

**Qualitative research in the making:
A practical guide to project design**

Paper submitted to:

ACSPRI Social Science Methodology Conference 2006

The University of Sydney, Sydney, Australia

10-13 December 2006

Peer Review Stream: DESIGNING QUALITATIVE RESEARCH

Dr Ann Dadich and Dr Anneke Fitzgerald

Social Policy Research Centre (SPRC)

University of New South Wales

Email: a.dadich@unsw.edu.au

Qualitative research in the making:

A practical guide to project design

Introduction

Although potentially very useful, particularly in exploratory efforts (Babbie, 1989), qualitative research can be difficult to conduct. Novices and experienced researchers alike often struggle with the theoretical and practical considerations that surround qualitative research. For instance, what constitutes a qualitative methodology; how can the meticulous analysis of research material be assured, particularly when there are rigid timeframes to adhere to; what questions can be asked of the data; how can the findings be validated and deemed acceptable by others, particularly those with a penchant for quantitative research; and how is it possible to present the findings in a manner that is acceptable to journal publishers, and still do justice to the qualitative research process. Presented with these dilemmas, qualitative research can be quite “intimidating” (McCaslin & Wilson Scott, 2003, p. 447).

This is *not* to suggest that there is a dearth of literature on qualitative research. In fact, there are numerous bibles to inform the researcher (Crotty, 1998; Denzin, 1989; Denzin & Lincoln, 2000; Fetterman, 1989; Janesick, 1994; Jorgensen, 1989; Kirby & McKenna, 1989; Morse, 1994; Strauss & Corbin, 1989; Van Maanen, 1988). Yet despite this, ambiguity in the field abounds. Berg (2001) for instance asserts:

“Many books discuss a variety of social scientific research methods; thus, you may reasonably question why anyone would bother writing another text. However, a close examination reveals that although a great many texts have been written about such abstract concerns as research design... few books have concentrated on how to do qualitative research and analysis” (p. 1).

With few exceptions (Blank, 2004; McCaslin & Wilson Scott, 2003), the status quo largely remains unchanged. This paper therefore attempts to partially fill this void by presenting a structure to inform the development of qualitative research projects.

The paper presents the *Research Design Framework* – a practical method to devise a well-informed qualitative research project. Although simple and commonsensical, the value of the framework is its ability to comprehensively articulate, and make explicit, the array of considerations that a competent researcher should be attuned to when sculpting a sound and robust project. This includes the *overarching research question*; *specific research questions* that will ensure the thorough consideration of the overarching question; *epistemological* and *theoretical* orientations; possible *research methods*; *analytical approaches*; as well as appropriate ways to *present* the research journey and culminating findings.

Arguably, the *Research Design Framework* has potential value to qualitative and quantitative researchers alike. However, given the messiness of qualitative research (Mellor, 2001), which is seldom a linear process, the framework prompts the researcher to give considerable forethought to all phases of the project, and the assumptions that influenced its trajectory.

With such forethought, the framework has the potential to expose unanticipated research dilemmas as well as newfound opportunities. This in turn, helps to ensure the timely completion of research projects – and in this aeon of increasing academic pressure, where the adage, *publish or pressure*, has intensified for both staff and students alike, this is surely welcomed.

The framework also increases transparency. By documenting the process, others who share or merely peer at the research journey have a clearer understanding of where the project has been and where it is going. This is particularly important in the context of a supervisory relationship where the research student might struggle to eloquently relay to the academic supervisor (especially one who is most comfortable in the positivist paradigm) his or her thought processes.

Transparency is also important in this epoch where collaborative research efforts are becoming increasingly essential for both funding-starved academics and industry partners (including government bodies) that require evidence-based practice. Researchers need to actively find ways to *build bridges* so that the isle of qualitative research is more accessible to others. As Eakin and Mykhalovskiy (2005) avow:

“The bridge building dimension of teaching QR [Qualitative Research] goes well beyond translating the to students; it also includes the constant necessity to represent this form of research coherently and convincingly to colleagues, committee members, research associates, community research partners, and funders... [Qualitative researchers] must... be able to... [employ] the critical skill of articulating the logic and method of QR succinctly, and convincingly. Bridge building demands a sharp and accessible vocabulary that does justice to the methodology while at the same time being comprehensible and convincing to those with varying disciplinary and professional backgrounds and standards of judgment” (para. 23).

