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Te Hautaka Mātauranga o Waikato



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TE HAUTAKA MĀTAURANGA O WAIKATO

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WJE 2006: Call for papers: Pacific education, Research and practice

The Waikato Journal of Education is a well-established peer reviewed publication that has quality articles on a range of topics related to education.

New Zealand has a strong presence in Pacific education, and Pacific communities have a strong presence in New Zealand schools. However, opportunities for publication of Pacific research in mainstream journals are limited. Therefore, this call for papers seeks articles that focus on Pacific education; both research and practice. Pacific research is reflective of the traditions of the past, as well as the present and future. It often embodies different paradigms, perspectives and critical stances that are not always captured in mainstream research and aims to benefit Pacific communities. Articles will be welcomed that theorise about Pacific research, report on research projects, report on an innovative practice or initiative, or a combination of any of these. As well as traditional manuscripts, the journal welcomes submissions in other formats, such as short stories, poetry and drawings.

Submissions please to Timote Vaioleti (<u>vaioleti@waikato.ac.nz</u>) and Jane Strachan (<u>jane@waikato.ac.nz</u>), School of Education, The University of Waikato, PB 3105, Hamilton. Please submit 3 blind copies and a separate page with author/s contact details by 30 April 2006. Electronic submissions also accepted for consideration.

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TE HAUTAKA MĀTAURANGA O WAIKATO

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CHANGING EXPECTATIONS OF RESEARCH: WRESTLING WITH THE COMPLEX AND UNPREDICTABLE

BEVERLEY NORSWORTHY

Bethlehem Institute of Education

ABSTRACT Many neophyte researchers such as those who undertake a substantial masters thesis or embark on doctoral research find themselves faced with an unexpected sense of alienation, aloneness and self doubt. The research process is not necessarily what one expects. Nor does it appear that research methods papers prepare one for the personal uncertainty and upheaval that can be part of the process. This article maps my journey as a developing researcher and PhD student who set out to study student teachers' level of reflectivity and active learning in a class I was teaching but found myself intruding into and exploring my own world of assumptions, beliefs and values. I had embarked on an intrepid journey which would challenge and change my understanding of research methodology, my own teacher education practice and even my self-understanding. The research journey has become an ongoing transformative experience of self discovery, personal and professional development where research is no longer viewed as linear, sequential and clean, but rather dynamic, complex and unpredictable.

KEY WORDS

Teacher Education, Reflection, Critical Reflexive Methodology, Uncertainty

INTRODUCTION

Many neophyte researchers who undertake a substantial masters thesis or embark on a doctorate find themselves faced with unexpected upheaval, a sense of aloneness and self doubt. For many neophyte researchers academic research is often viewed as an "impersonal activity where the notion of rigour demands that we adopt a stance of distance and non-involvement" (Etherington, 2004, p. 25). I have come to realise that the expectations of research methodology that I held at the beginning of this journey are not uncommon. My expectations were of a process which was linear, logical, clean and simple. However, what I discovered is a dynamic, complex and apparently unpredictable reality. A commitment to authenticity required courage to keep the focus of my research uppermost and to find a methodology that would overcome the barriers that my own expectations of a linear framework presented. In this article I set out to describe something of my journey as a developing researcher and PhD student working in the field of teacher education with a focus on the role of reflection.

At the time I began this doctoral journey the reflective literature in teacher education tended to focus on reflection during and after the practicum experience

(Appleton, 1996; Dobbins, 1996; Hoban, 2000; Li, 2002; Zeichner, 1999). A first step was to clarify what I meant by reflection. Consideration of existing literature together with my own epistemological beliefs led to its conceptualisation as "a process for improving practice by becoming professionally self aware through identifying assumptions in decisions and responses within the learning/teaching relationship, and judging those assumptions for their adequacy in the light of a developing and critiqued educational vision" (Norsworthy, 2002, p. 111). As a result of this conceptualisation and the interest in the notion of 'becoming professionally self-aware', I focused my study, not on the current emphasis on reflection during and after the practicum experience, but rather, on how student teachers were reflective and engaged in active learning during on campus courses. Consequently my research question was phrased as, "how does pre-service work within an initial teacher education programme contribute to the development of the reflective professional?"

