

Bridging the Methodological Gap between Self, Practice and Research

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Abstract

This methodological paper emerges from an investigation of the varying levels of pre-service teacher professional preparedness. More specifically, the variable to be measured is the rigor and relevance of the instruction planned to teach the moving skills of the NSW PDHPE K-6 syllabus. At this stage, this variable is a potential indicator of professional progression along a specialisation pathway during initial teacher education at UNE. As the principal researcher is concurrently involved in the design, implementation and assessment of unit offerings in the B.Ed, the objectivity of the individual is open to question. The dual position of practitioner and research-practitioner is a challenge to the design process and is central to this report. This paper focuses on the idea that the gap between self, practice and research can be bridged through 'reflection by introspection' using the technique of 'crafting portrayals'. Essentially, this method makes explicit self-understanding, tacit knowledge, 'taken-for-granted' assumptions and preconceptions that may otherwise distort or heighten the perception of 'what is happening'. The data from the descriptive, interpretive and explanatory portrayals describe the research-practitioner moving from the situational to the theoretical. The robustness and application of the method is presented through example.

Introduction

This paper unfolds as a professional journey rather than a recount. It begins as a synthesis of a challenge and an idea. The challenge is laid down at the nexus of self, practice and intended research (see Figure 1) where the researcher finds a gap in the research design. This gap is perceived as a potential threat to the veracity of the study. The idea is to bridge this gap between self, research and teaching with a connection that resonates with the ideals of education research.



Figure 1: *The perceived methodological gap at the nexus of self, practice and research*

The journey begins by describing the features in Figure 1 that interface at the methodological gap. At this nexus is the researcher's:

1. Practice
2. Research
3. Self

Practice

Initial teacher education of primary school teachers in New South Wales (NSW) is enacted at the interface of two external influences. The first is the NSW Department of Education and Training (NSW DET) whose staffing policy mandates the employment in public schools of the generalist as opposed to specialist primary teacher. The second is the New South Wales Board of Studies (NSW BOS) whose curriculum are framed by six Key Learning Areas (KLAs). Collectively, these stakeholders necessitate that the practice of initial teacher

education be oriented to the preparation of generalist primary teachers accredited to teach across all six KLAs.

Despite the publication by NSW BOS of Foundation Statements (2005) to assist generalist primary teachers to know 'what must be taught' it is still incumbent on classroom teachers to decide what is and is not taught. These judgements are necessary because practicing teachers find the curriculum to be overcrowded. Compounding this difficulty are accountability procedures yet to ensure alignment between the intended and enacted curriculum. Consequently, the generalist teacher is the face of curriculum implementation.

One of the six KLAs in the NSW K – 6 curriculum is Personal Development, Health and Physical Education (PDHPE). This KLA, covers a broad range of subject matter across the content strands of dance, gymnastics, games and sports, active lifestyles, safe living, growth and development, interpersonal relationships and personal health choices. According to NSW BOS recommendations, planning a balanced program requires teachers to allocate 6 - 9% of available teaching time for PDHPE (NSW Board of Studies: NSW Primary Curriculum Foundation Statements 2005 p.12). This recommendation conceivably marginalises PDHPE relative to the other KLA.

Research conducted since the introduction of the PDHPE KLA based curriculum has found that 'the majority of teachers in NSW primary schools are not providing opportunities for students to achieve syllabus outcomes across the breadth of the syllabus' (Webster 2002 p.7). Later studies suggested that 'Generalist teachers feel they lack the confidence, training and time to teach PE effectively and subsequently may avoid teaching PE altogether' (Morgan & Bourke 2004 p. 1). Contemporary PDHPE teacher education seeks to address these issues to ensure that the lack of opportunities for school students to achieve PDHPE outcomes is not attributable to the teacher's pre-service teacher education.

At The University of New England (UNE), the School of Education assign a curriculum team of four PDHPE teacher educators to service the PDHPE KLA. This team is known as the Health, Physical Education and Sports Studies (HPSS) team. HPSS provide pre-service teachers with curriculum choice to gain qualification to teach PDHPE. This choice takes the form of pathways linking unit offerings. As shown in Figure 2, the pathways are constructed via a suite of both mandatory and elective unit offerings along a generalist-specialist continuum. At the generalist end of this continuum, pre-service teachers need only complete one mandatory, six credit point unit (EDPE214) to satisfy minimum qualification requirements. At the specialist end, pre-service teachers have completed three elective offerings including a specialised PDHPE internship. A number of shorter pathways are also available.

