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## Important Themes in Postgraduate Research Supervision and Examination for Communities of Practice

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## **Abstract**

This paper analyses the themes arising from two Community of Practice (CoP) projects focused on supporting postgraduate research supervisors. One project was undertaken in New Zealand and the other in Queensland, Australia. The aim of the analysis is to provide interested readers with advice on important aspects of Postgraduate Supervision and Examination. The motivation for these CoP projects comes from increased demand for postgraduate supervision and also the notion that academic support is needed for all students and not just the traditional academic elite. This paper describes the background which prompted the projects, then details the activities undertaken. Following this discussion, the themes identified by two similar postgraduate supervision and examination CoPs are reported and compared. The analysis of these results suggests that there are core themes that might be common to all institutes and also unique themes specific to the context of the university or group where the CoP has been established. We call for further universities to set up a CoP and share their results in order to add to our comparison of the two universities and form a framework of themes significant in Postgraduate Supervision and Examination.

#### **Keywords**

Postgraduate tertiary teaching, research supervision, community of practice.

#### INTRODUCTION

The motivation for the Community of Practice (CoP) projects came from our own observations and personal frustration in finding relevant resources to support our postgraduate supervision practice. We found that increasingly islands of resources existed and would go untapped simply because the knowledge about the existence of such resources was not accessible to us. We also found in our review of the relevant literature, programmes that support the supervisor are relatively rare. Many studies that we reviewed approached the role of the supervisor from the perspective of the student (Wisker et al. 2003).

However, among the studies that investigates individual supervisory practices there are several different alternatives reported in the literature. Brew and Peseta (2004) investigate a case study of individual supervisory practices in an autobiographic style. However, the personal case study approach is very confronting and supervisors will need to be very comfortable with their own practice to fully engage with this approach.

In a critique of the development of research supervision skills in Australia (Manathunga 2005), the practice of postgraduate supervision is acknowledged as a very private space where supervisors resent the intrusion of formal educational programs as demonstrated by anecdotal evidence reported by Cater-Steel and McDonald (2009) showing an email communication resenting the intrusion of a formal training assessment exercise.

Although institutionalised supervision training courses such as those proposed by Pearson and Brew (2002) exist at AUT and on an ad-hoc basis at USQ, as one participant of the New Zealand study described, courses are like sowing seed. Some seeds will fall on barren ground and will not grow. Therefore, some knowledge from the training courses will be delivered but not internalised by the individuals taking the course.

Unlike the formal training courses and reflective case studies, we argue that CoPs provide a social network that supervisors can access to be reminded about relevant theory or supervisor best practice when they have a need for that information. In contrast to formal supervisor training programs, the CoP model is more respectful of the expertise of the supervisor, celebrating and acknowledging each member's skills and knowledge. Also, unlike the personal reflective model, the CoP model does not exclusively cater to the academic elite.

CoPs have been shown to benefit PhD student cohorts and their supervisors in a study reported by Wisker et al. (2007). However, in the approach taken by Wisker et al. (2007), the CoP is viewed mainly in the context of student learning facilitated by the supervisors as opposed to supervisor learning. The power relationship in supervision teams is acknowledged by Manathunga (2007) and for this reason we argue that there is a very clear need to keep the CoP for postgraduate supervisors separate from any CoP of postgraduate students. However, we

also acknowledge that it is the nature of our environment that academic staff will often have dual roles such as supervising masters research projects and being a PhD student themselves. However, this is a special case and we rely on the professional integrity of the staff members in this position.

In this paper we discuss initial themes in postgraduate supervision collected as part of the establishment of a CoP on postgraduate research supervision and examination within the School of Computing and Mathematical Sciences at AUT in New Zealand and as a university wide project at USQ, Queensland, Australia. The purpose of the CoP is to establish a formal social network of supervisors and examiners to encourage education, dissemination of best practice and reuse of knowledge in postgraduate research supervision and examination.

CoPs are described by Laudon and Laudon (2010) as "informal social networks of professionals and employees within and outside (organisations) who have similar work-related activities and interests" (p.445). The essential elements of a CoP are defined by Wenger (1998) as:

- a domain of knowledge that creates a common ground and sense of common identity;
- a community of people who care about the domain and create the social fabric of learning;
- a shared practice that the community develops to be effective in its domain.

