similar research interests. The students met regularly to assist each other, reflect on the doctoral experience and share learnings. They also supported each other informally through emails. In this paper, we report on how our mentoring relationship relates to postgraduate socialisation and the stages of mentoring reported in the literature.

This relationship created a safe “space” outside of the students’ disciplines to talk about issues related to their doctorates. This assisted with coping with the challenges of a doctorate. Through assisting each other, the students learnt that there is much that can be transferred across disciplines. Removing this discipline specific nature of research assisted in developing general research skills. Research output was increased through this process. From 2009 until 2011, the students presented at two conferences, had two papers accepted as conference posters and submitted one manuscript to a peer-reviewed journal, all related to their collaboration. A willingness and commitment from both parties, including a desire to learn about the other discipline, increased the effectiveness of collaborative efforts and enabled the relationship to continue.

This experience demonstrates the benefits of collaborating across disciplines. Collaborations between doctoral students from different disciplines could be encouraged by universities as a strategy for supporting postgraduate students and maximising their research output.

#### **Introduction**

Postgraduate education, specifically doctoral studies, represents an important part of career development for researchers, academics and others. A significant investment of time is usually contributed to doctoral studies, highlighting the potential for multiple experiences and learnings during this process. Therefore, it is important to consider

how the doctoral experience might be maximised. Our experience suggests that one way in which this can occur is through informal peer mentoring.

For us, informal mentoring represented a vital part of the PhD learning process. Therefore, in preparing this paper, we sought to identify whether similar experiences had been reported in the literature. In a review of the relevant research we found that the doctoral journey, in particular in relation to the stages of postgraduate socialisation, had been described before. In addition, literature on mentoring relationships and the stages of mentoring was discovered but much of this focussed on formal mentoring arrangements. Yet, together, these doctoral and mentoring studies provided useful theoretical insights into our own experiences. Specific studies of informal peer mentoring such as ours were sparse. The relevant studies which informed our self investigation are detailed below.

Socialisation plays an important role in postgraduate students' journey from novice to professional. According to Weidman et al. (2001) graduate student socialisation is "the processes through which individuals gain the knowledge, skills, and values necessary for successful entry into a professional career requiring an advanced level of specialized knowledge and skills". Faculty context and culture contributes to doctoral students' socialisation (Gardner, 2010a). However, although each graduate student's experiences are unique, according to Weidman et al (2001), professional socialisation occurs in four overlapping developmental stages: anticipatory, formal, informal, and personal. In the initial anticipatory stage, newcomers prepare for and enter their program uncertain about what is expected; in other words, about procedures and agendas. During this period students tend to seek out information and listen carefully to directions. In the formal stage of socialisation, "veteran newcomers" (Weidman, et al., 2001, p. 13) learn more about role

expectations, standards and policies through formal instruction, concrete information and observations of others. At this time, tasks issues are the main concern. The informal stage is characterised by the learning of informal expectations and degrees of flexibility from interactions with academics and peers. No longer a novice, the student starts to feel more professional. Peers can be important at this stage as students seek support and reassurance. Finally, in the personal stage, students internalise their new professional identity. As scholarly concerns advance, involvement in professional activities, such as presenting at conferences, increases. As programs end students prepare for future employment and further professional development (Weidman, et al., 2001). Doctoral student socialisation may be facilitated or impeded by ambiguities, study/life balance, ability to work independently, personal and professional development, and support received (Gardner, 2007). Socialisation can be particularly difficult for female, ethnic, older, parenting and/or part-time postgraduate students (Gardner, 2008).

Mentoring is also important to graduate students' development (Stacy, 2006). Mentoring can foster socialisation by nurturing professional and social development (Weidman, et al., 2001). Other outcomes from mentoring include behavioural and attitudinal change, improved health, enhanced relationships, increased motivation, job satisfaction and career outcomes (Eby, Allen, Evans, Ng, & DuBois, 2008) . In addition, mentoring positively influences students' perceptions of their graduate experience (Luna & Cullen, 1998). "Mentoring" is an ambiguous term to define (Crisp & Cruz, 2009; Eby, Rhodes, & Allen, 2008). However, "in all cases a mentor makes an individualized, personalized effort to assist someone in achieving their goals, reaching their objectives, and/or becoming successful" (Landefeld, 2010, p.