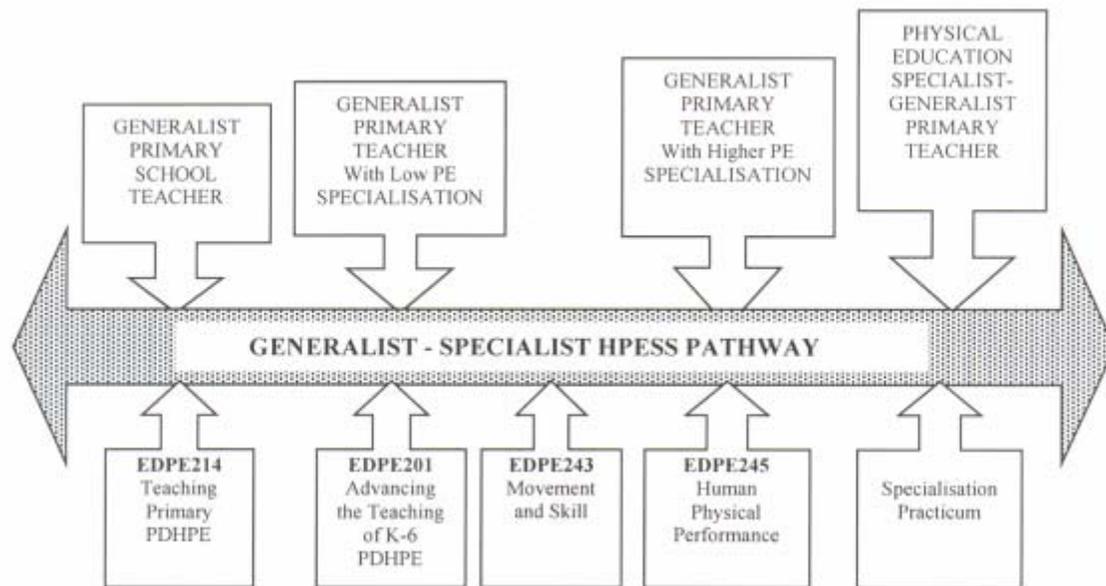


Figure 2: *The Generalist-Specialist HPESS Pathway at the UNE 2006*

Consequently, UNE pre-service teachers graduate with varying degrees of preparedness to teach PDHPE. Cohorts of pre-service teachers are currently positioned along the length of the specialisation pathway at UNE. Therefore, it is both timely and practical to undertake research to ascertain the efficacy of the HPESS pathway.

Research

The intended research is a cross-sectional longitudinal study designed to explore differences between groups of pre-service teachers at different points along the specialisation pathway. These differences may be identified through a pilot study analysis of instructional plans, namely, lesson plans and post teaching reflections. The analysis will have a focus on the skill development phase of the lesson plan. In this phase of the lesson teachers plan toward skill acquisition, skill practice and refinement. The intended research instrument is an adapted version of the Rigor/Relevance Framework (RRF). Data generated from this instrument will be used as a starting point for open-ended interviews with purposively sampled participants. The interviews will investigate the pre-service teacher's perceptions of preparedness to teach the moving skills of the PDHPE K – 6 syllabus. The reference point for the open-ended interviews will be the rigor/relevance rating and the quadrant (see Figure 3) that characterises the learning at that level.

According to Clark, (1989) 'to understand planning is to understand how teachers transform and interpret knowledge, formulate intentions, and act from that knowledge and those intentions'. Accordingly, the

research design intends to facilitate a process through which the researcher can better 'understand the pre-service teacher's thinking about teaching and ultimately, their observed teaching behaviours'(Schmidt 2005 p.6).

The RRF was originally developed by the International Center for Leadership in Education to assist schools to move students toward a more rigorous and relevant education (Daggett 2005). For the purposes of the intended research, the framework designed for the cognitive domain is adapted (see Figure 3) for application to the psychomotor domain. This is achieved by replacing the vertical axis formerly informed by Bloom's Taxonomy with Dave's (1970) Taxonomy of Psychomotor Domain. Modifications to the horizontal axis provide greater application to the context of curriculum implementation in NSW.

