

Reflective practice into practice based research: strategies for migration.

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Abstract: Reflective practice is the pivotal element of experience-based learning. It has an extensive history as far back as the Greek philosophers. In contemporary times it also appears as an essential ingredient in practice based research which emerged from the post positivist investigative paradigm debates. Both reflective practice and practice based research have an elusive nature within learning that they appear to be naturally generating professional practices, but, as Schon (1987) suggests, it is as we move into the marshy ground of experience and practice that we come to understand both the power and the clarity of the theory practice dissonance.

This study is contextualised within the literature on research supervision professional development in which there has been considerable discussion about how best to improve the quality of research supervision practices. Brew and Peseta (2004) point out that reflective practice processes provide an ideal vehicle for improving research supervision and, citing Kandlbinder and Peseta (2001), draw attention to the belief that for many research supervisors the predominant experiences informing their research supervision practices are their own experiences of being supervised. This paper will examine the processes used to help novice research supervisors draw from their experiences of being supervised and begin to mark out territory for their own professional growth as research supervisors and lay out the theory from which those practices have evolved.

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1. Introduction

Reflective practice has been acknowledged as the foundation of experience-based learning [13]. It has a longstanding provenance.

Plato and his successors advocated deep and sustained reflection on our beliefs and experiences [18]. In contemporary times this has become known as critical reflection. In contemporary philosophy, reflective practice has been seen as a foundation practice within Education. John Dewey (p. 9, [5]) defined reflective thought as:

“active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and further conclusions to which it tends”

Schon (p 49, [16]) extrapolated reflective practice from just educational practice to having application to all professional practice.

“When we go about the spontaneous, intuitive performance of actions of every day life, we show ourselves to be knowledgeable in a special way. Often we cannot say what it is we know. When we try to describe it we find ourselves at a loss, or we produce descriptions that are obviously inappropriate. Our knowing is ordinarily tacit, implicit in our patterns of action and in our feel for the stuff with which we are dealing. It seems right to say that our knowing is in our action”

Despite being easy to recognize in our day-to-day practice, reflection is not always easy to practice. Because of its commonsense definition it is often discounted as not important. It is also often in competition with experiencing the experience as distinct from reflecting on the experience. Schon (p.1, [17]) commented on these difficulties, inviting practitioners to enter into investigations into the more difficult aspects of their practice. He described these as the ‘swamp ground’.

“In the varied topography of professional practice, there is the high, hard ground overlooking the swamp. On the high ground, manageable problems lend themselves to solution through the application of research-based theory and technique. In the swampy lowland, messy confusing problems defy technical solution. The irony of this situation is that the problems of the high ground tend to be relatively unimportant to individuals or society at large, however

great their technical interest may be, while in the swamp lie the problems of greatest human concern.

The practitioner must choose. Shall he (she) remain on the high ground where he can solve relatively unimportant problems according to prevailing standards or rigor, or shall we descend into the swamp of important problems and non-rigorous inquiry?”

While I agree with Schon’s [17] encouragement to investigate important and relevant problems I do not hold to his idea that because of their difficulty they warrant non rigorous inquiry. My own belief is that through rigorous inquiry a light can be brought to bear in otherwise complicated and confusing issues - the swampiness -, and this helps to bring clarity to the situation.

In this paper I argue that through the iterative process of action inquiry, the practices of facilitating learning from experience can be both illuminated and improved. Specifically this article examines the iterative curriculum delivery of a set of reflective practices designed to encourage research supervisors to both draw from their previous experience of their research candidature and to bring to that reflection critical agendas based on the debates surrounding exploration of good research supervision.

Context

The practices of research supervision in Australia have come to the forefront in discussions about research and research education since 1985. When the government funding formulae for university research students changed between 1985 and 1990 [14], the universities’ attention was drawn to the inadequacy of their current research supervision practices. In particular they noted high levels of attrition and high levels of discontent in research supervision from those students who completed their candidature [11]. Since 1985 there have been continuous studies in various universities and across the higher education field, to examine the practices of research supervision. These have identified several areas of swampiness within the general field of higher degree research, including the problem common to many investigations into professional practice, naming the things that can be done in the name of professional practice [8]. In the case of research supervision, that is naming the strategies research supervisors use when they assist students in the completion of

their research. This naming process is a starting point for a research supervisor building their repertoire of research supervision practices.

The process of naming research capabilities has already taken place for many research students with the impetus of the Research Capabilities project and consequent research attributes studies [4]. This has resulted in research degree graduates being encouraged to name the capabilities emerging from their research degree candidature.

