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Reflections on researching when you don't 'own' the question

Abstract

Research students from various disciplines often become a part of an already established research study. Research question, methodology and data collection and analysis procedures have already been decided in order that the requirements of Grant Committees are met. How difficult is it then for the research student to assume ownership of the project? This was my experience as a PhD student working on a SPIRT or APA(I) grant. My struggles to make this qualitative research my own and some of the solutions that I found will be identified and discussed.

The majority of qualitative research studies for Post Graduate Research in Education involve a single researcher identifying an important research question, locating this in the literature then applying an appropriate methodology, data collection processes and data analysis procedures to explore the question. An additional component of this process is the identification of an accessible research site/s and the location of participants to provide relevant information for the study. While this type of experience is considered to be the norm, what are the implications if some or all of these factors are already decided?

At times this is the case, for example if your research study forms part of a larger research initiative as happens in the Sciences. For many researchers this pre-identification process would appear to be ideal. There is no need then to agonise over identifying a research question, methodology and data collection and analysis procedures already located all you need to do is step into the research. Although this was my experience with respect to my PhD research, I found the reality far from ideal. Perhaps this was because my study wasn't nested within a larger research initiative, whatever the reason I found it a challenge to take control of the study and make it my own. In what follows I detail the background to the study, the problems I faced and the solutions I found.

The following model (figure 1) will be used to provide background and to identify and discuss the various aspects that resulted in the conceptualisation of the study

Research Partners

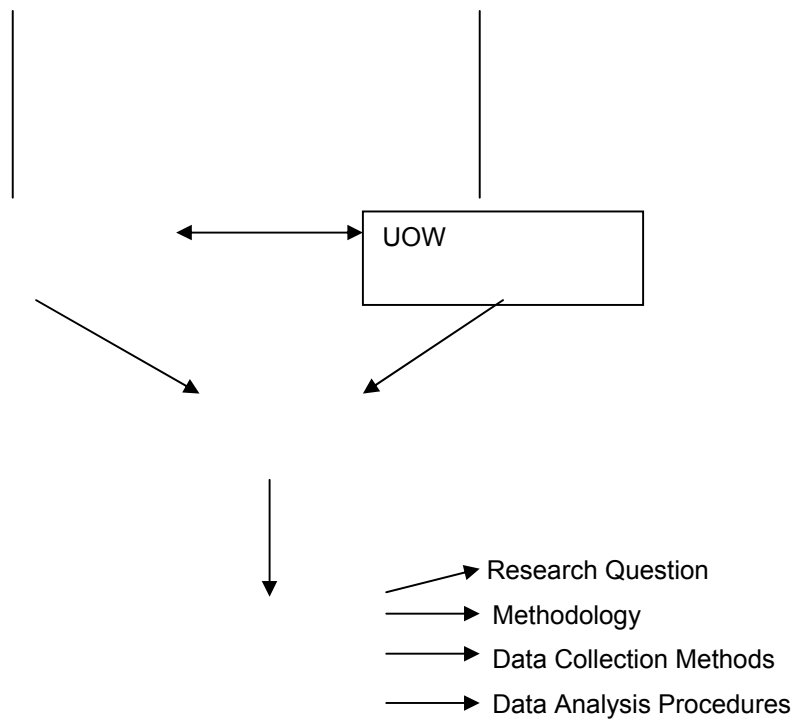


Figure 1

The connections among and between the 'players' in the SPIRT (later APAI) grant process

Setting the Scene

Research Partners

As the previous figure identifies, there were two partners in this research study. The Industry partner in this research was a Catholic School Diocese located on the eastern seaboard of New South Wales in an area that ranged north and westwards of a large capital city to a regional centre on the central coast of New South Wales. The schooling system directed by this Diocese provides educationally for students from diverse socio-economic and ethnic backgrounds through thirty-nine Primary and fifteen Secondary school sites.