Adapted Rigor/Relevance Framework

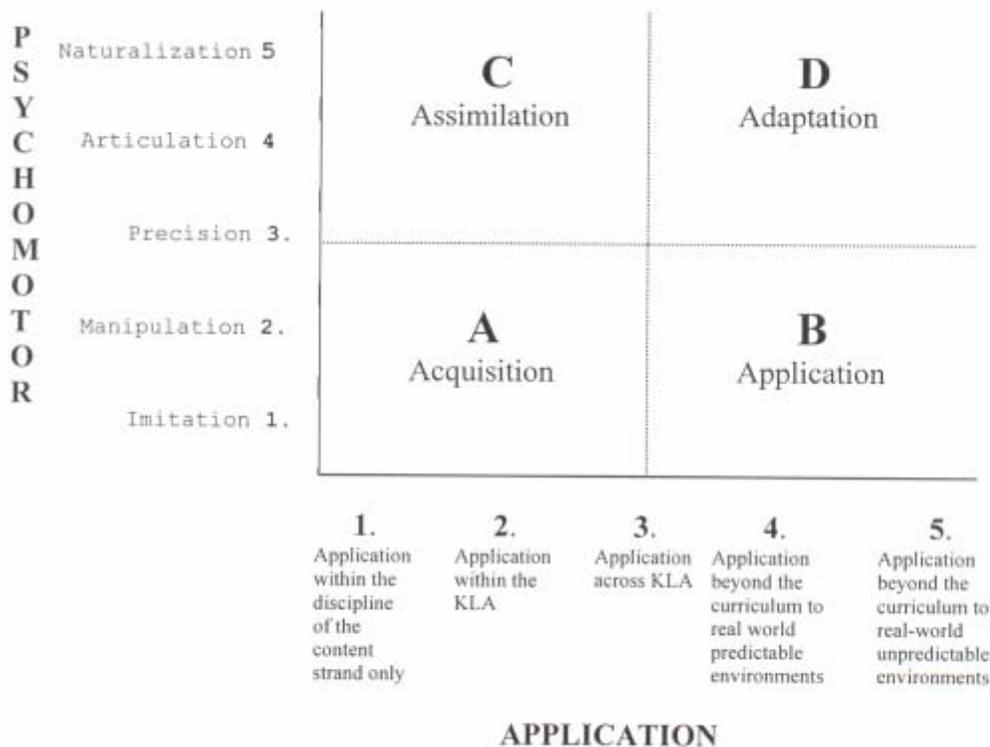


Figure 3: Rigor/Relevance Framework Adapted to PDHPE K-6

At this stage, the RRF is an important dimension of the research inquiry. Subsequently, it is prominent within the research questions currently informing the inquiry. These are:

What differences does greater specialisation have on instructional plans for teaching the moving skills of the NSW PDHPE K-6 syllabus?

What validity does the Rigor/Relevance instrument have in differentiating the skills of groups of pre-service teachers?

Does the rigor of planned instruction increase with greater number of units along the PDHPE K-6 specialisation?

Does the relevance of planned instruction increase with greater number of units along the PDHPE K-6 specialisation?

Self

The 'self' depicted in Figure 1 is a PDHPE K – 6 teacher educator intent on researching the learning along the specialisation pathway and the broader implications for unit design and practice in pre-service teacher education. The following excerpt from the professional reflective journal describes the problem in locating self in the study.

At the nexus of my self, practice and intended research is a personal knowing. I know an experience of dis-ease. This experience is all the evidence I need that my position in the research design is problematic. I know tacitly there is a methodological gap. To bridge this methodological gap, I need a method to ensure my position in the study actively contributes to, rather than brings into question, the integrity and veracity of my findings.

It is at this juncture that the researcher becomes the focus of a smaller inquiry inside the inquiry of the intended research. The purpose of this smaller, more intimate inquiry is to identify a method that can effectively meet the researcher's stated need.

Method

Proposed Method to Bridge the Gap

Portraiture is a methodological innovation formalised by Lawrence-Lightfoot & Davis (1997) for application in educational research. 'With portraiture, the person of the researcher – even when vigorously controlled – is more evident and more visible than any other research form' (Lawrence-Lightfoot 2005 p.11). The researcher can be seen:

1. Defining the field and focus of the inquiry
2. Navigating relationships with the subjects
3. Witnessing the action
4. Interpreting the action
5. Tracing emergent themes
6. Creating the narrative.