Thus, such transparency is pivotal if veterans to the approach want to raise the profile of qualitative research. Unlike its quantitative counterpart, qualitative efforts are not well regarded or supported by esteemed disciplines, particularly those situated in the positivist paradigm. As Blank (2004) explains:

“The advantage of quantitative work is that there exists a strong culture to support high-quality work. This manifests itself in various excellent texts and advice from colleagues and technical staff. The culture of qualitative analysis is much weaker and less developed. Support is harder to find, so that researchers are forced to rely much more on their own resources” (p. 188).

While the situation is gradually improving, qualitative research is often deemed subjective as well as deficient in both validity and reliability (J. M. Eakin & Mykhalovskiy, 2005). Consequently, it seldom attracts the attention of policymakers and funding bodies. However, by shrouding their craft, qualitative researchers only fuel

this ignorance. It is therefore important that they demystify their empirical efforts by articulating the process that informed culminating findings.

Admittedly, efforts toward this aim are often thwarted by word-limited journals. Unlike the brevity of numerical data, qualitative research is typically word-hungry and devours with ease the stringent word limit set by journal editors. This often leaves a trail of unanswered questions – notably, “how exactly did the themes *emerge*?” This poses a problem for neophytes who, with their desire to learn, have turned to peer-reviewed journal papers for guidance; it is also problematic for those hoping to replicate or adapt the approach. Further to this, brief (if not ambiguous) presentations of qualitative research do little to broaden the horizons of those who remain steadfast to the positivist paradigm. Qualitative researchers thus have a responsibility to develop clear and concise prose to ensure that the chosen approach is comprehensible and, more importantly, *included* in the journal papers they prepare.

The espoused framework is offered, not as a definitive approach to research design, but rather, as an instrument to add to the toolbox of possible options. This in turn, enables the researcher to use the most suitable instrument for the task at hand.

Before presenting the *Research Design Framework*, it is important to look to existing literature to learn from the efforts of esteemed social scientists in teaching qualitative research design.

Learning from Others

For the novice qualitative researcher who is eager to learn *how* qualitative research is conducted, a number of authors provide coherent if not structured descriptions. After having the use of qualitative research rationalised by Marshall and Rossman (1999), Crotty (1998) offers an introductory text to conceptualising epistemology, theoretical perspective, methodology, and method. Its ostensible logic and clarity is reprieve for those who are in unfamiliar territory. Similarly, Creswell (1998) compares five key traditions in qualitative research – namely, biography, phenomenology, grounded theory, ethnography and case study research, while Tesch (1990) details 27 different types of qualitative research, ranging from those concerned with the characteristics of language, to those that seek reflection.

For those with an insatiable appetite for text on qualitative research, Denzin and Lincoln’s (2000) capacious edited handbook cannot be overlooked. While its prose and volume are at times difficult to digest, its comprehensiveness allows the novice to feel they have completed more than a mere introductory course. Yet, in reading this tome, one comes to realise that there is no universal approach to qualitative research.

Akin to the messiness of conducting qualitative research (Mellor, 2001), instruction on *how* to perform it appears jumbled, serving to confuse, rather than abet the neophyte. This apparent disarray was somewhat confounded by the introduction of poststructuralism and postmodernism, “largely by pressing us to abandon altogether any notion of a real world out there waiting to be discovered” (Oakley, 1999, p. 160).

It might be argued that the presentation of *choice* is an essential part in the development of critical and astute researchers. Carvajal (2002) for instance asserts, “The more information we include in the workshops, the more critical participants will be” (Art. 35). However, the need for structure has made stepwise approaches like grounded theory (Glaser & Strauss, 1967), even in its revised form (Glaser & Holton, 2004;

Strauss & Corbin, 1990), particularly attractive to novices (J. M. Eakin & Mykhalovskiy, 2005).