The second partner in this research was the 'Frameworks Professional Learning System' (PLS) developed by Turbill, J., Butler, A., Cambourne, B. with Langton, G (1991, 1993) at the University of Wollongong. This PLS focussed upon language and literacy learning initially for early stage one and stage one teachers. The PLS was originally trialled over eight-weeks in Rochester New York for the Wayne Finger Lakes Board of Co-operative Services in 1990 beginning with the training of thirty-six facilitators. This began an association that would continue for ten years (Turbill, 2002). The Frameworks PLS was also run in several other countries (Saudi Arabia, USA (various states) and Papua New Guinea) as well as domestically in both New South Wales and Victoria.

It was this PLS that was chosen by the Diocese as part of their Early Learning Initiative to assist in the professional development of their teachers in the area of language and literacy. This was a project designed to run over three years from 1996 to 1998. A one-week Frameworks PLS would be provided for classroom teachers at the beginning of each of those school years, over the length of the project 75 teachers took part in this professional development. During this period, Frameworks measured both teacher and student learning outcomes as well as collecting data relevant to the school culture.

The Professional Learning System

The professional learning system utilised by Frameworks pivots upon the interplay between four domains of knowledge about the teaching of literacy; 'my personal theory', 'my personal theory in practice', 'theory of others', 'theory of others in practice' (Turbill, 1994). Although teachers can and do learn from each of these domains, it is in the space where these domains intersect that the possibility for learning and therefore change resides. The following model illustrates this process.

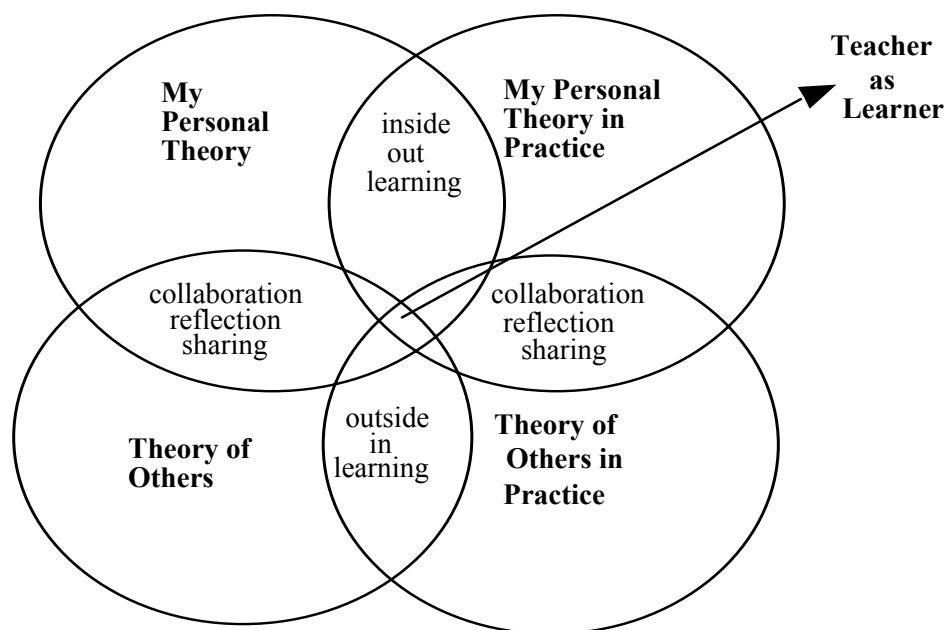


Figure 2

Turbill, 1994 Model of Effective Professional Development

As part of the reporting process to the Diocese, annual reports were presented by Frameworks detailing data gathered and analysed regarding teachers, students and schools. This data assisted to inform the future directions of the Diocese literacy strategy.

The SPIRT/APA(I) Grant

In 1998 Dr Brian Cambourne and Dr Jan Turbill successfully applied for an ARC Industry Partner (SPIRT) grant (later referred to as an APA(I) grant) with the Diocese to fund a PhD scholarship to investigate how teachers implemented their professional development experiences into their classroom practice. As a part of the grant process, several factors needed to be identified and discussed. These included the proposed research question/s, type of methodology and the data collection and analysis procedures.

I was the successful applicant and began work on the inquiry in March 1999. I had previous school experience as a Primary School teacher and also with the Frameworks PLS. While undertaking my Masters Honours on a part time basis I worked for Frameworks as a Research Assistant performing a variety of duties on both international and domestic research sites. I later also completed Frameworks PLS training as a facilitator over five days at a training site in the Diocese.