11). Key features of mentoring are a unique relationship, a learning partnership, a process of providing support and reciprocity (Eby, Rhodes, et al., 2008).

University staff, other students, peers, friends, religious leaders and/or family may mentor students (Zalaquett & Lopez, 2006). Mentoring relationships can develop spontaneously or originate in formal mentoring programs (Eby, Rhodes, et al., 2008). Whereas formalised mentoring may be initiated through third party matching processes, informal mentoring develops through personal relationships. “Informal mentorships are not managed, structured, nor formally recognized by the organization. Traditionally, they are spontaneous relationships that occur without external involvement from the organization” (Chao, Walz, & Gardner, 1992, p. 620). Informal mentoring relationships at the doctoral level are often between individuals of similar sex, race and age (Turban, Dougherty, & Love-Stuart, 1997). Personally committed to working collaboratively, informal mentors share similar goals and interests (Chao, et al., 1992). Studies (e.g., Chao, et al., 1992; Ragins & Cotton, 1999) suggest that informal mentoring outperforms formal mentoring programs in terms of effectiveness and career development. Perhaps this is because unlike formal mentoring programs, informal mentoring is not constrained by time, who is recruited and matching practices (Weinberg & Lankau, 2011).

All mentoring relationships, regardless of type, progress through four stages: initiation, cultivation, separation and redefinition (Kram, 1983). During the initiation stage mentoring is initiated and expectations clarified. In the cultivation stage, the mentoring relationship is maximised and the value of the relationship realised. A characteristic of the separation stage is a contextual or psychological change to the mentoring relationship. Anxiety and feelings of loss are common during this period, as those involved adjust to a changed relationship. Finally, the relationship evolves

into a new form in the redefinition stage. Contact may continue for many years but is more on a friendship than professional level (Kram, 1983).

Doctoral work is an arduous process that poses immense challenges to students and their mentors who often have to tread this perilous passage alone, only marginally aided by established institutional procedures. Student-led doctoral groups that combine strong peer and mentor/mentee relations can be an invaluable configuration for improving the doctoral student experience and for nurturing and socializing fledgling academicians. (Hadjioannou, Shelton, Fu, & Dhanarattigannon, 2007, p. 175)

Faculty members mentoring graduates students become “agents of socialization” (Lechuga, 2011, p. 768). However, doctoral students’ participating in formal mentoring programs report limited learning from academic role models (Linden, Ohlin, & Brodin, 2010). In a longitudinal study, Paglis et al. (2006) report that mentoring in doctoral programs may increase students’ research productivity and self efficacy. However, over time, commitment to a research degree was not influenced by doctoral mentoring. Perhaps this was because after observing the realities of academic life many students choose to pursue alternative careers.

In general, a social, respectful and helpful role model with good communication skills, who is able to provide feedback and whom they may like to emulate is preferred by many doctoral students (Rose, 2003). Based on these attributes, Rose (2003) developed the *Ideal Mentor Scale* to help determine what qualities individual students prefer in their mentor. The *Ideal Mentor Scale* (Rose, 2003) measures three factors – integrity, guidance and relationship. The integrity subscale reflects virtues desired. The guidance subscale describes the type of practical assistance sought and the relationship subscale is concerned with personal relationships. Conceptualisations about the ideal mentor are consistent across academic disciplines and stage of candidature, but do vary according to age, gender and citizenship (Rose, 2005). Bell-Ellison and Dedrick (2008) found that women tend to rate acceptance and confirmation by their ideal mentor more highly than male students. Although

personal liking is important to informal mentoring, personal liking appears to be less important within formal mentoring programs (Lankau, Riordan, & Thomas, 2005).