SETTING THE SCENE

Teacher education literature indicates that students come to their initial teacher education with well established ideas about teaching and learning based on their own previous "apprenticeship of observation" (Lortie, 1975, p. 65). The literature also points to the fact that in many instances formal teacher preparation appears as a weak intervention which has little effect on beginning or future teaching (Calderhead, 1989; Day, 1999; Fecho, 2000; Fletcher, 1997; Hatton & Smith, 1995; Hill, 2000; Kagan, 1992; LaBoskey, 1994; Richardson, 1996; Valli, 1992; Wideen, Mayer-Smith & Moon, 1998; Zhou, 2002). Even in the 21st century teacher educators comment that most experiences and courses within teacher education programmes "are not sufficiently powerful to change entrenched attitudes and understandings about pedagogy" (Hill, 2000, p. 37). Unless their journey from school student to student teacher and on into classroom teacher is interrupted in some major way which draws attention to, and includes challenges to their "personal history based beliefs about teaching and learning" (Van Brummelen & Elliott, 1997, p. 105), it appears that most student teachers teach as they experienced being taught (Berry, 2004; Grossman, 1991; Hill, 2000; Norsworthy, 2003; Ross & Weidner, 2002).

The setting for the study was a second year methods course, *Teaching of Science*, which focused on teaching approaches in the Science curriculum. The emphasis in the Science in the New Zealand Curriculum (Ministry of Education, 1993) on investigative science and the notion of 'fair tests' meant that a dual emphasis on an approach to science, as well as to teaching, might be reasonable and a way of indirectly, but meaningfully, encouraging change in the way students thought about their teaching. It seemed a natural place to encourage reflexivity. My assumption was that if these students were to become beginning teachers who would teach investigative science, then they would need to be investigators and inquirers themselves.

REFLEXIVITY AND TEACHER EDUCATION

At this stage of the journey, I was confident that such change would occur and, therefore, that researching this process would be a pleasing and satisfying process. Little did I realise that I was in for a major shock about the way I thought about teaching, learning and research.

As already indicated, the literature reflects a concern that, almost irrespective of the teacher education provider's epistemological stance, student teachers revert to a 'technical-rational' (Schön, 1983) approach to teaching and approach teaching strongly influenced by their own apprenticeship of observation (Lortie, 1975, p. 65). A technical-rational approach to teacher preparation would more typically be described as 'training'. It privileges pre-packaged 'techniques' and 'skills' and sees teacher educators present expert knowledge about teaching (Berry, 2004) which student teachers can then apply in classrooms to 'manage' their students with maximum efficiency as measured by official curricula and assessments (Mayes, 2001). Such a view tends to ignore the fact that the knowledge required for teaching is personally embedded, context- specific and dynamic (Berry, 2004; Russell & Korthagen, 1995).

Teacher education literature within the past 20 years has seen an everincreasing allegiance to the notions of reflection, reflective teaching and reflective practice (e.g., Appleton, 1996; Bean & Stevens, 2002; Brady, Segal, Bamford & Deer, 1998; Brookfield, 1995; Calderhead, 1994; Conway, 2001; Ferraro, 2000; Groundwater-Smith, Ewing & Le Cornu, 2003; LaBoskey, 1993, 1994, 1997; LaBoskey & Cline, 2000; McDrury & Alterio, 2002; Martinez, 1989; Tabachnick & Zeichner, 1991). In 1990, Zeichner and Liston reported that in the last decade, 'reflective teaching' and its closely associated terms "have become fashionable throughout all segments of the U.S. teacher education community" (1990, p. 22). Similar statements can be found for subsequent decades across countries, particularly Australia, the United Kingdom and the United States of America. Certainly, in New Zealand teacher education programmes and expectations include these notions. Overwhelmingly teacher educators, in order to overcome the previously identified challenges related to the tendency of beginning teachers to techno-rational approaches to teaching and learning, have placed their hope in developing beginning teachers who are reflective.

