Research Supervision in Non-University Higher Education Institutions: New Zealand Supervisors’ Acquisition of Skills.

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Abstract

Supervising students undertaking research projects, dissertations or theses at all levels from pre-degree to masterates is a significant part of the work of tertiary educators in polytechnics and private training establishments (PTEs) across New Zealand. In recent years there have been considerable efforts internationally to understand more about supervision at postgraduate, especially doctoral, level. However, as Todd, Smith & Bannister (2006) note, the research literature relating to experiences, perceptions and practices at other levels is less well developed, and there remains relatively little advice available for supervisors of research below doctoral level. Moreover, there is scant research addressing the specific requirements of supervision beyond the university sector and only an emerging literature related to supervision within the New Zealand context. Therefore, this exploratory project sought to explore current practices across a range of types of organisations and qualification levels.

Whilst a larger project (Rath, 2008) used both a survey and qualitative case study approach, this paper focuses on interview data gathered as part of the latter method from three polytechnics and a PTE. A narrative interview approach was adopted to maximise the opportunities for informants to speak to their own priorities within each setting. None of the four institutions had a formalised training programme for supervisors. They relied on wider, system-based, initiatives that focused on staff research and/or teaching capabilities. This paper concentrates on how supervisors draw on a range of skills, experiences, resources and non-supervisory formal professional development opportunities in order to understand their development of pedagogies of research supervision. It focuses on key interlocking themes, which arose from an inductive content analysis, in order to highlight issues for future research and to suggest implications for the development of practice. These include the importance of recognising supervision as space for crafting (and re-crafting) scholarly identities, the evolution and expansion of teaching duties and the crucial role of supportive academic communities.

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Introduction

Supervising students undertaking research projects, dissertations or theses at all levels from pre-degree to masterates is a significant part of the work of tertiary educators in polytechnics and PTEs across New Zealand. In recent years there have been considerable efforts internationally to understand more about supervision at postgraduate, especially doctoral, level (e.g. the PhD Completion Project in the United States and Canada, http://www.phdcompletion.org, The Carnegie Initiative on the Doctorate, which explored the state of doctoral education in the United States (see Walker, Golde, Jones, Bueschel & Hutchings, 2008) and the ongoing Australian Learning and Teaching Council funded project “Building research supervision and training across Australian universities”). However, as Todd, Smith & Bannister (2006) note, the research literature relating to experiences, perceptions and practices at undergraduate level is not well developed, and there remains relatively little advice available for supervisors of research below doctoral level. However, there remains little research at sub-doctoral levels, scant literature addressing the specific requirements of supervision beyond the university sector and only an emerging research field focused on supervision within the New Zealand context.¹ In recent times ACER Press has published two edited collections focused on Australian and New Zealand postgraduate students and supervisors (Denholm & Evans, 2006 & 2007), and the Australian focused biennial Quality in Postgraduate Research (QPR) conferences have been held in Adelaide since 1994; they are now well established as a meeting place for those concerned with postgraduate education in both Australia and New Zealand². However, the focus remains firmly on the university sector with little information available regarding the non-university sector.

Non-university establishments are a significant sub-sector of New Zealand Higher Education institutions. Government policy changes related to research quality assessment reporting and funding mean that all institutions are under increasing pressure to build research capability and capacity (see Curtis (2008) for a critical overview of New Zealand’s Performance Based Research Fund and the way in which it has stripped funding from the non-university sector). The research reported here focuses on polytechnics and Private Training Establishments. In both types of institution time-consuming teaching loads and restricted resources mean that there is a high likelihood that supervisors themselves have limited opportunities to be active researchers.

The polytechnic sector is in transition. In recent years staff duties have evolved from teaching solely on sub-degree vocational qualifications to degree and most recently postgraduate qualifications. Indeed, many members of staff are still in the process of “upgrading” their own qualifications to research degrees. The PTE sector is more diverse, with many establishments offering specialised provision for sub degree qualifications; however, this research focussed on PTEs offering provision at undergraduate and postgraduate level. The PTE referred to in this paper offered its first Masters degree in the 1990s, one polytechnic offered no postgraduate provision and the other two limited provision at Postgraduate Level.

¹ Although there is a growing body of work to address the nature of supervisory processes for Māori doctoral candidates particularly within the Wānanga sector (e.g. McKinley, Grant, Middleton, Irwin and Williams, 2007), little is know of supervision at other non-university institutions, ie polytechnics and private training establishments. Most notably, and urgently, there is a growing body of work to address the nature of supervisory processes for Māori doctoral candidates (e.g. Fitzgerald, 2005; Kidman, 2007).