In this paper we present our experience as informal peer mentors who sought to guide and support each other during our candidature. Although past studies indicate that both socialisation and mentoring are important to doctoral candidates, currently there is limited research linking stages of PhD socialisation with mentoring phases. Such an understanding could be beneficial to further understanding how mentoring positively assists PhD students to successfully progress through their candidature. There are also few reports of interdisciplinary informal peer mentoring at the doctoral level. Insights into why and how peers choose to support each other outside of a formalised program could also help to address the gap in academics awareness of informal socialisation of doctoral students reported by Gardner (2010b).

### **Introducing the mentors and the mentor experience**

In this section we provide some brief information about the mentors and mentees, Annabelle and Carolyn. We also outline how this mentoring relationship was established and maintained.

**Annabelle.** Annabelle is a full-time student completing a PhD in the Department of Nutrition and Dietetics in the School of Medicine. After completing a Bachelor of Nutrition and Dietetics with Honours, she worked for a year in rural and remote South Australia where she developed a passion for Aboriginal health. Annabelle returned to complete a PhD looking at how White health professionals work in Aboriginal health and how they might do it better. She continues to work part-time as a dietitian in Aboriginal communities while completing her PhD. She also has an interest in working with schools which was developed through participation in two large data collection processes in South Australian schools.

**Carolyn.** Carolyn is a part-time mature age student completing a PhD in the School of Education. To fulfil a life-long dream, she began undergraduate teacher training shortly after the birth of her first child. An early school leaver, Carolyn had a successful administrative career before this. After completing a Bachelor of Education with honours she then commenced doctoral studies. The focus of her doctorate is on school-community partnerships in metropolitan secondary schools. Carolyn juggles study with part-time work and family commitments.

**Setting.** Annabelle and Carolyn are enrolled at an Australian university. The university has structures in place to support postgraduate students. For example, an extensive professional development program associated with research skills is available to all masters and PhD students. An academic internship program for doctoral students aspiring to pursue an academic career, is available to a small number of near completion doctoral students each year. This is important, as Austin (2002) identified that doctoral students are often not exposed to academic life during doctoral studies. These programs provide some opportunities for students to establish informal mentoring networks. Both Annabelle and Carolyn separately completed the internship and other professional development programs.

**Developing an informal mentoring relationship.** Annabelle and Carolyn attended a writing group in early 2008 that was part of the professional development program for doctoral students provided by the university. This writing group encouraged collaboration and discussion about writing and research. Through these discussions, Annabelle and Carolyn identified they had similar interests in working with schools, and similar approaches to research, including a desire to look beyond their own discipline, and a desire to publish. They began to discuss how they could utilise these



common interests and produce some research output. When the writing group disbanded in late 2008 they kept in contact.

**Maintaining an informal mentoring relationship.** Annabelle and Carolyn maintained their informal mentoring relationship through face to face meetings approximately every 2 months, and email contact when needed. While initial catch-ups were generally associated with ideas for research output, over time Annabelle and Carolyn continued to do this in addition to providing each other with practical and emotional support, which has previously been reported as a benefit of informal mentoring between doctoral students (Hadjiouannou, et al., 2007). Annabelle and Carolyn kept documentation of their mentoring relationship through informal emails, informal reflective journals, and voice recording of some meetings. In writing this paper, this documentation was reviewed.

### **The mentoring experience**

In this section we describe our mentoring experience using the stages of mentoring proposed by Kram (1983).

#### **No mentoring**

At the beginning of our PhD candidatures, we felt alone and unsupported. We both had minimal relationships with other doctoral students and experienced a feeling of a lack of guidance, which led to feeling somewhat lost. This was a stimulus for us both to independently seek external support, which we did when we both joined a writing group, run by the university, for PhD students. Joining the writing group was a deliberate strategy to move past this loneliness and feelings of lack of support.

#### **Initiation**

In the initiation stage of our informal mentoring relationship, we identified that we had a common interest about doing research in schools. We shared ideas for research

output and demonstrated that we were willing to listen to one another. Sharing ideas increased our enthusiasm for research, which assisted us to continue with our PhDs.