When my problem became apparent

As a part of the research process, students at UOW are required to present their research proposal at a Faculty Research Colloquium to a panel of academics before they can undertake their research. This requires the candidate to present an overview of the literature review, choice of methodology and proposed data collection and analysis procedures. It became apparent while undertaking this exercise that I had some considerable difficulty in stepping into the mind-set of my supervisors who had initiated this research. An excerpt from my research journal highlights my frustration

Research Journal (date): 'OK...I've done the reading, I understand the question, agree with the focus. I've done the training (FWS), I know it works...Hell, I've seen it from both sides. Why don't I feel like I 'own' this research.....(MAYBE BECAUSE I DON'T!!!!).
How can I change this??

In order to try and understand what the problem was I initially consulted with my supervisors and then I began to ask myself a series of questions:

- Is this always the case when others step into an already decided research project?
- Is there a psychological term for this? 'cognitive dissonance, psychological dissonance, disequilibrium'??
- Is this connected with appropriation? Some link it with accommodation???
- How can this be discussed in the research process (Research question and it's importance??)
- How can I move beyond this problem?

What I did to address the problem

I had to find ways to take ownership of the inquiry and began by widening the reading I was already undertaking in order to complete the literature review and methodology for my research proposal. It became apparent as a result of this wider reading that there was some considerable dissonance between my world-view as a beginning researcher and the original SPIRT research question/s. This difference perhaps reflected my supervisor's knowledge and understanding as more experienced researchers. Based as it was upon their view of the world, greater knowledge base and experience, plus the Industry Partners' world-view and interests. This wider reading resulted in my ability to identify and articulate my personal world-view as a researcher and link this with a research paradigm. This extension of my knowledge base led to a greater level of confidence in my ability as a researcher

What happened as a result of this problem?

1. In order to understand and make connections for myself I needed to read more widely

2. I began to become aware of the need to identify my role as a researcher (constructivist) ontology(nature of reality) and epistemology (kind of knowledge possible) and work out my own world-view
3. I gained increased knowledge and understanding about the importance of the research question. The need for it to be flexible, reflect **my** bias (ontology/epistemology) as a researcher
4. I was able to take more ownership of the inquiry

What did I learn about each of these issues?

World view of the researcher

Each researcher works from a particular way ‘...of viewing the world’ (Guba & Lincoln, 1989:160) this is often referred to as a paradigm. Denzin & Lincoln (2000a) define a paradigm as a set of beliefs that we use as a guide to interact within our world. The particular paradigm that best describes my research orientation is that of constructivism. Constructivism has many forms and various qualifiers such as social constructivism, radical constructivism, social constructionism, philosophical constructivism and cybernetic constructivism (Boudourides, 1998). A common element that flows through all forms of constructivist thinking is that knowledge is actively constructed on the basis of existing knowledge.

As a means of detailing my bias for the reader I feel it is necessary to identify and explore the ontological, epistemological and methodological structures that underpin my world-view of working within a constructivist paradigm. Although Denzin and Lincoln (2000a) discuss the recent proclivity for ontology and epistemology to merge I will for my purposes here discuss them separately. Reflecting upon ontological issues within my research means asking myself reflective questions about *what is*, such as *what is there that can be known?* or *what is the nature of reality?* (Guba, 1990; Crotty, 1998). These are the types of questions that identify my assumptions regarding the nature of reality.

From an ontological perspective constructivists dispute such positivist notions as a single reality or the existence of immutable natural laws and the concept of cause and effect and explore the '...multiple realities constructed by human beings' (Guba & Lincoln, 1989:64). Constructivists view reality as being a social construction (Mertens, 1998; Schwandt, 1994) and acknowledge that respondents' constructions are their own perceptions of that reality (Lincoln & Guba, 2000).