Despite the varied ways of conducting qualitative research, artisans of this craft seem to share one belief – this approach is not the soft alternative to quantitative research. It is an involved process that appreciates, if not welcomes complexity. It recognises that, like the human life, topics worthy of exploration are often influenced by a gamut of seemingly extraneous factors that cannot necessarily be segmented into palatable portions (Cook & Seely Brown, 1999).

Given such complexity, it is often difficult to present a qualitative research journey concisely. For the most part, one only has to glance at the size of a thesis to foretell how a postgraduate student chose to answer the overarching research question. However, the *Research Design Framework* attempts to moderate this dilemma by offering a visual presentation of a qualitative research journey.

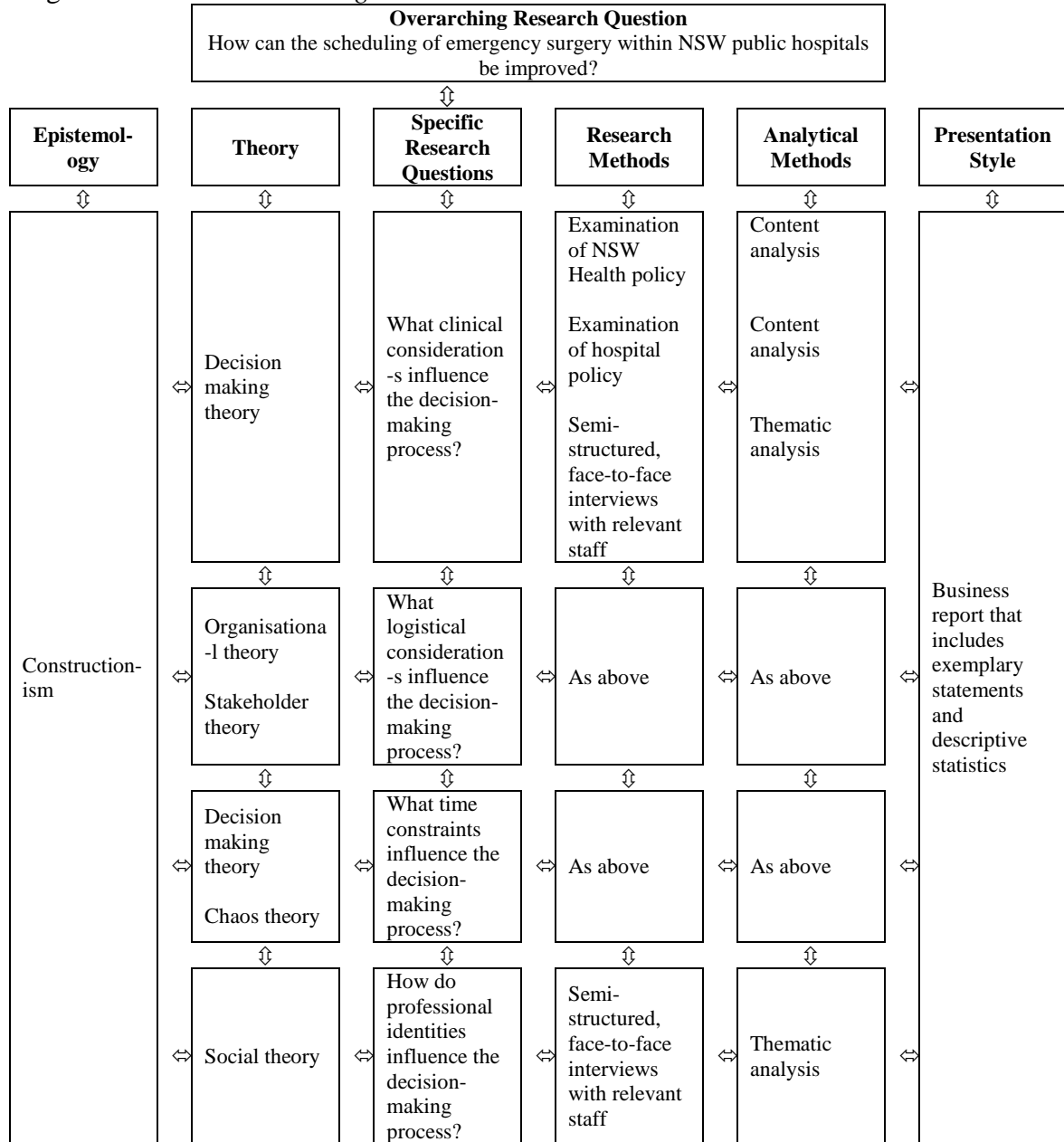
The Research Design Framework

For ease of clarity, the *Research Design Framework* is presented in diagrammatic form (see Figure 1). However, when used by a researcher, the artisan breathes life into the framework and it becomes a living entity. Just as the researcher lives, experiences, learns and evolves, the framework, like a mirror, reflects these changes. Subsequently, change in one part of the diagram quite possibly initiates change in others – akin to the ripples created by a pebble thrown into a pond. Therefore, the development of the framework is *not* a sequential or *ad hoc* process; it is one that asks the researcher to consider all phases of the project, and the assumptions that influence its trajectory, in a manner that is cyclical and iterative. In the words of Blank (2004), it is *systematic* and *well-documented*:

“Systematic simply means being deliberate, orderly, and structured. The analysis is not impulsive or arbitrary. Systematic does not mean giving up the spontaneity and flexibility that make qualitative research so appealing. The qualitative studies I admire are systematic, but they are not only systematic. They mirror the creativity of the researcher as well as the information from study participants. They do not mindlessly follow someone else’s recipe. Well-documented means that the researcher writes extensively about decisions made, interpretations of events, and how concepts are employed. Important documentation includes how theoretical issues are operationalized in the practical setting of the research, how conclusions are explicitly linked to data, and how the events described in field notes or interview transcripts are translated into larger theory. The researcher should be able to point to a trail of evidence and logic supporting all these issues” (p. 188).