STUDENT TEACHERS' CULTURE OF ACQUISITION

Previous experience with student teachers together with reading teacher education literature identified a strong tendency toward a 'culture of acquisition' (Marshall, 1999). This tendency is exhibited in two distinct approaches to their professional The first relates to a 'give-the-teacher-educator-what-she-wants' preparation. approach (Appleton, 1996; Berry, 2004; Campbell et al., 2001; Gordon & Debus, 2002; Leung & Kember, 2003; Marshall, 1999). The second way this culture of acquisition is displayed is in the 'give-me-the-simple-recipe - Steps 1-2-3' approach (Boud & Walker, 1998; Brunner, 1994; Mueller & Skamp, 2003). One example of this approach comes from final course feedback where a student who clearly felt unprepared for teaching science bemoaned the fact that she had not been

shown either, what equipment to set out, or, in what order to do so. Such a response is apparently not uncommon. Apparently, student teachers commonly expect their initial teacher education courses to provide a wide-range of practical teaching strategies, noting that they are also often critical when this does not occur (Berry, 2004).

Even recognising student teachers' preoccupation with the technical aspect of teaching, this tendency to acquisition appeared to have pushed aside, hidden or marginalised the students' desire to learn. One may posit that they are learning something but 'it' is often not what we would like them to learn.

INITIAL RESEARCH EXPECTATIONS

At the beginning of this study the research question positioned me as a dedicated teacher educator committed to the role of reflection as an integral part of effective initial teacher education, and indeed professional development, where the aim was to "effect those personal changes which *will permit* the integration into practice of self understanding, relevant theory, substantive knowledge and functional skills" [emphasis added] (Fielding, 1966, cited in Pyle & Seals, 1995, p. 86).

The research plan was that through a pre-course questionnaire I would discover something about the students' expectations of the course and then track their processing of learning experiences within the course through a range of reflective experiences. A meta-reflection at the conclusion of the course would identify the students' awareness of their growth and development. The fact that I was both teacher educator and researcher for these student teachers raised both inevitable power and ethical issues due to the dual relationships of teacher to student, researcher to participant. One concern within the focus of my study was the students' tendency to "give the lecturer what they wanted to hear" and this could easily be influenced if the unequal power relationship between teacher educator and student flowed over into the researcher-participant relationship. The privileged position I held inside these relationships also meant that the students needed to be very sure that I was 'there' for them as teacher educator first, rather than them being 'there' for me primarily as participants. In order to manage these power and ethical issues, no reflective material from the course or data collected for the research was accessed for analysis until after all grades had been through the Board of Examiners process. Students were provided with Participant Information sheets and consent forms at the beginning of the Teaching of Science course. These, with the pre-course questionnaire, were returned to the Associate Dean who kept them locked in her filing cabinet until the above process was completed. Consequently, while teaching the paper I did not have information relating to who had or had not consented to participate in the study. With these boundaries in place, the research methodology appeared linear – clean, predictable and sequential; an "effort to increase human effectiveness through systematic data-based inquiry" (Patton, 1990, cited in Pitman & Maxwell, 1992, p. 735).

My beginning expectations may have been of a linear approach – clean, predictable and sequential, but what I discovered was a dynamic, complex and apparently unpredictable reality. This plan did not take into account the effect of my expectations for student engagement in active learning, particularly of the challenge involved for some students in understanding the nature of the thinking involved in that learning.

RESEARCHING AND TEACHING: VULNERABILITY APPEARS

There was turbulence on two fronts: my own teaching, and then the lesser known and experienced research activity. I was not a new teacher educator making the transition from the compulsory sector to tertiary education. I was used to receiving positive feedback about my relational and supportive approach to teaching. Here I was faced with the opposite.

For example, I believed that to understand an educational situation was to understand the participants' "theories of action" (Argyris & Schön, 1974, p. 6) and the factors which sustain those theories. Therefore, to bring about educational change requires interaction with those theories of action to produce different consequences, which may be described as leading to improved learning. One may ask why in my initial interactions I thought only of the student teachers' theories of action. Why did I overlook and underestimate the degree to which I was a participant within an institutional framework which generated factors which sustained those very theories? Similarly, why, when given the clear message from the students' pre-course questionnaires that a great course would be "fun, fun, fun, little reading and not much writing", did I view as unproblematic my belief that to be an effective teacher of science one needed to be an active learner, an enquirer?