CoPs exist in a variety of commercial organisations including IBM, the U.S. Federal Highway Administration and the World Bank (Laudon & Laudon 2010). CoPs are well established in the Australian Vocational Educational and Training sector and more recently have been established in pockets of tertiary education in Australia (McDonald & Star 2006). McDonald and Star (2006) relate the business case for establishing CoP for tertiary teachers of first year undergraduate courses to tertiary teaching issues explained by Briggs (1999) as a need for academics to address the academic support needs for all students and not just those of the 'traditional academic elite' who would probably be successful at university with little academic support. In this paper we discuss two case studies of CoPs to facilitate postgraduate supervisory teaching. The first case study is by AUT, New Zealand and the second is by USQ, Queensland, Australia.

#### NEW ZEALAND PROJECT

#### Rationale

Traditional approaches to research supervision assume that being active in research is qualification enough for supervising it. However, it is increasingly argued that supervision is a subtle and complex form of teaching (Taylor 2008). AUT has a rich range of resources on research supervision and examination including those provided by the fIRST web site (a comprehensive set of research supervision training material jointly funded by 36 Australian and New Zealand universities and hosted by the University of Technology, Sydney). However, the AUT Academic Audit (2006) urged for a focus within the University on dissemination of information generally. Anecdotal evidence also supports this need for better dissemination of information where in an informal meeting among research active academic staff of the School of Computing and Mathematical Science, staff discussed difficulties with research examination and successful training and selection of potential examiners. Few members were aware of resources or networks of people who might be able to help. In the next section, we discuss the approach taken to establish the Postgraduate Supervision and Examination CoP (CoP – PSE) in the School of Computing and Mathematical Sciences at AUT.

The CoP - PSE proposal is closely aligned with AUTs immediate strategic development plans as published in the AUT Investment Plan 2008-2010 (2007). The Plan cites the substantial growth in AUT postgraduate qualifications and estimates further growth in the provision of postgraduate qualifications over the next four years. In particular, this proposal addresses the TES Key Shift 4 (AUT Investment Plan 2008-2010) p.13) of increasing collaboration and critical mass in teaching and research in postgraduate research degrees. The AUT Investment Plan acknowledges that such growth will place pressure on current postgraduate research supervision capable staff and will create a need for more capability to be developed in the area of postgraduate research supervision and examination.

There are five planned outcomes of this project that will have lasting value for AUT and they are as follows:

- A set of protocols will be established that will be useful in future projects such as protocols for dealing with or talking about sensitive supervision issues in a forum where the relationships are known;
- A set of instructions for setting up a CoP on postgraduate supervision that could be used in other schools and faculties at AUT;
- A resource list of accessible material (electronic & hard copy resources);

- Annotated bibliography of relevant scholarly literature on supporting supervisors;
- A description of mechanisms used to facilitate contribution to the CoP.

## **Approach**

Our approach taken to establishing a CoP – PSE at AUT was similar to the setup of any CoP. First a steering committee for the CoP was setup. The steering committee provided guidance and insight to the project. The steering committee included the Head of Research and postgraduate programme leaders at the school level, the Faculty Associate Dean of Research and members of the University Postgraduate Committee. The project was longitudinal and spaned an initial period of 12 months and is ongoing. Data was collected through focus groups and group conversations. AUTEC (ethics) approval was obtained for the data collection.

A repository of the CoP - PSE was setup on AUTOnline, the online teaching platform powered by BlackBoard Academic. The members of the group were formed from the list of postgraduate supervision and examination capable staff members at the School of Computing and Mathematical Sciences. Staff were given instructor status to allow them to unsubscribe from the group if they wished. The tools from the online teaching platform included the announcement and group email facility to communicate information about the groups, documents folder to hold summary results of the project including a vision document and the themes from the focus groups. The glossary tool was used to form a Subject Matter Expert (SME) directory with the definition field for the glossary term containing the name and web page address for the expert. Notes from each of the conversations sections were written up. The external links were used to list useful references and resources.

The initial CoP meeting was held in the style of a focus group to identify priority issues of members. Based on the results of the focus group, an agenda of themes for the year long programme was developed. Based on the themes from the focus group sessions, conversation sessions were planned and relevant experts invited.