Reflecting upon epistemological issues within my research means asking myself reflective questions about the relationship between the knower and the known, such as '*What does it mean to know?*' '*What kind of knowledge is possible?*'

From an epistemological perspective constructivists acknowledge the value of the relationship between the researcher and the respondent/s, that all knowledge is a transaction (Denzin & Lincoln, 2000b). They also acknowledge that the nature of the inquiry process itself is interactive and therefore requires the utilization of a range of more personal and interactive modes of data collection (Mertens, 1998). This view also impacts on the notion of the value system of the researcher and the methods they instigate to fulfil these requirements. Here,

'...terms such as credibility, transferability, dependability and confirmability replace the usual positivist criteria of internal and external validity, reliability and objectivity' (Denzin & Lincoln, 2000a:21).

Locating this research in the constructivist paradigm referred not only to the use of a range of specific data techniques but also to a particular way '...of viewing the world'. Guba and Lincoln (1989:160) refer to the use by a researcher of a range of specific tools and techniques as 'naturalistic evaluation of the first kind' and the change in world-view as 'naturalistic evaluation of the second kind'.

Wider reading also led to my increased understanding regarding the important role played by the research question in both focusing and driving any inquiry. In

this present study this is reflected in various areas such as those connected with time and resources; providing a boundary for the research and as a reflection of the ontological and epistemological view of the researcher.

The role of the research question

As Mason (1996) discusses, time and resource issues such as access to research sites and available data sources are also a consideration when formulating research questions. Due to the initial collaboration between the Industry Partners (The Diocese and University of Wollongong) I was assured access to a range of school and classroom sites. This guaranteed access to key data sources and teacher interview time allowed for the formulation of research questions that were not impacted upon by these types of practicalities.

Several researchers (Flick, 1998; Mason, 1996; Creswell, 2002) identify the initial research question as being vitally important. Good research questions act as both a boundary for the study while still allowing some fluidity or scope for growth and change. In this present study the questions that frame and guide this study are focussed within the research site and broadly identify the phenomenon being studied and the 'boundary' is provided by the focus on the literacy block in each of the respondents classrooms.

There was no expectation that the research questions would remain static, but rather that they will grow and change as the study proceeds and the site and participants impact upon the original questions (Morse, 1998; Creswell, 2002; Janesick, 2000). In fact in phase one of this study the changing research questions reflect just such an impact. Initially this was the result of researcher dissonance and led to changes in the original research question. The confluence of the emergent data, the cognitive dissonance of the researcher and the emic language of the respondents directed later changes, that would lead to phase two of this inquiry.

The choice of research question reflects my bias as a researcher, in that the results will be descriptive, (Creswell, 2002) discussed through means of 'thick, rich description' (Lincoln & Guba, 1985:316) those things that occurred on site, couched in terms of a narrative. This reflects my views that the respondents in this study have valuable knowledge about the phenomena under study. The process will be interpretive (Creswell, 2002) in that I will attempt to capture each respondent's understandings via their classroom stories. This reflects my views of the notion of reality being a social construction (Mertens, 1998) and that my respondents' constructions are their own perceptions of that reality (Lincoln & Guba, 2000). Finally, that my access to this transactive knowledge is based on creating and maintaining my relationships to my respondents (Denzin & Lincoln, 2000b).

Once I had grappled with my own stance with respect to these issues I was able to assume a greater level of ownership over the research inquiry. The level of disequilibrium and lack of ownership that I had experienced at the beginning of the inquiry was beginning to dissipate. After my presentation at the colloquium, the panel recommended a change in the research question that now became:

'What is the nature of those factors which support and/or hinder the ways teachers turn a professional learning experience (in this instance an 'integrative/interactive' model of professional development) into classroom practice?'

Focussing the Study

In order to better understand the nature of the relationship between teacher learning and classroom practice, it was necessary to choose a methodology on the basis of its methodological 'appropriateness' (Paton, 1990:39; Flick, 1998). Locating this research within a qualitative, naturalistic or constructivist (Creswell, 2002) paradigm reflects the focus on understanding the 'multiple realities' of the respondents (Guba & Lincoln, 1989:143) and acknowledges the complex nature

of the phenomena under study. As Creswell discusses, qualitative research is selected when

‘...the inquirer is interested in exploring and understanding a central phenomena, such as a process or an event, phenomenon or concept. This exploration is needed because little existing research exists on the topic or because the issue is complex and its complexity needs to be better understood’ (2002:62).