It appeared from the initial science course questionnaire data that what they wanted was entertainment and notes on the board to copy down. motivation for the course seemed to focus on completion of tasks, assignments and courses, rather than on noticing, observing and learning along the way (Mason, 2002). The belief that the professional responsibility of classroom teachers is to utilise knowledge about teaching generated by those outside the classroom rather than themselves, was held strongly by the student teachers. Given the previously identified tendency toward a culture of acquisition, I ought not to have been surprised that the rocky beginnings of this journey emphasised the students' perceptions of, and often preference for, an overarching metaphor of 'teachers-astellers', 'dispensers of knowledge'. But I was surprised.

I soon became aware that at the outset of this study I had not fully appreciated the personal tension and vulnerability that would be mine as a result of researching the students' responses to my teaching. Within such a scenario, I was filled with conflicting emotions and thoughts. To my colleagues I described the student teachers' responses as 'resistance'. From my perspective it was clear. Apparently, these students did not want to learn. My deepest anxiety related to the fact that they were preparing to be teachers. How could teachers not want to learn and inquire? At several times throughout the course I entertained the idea of giving them what they wanted – notes on the board, recipes for experiments – I could do that. But 94

could I? Such a choice would ask me to be untrue to myself and my epistemological and pedagogical beliefs. My reason for being a teacher educator is inextricably linked to the notion of being a professional committed to transformative education. To work toward any other end would be to turn my vocation into a job, my role as a professional into a technician. "Being professional requires a personal commitment to the *telos* or *purpose* of the professional activity, and this involves moral or ethical purpose" (Norsworthy, 2003, p. 60). A professional is one who commits to walking in accordance with their 'profession' or educational creed. To see education as transformative, equipping, liberating and refreshing is part of who I am. My identity and the motivation and strength to be an educator flow from this. If I deny this, I lose the heart to teach (Palmer, 1998).

The rocky path would yet become rockier. A few key and vocal students voiced concern to the Assistant Dean. Mid-year Institutional Evaluation Sheets for the course and the year programme identified that some students were not as confident with teaching the subject as they would like. This is not the outcome I expected - not from the teaching or from the research. Such information challenged my own integrity and identity. The previously referred to student comment, which records disappointment that the course had not included how to set out equipment for experiments, shouted to me that my hope of moving students from reliance on a recipe approach had failed dismally. Naturally I was concerned about the fact that students did not feel confident with teaching science. I knew from the literature (Brady, Segal, Bamford, & Deer, 1998; Brunner, 1994; Campbell et al., 2001; Chan & Leung, 1998; Dadds, 1997; Danielson, 1999) that confidence is an important factor in developing effective, thoughtful and reflective teaching. Such confidence is a critical component of a teacher's self-efficacy which in itself is a strong predictor of what the teacher will actually do (Gibbs, 2003). Where was the awareness - the 'aha' factor - that signifies the type of insight and ownership which I sought and which several years later came when a student expressed gratitude for the fact that this course focused on the 'Why?' of teaching science given that the 'How?' is easy to find? Where was that insightful and desired student comment to record as data now when I needed it the most? As Hochschild (1983) notes:

Teachers' emotional commitments and connections to students, both positive and negative, energise and articulate everything they do. Teaching involves immense amounts of emotional labour... This kind of labour calls for a co-ordination of mind and feeling, and it sometimes draws on a source of self that we honour as deep and integral to our personality. (p. 7)

My journal diary from this time records my turmoil as I struggled with the tensions between 'justifying' my course approach, while also desperately trying to find a way forward to increase the students' level of confidence in their preparedness for teaching science. I dug deep into my vocational call to education, to my commitment to the students and to my beliefs about the nature of teaching and learning.

EXAMINING AND CHALLENGING INITIAL ASSUMPTIONS

After processing the data from the pre-course questionnaire and initial student reflections, there was no doubt-that these students were resistant to learning. However, this conclusion itself troubled me as such blame rhetoric embodies a deficit view of students and gave me little or no way forward. I began to read the related literature, yet I sensed that there was more to this situation than I had captured. A search for authenticity required a methodology that would overcome the barriers presented by my expectations of a linear framework. As I continued to read, write and teach in the area of reflection and reflective practice, I knew I had to re-visit and reframe (Schön, 1983) the experience, to consider the "politics of the gaze" (Pillow, 2003, p. 175). This time I needed to challenge and examine the assumptions underpinning that experience, and particularly those which sustained the assumptions underpinning the enquiry process itself as the spotlight moved away from the students' apparent resistance to focus on my research experience, and particularly to the meaning-making within that experience. As previously mentioned the practice of reflection targets the assumptions which are inherent in the meaning-making process. The question to be answered was now about my courage in identifying and judging these assumptions for their adequacy. Would I make choices in the light of appropriateness rather than being constrained by a particular paradigm? (LeCompte, Millroy, & Preissle, 1992, p. xiv).