Research supervision capabilities have been more evasive. Shannon (p. 12, [19]) cautioned against formulating a definition for research supervision, suggesting that “we might lose that intangible quality that makes good supervision”. Having research supervision as intangible exacerbates the search for capabilities. Sometimes such a claim can be used to endorse practice without reflection. The pressure of completions through the changed funding formulae has however generated a foil for such reflection evaders in that it has generated discussion about what constitutes good research supervision, and a consequent agenda on behalf of universities to provide professional development for research supervisors. These discussions can in turn lead to the identification of specific capabilities for research supervisors.

While not as such defining research supervision, Brew and Peseta [3] have identified practices which contribute to an overall agenda of good research supervision. One of these is identified as reflective practice. They also cited Kandlbinder and Peseta [9], and drew attention to the belief that for many research supervisors the predominant experiences informing their research supervision practices are their own experiences of being supervised. Brew and Peseta [3] emphasised the need for reflective practice on the candidature or the pre research supervision practice experiences.

All research supervisors are expected to have completed a research degree themselves before they can supervise students in research degrees. The pathway that most research supervisors have followed is that they begin the process of learning how to supervise new research students on the strength of their own experiences of being [9], [14], [3]. Student experiences are not altogether positive, nor educational. Consistently Post Graduate Experience Questionnaires have reported unsatisfactory experiences from

graduating doctoral candidates [1]. These novice research supervisor candidature experiences also need to be reflected upon. Without opportunities to review and perhaps reframe some of their candidature observations of research supervision, novice research supervisors risk commencing their neophyte practice with ill informed notions of what ‘good’ research supervision practice might be.

Novice research supervisors are commonly mentored into the practice by pairing them with more experienced research supervisors in a research supervision model of co-supervision. The intent is that they will learn through this apprenticeship in research supervision [15],[2]. Like the candidature experiences, there can not always be assurance that this apprenticeship is based on notions of ‘good’ research supervision. Novice research supervisors who have been exposed to this model have reported on the lack of explicit learning outcomes and explicit learning experiences from these mentoring relationships [20]. Without adequate reflection about their co-supervision experiences, novice research supervisors risk adopting modeled practices which themselves are not examples of ‘good’ research supervision.

The agendas set by the nature of novice research supervisor’s background knowledge and their first experiences of professional development through mentoring requires that they reflect on these experiences in the light of an understanding of ‘good’ research supervision. That agenda can be further deconstructed to address:

1. consciousness raising of research supervision capabilities (*awareness*)
2. *naming* of research supervision capabilities
3. and potentially *reframing* of experiences to bring them into line with concepts of ‘good’ research supervision.

Methodology

This study was initiated as a curriculum design for a cohort of international academics. The resultant professional development program progressed through several iterations thus providing a basis for curriculum action research with a specific focus on valuing a research graduate’s prior experience from their research, and exploring strategies for enabling them to convert recognized research capabilities into research supervision capabilities.

The iterations followed a process of planning, implementing and reflecting in line with Kemmis & McTaggart's [10] model of action research which emphasizes iteration of the cycles of reflection and action and the movement towards a change in the situation.

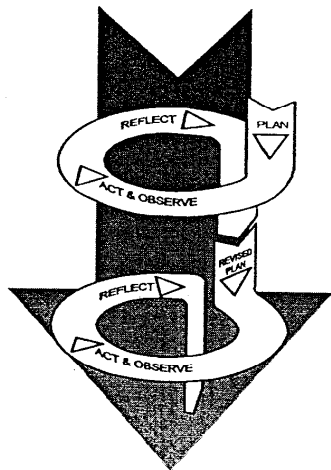


Figure 1: Model of Action Research

Action Research does not play out as neatly at this model indicates and so it is also important to acknowledge the ways in which spin off investigations can emerge from the main cycles of planning, implementation and reflection.

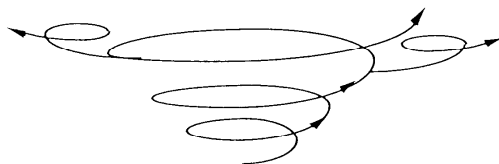


Figure 2: Model of Action Research with spontaneous iterations

McNiff, Lomax and Whitehead [12] draw attention to these phenomena in their model of action research. An investigator can choose to follow up on these tangential issues, and sometimes the tangential issue becomes the main study.

Dick [6] defined action inquiry as “a flexible spiral process which allows action (change, improvement) and research (understanding, knowledge) to be

achieved at the same time”. There is resonance in this definition with Dewey's [5] model of Reflective Practice and thus draws parallels between action inquiry and iterations of reflective practice leading to changes in the observed and analysed practice. A given cycle of reflection leads into a new intervention, and creates a second round of Observations, Meaning making and Planning and so the cycle continues.