Other researchers (Mertens, 1998; Guba & Lincoln, 1985; 1989) link methodological choice with the world-view or paradigm of the researcher. The general lack of research available concerning how classroom teachers implement aspects of their professional development experiences into their classroom practice also affected the methodological choices I made with respect to this inquiry. My use of a grounded theory methodology reflects my concurrence with Strauss and Corbin’s (1990) view that

‘...one does not begin with a theory, then prove it. Rather, one begins with an area of study and what is relevant to that area is allowed to emerge’ (p.23).

Both the choice of the research sites and the participants in this study also suggest another element in the research design, that of the use of case study.

When choosing from an array of methods in an inquiry, researchers identify from a ‘toolkit’(Feyerabend, 1975:30) of possible resources. In this way the researcher creates a ‘bricolage’ (Denzin & Lincoln, 2000a:4; Arminio & Hultgren, 2002:456) or pastiche of methods that they judge to be the most appropriate. My use of case study in this instance reflects such a choice as I was entering a series of complex research sites; with a view to observing the many interactions there and that each site represented a bounded system.

Case Study Method

Some researchers argue that the term ‘case study’ refers to a research methodology linked to ethnography (Tesch, 1990), while others (Yin, 1993; Stake, 1994; Stake, 2000) disagree

'Case study is not a methodological choice, but a choice of what is to be studied' (Stake, 2000:435).

Most agree however with the notion that a case study is the exploration by a researcher of a 'bounded system' (Creswell, 2002:485; Stake, 2000:436). In this research the bounded system referred to is the 'literacy block' created by each of the respondent teachers within their classroom.

Creswell discusses the usefulness of a qualitative case study to focus upon a number of cases 'to provide insight into an issue' (2002:485). This is termed a multiple (Creswell, 2002) or collective (Stake,2000) case study. In utilising this type of case study with the focus on each of the classroom literacy blocks I turn the investigative focus upon

'...a phenomenon, population or general condition' (Stake,2000:437)

Another important element of case study research is the focus upon the collection of multiple forms of data and the provision of 'thick description' (Stake.2000:439). In all of the cases discussed in this research the data selected for collection demonstrates these criteria as they take the form of observational field notes, classroom maps and diagrams, classroom resources and artefacts, transcribed interviews, videotapes and teacher created flowcharts.

As I intimated earlier the processes identified within a grounded theory methodology have been used to as a means of analysing the data.

Grounded Theory Methodology

Grounded theory is a research method with several attractive qualities for a constructivist researcher in that it seeks to develop theory that is grounded in or emerges from the data (Dick, 2002; Glaser & Strauss, 1967; Strauss & Corbin, 1990). Grounded theory provides a template for data analysis (Charmaz, 1995), is systematic (Strauss & Corbin, 1994) and advocates a tight link between data collection and data analysis (Strauss & Corbin, 1990). It is primarily used to

develop inductively derived theory about a phenomenon (Strauss & Corbin, 1990) where either theory had previously not existed, or where the theory that did exist was deemed to be inadequate.

Grounded theory has been described variously as 'substantive theory' (Strauss & Corbin, 1990:74; Dey, 1999:210), 'middle range theory' (Creswell, 2002:452; Charmaz, 2000, 2003) and 'process theory' (Denzin & Lincoln, 2003). The aim of a grounded theory study is to produce a middle range, rather than a formal theory. This theory is considered to be substantive or process theory because it
'...is an abstract explanation or understanding of a process about a substantive topic grounded in the data' (Creswell, 2002:452).

Some of the other important elements here are that the theory accounts for a particular phenomenon and that this is defined in terms of time and space...in my particular research, the phenomenon is the literacy block in each of the teachers classrooms rather than the classroom itself. Also important is that I'm looking at this phenomena as a whole, not as the sum of its parts. So, the theory that's generated provides an explanation for what's happening in each of the literacy blocks in terms of how teacher's professional development experiences have impacted there.