Qualitative methodology had been identified as the most appropriate paradigm for this type of research with the expectation that I would focus on "a single thing with a single subject matter" (Patton, 1990, cited in Pitman & Maxwell, 1992, p. 734). Wolcott (1992) identifies two facets of research: the ideas that drive the work and the *inquiry* procedures used to pursue them. Without realising it I had privileged inquiry procedures and, like the students of whom I was so critical, adopted a cook's approach: Given a method, I would implement it, 'bake' the research, and produce the 'cake': an outcome to enjoy. I now realise that I had assumed that the "very stringency of the method guarantees good research results" (Alvesson & Sköldberg, 2000, p. 2). In other words, I believed that method-driven research would produce the results without giving sufficient attention to the ideas which sustained and supported such inquiry.

Slowly and surely, and probably with more grace than I had extended to my student teachers, I began to see that rather than being a research cook, I needed to be an explorer and see qualitative research not as a model to be implemented, a recipe to be followed, but rather as an enabling strategy, a series of ongoing realizations that lead to complex choices and guide decision-making along the way. Such an approach would enable me as the researcher to be responsive to situations and events along the research journey. With a sense of disbelief, I began to see that my own inquiry was trapped within a technicist framework and, ironically, the elements of reflexivity (Shacklock & Smyth, 1998) which I expected my student teachers to demonstrate were not present, or were perhaps being silenced.

MOVING ON BEYOND THE SAFE AND SIMPLE

The awareness noted above signals the second stage of my PhD journey. For example, my consideration of Alvesson and Sköldberg's (2000, p. 134) reasons "for not regarding empirical material as the whole truth" helped me to realise that any data or indeed interpretation of that data may not capture the ideas and beliefs at work resident in the context or lived reality within which each snippet occurs. Also, Orland-Barak (2002) suggested that, when it comes to interpretation of our data, we think carefully about the ever present danger of "getting trapped in easy theorising" (p. 264). The idea and importance of working past the simple interpretation that students were resistant took root. I started to investigate the degree to which my approach to collection and interpretation of data identified the social conditions, ideologies and communicative processes which were operating in my unexplored assumptions.

The result of these considerations led me to change the research question from a "How?" question to a question that was directed to "What is happening?" Perhaps by understanding what was happening, I would be more able to effect change. Alvesson and Sköldberg (2000, p. 132) indicate that the "how" question assumes somewhat naively and simply that the organisation exists first and foremost to fulfil the official goals, while in reality it is driven by external functions (employment, regulations) and interests of leaders and staff (harmony, job satisfaction, favourable conditions, living up to norms about 'what it ought to look like'). A question which seeks to discover not just what is happening but also what constraints both enable and support such practice in its occurrence, is more likely to uncover the taken-forgrantedness. It was time to realise that the initial question tended to focus more on my educational vision, goals and even the hope I had for the outcome of the study. The reworded question focused on identifying and exploring participants' experience and understanding of what is. Perhaps then, such exploration can be interpreted and critiqued with the intention of moving what is closer to the educational vision and goals, what might be. As Carr and Kemmis observe, "practices are changed by changing the ways in which they are understood" (1986, p. 91). Rather than eliminating tensions, discrepancies and anxieties, I needed to name them and engage with them (Orland-Barak, 2002). As well as reworking the research question, this led to changes in the way I perceived the research data, particularly in terms of its representation and authority. How did I know the responses to the questions, the reflections and meta reflections were real? I knew the data were real in the sense of existence and recordings in black and white. However, now I was suspicious of the process. I could analyse what I had, but how authentic and therefore truly helpful in understanding what was obviously a very complex situation would such information or interpretation be? One student who had written a very insightful meta-reflection, just the sort of thing a researcher might want to hear, had also, with reference to an essay, asked "Do we write what you want, and what you believe? In response to my answer, "No, thank you, I already know what I believe, I want to know what you believe", the student had commented, "But I always write what I think the lecturer wants to hear."