By making these elements more explicit, the voice of the portraitist identifies his or her place in the inquiry.

A specific application of portraiture is the act of crafting portrayals. According to Piantanida et al. (2002), a major proponent of this method in the context of educational research crafting portrayals ‘involves reflection by introspection to make explicit self-understanding, bring tacit knowledge to light, recognise taken-for-granted assumptions and examine preconceptions (and perhaps misconceptions)’ (Piantanida et al. 2002 p.3). Reflection as introspection is conducted at some distance from the action and involves both thinking and feeling (Louden 1992). Introspection requires the researcher to consciously look within, to examine the mental and emotional responses to the experiences encountered.

As shown in Figure 4 the crafting process involves three distinct phases moving from the situational through the conceptual to the theoretical.

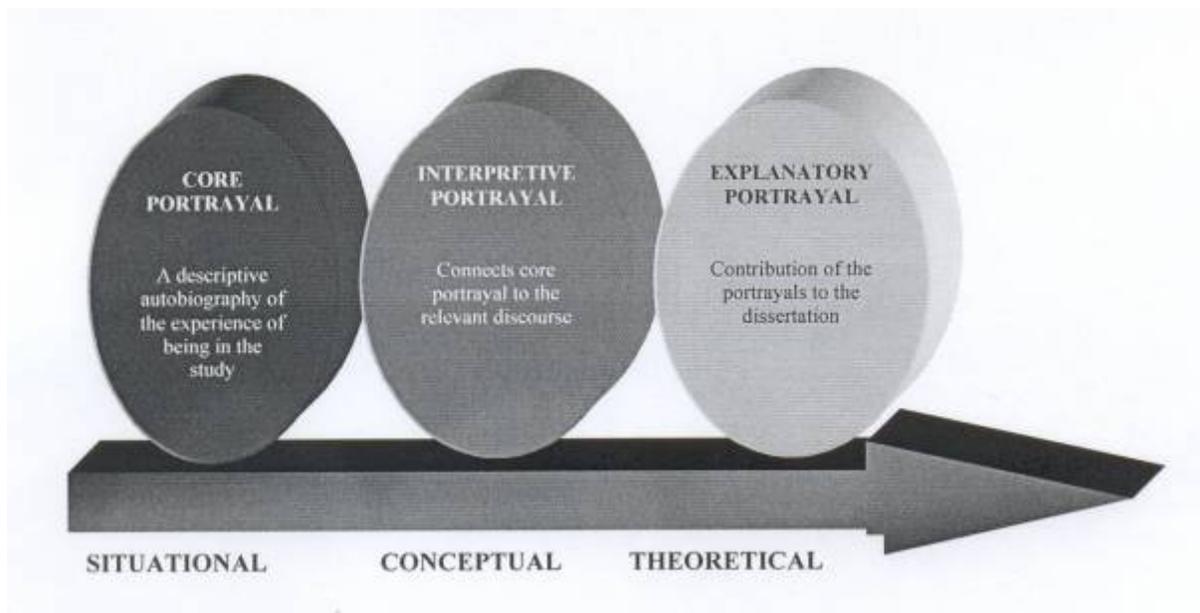


Figure 4: *Diagrammatic Representation of the Process of Crafting Portrayals*

The first phase of Figure 4 produces a descriptive autobiographical account of the experience of the self in the action of the phenomena of the study. This is the core portrayal. The second phase requires the researcher to unpack the salient features of the core portrayal (such as themes, issues, dilemmas and problems) and connect them to the relevant discourse. In so doing the portrayal moves from the situational to the conceptual. This is the interpretive portrayal. The final phase makes explicit the contribution of the inquiry to the discourse of the thesis. This is the explanatory portrayal.

The research genre that informs the portrayal process is based in a 'logic of justification'. According to (Piantanida & Garman 1999) the 'logic of justification' is the researcher's explanation of the procedures used to craft the portrayal and the lines of reasoning used to move from one portrayal to the next.