Cycle 1

Context

The initial impetus to develop a professional development program for novice research supervisors arose out of a request from a developing country to provide professional development for a group of academics of a newly formed university. It was intended that these academics would visit Australia for one month and during their time here undertake a research supervisor induction program.

There were four elements to the program.

1. Introducing (new) research supervisors to the notion that their experiences of being supervised inform their emergent research supervision practices - *Awakening*.
2. *Naming* [8] the capabilities that they have taken from their research candidature experiences to establish a basis for critical reflection of these capabilities.
3. *Reframing* [7] the capabilities taken from research candidature experiences to
 - a. Turn negative experiences into positive agendas
 - b. Position their research capabilities within a new framework of research supervision capabilities.
4. Review the possibilities for professional development and create an action plan for ongoing development of a nominated research supervision capability.

The primary catalyst that was devised to generate the awakening and naming was a set of question put to the participants:

- When I was doing my doctoral studies the best thing about it was.....
- The most troubling thing about it was...
- Together, these two things give me a research supervision agenda of....

This generated a list of incidences that could then be evaluated against some of the literature on good research supervision to develop a repertoire of desirable research supervision practices.

The overall program containing the four elements was delivered as two one day workshops. Fourteen participants completed the program.

Outcomes

The research supervisor induction was well received by the participants. There was a recommendation to repeat the program for a second cohort of participants from their country who would visit Australia at the same time the following year. Several of the participants commented that they felt affirmed by the position adopted in the program that research capabilities developed in candidature were useful as graduates transferred to the responsibilities of research supervision, and research supervisor capabilities. What was evident in this first iteration was the ease with which participants could identify experiences from their own candidature and use this as a basis for developing a range of possibilities of good and poor supervision. Because of the novice nature of the participants - some of them were still completing their research degrees - it was easy to identify both good and bad experiences out of their candidature experiences. It was much more difficult to formulate the possible range of desired practices into a development plan to enable continued growth. For many, the list of desired practices was so large that it overwhelmed the likelihood that a professional development plan could be addressed.

Cycle 2

Context

Following the success of the pilot program the research supervisor induction program was repeated with a group of local novice research supervisors. It was delivered as 4x ½ day workshops, offered at two weekly intervals over a period of two months. The program was called Transition to Supervision and it was marketed exclusively to new research supervisors. The fortnightly mode of delivery gave less material per session to absorb and also provided more time for reflection between sessions. It was

concurrently delivered in face-to-face mode and web based mode to accommodate those people who were unable to commit to four face-to-face sessions.

As part of the reframing process to turn negative experiences to positive models, in this iteration I included a framework for exploring the range of practices under the umbrella of research supervision. This framework was developed based on a reading of the general literature about research supervision, particularly acknowledging the relationship between research and epistemology, the dominant conversations in the literature about research supervision as pedagogy and the emergent conversations about supervision relationships and administrative requirements.

This framework proposed four aspects of research supervision

- Research supervision as contributors to knowledge
- Research supervision as pedagogy
- Research supervision as management or administration
- Research supervision as relationship.

Eleven people completed the four face-to-face sessions and a further 8 participants completed the program in a mix of face-to-face and on-line.

Participants were surveyed and consistently reported satisfaction with this particular program and the encouragement to make use of skills acquired through their research candidature in their subsequent roles as research supervisors.

In addition the following comments were made by participants following their completion.

they are just the sort of thing for us that are new to the game. Hearing different perspectives and knowing there is a network out there to support new academics is fantastic. A very valuable experience all round

Dr. Mark Schütze
Research Fellow

I would absolutely recommend this for future/new supervisors. The opportunity to discuss/hear from people from a range of different faculties was excellent.

Dr. Erica Hatley
Education

Outcomes

This second iteration of the curriculum benefited from the domestic nature of the bulk of the audience, and like the previous iteration, there were a good number of participants fresh from their candidature experiences. This facilitated reflection on prior experience and giving names to several potential research supervision capabilities.

The framework of research supervision practice also provided a simplified scaffolding to the complicated nature of research supervision practices. There was need to emphasize that this was just a model of practice and was in no way meant to suggest that the actual practices fell as neatly into four quadrants. This tool was a means of encouraging a participant to plan for development in one of the aspects of their research supervision that had emerged as their dominant aspect. It also provides a means to encourage participants to explore aspects of their research supervision that were not their dominant mode.

Cycle 3

Context

In the local delivery of the program in cycle 2 an on-line option was provided to accommodate those participants who were unable to commit to four face-to-face sessions. In its third cycle the novice research supervisor program was subsequently developed in an on-line only provision.

The university at which these interventions were undertaken has maintained an on-line professional development program for research supervisors since 2004. Currently this is provided as a selection of modules accessible through a web page.