As a result of this growing awareness of the complexity within the research interactions, I began to view the students' world differently. While, student teachers' overriding goal on this journey appeared to be "complete and pass", previous work with student teachers had indicated that they were not necessarily aware that their practice and decisions were in fact choices. So could it be that, as they sought to 'survive' the tertiary world, these students were not being supported in challenging their production metaphor with its emphasis on completion. The student teachers' behaviours made sense to them, so what were the thinking processes, assumptions and situations which sustained this behaviour? I knew the well documented claim that an approach to research which claims to be critical and/or interpretive needs "to be rooted in the self understandings of educational practitioners" (Carr & Kemmis, 1986, p. 129). However, instead of collecting these 'self understandings' I was beginning to see that the experience of research itself is a tool to develop these, rather than take them as a given. I could see that this was true for the researcher as well as the student teacher.

My initial view of the research process as logical, sequential, clean and uncomplicated incorrectly assumed more than is possible - that one may 'know' and interpret the data with accuracy and authenticity. However, as already noted, contexts within which research is based are themselves politically, socially and historically complex. For example, re-examination of the data which had initially led to an interpretation of resistance, now led to recognition of the power of educational and institutional messages in terms of what is important. I reluctantly faced the fact that while educational settings such as secondary and tertiary providers may package their messages within the rhetorical framework of lifelong learning, for students the reality does not appear to match the rhetoric. Our students come to tertiary education with years of being rewarded for appropriate task or activity completion - and the tertiary institution in which they found themselves continued to reward them for such behaviour. The very terminology they meet is the terminology of 'provision', and 'delivery' rather than 'engagement' and 'discovery'. So why should I be surprised when the framework of learning they are faced with emanates from a distinctively different metaphor and expectation of engagement, growth and transformation without recognition of the anxiety, the risk taking that such an expectation stirs up? This apparently new and different metaphoric framework and its associated expectations which I had placed before the students required a new approach to learning. It ought to have been obvious to me that students would need support in interpreting the new terminology and expectations. This would take time to understand.

HONOURING THE UNCERTAIN AND THE COMPLEX

So there I was on the journey. Instead of riding along enjoying the scenery, collecting insight about students' professional growth and development, I was anxious, troubled and wondering about what the future twists and turns might herald. Ouestioning my own contribution to and complicity in the practices that contributed to the passive learning I so wished to avoid became a focus of self reflective critique. Acting on that recognition put me in an extremely vulnerable

place institutionally. It might be said that now I found myself in the vulnerable position shared by the student teachers. A place where "being self-critical, raising questions about our own practice is what I think we have to do if we are not to accept blindly such models as the perfect solution in any class" (Brunner, 1994, p. 208). This exploration of my own research beliefs indicated that my initial approach privileged the institutional framework, as well as the power associated with my position of lecturer. Recognizing the multiplicity of realities with which I was working and the need to honour the uncertainty and complexities within the learning/teaching relationship – the research journey for authenticity continued.