² The QPR website (http://qpr.edu.au) provides an overview of past conferences and a comprehensive database of past papers.
Methods

In order to research the different aspects of supervisor professional development the project as a whole used both a survey and qualitative case study approach in order to address two research questions:

- What existing resources and professional development activities are available at universities, polytechnics, wānanga and relevant PTEs?
- How do supervisors draw on resources and professional development activities to develop pedagogies of research supervision?

This paper’s focus is on the second research question. It draws on in depth interviews with twelve supervisors conducted as part of the case studies in three polytechnics and a PTE.

The exact nature and length of individual interviews varied, these lasted an average of 64 minutes, varying from 36 to 109 minutes. The interview approach was influenced by the work of Riessman (1993), who emphasises the need to develop interviewing techniques that allow informants to focus on facts, opinions and stories that are of abiding interest to the participant. The intention was to obtain data that reflects the priorities and narratives within each setting.

Findings

None of the four institutions had a formalised training programme for supervisors; consequently few supervisors had undertaken formal supervisor training. They relied on wider, system-based, initiatives that focussed on staff research and/or teaching capabilities. The findings reported here concentrate on how supervisors draw on a range of skills, experiences, resources and non-supervisory formal professional development opportunities in order to develop pedagogies of research supervision. An inductive analysis of the interview data using NVivo software produced four main themes in supervisors’ narratives: memories of supervision, supervision as teaching, transferring skills, and learning from and with colleagues.

Memories of supervision

Whilst books, articles and online information were sources of information for a few, most supervisors mentioned their own student experiences as the major factor in determining an approach to supervision. Some had experienced positive role models:

When faced with this task for the first time I remembered back to my own Masters supervision experience and I was fortunate that I had a very good supervisor so my model, my supervision model was very good, imprinted in fact in my brain.

I suppose you kind of model yourself on aspects of certain people and find your own way. Yeah, I appreciated things that people did well for me and I’ve certainly used those and modelled myself on those aspects. Same with the teaching side too, good teachers you had.

Others had been less fortunate and developed a supervisory style based around not wishing to repeat such negative experiences for their own students.
[My supervision experience] was enough to taint my thinking. I mean I got through and they were supportive. But to me at that level it needed to be more. But, you know, it’s like going to a restaurant and having, you have five good cups of coffee and then you have one bad cup of coffee and you remember the bad one.

I felt [my supervisor] didn’t know what he was doing. So I bought a few books on supervising PhD students. So, I taught myself what I was supposed to do. I started managing him. So I got my doctorate because I knew what was supposed to happen. So I knew what to do to supervise the students when I got here.

Defining roles and expectations was a clear sub-theme for many participants. One compared her experiences as Masters and PhD student to illustrate how she had learnt the importance of clear communication early in a candidature:

I did Masters by thesis and I had an uncomfortable feeling as a student in that I didn’t really quite know where the boundaries were sometimes. … There was never any discussion at that time about what the role of the supervisor was and really what they expected of me other than the fact that obviously I was going to produce a thesis.

…
In my experience as a PhD student, I was really, really fortunate to have an excellent supervisor and the school that I was working through also had a process that facilitated a very open and frank discussion about expectations. We had an understanding [of] what we were both responsible for; it was really, really helpful

This reliance on personal memories of being supervised is in line with findings of other research focusing on supervision in universities. Recently, Hammond and Ryland (2009) reported that university-based research supervisors in Australia and New Zealand emphasised the importance of individual experiences of being supervised in shaping their professional development. This was prioritised above formal supervisor development courses or reading about supervision practices. In contrast to the findings of the research reported here, Hammond and Ryland noted that these experiences may have a primarily negative impact.

Transferring skills

Most participants spoke of transferring skills from other areas of their professional and personal lives to enhance their supervisory practice. Some had acted as managers, supervisors, librarians, mentors or adult educators. Concepts of professionalism were frequently seen as having been learnt in contexts other than academe:

If I get a question from a student I respond the same day even if I can’t answer the question. I tell them when I will answer the question and what I’m doing to find out. And that comes directly from my business background.