In an effort to enhance the intended study through the crafting of portrayals, the researcher proposes to:

Identify critical junctures in the research that could potentially be interpreted as being the 'hand of the researcher in shaping the study' (Lawrence-Lightfoot 2005 p. 11)

Craft the core portrayal by maintaining a professional research journal of the experience of working in the study

After some time and from a distance, craft the interpretive and explanatory portrayals

Position the portrayals at the end of the appropriate section of the thesis

Use the portrayals as research data.

At this early stage, it is envisaged that the portrayals will be placed in the appendices of the final dissertation.

Other possibilities may include collating the portrayals into the researcher's profile or shadowing the appropriate chapter with the relevant portrayal.

Methodology in Action

For the purpose of demonstrating the potential of the method, a crafted portrayal of the researcher follows.

This portrayal depicts the process of the researcher establishing a stance or position (positionality) in the research design.

<p>CRAFTED PORTRAYAL</p> <p>Communicating Positionality in the Research Design</p> <p>Researcher: Annette Freak</p> <p>March, 2006</p>
<p style="text-align: center;">CORE PORTRAYAL</p> <p>At the nexus of my self, practice and intended research is a personal knowing. I know an experience of dis-ease. This experience is all the evidence I need that my position in the intended research design is problematic. I feel I am caught in a paradox between an imperative for the researcher to be detached from the action of the study to ensure objectivity and the need for attachment to ensure subjectivity.</p> <p>In the intended study I necessarily adopt dual roles. As a research-practitioner I hold both an obligation to knowledge building and an obligation to learners (Hitchcock & Hughes 1989 p.201). From the practitioner's perspective, this obligation is to provide best practice to my students. From the researcher's point of view the obligation is to better understand the outcomes of HPESS team effort in preparing pre-service teachers along the specialisation pathway. These roles intermesh.</p> <p>The tension between the role of researcher and practitioner was evident after I had chosen and adapted the Rigor/Relevance framework as a research instrument. In preparing lectures and tutorials I found the framework provided a very useful teaching tool. As an educator, this was an exciting pedagogical improvement to the delivery of unit content in planning and programming.</p>

From a researcher's point of view however, using the framework would problematise comparisons between research groups. Ideally, unit content and the delivery of that content should remain relatively constant where as best teaching practice varies over time and student groups in order to engage the most relevant frameworks available.

If I were to approach the study using action research the tension between roles could be overcome. By adopting the dual role of practitioner-researcher I would generate understanding or theories that come out of the team's respective practice because it would be useful for enacting further practice (Piantanida et al. 2002). I do not see this as a viable solution since the purpose of the research is not solely to improve practice. The role I need is more akin to research-practitioner since the greater obligation is to building a body of evidence about the contribution the specialisation pathway makes to teacher preparedness.

I am concerned about the stance of research-practitioner. How is this dual position defensible given the view that 'No researcher can eliminate all of the prejudices and presumptions they bring into their work, nor can they escape the theoretical optics they use in deciding what to study and how to study it' (Van Heertum 2005 p.9). I have already experienced a tension in this regard with the RRF. I think my concerns are best summarised in the following quote.

Even the most scrupulously 'objective' investigations reveal the hand of the researcher in shaping the inquiry. From deciding what is important in the study, to selecting the central questions, to defining the nature and size of the sample, to developing the methodological strategies, the predisposition and perspective of the researcher is crucial; and the researcher's perspective reflects not only his or her theoretical, disciplinary, and methodological stance but also personal values, taste and style.

(Lawrence-Lightfoot 2005 p.11)

To address the tensions outlined by Lawrence-Lightfoot (2005), I frame the following argument as a basic tenet.

Premise 1: A neutral, uncommitted, and apolitical educational practice does not exist (Freire 1998 p.39)

Premise 2: The self is the instrument that engages the situation and makes sense of it (Eisner 1992)

Therefore: It is necessary to make explicit the self and the theoretical optics used to decide 'what' to study and 'how' to study it.

Consequently, it is necessary to disclose from the outset my involvement along the specialisation pathway. This pathway was established in 1999, some four years prior to me joining the HPSS team. The structure and design of the suite of units were established prior to me being allocated specific roles within the pathway. These allocations are shown in Table 1.