SEEKING AUTHENTICITY

It is a given that the two foci for qualitative analysis are description and interpretation. The description is not just of the practice being observed, but also of the beliefs and values shaping both participants' behaviour and the institutional setting within which that practice occurs. Such description and interpretation is not unproblematic in that when it comes to the relationship between the self and the process of research, there are differing views. For example, I read of uncovering the various competing selves which may be present or even "intrinsic in my theoretical sensitivity" (Orland-Barak, 2002, p. 267) and of the multiple researcher's selves where one's identities are inherently multiple with some emergent, some prioritised and some diminished in importance. understanding the thrust of multiple interpretations and readings of data and even perceptions, I found myself reacting strongly and with resistance to this apparently deliberate division and dichotomistic view of self. I found solace in the notions of Whitehead's (1989) 'research as lived experience', Palmer's (1998, 2004) 'hidden wholeness' and Bakhtin's (1986) 'privileged outsider'. However, as previously identified, I was also a privileged insider. While recognising the ongoing challenges and the need to carefully and considerately live through this privileged outsider/insider tension, these metaphors enabled me to seek out desirable characteristics of a methodology that would recognise, be responsive to and valuing of, the real context of teacher education and the day-to-day experiences of the many and varied co-participants along the way. Such a research methodology, while presenting experience for enquiry and enabling participants to venture into it as privileged outsiders, also held the potential for authentic wholeness, where authenticity would celebrate the multiplicity of factors and perspectives without simplification and reductionism. Such an approach would focus on seeing or observing to understand rather than mere looking and would seek to be sensitive to what is subtle and significant. Thus, key to the methodological design for a study which seeks 'meaning making' is to value reflection, not as a "straitjacket on the social world" (Bryman, 2001, p. 269) but as a "way of knowing" (Kuzmic, 2002, p. 224). This way forward required the researcher to demonstrate characteristics which Dewey (1997) described as prerequisites for reflection: open-mindedness, wholeheartedness and responsibility. Given one's propensity to bias and privilege, it was needful that even this openness be submitted to critique so that the assumptions which frame the processes of observation and interpretation were

themselves engaged and subjected to critique. Research became more of a conversation between myself as researcher and participants (human and written) which no longer were fixed, immovable objects but rather co-constructors in "a creative act [which] arises out of their intertextuality" (Hamilton, 2003, paragraph 4). As Etherington (2004) points out, the existence of reflexivity within the research process closes "the illusory gap between researcher and researched and between the knower and what is known" (p. 32). The researcher is not dismembered from her research, but rather, "research is an extension of self-hood – a thrust of intentionality toward meaning within one's 'lifeworld' (to use Habermas' term)" (Hamilton, 2003, paragraph 5). Hamilton is careful to point out that this is not to be equated with falling "down the slippery slope of subjectivism and into solipsism, but rather to acknowledge the ubiquity of the human element" (2003, paragraph 5). As well as increased presence it was needful to include "a deeper analysis of the settings in which research participants live and learn" (agee, 2002, p. 569). The potential for such analysis was found through adapting Wolcott's (1992) categories of data gathering techniques.

CHANGES IN METHODOLOGY EMERGE

Wolcott (1992) identifies and describes three categories of data gathering techniques: experiencing, enquiring and examining. By changing his categories from data gathering techniques to categories of knowing and inquiring, I found a sense of hope about what I trusted would lead to an increased level of authenticity. For Wolcott, experiencing referred to data collected through the senses, particularly through watching and listening. However, in changing from a data gathering technique to a category of knowing and inquiring, experience, that is the multifaceted student teacher's or teacher educator's daily work, becomes the initial starting point for data collection, interpretation and theorising. The world of experience includes thoughts and feelings which arise out of past experiences (with learning, the particular subject, the staff member), institutional expectations (spoken and unspoken) and relationships (with peers and staff). For Wolcott, enquiring provided for the researcher a role more intrusive than that of a "mere observer" (1992, p. 19) akin to Bakhtin's (1986) previously mentioned notion of the privileged outsider. Enquiry for me, as a way of knowing and inquiring, then became the process of placing the identified experience with its history, expectations and assumptions into the public arena and asking hard questions of it. Finally, for Wolcott (1992) the process of examining involved making use of the materials others had prepared. In my model, this process of examining encapsulates the change in research methodology at the heart of my study. Examination focused on identification, critical evaluation of, and investigation into both the assumptions underpinning the research, and, the process of enquiry itself. This examining may be likened to Smyth's (1999) interrogative research. The kind of interrogation he has in mind is "of the contexts and dominant discourses that envelope the everyday lives and experiences of teachers, and that are held in place by hegemonic ideologies, paradigms and worldviews" (p. 76). The status quo, by its very nature, often eludes critique and examination. It is so comfortable there – like the air we

breathe – and yet its comfort and familiarity are themselves traps for the researcher due to the fact that "The status quo paradigm in education makes the rules and sets the standards by which all innovations – and the new paradigm they propose – are judged: this principle greatly inhibits paradigm shifts, which by definition establish new boundaries and rules" (Hull, 2003, p. 216).