Each participant was provided with an information sheet and completed a consent form. Both the information sheet and the consent form outlined best practice guidelines to ensure that issues were handled professionally to protect the postgraduate student since some supervisors and examiners were themselves postgraduate students and the postgraduate community is relatively small and close knit meaning that the identity and private details of one student's supervision experience may be accidentally exposed.

Based on the themes that arose out of focus group sessions an agenda was set for the first 12 months of the CoP. The purpose of the conversations was to provide opportunities for members of the CoP to engage in learning about their postgraduate supervision and examination practice. To achieve this learning environment, the CoP facilitator invited guest speakers and members to share practices and provided members with opportunities to celebrate triumphs and achievements. In line with the CoP model, the facilitator also provided exciting refreshments such as frothy coffee and decadent muffins.

Throughout the process, the coordinator personally invited SMEs to become part of the Research Experts Directory as they emerged from the conversations sessions. For example, if a guest was invited to the session and their contribution showed that they had expertise or skills of interest to the group such as how to prepare a PhD student to give a viva, the opportunity was offered to that expert to become part of the SME directory. The facilitator also actively sought opportunities to raise awareness of resources (specifically fIRST & CEPD).

Sustainability of the project was planned by setting up of a number of resources that will allow organisers to run the programme with the help of existing departments at AUT such as CEPD and postgraduate advisors in each of the Faculties at AUT.

Dissemination of the CoP outcomes was mostly word of mouth through the steering committee. A program of both formal and informal evaluation was undertaken. Informal evaluation was sought at major stages throughout the project from the steering committee.

Formal feedback is sought from the community members at the end of the 12 month period during November 2009 by way of a very short satisfaction survey. The satisfaction survey is overseen by CEPD. Formal feedback is also sought after each of the monthly workshops (suitable evaluation instrument and independent collation of data to be overseen by CEPD).

#### Results

There were 44 members of the CoP - PSE. These included steering committee members and some members of the community were interested members of other schools within the University. Two initial focus group sessions were held to set establish the themes for the CoP. The first focus group had six participants and the second group had three participants. Chart style notes were taken during the sessions in full view of the participants and these were later analysed using a grounded theory data analysis approach to identify important categories. These

categories became the themes that were used to guide the setting up of the conversations sessions similar to the approach by Wisker et al. (2003) which they describe as 'dialogues'. Table 1 shows the themes that were identified and the planned activities.

Table 1. Postgrad Supervision & Examination Themes 2009

Theme	Planned Activity
Getting to understand the expertise that is recognised –	Subject Matter Expert (SME) directory
shared expertise.	
Methods of inculcation of supervisors.	Conversations topic and invited expert.
Getting postgraduate students more involved in the	
school.	
How to communicate quality examination guidelines	Invite professors to make a CmapTools <sup>4</sup> of their
to examiners and share examination heuristics.	examination heuristics at a conversation topic.
Understand why new examiners are more likely to fail	
students and how to correct this problem.	
How to help students who are average and below	Conversations topic and invite SME speaker
How to efficiently navigate ethics processes	Subject Matter Expert (SME) directory

The main underlying need identified as part of this process was a need to share knowledge. Essentially, this was facilitated through the Subject Matter Experts (SME) directory and the conversations sessions. The next section describes a similar project undertaken at the same time in Australia. Following this, the projects are compared.

## **AUSTRALIAN PROJECT**

A sister project was undertaken in parallel with this study at the University of Southern Queensland (USQ) in Toowoomba, Australia. However, the design of the Australian Project was quite different compared to the NZ project. The overall approach of the Australian project was University-wide whereas, the study in New Zealand focused on a school unit.

#### **Rationale**

Like other Universities, USQ is under pressure to ensure postgraduate research students complete their projects in a timely manner. As well, it is important to consider student satisfaction with the quality of supervision provided and ensure adequate resources are provided to ensure effective supervision. The project commenced in March 2009 with funding for four months from the Learning and Teaching Support Unit (LTSU) and support from the PVC Research. The issues addressed by the USQ project are:

- 1. do research supervisors at USQ have adequate knowledge and skills to supervise students?
- 2. can the capability of research supervisors be improved by offering workshops and resources as part of USQ's professional development program?