Following the success of the face-to-face delivery to local neophyte research supervisors, changes were made to the structure of the on-line professional development program so that it paralleled the processes established in the Transition to Supervision program.

Participants undertook five on-line modules across a five week period. Each module required three hours work. The work undertaken was equivalent to that covered in the 4 session face-to-face program and an additional module provided opportunities for participants to gain

confidence in engaging in the on-line conversations. An additional three weeks buffer zone was also provided for those people who could not engage in such a focussed way and thus took longer to complete the required modules.

The value of delivering the program on-line was that contributions from the participants could be easily captured. In this regard it was possible to record the types of research supervisor capabilities that participants felt could grow out of their positive and negative candidature experiences. Some of the ones that arose out of the reflecting on candidature activity were:

- Hold regular meeting with my students and provide feedback on their writing.
- Encourage rigorous debate among students
- Read their writing and provide feedback and provide useful links and resources
- Encourage students to build research skills and research network skills
- Help students establish their research agenda
- Keep students focused on the big picture of their research and how all the bits fit together.
- Provide feedback and guidelines on their written work
- Continually updating research and learning plans
- Providing guidance and clear objectives to students about their research.
- Attempt to bring students together to help them avoid intellectual isolation.
- Focus on empowering the students about their research
- Encouraging them to publish and to get peer reviewed feedback on their research before submitting it

Seven people completed the five on-line modules, three of these within the additional three week buffer zone. On completion of the program, participants were advised by email that they had completed the requirements and this often prompted a spontaneous response about their engagement with the program. In addition participants were invited to post feedback on the program on the web site and while not all participants complied with this request for feedback, some was obtained.

I found the content available to be very beneficial, and Geof's moderation was helpful, appropriate, timely and efficient. I found the web site, however, confusing and frustrating. The navigation system is not intuitive, some links are dead, and I never knew where I was in the system. The Solutions site could use a thorough overhaul.

Larry Neal
Business Faculty

Thanks Geof - I'd just like to say that I feel this has been a really worthwhile process. I've gained a much better appreciation of the different facets of good supervision and have enjoyed reading the different approaches of the other participants.

Nicola Durrant
BE&E

Thank you Geoff. The program has made me think more about what is required for good supervision – so thank you for that!

Rouhshi Low
Business Faculty

Thanks Geoff, and thanks for forwarding the references. It is really helpful to have this resource to look to (all the refs etc in the module) and I will be using them in the future.

Cheers
Maree Corkeron
Science

Discussion and ongoing agendas

The program in its three iterations represents the continual development of an idea into specific activities. Across the iterations it is clear that participants value being asked to reflect on their candidature experiences as a way of identifying their emergent research supervision capabilities.

There is a significant difference between the engagement of the international academics and the two engagements of face-to-face and on-line delivery of the program. There is a sense that the commitment from the international academics, given that they may not again have the

opportunity to have this sort of professional development, is a strong incentive to complete the program.

There appears a clear preference by the numbers of engagement for face-to-face delivery. This can as much be a learning preference as that the on-line resource is not user friendly and warrants development to make it an easier to use portal. Providing on-line options for face-to-face professional development programs continues to be a high agenda for this university and with the rapid advances in these forms of technology it warrants regular review of on-line resources so that they are reflecting up to date technology as well as sound curriculum thinking.

Across the three iterations it has been good to refine the activities which invite participants to reflect on their candidature experience and reframe these into research supervision capabilities. Some found value in reconsidering negative experiences and using these to name and value alternative positive research supervisor strategies.

There are parallels for me between Kiley and Mullin's (2005) [11] study of research supervisor's conceptions of research and the developing list of strategies identified by novice research supervisors as starting points of their repertoires of research supervision practice. The later list suggests to me a move from theory to practice. The framework proved a useful tool for facilitating reflection about what is generally a complicated practice. The risk with such a model is that it bears little resemblance to the truth of the practice. Research supervision does not fall out as neatly as this model might suggest. The model is more a device to enable practitioners to contemplate an otherwise complicated practice and to choose a smaller part, rather than the whole, in which to develop their capability.

My ongoing investigation will be to explore how well or poorly generated strategies fit into these categories. My emerging theory is that when asked to identify a productive research supervision strategy based on one's experience of research degree candidature, a novice research supervisor will nominate a strategy that can be understood as fitting in one of the four quadrants. The value of such a quadrant model is that it can then encourage novice research supervisors to also explore the strategies within

the other quadrants as part of their building of a repertoire of practice. As a model it is not intended to suggest a truth about research supervision practice but rather act as a reflection scaffold to enable them to broaden their concepts of what might be worthwhile research supervision strategies or capabilities.

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