Confidentiality is one of the hallmarks of [nursing] practice and we’re actually generally quite clear about the divisions … I can be out here and talking to one person privately about something and that stays there. It’s like that in practice, you move from client to client in those situations all the time. So yeah, I think that my background as a nurse probably assists that process [of supervision] quite well.
Yet, relevant learning was often seen as coming from broader, more personal, life experiences rather than professional practices:

I used to have goats as a kid. And if you wanted a goat to come in a certain place you can’t pull it by its tether because it has feet specially designed not to be pulled. They’ll dig in and you’ll break their legs rather than go with you, so you always go behind them and they will run away from you. So it’s easy you get behind and make them think it’s their idea and they will take the lead and off they go. So, I think my goats taught me a lot about human nature and I think probably my experience with goats helped me more than my experience as a manager.

Well I work with all the Māori and Pacific Island students here and that’s my, always been my role and I go out to bat for them and I go out and bat hard… Because I’ve lived in the Islands, my husband’s an indigenous Fijian, I speak Fijian, I lead two quite different lives. When I step off the plane in Fiji I’m home and this [New Zealand] is the place that I am when I’m not home. … I listen and I hear, but I also know what they’re saying and those people who’ve not lived in the Islands, have not lived amongst Māori and Pacific Islanders, don’t have that lived knowledge and you can’t teach a lived knowledge, you can only live that knowledge.

Most respondents had a complex notion of drawing on prior skills, which linked closely with understandings of pre-existing personal attributes. For example, this woman spoke in terms of her personality determining an approach to both research and supervision:

Part of my personality is to try and draw out the creativity within the person and because I think a lot of research if it’s creative, and I mean creative in the sense of originality of thought, then it’s exciting for me and so I try and make it exciting for the student as well.

Participants repeatedly connected transferring skills with their own personal attributes, which were understood as both “natural” and emergent. The following quote illustrates the complex interplay of experience and disposition. The supervisor is clear that his skills have evolved, yet links these to both his approach to learning and his comfort with uncertainty:

I couldn’t have done it when I started teaching. I couldn’t have done it in the early days. … So it’s really life experiences as much as anything. It’s just been time on my feet teaching and, and coming up against all kinds of different issues and, and problems. I couldn’t supervise if I hadn’t both, studied to enough degree, taught for a long time and then have, have actually had some practical experience in it. And, now I’m very comfortable with whatever comes. I like the uncertainty of not knowing what’s going to crop up next.

**Supervision as teaching**

In contrast to university-based staff in this study, the supervisors from polytechnics and the PTE characterised supervision as an aspect of teaching rather than an extension of research practice. Several had not sought out the role of supervisor; rather they were assigned the responsibility as a logical extension of existing teaching. Often for these people there was no time to prepare before being allocated students.
I suppose I was thrown in the deep end and found my own resources and my own way around it and eventually plugged in to more resources, in terms of people and contacts online and resources and so on, that fed those skills.

I started teaching the Research Methodology paper, part of that was students writing their dissertation proposal, so it just naturally happened that I [became] one of the supervisors.

This lack of preparation to supervise meant that some supervisors felt insecure about their abilities; one noted that she had “sort of kept two steps ahead of the needs all the time … it seems to have worked so far”. Whilst another reminisced about considerable uncertainties during her early years as a supervisor: “I waited for them to say ‘you’re a fraud, you know nothing about it,’ because I think that the more you learn, the more you realise how little you know”.

Several participants had completed adult teaching qualifications. Although these had not explicitly included supervision of research students, participants felt that the skills learnt were applicable to supervision particularly with regard to “staircasing” a student through to greater understandings. Indeed, most participants emphasised that subject content was secondary to teaching within the supervisory relationship. They agreed that for postgraduate study the student was expected to become the content expert early in the process, and that the supervisor’s primary role was to facilitate the development of cognitive skills:

The most important aspect I found is the fact that there’s a mindset change and behaviour change supposed to happen in people so that they become active researchers instead of, of methodology deployers. So the most important thing I found was to get the paradigm going, the mindset going of questioning, ‘where does knowledge come from?’

Learning from and with colleagues

Supervisors had sought feedback from a range of sources and all were keen to discover more about their role and how it compares to the way in which others pursue the tasks associated with supervision. Several had experienced a mentoring or “buddying up” relationship with a senior colleague as a way of acquiring skills and confidence. All spoke highly of such relationships:

I had the benefit of a sort of mentorship of Professor [name] because I’d known her back in [country of origin] and we’d worked together there and she has a wonderful reputation as a supervisor. I think she is really, really smart. And I’ve had wonderful conversations with her and she’s been very, very generous in terms of advice and so on.