In April 2008, the Graduate Research Committee (GRC) discussed a plan to accredit research supervisors and record their details in a register. At the time, it was estimated there might be as many as 80 USQ staff currently supervising research students. The GRC discussion paper stated that applicants for accreditation as a Research Higher Degree Supervisor "must have undertaken the University's Research Supervisors' Program or demonstrate that they have an equivalent level of expertise and/or training". USQ does not have a Graduate Research School – a situation typical in regional Australian universities. Subsequently, USQ subscribed to fIRST - a repository of resources and workshops compiled by a consortium of universities in Australia and New Zealand (fIRST 2002). A working group was formed at the June 2008 GRC meeting to recommend the components of the research supervisors' program. One of the authors of this paper was appointed as a member of this working group along with one of the Associate Deans (Research) and a staff member of the Office of Research and Higher Degrees (OR&HD).

The knowledge and skills required by supervisors can be broken into two groups: administrative and academic. Administrative knowledge can be covered in an induction program for research supervisors and should include topics such as university research policy, IP policy and contract framework, ethics clearance, workplace health and safety issues relating to students, policies related to research finance support, administrative processes, university and Federal Government policies relating to admission, confirmation of candidature, submission of thesis, and examination. In relation to academic knowledge and skills, in the past, ad-hoc seminars and

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<sup>&</sup>lt;sup>4</sup> CmapTools is knowledge modelling software which facilitates the construction, sharing and constructive criticism of knowledge models. More information is available at http://cmap.ihmc.us/conceptmap.html

workshops had been organised at USQ and Faculty level. The working party identified a requirement for the following topics in the professional development program: developing the student-supervisor relationship, literature review, development of the proposal and confirmation of candidature, thesis writing, and data analysis methods.

As well as addressing the requirements of a research supervisors' training program, this project established a cross-institutional research supervision Community of Practice (CoP-RS) including all five faculties and three USQ campuses. The purpose of the CoP-RS is to provide a formal social network of USQ research supervisors to encourage education, dissemination of best practice and reuse of knowledge in research supervision.

USQ has encouraged the formation of CoPs as part of its Project Revitalisation Project. The CoP-RS was proposed to build on the existing repository provided by the fIRST consortium by supporting professional development and providing opportunities to share practice, build resources and implement innovative research supervision practices. This project follows guidelines promoted by Pearson and Brew (2002) and is "focused on the development of supervisors knowledge base, their skills and their orientation to their practice" (p.148). The CoP-RS aims to provide the following learning outcomes for research supervisors:

- Knowledge of USQ institutional requirements and procedures including ethics and WH&S;
- Greater self-awareness of own conceptions of research and supervisory practice;
- Understand what constitutes a productive research learning environment;
- Appreciate a range of good practice approaches to research supervision.

Furthermore, the establishment of the CoP-RS addresses USQ's desire to improve research supervision practices by drawing together separate islands of research supervision knowledge into an accessible body of resources and social networks of professional expertise. The project increases the awareness and use of different approaches to research supervision through the creation of a program of activities that incorporates existing workshops and resources available both within USQ and from the wider fIRST Consortium of 35 Universities throughout Australia and New Zealand.

#### Approach

The USQ project comprised of four main activities:

- 1. establish a CoP for Research Supervisors (CoP-RS);
- 2. perform training needs analysis;
- 3. develop and conduct induction and pilot workshops program;
- 4. evaluate the program and report outcomes and recommendations to stakeholders.

Prior to commencing the project, an updated list of 180 current supervisor names (more than double the initial estimate) was provided by the OR&HD. The OR&HD assisted by providing the email addresses of the supervisors. The organising structure for CoP-RS meetings includes the use of three CoP elements: community fellowship and refreshments, sharing practice, and building domain knowledge. The role of convener is shared by a domain expert (in this case the Project Leader) and a convener from LTSU with knowledge of CoP processes and professional development. CoP priorities and a tentative yearly agenda were established from issues identified by members at the first CoP-RS meeting.

#### Results

**Activity 1 Establish CoP-RS.** During the initial CoP-RS, supervisors worked in groups to discuss, list, and prioritise issues in relation to research supervision in a similar manner to the CoP-PSE (the New Zealand case). The issues reported by the Australian study fell into four categories:

- Lack of training, mentoring, workload to support supervisors. Training requirements include thesis proposal defence, thesis writing, philosophy and methodology.
- Need to establish and maintain positive relationships with students and to recognise external pressures for student to complete in minimum time.
- Requirement for a central repository so supervisors can access policies, procedures, definitions.
- Difficulties in supervising local and distance international students due to language and culture.