The framework appreciates the value of such reflection and thus accommodates change. In fact, the elasticity of the framework in the face of change affirms its value as a practical guide in research design.

Figure 1: The *Research Design Framework*



Overarching Research Question

As a commonsensical approach, the *Research Design Framework* commences with the overarching question that the researcher hopes to answer. While this can take the form of an aim or a hypothesis, the authors have found that a clear and concise question helps the time-poor researcher to maintain focus – particularly while reviewing seemingly interesting, yet superfluous literature. It is important that this statement is clear and concise, as this helps to establish parameters around the area under investigation. One useful litmus test to gauge degree of lucidity is to try to explain the project to a peer in one sentence – a feat that few academics can master. To demonstrate the framework in operation, one example from the field of business management research would include, *how can the scheduling of emergency surgery within NSW public hospitals be*

improved? In the context of the research project, this question is awarded centrality; it permeates the framework and informs subsequent development of the study.

Specific Research Questions

Having articulated the overarching question, the researcher then considers specific questions that will help to respond to this question in a comprehensive manner. Like objectives (Polit & Hungler, 1999), these bite-size statements facilitate a methodical and systematic exploration. This is *not* to suggest a sequential research process, but rather, a well-informed approach to the area under study. Advancing the aforementioned example of an overarching research question, specific research questions would include:

- What are the clinical considerations that influence the decision-making process?
- What are the time constraints that influence the decision-making process?
- What are the logistical considerations that influence the decision-making process? and
- How do the professional identities of relevant staff members influence the decision-making process?

However, as the study progresses, these statements might be amended. Informed by existing literature and consultation with key stakeholders, the researcher comes to recognise his/her naiveté and revise the questions accordingly. As Creswell (1998) advises, “We refrain from assuming the role of the expert researcher with the ‘best’ questions. Our questions change during the process of research to reflect an increased understanding of the problem” (p. 19). Such flexibility provides the researcher with comfort and confidence in the latitude to respond to the evolving context.