Table 1: Roles of the principal researcher in EDPE units

Role	EDPE UNIT
Unit Co-ordinator	EDPE 214; EDPE340/440; EDPE914
Teaching/Lecturing	EDPE201; EDPE214; EDPE 340/440; EDPE914
Assessing	EDPE201; EDPE214; EDPE 340/440; EDPE914
Unit Development	EDPE201

Of particular relevance to role identity along the specialisation pathway are references to EDPE214 (the mandatory unit). At the point of data collection in 2007, three research groups will know me by the role of lecturer. Subsequently, it may be useful to briefly document my current conceptions of that role.

I am aware that in my role as teacher educator, I can potentially shape the way pre-service teachers think about the dilemma of delivering PDHPE in a crowded curriculum. I am aware that there are very different possibilities for generalist as opposed to specialist teachers. I believe at this time that my responsibilities to the PDHPE syllabus are best served on two fronts. Firstly, to educate the pre-service teacher about the educative value of so many of PDHPE outcomes for the primary aged child and secondly, to change the pre-service teachers capacity to think about how the generalist teacher conducts him/herself in fulfilling, as opposed to fulfilling the expectations, of the profession.

In a university-based setting, teacher education as opposed to teacher training should be a major priority. In my opinion, the major difference between the two approaches is a freedom for the individual to think deeply about the frameworks that guide firstly personal thought and then professional practice. I find the externally imposed accreditation requirements for professionally oriented degrees a major barrier to maintaining best practice as a teacher educator. It imposes additional pressures to seek new and more efficient ways to satisfy concurrently the externally imposed demands of accreditation bodies and the internal virtues of university-based learning.

INTERPRETIVE PORTRAYAL

Problem

This core portrayal has identified a role conflict in adopting the dual stance of research-practitioner. Kvale's (1996) binary image of 'researcher as miner' and 'researcher as traveller' in social research is a useful means of analysing the source of this conflict. The 'miner' works from the traditional scientific model of enquiry in an objective world in which it is conceivable to have a single, knowable and measurable reality (Dunne et al. 2005). The 'miner' works to extract information from the pre-existing social strata. The 'miner' can be detached from the object of his/her work. The product is 'what is there' recorded using neutral language in text. The nature of the person of the 'miner as researcher' is irrelevant.

The 'traveller' analogy describes the researcher as one of the actors working in a world that is continually in a process of social construction. Knowledge in this world is jointly constructed and the presence of a 'traveller' is integral to better understanding the event under investigation. From this perspective, the instrument to collect and analyse data is human-as-instrument (Lincoln & Guba 1985) since

the human is the only instrument which is flexible enough to capture the complexity, subtlety, and constantly changing situation which is the human experience.

(Maykut & Morehouse 1994)

The data generated by the 'traveller' gives greater understanding and meaning for those actors involved in the inquiry. As a 'traveller' it is possible to envisage the social context in which educators practice as hosting both multiple realities and multiple socially constructed meanings (Burns 2000) where 'knowledge is both local and contingent' (May 2001 p.16). Accordingly, the stance of a naturalistic rather than experimental researcher seems more appropriate. This engagement as a social researcher requires that the researcher explicates meaning (May 2001) rather than fact.

Commitment to an engagement as a social researcher would define positionality since 'The social researcher stands at the centre of the research process as a requirement of interpreting social life' (May 2001 p.15). From this position, the researcher has an insider's view of the field (Burns 2000) and therefore must necessarily be included within the objects of the inquiries (May

2001 p.57).

Moving from the situational to the conceptual I can better analyse the experience of dis-ease. I have multiple roles and my position varies across time. Within the units in which I teach, I am practicing and thinking as a postmodernist but researching and planning as a traditionalist. I am the 'travelling' teacher and the 'mining' researcher. This is conceptually problematic because I cannot extract a single, knowable and measurable reality (Dunne et al. 2005) from a social strata I am presently helping to construct. Whilst in the units in which I do not teach I can adopt the role of the 'mining' researcher.

Is it conceptually possible and theoretically practical, to be both inside and outside the inquiry at different phases of the research process? Clearly there are distinct advantages of positioning oneself in different places in the research field at different times if such a posturing can be justified.

EXPLANATORY PORTRAYAL

It is clear through crafting the core and interpretive portrayals, that I began with a belief that credible research required the researcher to maintain a position of greatest objectivity. Objectivity implies the researcher be independent of personal feelings, opinions, prejudice, bias and therefore remain detached. Objectivity conceived in this way is necessarily an ideological position. As an ideal, this notion of objectivity will logically create methodological gaps.