The final issue has become critical as a result in the doubling of the headcount of international research students over a five year period from 39 to 88 as shown in Figure 1.

Figure 1. Higher Degree Research Students – Student Headcount from 2003-2008 Source: USQ 2009 (AUQA Portfolio)

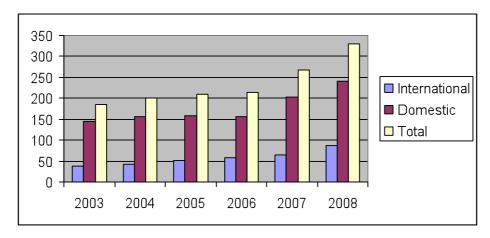


Table 2 shows the topics covered at the CoP-RS meetings to date. Attendance rates varied from 12 to 24 for each meeting. A website has been established to share CoP-RS and workshop resources on Moodle, USQ's Learning Management System (LMS).

Table 2 CoP-RS Topics

CoP	Sharing Practice	<b>Building Domain Knowledge</b>
meeting		
March -	Small group activity - identify and	Whole group activity – share group priorities and
launch	prioritise current challenges faced by supervisors	plan future CoP-RS meetings
April	Discussion regarding external RHD students - challenges of supervision and	Training for RHD supervisors. Review fIRST resources and decide on workshops and Understudies
	suggestions to overcome problems	
May	Challenges faced by novice supervisors	Panel discussion: Advice for the novice supervisor –
		how to attract and progress RHD students.
June	Discussion led by Prof Christine Bruce - Six pedagogical frames for higher degree research	Library resources and support
August	Interactive session to promote reflection	Panel discussion: cultural awareness – working with
	on 'out of culture' experiences	international students
September	Discussion: communication strategies currently used by supervisors and students	Presentation: 'Communication strategies for doctoral supervisors and students: doing it at a distance'

The April CoP-RS meeting focussed on sharing practices related to international students. Members discussed the challenges of supervising international students and suggested a range of solutions to overcome the perceived challenges. One suggestion is use the existing the LMS system to create a community research course which is not tied to any program or semester offer. This course would provide an online environment for supervisors and students to share resources, build learning communities and electronically answer frequently asked questions, for example, policy issues. The Moodle environment also hosts asynchronous discussion forums, so international students could interact at any time, despite different time zones. Other suggestions involved supervisors using communication technology such as Skype to help students overcome feelings of isolation.

Activity 2 Training Needs Analysis. Initially the scope of the project included the development of the training needs analysis for USQ. However, in July 2008, the project leader became aware of an Australasian Survey. The survey, funded by the Australian Learning and Teaching Council, was conducted by researchers involved with the fIRST Consortium (2009). Supervisors at USQ were encouraged by the Office of Research to complete the survey but there were insufficient responses from USQ for fIRST to provide a detailed analysis of USQ responses. In March 2009, the researcher gained cooperation from the fIRST researchers to reopen the survey for USQ supervisors. Research supervisors were encouraged by the PVC Research to complete the survey. This resulted in 90 responses and a report showing USQ's responses as well as a comparison against all the responses from Australia and New Zealand.

**Activity 3 Workshops.** At the April CoP-RS meeting, members discussed their perceived training needs and identified suitable workshops from the fIRST collection. The fIRST workshop authors were invited to USQ to present the selected workshops. To ensure transfer of skills, two USQ research supervisors volunteered as 'Understudies' for each workshop and worked with the visiting presenter so that in-house expertise is developed to conduct the workshops on an ongoing basis.

Three workshops were conducted in May-June 2009. The positive response from supervisors to attend the workshops highlighted the demand. The feedback from participants of all workshops was very positive.

- *Thesis writing workshop*: as attempts to contact the author of the fIRST resources for thesis writing workshop failed, two staff with experience in research supervision offered to conduct the workshop. The workshop was over subscribed with 24 attendees.
- Developing positive research supervision relationships: Dr Catherine Manathunga provided resources and assisted two understudies to conduct this workshop.
- Effective literature review: Visiting Professor Christine Bruce supported two understudies in presenting this workshop. Videoconferencing was used effectively to enable supervisors at USQ's remote campuses to participate in the group discussions. This workshop was booked out within two days of being announced.

**Activity 4 Evaluation and Reporting Outcomes**. The evaluation stage of the project is complete. The final project report was presented to LTSU and the GRC. Further funding support has been requested to continue and extend the CoP-RS project.