Epistemology

Regardless of the discipline or paradigm in which a study is positioned, it is important to identify the epistemological orientation of the researcher(s). According to Stanley and Wise (1993), this might be understood as:

“a framework or theory for specifying the constitution and generation of knowledge about the social world; that is, it concerns how to understand the nature of ‘reality’. A given epistemological framework specifies not only what ‘knowledge’ is and how to recognize it, but who are the ‘knowers’ and by what means someone becomes one, and also the means by which competing knowledge-claims are adjudicated and some rejected in favour of another/others” (p. 188).

To ease comprehension, Crotty (1998) identifies three primary orientations – namely, objectivism, constructionism and subjectivism. While each encompasses a number of variants, Crotty advises:

“Objectivist epistemology holds that meaning, and therefore meaningful reality, exists as such apart from the operation of any consciousness... [That is,] we can discover the objective truth... constructionism – rejects

this view of human knowledge. There is no objective truth waiting for us to discover it... Meaning is not discovered, but constructed... In this view of things, subject and object emerge as partners in the generation of knowledge... In subjectivism, meaning does not come out of an interplay between subject and object but is imposed on the object by the subject” (pp. 8-9).

As the present paper espouses the value of the *Research Design Framework* in qualitative approaches, most studies might be founded on constructionism (Crotty, 1998) (and/or subjectivism). This was the case in the example presented in Figure 1, whereby a constructionist orientation filtered through the project. Identifying this orientation at the inception of the project proved very valuable – not only did it facilitate consensus among members of the research team, but it also made explicit to the funding body that the team was not seeking definitive answers that had omnipresent generalisability.

Theory

Research proficiency requires more than a mere understanding of methodology and associated research methods. It demands theoretical knowledge as well as an ability to make explicit links between theory, research methods and findings (J. M. Eakin & Mykhalovskiy, 2005).

Theory is said to be “the philosophical stance informing the methodology and thus providing a context for the process and grounding its logic and criteria” (Crotty, 1998, p. 3). The *Research Design Framework* thus invites the researcher to consider the various lenses and baggage that he/she brings to the study (Eco, 1979). The researcher is encouraged to deliberate on *how* they understand the area under study, and more importantly, *why* it is understood in this way.

As depicted in Figure 1, the exemplary study was informed by a number of relevant theories. These were identified by members of the research team who represent distinct disciplines – namely, medicine, business management and psychology. While a careful consideration of relevant literature proved most useful when identifying relevant theories, the potential value of consultation with key informants should not be disregarded (M. N. Marshall, 1996).

Research Methods

Guided by the epistemological orientation and the identified theories, the researcher is asked to consider which method(s) would be most appropriate to answer the overarching *and* specific research questions. Not only does this require familiarity with the plethora of possibilities, but it also demands an awareness of those that are deemed acceptable by researcher’s discipline – methodologically and *ethically*.

Using the example depicted in Figure 1, the setting of interest was the operating theatre. Ostensibly, the overt observation of decision-making practices among surgical staff might have helped to answer the research questions. However, the appropriateness of this approach remained dubious for a number of reasons. Firstly, ethnography (and its variants) does not have a strong following in some of the disciplines represented by the researchers. Secondly, the approach may have actually tainted the culminating findings;

this possibility is magnified by the strong professional identities among (some) hospital personnel and the possible fear of litigation, should malpractice be observed. Yet, most importantly, observation in the hospital setting does little to uphold patient confidentiality. Following extensive deliberation around the pros and cons of various research methods, the research team collectively decided on two complementary research methods – namely, policy analysis and semi-structured, face-to-face interviews with individual staff members involved in the scheduling of emergency surgery within NSW public hospitals. These methods are noted in Figure 1.

Analytical Methods

The consideration of appropriate research methods should be married with the consideration of appropriate *analytical* methods. Failing to make this connection risks a *methodological meltdown*, whereby the researcher does not know what to do with the wealth of material that he/she has accumulated.