During this stage of our relationship, we were both becoming aware of the professional skills associated with doing research. We were able to learn some of these skills from each other, based on our different experiences and perspectives. For example, on first meeting Carolyn, Annabelle reflected that: “I saw Carolyn as someone who had already been through some of the PhD process – and would therefore be very valuable to learn from – especially with regards to data collection and analysis” . (Annabelle, personal reflections 24/10/11)

This demonstrates that Annabelle valued the *guidance* that Carolyn was able to provide.

### **Cultivation**

In the cultivation phase of our mentoring relationship, we began to jointly produce research output. This included acceptance of two conference posters (one of which we later withdrew due to other commitments), two manuscripts (one of which we are currently looking for alternative places to publish due to an initial rejection) and oral presentations at two university conferences. In these cases, our initial enthusiasm was tested against reality, a characteristic of the cultivation stage (Kram 1983).

Importantly, we achieved more together than we would have achieved apart. We each demonstrated integrity by seeking to achieve the outcomes we had agreed on:

Talking to Carolyn helps to re-motivate my interest in our research areas, because she reminds me why we are doing it. This is one of the benefits of our collaboration – we get more done together than we would apart – mainly I think because of pushing each other. I do not want to let her down, so I do the work. (Annabelle, personal reflections 27/10/10)

In addition to the research output we created during this stage, we also began to discuss our professional goals with one another. We found that working together taught us a lot about collaboration and how to work in partnership, an important skill in both of our professional fields.

I am learning so much about working in partnership by working with Annabelle – this experience is forcing me to ‘walk the talk’. I

have to collaborate with a professional from another discipline, as a teacher would. We both have different styles, similar but not the same approach and vastly different training/backgrounds – though we can make linkages. (Carolyn, personal reflections 21/10/09)

We also shared our experiences with research; for example we had discussions about our understandings of different theories, and when the time came we shared tips on how to write a thesis discussion chapter. We both found that we obtained clearer ideas about expectations by discussing things together. This was a form of guidance and we both valued it. We also provided each other with relevant information, for example:

Hi Carolyn,  
Sorry to bother you again, but wondering if you can help...sometime last year we were talking about bringing about a cultural change (in an organisation/ practice of workers) and you mentioned some literature that you were using? Referring to bringing about cultural change in a school I think? If you remember our conversation, can you point me in the direction of these references...I am wanting to talk about the possibility of cultural change in dietetics as a discipline and the practice of individual dietitians who work with Aboriginal people. Any suggestions would be appreciated!  
Thanks,  
Annabelle (email correspondence 3/2/11)

Guidance was further appreciated by both of us as we experienced challenges along our PhD journeys. When we received feedback from supervisors that our writing was not of a high enough standard, or rejections from conferences, we reassured each other that we were still on the right track. This encouraged us both to be persistent, and it was an important way that we both maintained confidence during our doctoral studies. We also prompted and encouraged each other to take action on issues rather than to do nothing, further increasing our confidence in doing so. The challenges that the PhD journey presented, and the importance of our relationship, is demonstrated in the following comments:

The PhD journey is so lonely. I treasure my friendship with Annabelle. She is the one person I can be honest with, who really understands what this is like. Had coffee and a chat with her last week. She is so non judgemental, caring and understanding. How lucky am I. (Carolyn, personal reflections 7/3/11)

## Separation

As it came closer to the submission of our theses, we both recognised that the other would require time and space to write-up their thesis. Therefore, during these times we did not meet as often. We used email communication as a way to stay in touch when we could not meet in person. In this case, we both valued the integrity the other demonstrated, such as being honest about what we could and could not commit to during this time. However, despite our structural separation (Kram 1983), we were aware that we still had each other's support.

## Redefinition

As submission of our theses gets closer and closer, we are beginning to looking for new and novel ways to work together as our roles change and our careers develop. We are both confident that our informal mentoring relationship was mutually beneficial throughout our doctoral degrees. Therefore, we are committed to maintaining it. Regardless of the directions our careers take, our informal mentoring relationship is now characterised by a friendship, and we will continue to maintain informal contact.