#### **DISCUSSION**

Overall, we took the approach proposed by Haigh and Brown (2001) who incorporate Wenger's (2000) notion that organizations can "cultivate" communities of practice – "Like gardens, they respond to attention that respects their nature" (p. 144). Haigh and Brown (2001) argue that in order for a community of practice to continue to function as an effective community of practice, "managers need to be aware of their existence, actively support membership of them, remove or reduce obstacles to membership and engagement and, where possible, provide infra-structural support" (p.11). Further, Haigh and Brown (2001) argue that in particular, management need to "ensure financial support for staff participation, funding for publishing of documents, facilitating IT support, highlighting the significance of key contributions to this community in a staff appraisal context and approving of the job time involvement in the community's activities" (p.11). Therefore, in addition to understanding that the communities are about the knowledge and the people as set out in definitions given in the introduction of this paper, we argue that the cultivation and encouragement of such communities is equally important in an organisational environment. As such, using the existing mechanisms available to us in our respective organisations, we have outlined how such cultivation and encouragement was set about.

Although the projects used a slightly different in approach and emphasis, it is useful to compare the findings as it can highlight common problems and guide future convenors who may wish to setup a Postgraduate Supervision and Examination CoP at their school. The results of this comparison are presented in Table 3.

Table 3. Co	ompa	risoı	ı betv	veen	Australian	& Ne	w Zeala	nd S	Stud	y
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	CoP – PSE (New Zealand Study)	CoP -RS (Australian Study).				
Points of differen	nce between the case studies					
Ethics Approval	How to efficiently navigate ethics processes	-				
Examiner	How to communicate quality examination	-				
knowledge	guidelines to examiners and share					
	examination heuristics.					
Distance	-	Difficulties in supervising international				
postgrad study		students in Australia and across borders.				
Themes similar	Themes similar from both case studies					
Mentoring	Methods of inculcation of supervisors.	Lack of training, mentoring, workload to				
supervisors		support supervisors.				
Supporting	How to help students who are average and	Need to establish and maintain positive				
Students	below	relationships with students and to recognise				
		external pressures for student to complete in				

		minimum time.
Expert	Getting to understand the expertise that is	Requirement for a central web-based
knowledge	recognised – shared expertise.	repository so supervisors can access policies,
		procedures, definitions.

Through this comparison of the themes identified in each case study, we observed that there are commonalities and points of difference between the results of the two sets of analysis of important themes in postgraduate supervision and examination as perceived by the supervisors. We believe that the points of difference can be explained by the context of the particular University environment. The major points of difference were the ethics approval, the examiner knowledge and the distance postgraduate research study.

## POINTS OF DIFFERENCE

Ethics approval From the personal experience of the authors, we can say that ethics approval processes at the two Universities are very different. Although both Universities have both high and low risk ethics approval processes, the processes at the New Zealand University are much more complex. The application process is much longer in New Zealand and for one reason or another, the process is more problematic for both supervisor and student. Therefore, we suggest that this difference explains why the New Zealand Community of Practice group were much more concerned about finding out how to efficiently navigate the ethics process.

Examiner knowledge The Australian project focused mainly on supervision. USQ did not have a consistent process training supervisors until the beginning of this project. In comparison, AUT has a well established regular training session for both introductory and advanced supervisors. It is compulsory for supervisors in the New Zealand University to have undertaken the first stage of the training course before they commence supervision and the program has been established since 2006. Therefore, the AUT cohort was advanced enough in the basics to more on to cover the examination element of supervision. In the Australian University, there was more need to establish the training and provide access to resources and policy relevant to supervision in general. We suggest that this difference in the context of supervision training at the two Universities explains why the New Zealand University identified examiner knowledge as an important aspect of the CoP.

Distance postgraduate research study The Australian University participants identified distance study as an issue of concern. However, this issue was not raised as a theme in the New Zealand study. We suggest that this is because USQ is a distance education provider with a significant and increasing proportion of international research students. USQ offers the completion of postgraduate research qualifications by distance, whereas, AUT is not a distance education provider and supervision of postgraduate research students who do not attend the campus is not encouraged.

## **SIMILARITIES**

Putting the differences aside, there are however, some striking similarities in issues faced and therefore themes raised by the two communities of practice. These similarities run along the broad themes of mentoring supervisors, supporting students and sharing expert knowledge.