Yet, 'Objectivity is one of the most cherished ideals of the education community' (Eisner 1992 p.9). According to Van Heertum (2005), the field of education has increasingly followed the trend of adopting the 'objective' empirical methodology in an effort to gain credibility. The operative question for designing this research has shifted. It is now: Which position is rationally reasonable and defensible within the inquiry? (Toulmin 1982). As crafting portrayals provides a format for rationalising, defending and communicating positionality, it does appear more reasonable to design research in which the researcher has multiple positions.

A major advantage of this possibility is the opportunity to widen the scope of methods employed for the research. This is particularly purposeful given reports that 'No single methodological or theoretical approach will be able to provide all that is needed to understand how and why teacher education influences educational outcomes' (Zeichner 2005 p.743). Multiple positions are potentially more reflective, adaptable and responsive to a range of methodologies, theoretical perspectives and unforeseeable events. Positionality in multiple positions and the adoption of more diverse methodologies may conceivably result in a wider range of findings.

Now, at the nexus of my self, practice and intended research is a new personal knowing. Through crafting portrayals I have not only put myself at ease but opened up new methodological and pedagogical possibilities for my research and teaching.

'Speak of me as I am.

Of one positioned not wisely,

But too well.'

(Adapted from Shakespeare's Othello 5.2.340-41)

A case has been made for integrating crafted portrayals throughout the research dissertation as a public show of the researcher's private perspective, thinking and action about phenomena of the study. This show rationalises and intellectualises the researcher's position in the study through a 'logic of justification'. It is this logic and the opportunity for others to judge if such logic is defensible, that gives the study procedural objectivity. The visibility and public showing of the researcher's judgement now claims to contribute to, as opposed to bring into question, the integrity and veracity of the research.

If one were to accept the former claim, there still remains the question of the quality of the portrayals. Piantanida & Garman (1999) recommend a set of criteria to judge the soundness of the portrayal crafted. The following are iterations of the recommended criteria that are relevant to the context of the portrayal crafted above. These form a useful framework for others to assess both the portrayals presented and the robustness of the method to achieve what the researcher purports to achieve.

1. Integrity: Is the voice and stance of the author congruent with the mode of the inquiry? Does the voice and stance of the researcher convey the researcher's relationship to the study?
2. Verite: Has the researcher taken pains to cultivate a mind-set of authentic inquiry? Has the researcher shown a heartfelt desire to learn from the inquiry?
3. Rigor: Has the researcher demonstrated quality of thought?
4. Utility: Is the inquiry useful and professionally relevant?
5. Vitality: Is the inquiry important? Does it have a sense of excitement of discovery?
6. Aesthetics: Does the work challenge, disturb or unsettle?
7. Ethics: Has the researcher recognised and acknowledged his or her own preconceptions/biases/assumptions and considered how these might distort understanding?

Reflecting on the process, it is evident that the act of crafting portrayals is a skill that can improve with experience. This is particularly pertinent when moving from the interpretive to explanatory portrayal. Whilst it is acknowledged that the effectiveness of this method is limited by the skill level of the researcher, this deficit is not insurmountable. The method has sufficient potential to be recommended as a purposeful inclusion in the methodology of the intended study.

Conclusion

This professional journey has unfolded. At journey's end, bridging the methodological gap between self, practice and research has established a much stronger platform (see Figure 5) from which to investigate the learning of pre-service teachers along the specialisation pathway.



Figure 5: *Self, research and practice are bridged*

The new platform supports an inevitable transaction between self and world (Eisner 1992) by creating resonance at the interface of research and practice; self and research; and, self and practice. This resonance is possible because the method of crafting portrayals affords greater procedural objectivity. This objectivity is claimed not by the researcher seeking to eliminate, or at least aspiring to eliminate personal judgement (Newell 1986) but by a commitment and intention to make such judgements highly visible and therefore open to public scrutiny. This commitment has two major implications. Firstly, the researcher feels at ease because the methodological bridge ensures that the researcher's position in the inquiry contributes to, rather than brings into question, the integrity and veracity of the findings. Secondly, this bridge provides access to new and exciting possibilities for both research and practice. It is apt that this journey should end where it began - with a new challenge and a new set of ideas.

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