What has been critical in this personal journey is the recognition of the need to engage the constraints within the status quo and "systematically articulating the subjective-meaning structures governing the ways in which typical individuals act in typical situations" (Carr & Kemmis, 1986, p. 91). In other words, focusing on what is going on rather than what one hopes is going on, and bringing into the open the ways in which people within a situation make sense of what they are doing may influence practice by influencing the ways in which individual practitioners comprehend themselves and their situation. This may particularly be so when such constraints are critiqued by the intentions and hopes within the educational vision which initially inspired the activity, As outlined by Schwandt (2000) "social inquiry is a distinctive praxis, a kind of activity (like teaching) that in the doing transforms the very theory and aims that guide it" (p. 190). In fact more than transforming the theory and aims, it changes our view of self and the setting in which we live out our work (Renner, 2001).

CRITICAL REFLEXIVE METHODOLOGY

In this journey, a critical reflexive 'interactional dynamic' between *experience*, *enquiry* and *examination* appeared to provide an increased awareness of the powerful influences of the status quo: past learning and beliefs, institutional expectations and practices. The methodology itself required not only reflective practice by the researcher but also reflexivity that opened possibilities for the researcher's professional growth – in research, in teaching and in self understanding. The developing methodological framework, which I have described as critical reflexive methodology, is seen to hold potential for the building of integrity and authenticity because of a greater degree of alignment between participant and method, allowing the symbiotic relationship between these two to be seen, acknowledged and valued.

To be reflexive provides insight into the workings of our social world as well as how we arrive at our particular understanding of that world. In this case, reflexivity is not valued for its ability to "get better data" (Pillow, 2003, p. 184) or to result in more accurate or valid research as claimed by some (Altheide & Johnson, 1998) but rather for its ability to open the research process in its entirety for critique by the reader. This openness means readers are more able to make a judgement about its authenticity for themselves.

CONCLUSION

I now recognise that when I began this fascinating journey I had more in common with my initial perception of the students' beliefs and expectations than I care to note. My expectation was of the emergence of neat uncomplicated findings with clear implications for practice. In contrast, Kennedy (1997), writing about why

educational research has had what is viewed by some as a minimal effect on practice, wrote: "To the extent that our work reflects more adequately the ambivalent and ambiguous character of education, it may become more persuasive and more relevant, and perhaps as it does, it may also become more conceptually accessible" (p. 10).

My initial approach and interpretation did not place the students either historically or institutionally in context, but rather perpetuated what Smyth (1992) refers to as "a value consensus that stability is the natural order of things and goals are shared and unproblematic" (p. 272). Rather than positivistic research with a linear process seeking causal determination and prediction, critical reflexive methodology requires a holistic process that seeks critical reflection about both the illumination and understanding of all phases – describing the experience and enquiring into that experience as well as into the examination of that enquiry and interpretation process itself. By doing so, the researcher is provided with "a set of epistemological relationships" which in turn influence the purpose, process and product of research (Kuzmic, 2002, p. 224).

For this researcher, the process of research provided a clarion call to seek a method that would enable and in fact require the tensions between the espoused theories and theories at work in student teachers' approaches to learning to concurrently be more fully investigated and explored while at the same time being honoured and respected. A search for certainty and 'neat findings' was replaced by the aim of authenticity. Instead of viewing the subjectivity of the researcher as problematic, it set about to understand both the researcher and the biases which shaped her initial interpretations. The process of research was no longer separated from my identity and, like teaching became an extension of my life mission. As Palmer (1998, p. 2) notes, "We teach who we are". In the same way it seems we research who we are. Therefore, the inclusion of the inherent practice of reflection and reflexivity means that the process of research involves attending to and "interpreting one's own interpretation, looking at one's own perspectives from other perspectives, and turning a self critical eye into one's own authority as interpreter and author" (Alvesson & Sköldberg, 2000, p. vii). The "cycles of deliberation" (Piantanida & Garman, 1999, p. 1) include the "messiness inherent in learning by doing" (Piantanida & Garman, 1999, p. 2). Expectations for the initial research journey - linear, clean and simple - have been replaced with a "modest, unassuming style of one struggling to piece together something reasonably coherent out of displays of initial disorder, doubt and difficulty" (Van Maanen, 1988, p. 75). The exploration of my own research world and work continues to be a journey of self discovery as well as of professional growth and development.

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