Within the rubric of qualitative research is an array of analytical weaponry. While it is beyond the scope of this paper to describe these (even briefly), interested readers are referred to the tomes of established social scientists (Creswell, 1998; Crotty, 1998; Denzin & Lincoln, 2000). In the context of the *Research Design Framework*, it is important to ensure that an appropriate analytical technique has been identified for each chosen research method. This often involves peering over disciplinary fences to learn how other researchers manipulate and scrutinise their material (J. Eakin & Mykhalovskiy, 2003). Yet, this must be balanced by consideration of *accepted practice* within the discipline of the researcher, lest the findings (and associated recommendations) be dismissed by peers.

Extending the example in Figure 1, it is evident that the research team chose to examine relevant policy documents using content analysis, while interview transcripts were perused using thematic analysis. Admittedly, there is no universal understanding for either of these techniques. For instance, content analysis to the sociologist is somewhat different to content analysis for the ethnoscientist (Tesch, 1990). However, because the intended audience was primarily situated in the positivist paradigm, it was important to complement the qualitative analysis with descriptive quantitative information. This was believed to strengthen the value of the findings and culminating recommendations.

Presentation Style

Through the course of the study, the considered researcher would have entertained (and perhaps borrowed from) approaches from other disciplines; and being well-prepared, he/she would have begun writing almost at the inception of the project. However, the researcher still has to consider *who* the research findings are ultimately for and the disciplines, paradigms or interests that audience members represent. This constitutes an important factor because without engaging the audience and presenting the findings in a credible manner, research is done merely for research's sake.

Polonsky and Waller (2005) reiterate this point, encouraging researchers to familiarise themselves with their audience and the expectations they hold. However, they argue that there are ultimately two distinct styles by which to present research – the academic report and the business report. As the following statement suggests, each requires a different level of detail:

“The academic report will tend to focus more on the theoretical grounding, methodology, and academic implications of your research project. The report should, therefore, display your ability to deal with all relevant academic issues and communicate the research you have undertaken in a formal way...

Business Report[s]... are designed to be read by managers within the organization who are less familiar with the issue, but who are responsible for making a strategic decision based solely on the report. Therefore, these reports need to clearly discuss the critical issues, highlighting what the course of action would mean for the organization. Business reports, therefore, have a heavy managerial focus when explaining the problem, how it was examined, and appropriate implications for business practice” (p. 191).

While informative, this description provides little guidance to the qualitative researcher whose audience has limited familiarity with (or little appreciation for) exploratory work.

In the example depicted in Figure 1, it was important for the research team to maximise the credibility of the study in an unequivocal manner. While credibility is vital in all research, it is particularly important when audience members might read the findings through lenses coloured with cynicism. As the culminating report was primarily intended for managers and medicos who had limited familiarity with qualitative research, the findings were presented with exemplary quotes and policy statements, as well as descriptive statistics.

Conclusion

Given the difficulty that often surrounds the design, conduct and presentation of qualitative research (Berg, 2001; McCaslin & Wilson Scott, 2003; Mellor, 2001), there is a critical need to identify ways to ease this process – lest qualitative approaches be dismissed and/or avoided. More importantly is the need to present qualitative research in a manner that is logical, coherent and concise.

The present paper offers one such method; namely, the *Research Design Framework*. As a heuristic, the framework serves to prompt a researcher to consider and concisely articulate all facets of the investigation. The researcher is asked what the *overarching research question* is; what the *specific research questions* are that will ensure the thorough consideration of the overarching question; which *epistemological* and *theoretical* lenses he/she will use to guide the study; which *research methods* will be used to answer the research questions; how the material gathered will be *analysed*; and the way in which the culminating findings will be *presented*. While the framework is presented diagrammatically for clarity, the development of a qualitative study is not considered to be sequential, but rather systematic and well-documented (Blank, 2004). This may require the researcher to refine the design of the study as it unfolds.

The *Research Design Framework* is not espoused as a universal approach to qualitative research, but rather as one possible option to add to the researcher’s toolbox. Yet, there are a number of functional advantages associated with its use for both veteran

researchers and neophytes. These include the concise and clear presentation of complex research, making visible what is often described through lengthy prose; the identification of possible dilemmas and opportunities, and their impact on the project's timeframe; as well as greater transparency in the research process – not only to peers or supervisors, but also funding bodies and those not familiar with qualitative research.