The very first time I was supervisor, for a student, we had a, a piggyback system, so there was the principal supervisor, who was supervising me supervising a student. So that was a good, a really good relationship that he and I had, and it was interesting, because sometimes he would just, literally, sit back and let me talk to the student and then tell me the things that I had done …He was very skilled, really, in supervising supervision.

Following personal experience of being supervised, collegial support networks were the second most popular source of feedback and advice. Most interviewees acknowledged that they would talk with close colleagues about difficult situations or seek advice about how to deal with novel situations. Again, this is in line with Hammond and Ryland’s (2009) findings related to university-based supervisors, who placed high priority on discussions with colleagues.
Managers were often the first person to be consulted, although they were usually part of broadly based formal and informal collegial support networks. One further form of feedback was from assessment processes. Several supervisors used external assessors’ dissertation marking reports as key indicators for future practice and one believed that his own experience as an external examiner contributed significantly to the advice he now gives to students.

Importantly, collegial support meant that supervisors developed support networks not only for themselves but also for their students. Broad networks enabled supervisors to encourage students to speak with a range of staff, and supervisors were positive about the levels of trust between colleagues that facilitated such networking. As one supervisor noted:

An important aspect here [is that] we tend to not be too clingy to those that we are supervising. We do share it around and if the students feel they’d like to talk to anyone else within the Postgraduate department they can and they do and I think that’s healthy”.

**Themes and narrative complexity**

Whilst this initial thematic scheme will be further refined in future work to enable a more in depth treatment, it is important to note that these empirically generated codes appear consistent with current understandings from the supervisor literature. The portions of interviews focused on the personal acquisition of supervisory skills are highly complex webs of narratives. There is no simple story line, rather a weaving together of a variety of, sometimes contrasting, themes and events. Individual's webs of stories move beyond merely providing a context for a main narrative of supervisor professional development as a linear trajectory. For example, Table 1 lists the multiple elements an experienced supervisor of undergraduate and Masters’ level research 'contours' between in order to develop a personally meaningful narrative, which requires all elements to make her personal story meaningful.

**Table 1: An example of the elements necessary to explain the development of supervisory practice**

<table>
<thead>
<tr>
<th>PAST EXPERIENCE AS A PHD STUDENT</th>
<th>PAST EXPERIENCE AS A MASTERS STUDENT</th>
<th>BEING A RESEARCHER</th>
<th>THE REGION</th>
<th>EXPERIENCE AS AN EDUCATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENTORING OTHER STAFF MEMBERS</td>
<td>COURSE HANDBOOKS</td>
<td>FRIENDSHIP NETWORKS</td>
<td>OSMOSIS</td>
<td>FORMAL SUPERVISOR TRAINING</td>
</tr>
<tr>
<td>PAST EXPERIENCE AS A NURSE</td>
<td>CHILDHOOD SCHOOLING</td>
<td>CLINICAL SUPERVISION</td>
<td>EVOLVING CULTURES</td>
<td>FLEXIBILITY</td>
</tr>
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**Discussion**

The emphasis on postgraduate research processes in recent research and advice literature is echoed in the cross-institutional findings of the online survey. In the entire study only two organisations (a wānanga and a polytechnic) reported providing institution-wide supervisor professional development at sub-degree level; the current poor retention rate for Māori students (Ministry of Education, 2007) appears to be an influencing factor in this approach. In addition,

evidence from the case studies suggests a growing concern that an enhanced research-teaching nexus at pre-degree and undergraduate level requires staff to be well-prepared to supervise small research projects (as identified by Jenkins & Healey (2005) as a key strategy to enhance the nexus and strengthen distinctive teaching and research capabilities). Whilst universities appear to be approaching this issue via devolution of such professional development to schools and faculties, polytechnics understandably remain preoccupied with initiatives focused on enhancing staff research capability. Albeit with an appreciation of the close connections between building staff research capability and enhancing student experiences and outcomes. This generates a dual approach to building staff and student research skills, which sees staff developers working to enhance a broad range of skills across the institution.