Currently there are three main Grounded Theory designs in use, each connected with particular theorists, these are (A), Strauss and Corbin's systematic design; (B), Glaser's emerging design and (C), Charmaz's constructivist design. The major elements of each of these designs are discussed in more depth in what follows.

Strauss and Corbin

The systematic design of Anselm Strauss and Juliet Corbin (1990; 1998) provides a set of specific measures for the development of a grounded theory driven by the intimate connection between data collection and data analysis via the use of inductive analysis. An important concept in this design is the identification of the steps in the data analysis and the use of open, axial and

selective coding procedures in order to construct and discuss a logic paradigm of the theory (Strauss & Corbin, 1990).

‘...the use of data analysis steps of open, axial and selective coding and the development of a logic paradigm or a visual picture of the theory generated’ (Creswell, 2002:441).

Strauss and Corbin (1990) identify open coding as the means by which a series of initial categories are identified and named by means of data analysis that segments the data. Here, the researcher ‘makes comparisons and asks questions of the data’ (Strauss & Corbin, 1990:57). In axial coding the data is re-connected in new ways in order to ‘identify the connections’ (Strauss & Corbin, 1990:58) between a category and its sub-categories. This is far from a linear process, often a researcher will toggle between open and axial coding when analysing data. In axial coding the connections between a range of elements such as the core phenomena; categories and sub-categories; ‘causal conditions; strategies; contextual and intervening conditions and consequences’ (Creswell, 2002:441) are linked together visually in the form of a coding paradigm. Selective coding is the means by which the theory is written that is based upon the previously identified axial coding paradigm. In writing this theory the researcher reaches back to the coding paradigm and discusses the relationships between and among the categories identified there, providing a higher level ‘abstract explanation for the process being studied in the research’ (Creswell, 2002:444). In effect, selective coding involves

‘The process of selecting the core category, systematically relating it to other categories, validating those relationships, and filling in categories that need further refinement and development’. (Strauss & Corbin 1990:116).

Barney Glaser

In the emerging design of Barney Glaser (1992) the focus remains on allowing a theory to emerge from the data without forcing. Many see this design as a more flexible model as less emphasis is placed on the types of coding categories discussed by Strauss and Corbin (1990). Glaser (1992) advocates the use of constant comparative coding where the researcher focuses upon

'...comparing incident to incident and incident to category as well as category to category. The focus is on connecting categories and emerging theory not on simply describing categories' (Creswell, 2002:445).

Glaser discusses several different types of coding such as substantive coding where 'first order concepts' (Dey, 1999:9) are identified that are the most closely related to the data. A more abstract level of coding is also identified that Glaser terms theoretical codes. These are considered to be 'second order' codes and are at a more abstract level conceptually (Dey, 1999:10). Other coding terms are also used in this design, Glaser uses the term open coding in the context of

'...coding the data in every way possible...for as many categories that might fit' (Glaser cited in Dey, 1999:10).

Whereas selective coding involves the researcher in then delimiting the coding to

'...only those variables that related closely to the 'core' variable that forms the heart of the emerging theory' (Glaser cited in Dey, 1999:10).

In Glaser's design there is a focus on the four central criteria (1998) of fit, work, relevance and modifiability, the grounded theory remains conceptually more abstract in that the types of visual pictures advocated by Strauss and Corbin (1990) are not a feature of this design.

Kathy Charmaz

The constructivist grounded theory design of Kathy Charmaz (1990; 2000; 2003) assumes a different stance. Charmaz is more interested in

'...the views, values, beliefs, feelings, assumptions and ideologies of individuals than in gathering facts and describing acts' (Creswell, 2002:446).

The constructivist design of Charmaz moves away from the use of diagrams or conceptual maps as well as advocating the use of less 'complex terminology and jargonistic terms' common in each of the other designs (Charmaz, 2003:276).

This design focuses on foregrounding the feelings and experiences of the respondents as they interact with the phenomena under study (Charmaz, 1995). The style of the written narrative attempts to move from simply reporting the

experiences of the respondents to encouraging the reader to share these experiences.

‘ This means taking the reader into a story and imparting its mood through linguistic style and narrative exposition. This strategy removes the writing from typical scientific format without transforming the final product into fiction, drama, or poetry’ (Charmaz, 2003:278).