**Mentoring supervisors** Both CoPs raised the theme of mentoring for supervisors as being important to them. This is due to expanding postgraduate research student numbers in both Universities and a raised awareness of postgraduate research supervision as a teaching and learning process of equal importance to undergraduate teaching. Both Universities have recently implemented policy that encourages best practice supervision processes and both Universities have funded CoP initiatives that are supported by contestable University funded teaching and learning grants.

**Supporting students** Both CoPs also raised the theme of supporting students. Both Universities are at similar levels in terms of ranking and therefore deal with a similar calibre of student. Therefore, the issues they face in supporting students who are not the 'traditional academic elite' are quite similar.

**Expert knowledge** Both sets of CoP participants identified themes relating to the need to find expert knowledge. This is related to similar levels of acquired knowledge about research supervision and examination in both Universities. Both Universities struggle to access available resources and supervisors are not privy to how to find access such knowledge. We suggest that as University policy facilitates further postgraduate research, access to knowledge will become an important pre-requisite of the study.

#### IMPLICATIONS AND CONCLUSIONS

For Universities or schools within Universities who are thinking about deploying a CoP for Postgraduate Supervision and Examination to support the supervisory staff, there are a number of outcomes from the comparison of the Australian and New Zealand case studies that will be relevant.

Firstly, since there is a lot of commonality in the themes around mentoring new supervisors, supporting students and sharing expert knowledge, we would recommend that the groups taking up such a challenge include these themes in their CoP. However, there are three themes that did not match between the University cases and which we argue are relevant to the context of the University. That is, efficient ethics approval procedures, compulsory supervisor training courses for staff and issues related to supervision of distance research students. Therefore, it is worth running the initial focus groups for the CoP to identify themes and issues that are relevant to the group because our findings suggest that although there will be a core of common themes and concerns, there will likely be other themes and concerns perhaps not reported before that will be relevant to the group. We suspect that in a similar way to subjectivity in supervision as argued by Green (2009) there is also subjectivity in postgraduate research supervision programs across universities.

We encourage groups who do set up a Postgraduate Research CoP for supervisors in their institutions to compare their themes with ours and to report their findings as we suspect that by involving more institutions, we will uncover further context specific themes that relate to the situation and environment at the host institution. The final outcome of such a group could be a model that can be used by CoP convenors to ensure that all of the issues/concerns are identified and the model will inform the authors of postgraduate research supervisory training courses and relevant postgraduate supervisor training.

Finally, the aspect of sustainability needs to be considered. Both cases discussed here endeavoured to ensure the CoPs were viable beyond the timeframe of the initial grant. In the case of AUT, the researcher was required to plan for the sustainability of the project as a condition of receiving the grant. The proposal for the sustainability of the CoP - PSE was to undertake the project with the School of Computing and Mathematical Sciences with a view to replicating the model in other areas of the University. To this end, the researcher was required to document processes, approaches and best practice examples to enable further CoPs. In the case of the Australian CoP, a formal handover was arranged to staff from HR and ORHD at the completion of the project. As well, the involvement of the Understudies to conduct further workshops, and the establishment of the CoP-RS LMS site as a central repository of information and resources will help ensure the long term benefits. We recommend that units intending to set up a CoP provide for a sustainability plan because the funding body will probably require it and also funding for the full lifecycle of the CoP is not likely, therefore, there needs to be a plan for how the CoP will continue beyond the initial grant.

In conclusion, our work extends the views of Briggs (1999) explained earlier in this paper to the postgraduate area. We have confirmed a need to support research supervisors whose students require much higher levels of academic support compared to the 'traditional academic elite' who would probably be successful at university with little academic support. Clearly, the policies of accrediting supervisors implemented in the two institutions and the themes identified by the supervisory staff at both institutions show that supporting research supervisors is critical and increasingly the spotlight will be on completion times and successful completion rates of postgraduate research programmes. Therefore, further work is warranted both in implementing similar CoP programmes in other institutions and further analysis of the themes raised as well as longitudinal assessment of the success of the CoPs further in one or two years from now. On a personal note, the authors, relatively novice research supervisors, gained valuable knowledge, skills and satisfaction from developing and implementing the projects and look forward to extending their work alongside their IS teaching and research responsibilities.

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