## Discussion

In examining our mentoring experiences, we reveal links between mentoring stages (Kram, 1983), postgraduate socialisation (Weidman, et al., 2001) and mentor attributes (Rose, 2003). Table 1 highlights this.

Table 1 *Stages of mentoring related to stages of PhD socialisation and ideal mentor attributes*

<b>Stages of mentoring (Kram, 1983)</b>	<b>Stages of post-graduate socialisation (Weidman, et al., 2001)</b>	<b>Attributes of an ideal mentor (Rose, 2003)</b>
No mentoring	Anticipatory	
Initiation	Formal	Relationship

Cultivation	Informal	Relationship, integrity
	Personal	Relationship, integrity, guidance
Separation	Personal	Relationship
Redefinition	Graduation	

Table 1 highlights how our mentoring relationship changed during the course of our PhD candidatures. In addition, the attributes that we sought from each other also varied across the PhD and mentoring journeys. While Rose (2003) suggests that those seeking a mentor value particular characteristics more than others, our experience suggests that the relevance of mentor characteristics changes according to the stage of mentoring (Kram, 1983).

During the anticipatory stage (Weidman, et al., 2001), as PhD newcomers, we each relied heavily on own discipline/faculty for information and support. We then independently turned to the professional development program offered by the university to develop relevant skills. It was at one of these sessions, a writing group, that we first met. Receiving formal instruction is characteristic of the formal stage of socialisation (Weidman, et al., 2001). Kram (1983) suggests that new mentees can “fantasise” about the mentoring relationship. However, then we did not have unrealistic, if any, expectations about the role the other would play in our PhD journey.

As our personal relationship developed, we agreed to cooperate on our first project. The cultivation (Kram, 1983) of our mentoring relationship coincided firstly with the informal and later with the personal stage of socialisation (Weidman, et al., 2001). As our relationship grew, and we worked hard to achieve shared goals, integrity became increasingly important. We relied on each other to do tasks

allocated within set time frames. As we report, during the informal phase (Weidman, et al., 2001) peers are important. Our investment in this mentoring relationship played some role in reaching the personal stage of socialisation (Weidman, et al., 2001). The experience of working together and across disciplines matured our outlook about academia. The height of our relationship involved numerous collaborative projects. It was not until we really trusted each other that we truly opened up and sought each other's guidance and support on issues.

The separation phase (Kram, 1983) subtly began as the end of our candidatures approached. Completing our thesis was a high priority and left little time for collaborating. Yet still we managed to complete this paper just weeks before thesis submission. Nevertheless, although much of our work was autonomous, our personal relationship endures. As we approach graduation, how our mentoring relationship will be redefined is unclear. There is still much we could do to informally mentor each other during our early career development.

### **Conclusion**

This paper links the mentoring and socialisation experiences of two informal interdisciplinary peer mentors. It is difficult to traverse the doctoral journey alone. Informal peer mentoring can provide valuable career and psychosocial support throughout the socialisation process. Our experience suggests that academic subject knowledge is not always necessary to successful informal peer mentors. We more often sought general research knowledge and support in undertaking a PhD from each other.

Mentoring phases and outcomes may change according to the stage of socialisation. Interdisciplinary mentoring activities, whether formal (e.g., Santucci et al., 2008) or informal (as in the case of this study), appear to be positively associated

with increased research output by doctoral students. With increasing amounts of university funding tied to research output this is important. Our experience suggests that universities should provide opportunities for cross faculty interactions between doctoral students. These opportunities may valuably supplement formal peer mentoring opportunities and enhance preparedness for future employment. For example, it has been reported that greater collaboration between health and educational professionals, beginning at the undergraduate level, is required (Hillier, Civetta, & Pridham, 2010). Further, students participating in traditional discipline-based graduate programs are not well prepared for future interdisciplinary collaborations (Boden, Borrego, & Newswander, 2011). Mentoring could continue beyond the PhD as peers support each other during early career development.

The present study is limited by a reliance on a single perspective. How these data may generalise to other informal peer mentoring relationships is unknown. Further studies are needed on the extent of informal peer mentoring amongst doctoral students and the value of these relationships to socialisation.

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