In responding to the online survey several polytechnics and PTEs did not regard themselves as providing any professional development for supervisors of student research. As is apparent from the interviews few supervisors had undertaken formal supervisor training, however, they had access to a range of skills, experiences, resources and non-supervisory formal professional development opportunities that survey respondents may not have recognised. In line with previous research, supervisors across institutions explained how memories of their experiences of being supervised are influential. Indeed memories were often privileged over information from books, articles and online sources. Whilst there are potential problems with mimicry of an ex-supervisor’s approach, there are clear professional development advantages to grounding emergent practices within personal and professional experiences, so long as this is accompanied by disciplined reflective work. The story-dialogue approach (outlined by McCormack & Pamphilon, 2004) is one example of how structured memory work may be linked with current day supervisory experiences in order to shift the focus of professional development programmes from training to reflective practice.

Most participants spoke not only of drawing on memories of supervision but also of transferring skills from other areas of their professional and personal lives to enhance their supervisory practice. The case studies showed that professional developers and managers assumed that supervisors were able to use acquired attributes and skills in this way. As supervisors reflected on their professional development they produced narratives that demonstrated complex interplays of experience and disposition. There is no simple story line, rather a weaving together of a variety of, sometimes contrasting, themes and events. If, as some commentators have suggested, the supervisory relationship can be seen as an uncertain and risky pedagogic approach (e.g. Grant, 2003, 2005) then it is perhaps unsurprising that respondents produce multi-layered narrative networks to explore both supervision and attendant professional development. The supervisory relationship is already recognised as a place where the contested identity of the student as scholar is negotiated and created (Kamler & Thomson, 2007); the current research has highlighted the similar complexities and anxieties faced by supervisors as they too re-craft their scholarly identity through the process of supervision.

All supervisors characterised supervision as an aspect of teaching that required attention to building students’ cognitive capabilities as a key research skill. The participants supported the view of supervision as a specialist form of pedagogy intimately connected to supervisors’ conceptions of research (Kiley & Mullins, 2005; Lee, 2007). A number of respondents had first been assigned the role of research supervisor as an extension of existing teaching duties, e.g. moving from lecturer on a Research Methodology paper to helping students write dissertation proposals to supervising student research. The participants talked of how the levels of trust that already existed between teaching colleagues facilitated the move to working with research students. For some this gradual easing into the supervisory role felt haphazard and resulted in insecurities about their abilities; in contrast others welcomed the gradual transition as a way of building on their teaching knowledge and skills base. It

is likely that the type of collegial support available and the level of prior teaching experience may be a mitigating factor in how such transitions are perceived. The emphasis on supervision as teaching, particularly at pre-degree and undergraduate level means that supervisor development is evidently seen as an augmentation of teaching rather than research skills.

One outcome of the research has been to raise awareness of supervisor professional development across a range of tertiary institutions in the non-university sector. It is hoped that this will enhance future networking between staff developers who prepare staff to supervise student research at a variety of qualification levels. When identifying issues for future focus respondents to both the survey and during the case studies had an acute appreciation of the processes related to supervisor professional development and student research as complex with institutional, disciplinary and international factors producing a highly contested field of practice. Based on the themes identified above, there are several implications for the development of practice:

- Supervision should be recognised as a space for crafting (and re-crafting) scholarly identities for both students and supervisors. Professional development should encourage challenging reflective practices to acknowledge and build upon the knowledge and life experiences of supervisors with regard to their prior professional and personal experiences.
- Many supervisors develop their skills by evolving and expanding upon other teaching duties. Institutions can enhance this process by acknowledging pre-existing skills and by developing tertiary teaching qualifications that include supervision as a specialist pedagogy.
- Professional development models should seek to facilitate a process that honours the supervisory relationship as requiring not only competent individual supervisors, but also a supportive community of academics, other staff and students.

The research project was a scoping exercise, only partly filling a significant gap in our knowledge of supervisor development in the non-university sector. Whilst the findings are in line with those from the international University context, the particular characteristics of the non-university sector in New Zealand mean we cannot take for granted any “next steps”, nor would it be appropriate to develop models of supervisor development that assume particular approaches to, and resources for, research. The pressures from the (evolving) Performance Based Research Fund are inevitably a factor in a sector that seeks to retain its strong emphasis on community responsiveness, practical skills building and accommodating student diversity. Future more in depth research is required that adopts longitudinal, multi-dimensional, multi-method approaches to help develop credible models of how professional development affects the structure, acquisition, application and retention of supervisor knowledge, and how this influences students’ experiences and outcomes. The role of supervisors remains crucial in ensuring that students complete their education in a timely manner and gain enriched abilities with regard to research skills, scholarly endeavour and academic identities.

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References


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