The framework may thus prove particularly useful to the qualitative paradigm, informing the design of all facets of a study. However, it is important that others test this notion and toy with alternative approaches to research design. Pragmatism in qualitative research deserves further exploration by contemporary researchers, lest they become dissuaded from qualitative research efforts and ask only those questions that can be answered quantitatively.

References

- Babbie, E. (1989). *The practice of social research* (Fifth ed.). Belmont, CA: Wadsworth.
- Berg, B. L. (2001). *Qualitative research methods for the social sciences* (Fourth ed.). Needham Heights, MA: Allyn and Bacon.
- Blank, G. (2004). Teaching qualitative data analysis to graduate students. *Social Science Computer Review*, 22(2), 187-196.
- Carvajal, D. (2002). The artisan's tools: Critical issues when teaching and learning CAQDAS. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research [On-line journal]*, 3(2).
- Cook, S. D. N., & Seely Brown, J. (1999). Bridging epistemologies: The generative dance between organizational knowledge and organizational knowing. *Organization Science*, 10(4), 381-400.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Sydney, NSW: Allen and Unwin.
- Denzin, N. K. (1989). *Interactive interactionism*. Newbury Park, CA: Sage Publications.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2000). *Handbook of qualitative research* (Second ed.). Thousand Oaks, CA: Sage Publications.
- Eakin, J., & Mykhalovskiy, E. (2003). Reframing the evaluation of qualitative research: Reflections on a review of assessment guidelines in the health sciences. *Journal of Evaluation in Clinical Practice*, 9(2), 187-194.
- Eakin, J. M., & Mykhalovskiy, E. (2005). Teaching against the grain: The challenges of teaching qualitative research in the health sciences. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research [On-line journal]*, 6(2), Art. 42.
- Eco, U. (1979). *The role of the reader*. Bloomington, IN: Indiana University Press.
- Fetterman, D. M. (1989). *Ethnography step by step*. Newbury Park, CA: Sage Publications.
- Glaser, B. G., & Holton, J. (2004). Remodeling grounded theory. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research [On-line journal]*, 5(2).
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Janesick, V. J. (1994). The dance of qualitative research design: Metaphor, methodolatry, and meaning. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 209-219). Newbury Park, CA: Sage Publications.
- Jorgensen, D. L. (1989). *Participant observation*. Newbury Park, CA: Sage Publications.

- Kirby, S., & McKenna, K. (1989). *Experience, research, social change: Methods from the margins*. Toronto: Garamond Press.
- Marshall, C., & Rossman, G. B. (1999). *Designing qualitative research* (Third ed.). Thousand Oaks, CA: Sage Publications.
- Marshall, M. N. (1996). Sampling for qualitative research. *Family Practice*, 13(6), 522-525.
- McCaslin, M. L., & Wilson Scott, K. (2003). The five-question method for framing a qualitative research study. *The Qualitative Report*, 8(3), 447-461.
- Mellor, N. (2001). Messy method: The unfolding story. *Education Action Research*, 9(3), 465-484.
- Morse, J. M. (1994). Designing funded qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 220-235). Newbury Park, CA: Sage Publications.
- Oakley, A. (1999). People's ways of knowing: Gender and methodology. In S. Hood, B. Mayall & S. Oliver (Eds.), *Critical issues in social research: Power and prejudice* (pp. 154-170). Buckingham, UK: Open University Press.
- Polit, D. F., & Hungler, B. P. (1999). *Nursing research: Principles and methods* (Sixth ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- Polonsky, M. J., & Waller, D. S. (2005). *Designing and managing a research project: A business student's guide*. Thousand Oaks, CA: Sage Publications.
- Stanley, L., & Wise, S. (1993). *Breaking out again: Feminist ontology and epistemology*. New York: Routledge.
- Strauss, A., & Corbin, J. (1989). *Qualitative research methods*. Newbury Park, CA: Sage Publications.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. London: Sage Publications.
- Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. New York, Philadelphia and London: The Falmer Press.
- Van Maanen, J. (1988). *Tales of the field: On writing ethnography*. Chicago: University of Chicago Press.