Also of value in this design is a discussion of the values and beliefs that the researcher brings to the research site (Charmaz, 1995).

Although each of the previously mentioned designs emphasises particular foci areas unique to each of them, there are common grounded theory characteristics flowing through each of the designs. The following table has been constructed using those elements as identified by Creswell

Table 1 Illustrating the common elements in all Grounded Theory Designs

Common Elements in All Grounded Theory Designs
• ‘Studying a process related to a substantive topic
• Sampling theoretically involving the simultaneous and sequential collection and analysis of data
• Constantly comparing data with an emerging theory
• Selecting a core category as the central phenomena for the theory
• Generating a theory that explains a process about the topic’

(Creswell, 2002:448)

In developing the grounded theory methodology used in this study I again assumed the mantle of a bricoleur (Denzin & Lincoln, 2000a:4; Armino & Hultgren, 2002:456) and used elements of each of the previously mentioned designs. This is a notion that Strauss and Corbin themselves endorse as they reflect on changes in ‘grounded theory’s actual use in practice’ (1994: 276). In a later paper, Charmaz is even more direct

‘ We can use grounded theory methods as flexible, heuristic strategies rather than formulaic procedures’ (2003:251).

Due to the wider reading and research I engaged in with respect to grounded theory I was also able to identify the elements from each of the previously discussed designs and indicate its use in my own grounded theory design then link it back to the researcher specifically identified with each particular design.

Table 2 Illustrating the Grounded Theory design used in this Inquiry (identifying elements of each of the other Grounded Theory Designs)

Grounded Theory Design Used in This Inquiry
<ul style="list-style-type: none"> • Researcher's role in the process fore-grounded, my beliefs and values discussed. (Charmaz)
<ul style="list-style-type: none"> • Use of constant comparative coding procedures, comparing incident to incident, incident to category and category to category. (Glaser)
<ul style="list-style-type: none"> • Use of 'active coding' = 'ing' words for category labels to capture the experiences of the participants. (Charmaz)
<ul style="list-style-type: none"> • Use of memos about theoretical ideas. (Strauss & Corbin)
<ul style="list-style-type: none"> • Development of logic diagrams or a visual picture of generated theory. (Strauss & Corbin)
<ul style="list-style-type: none"> • Notion of 'good' grounded theory fitting the four criteria of 'fit', 'work', 'relevance' and 'modifiability'. (Glaser)
<ul style="list-style-type: none"> • Storyline of theory connects categories and includes memos and examines how the original phenomenon is influenced. (Strauss & Corbin)

The aspects of Case Study and Grounded Theory incorporated into this inquiry along with the unique setting and the interconnections between and among various methods of data collection serve to create the environment within which this study is contained. As already discussed, my wider reading to prepare for my research proposal led me to identify firmly with a constructivist paradigm. This initially resulted in the use of a model of constructivist inquiry (Guba & Lincoln, 1989:174) that I later adapted to reflect the unique elements within my inquiry process.

Important issues for me and all researchers

- It seems to me that the type of process that I needed to engage with in order to take control of my research inquiry could be useful for anyone undertaking qualitative postgraduate research. Wider reading led to a greater understanding about how all the research elements needed to come together within my study so that was cohesion between the type of research question I was asking, my world view as a researcher, the types a data collection instruments I would employ and the data analysis procedures I would use. All

of these things need to mesh together to form a unified whole. Answering the types of questions below provided me with a greater level of confidence in creating a bricolage approach to my study and allowed me to stand more confidently beside my more experienced supervisors. So, I leave you with a series of questions about your own research project...

- What do you know about the important role that the research question plays in your inquiry?
- Where do you locate yourself as a researcher? What is your world-view? What are your beliefs as a researcher? Is the truth really 'out there'? What is reality and how will you present this? What are your responsibilities to your respondents?
- Why have you chosen that particular methodology? Who are the 'players' in your research field? Do they all speak with one voice or are there divisions? How does your methodology intersect with your research question?
- How will you combine your methods in your inquiry and why have you chosen those particular ones?

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