

Shifting Paradigms and Mapping the Process: Graduate Students Respond to Qualitative Research

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We describe the experiences and responses of a group of graduate students as they first encountered an in-depth study of qualitative research methods. Four themes emerged as having important contributions: the nature of previous research experiences, personal style and learning preferences, epistemological and philosophical commitments, and assessment of professional viability. Key words: Qualitative Research, Conceptual Change, and Graduate Students Beliefs

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“It wasn’t even considered Sunday reading.” Gary

“It just seemed to me to be kind of backwards.” Carl

“[It is] consistent with “the essence of my life—my connection with others.” Julie

“Phenomenology spoke to me like an old friend.” Jane

“I finally found a way to capture the most important part of our lives—the meanings we give to things.” James

“It helped to anchor me as a person into the research.” Diana

Introduction

Reponses and reactions to qualitative research, as evidenced by these statements of students who participated in the same introductory class on qualitative research methods, contrast vividly. They mirror the controversy that still raises heated arguments in some academic communities; in spite of consistent calls for acceptance of alternative forms of research in the social sciences (e.g. Hoshmand, 1989; McLeod, 2001; Rennie, 1999), some scholars do not

consider qualitative research equal to traditional methods (Rennie, 1999). For others, study of what has become the main alternative to quantitative research (McLeod, 2000) causes a powerful connection to the research process and opens the door to generation of new research questions (McLeod, 2001). Why? What experiences and personal characteristics contribute to a learner's response to qualitative research?

The Current Status of Qualitative Research

In the last decade, qualitative research methods, once considered useful primarily for exploratory purposes in the field of psychology, have gained some acceptance in most scholarly research communities as credible research forms in their own right (Elliot, Fischer & Rennie, 1999; Rennie, 1999). The movement has been most evident in the social sciences, education and health care research because qualitative research offers opportunities to understand dimensions of social interactions that traditional research methods do not address (McLeod, 2001). This alternative paradigm provides insights into the why and how dimensions of experience, adding significantly to the completeness of answers provided by research (McLeod 2000).

Nevertheless, this acceptance has not been without controversy. Fields that have relied heavily on studies based on quantitative measures have been slower to embrace this alternative paradigm (Hoshmand, 1989; McLeod, 2000). This situation may be based on lack of understanding that the essential purpose of qualitative inquiry is to address different questions and to answer them in different ways (Hoshmand, 1989; Ponterotto & Grieger, 1999). It is not simply a different method, but a completely different paradigm that implies a distinctly different world-view, and a different consideration of the sources of truth (Hoshmand, 1989).

Although some institutions offer alternative tracks in which students may choose between an emphasis in qualitative or quantitative studies, this is not the case in every university (Miller, Nelson, & Moore, 1998). Counseling and psychology divisions of schools of education have been known for providing a strong background in research methods and statistics, often requiring students to take 9-12 credits in study of statistical concepts and procedures. By virtue of these experiences in academic settings, many graduate students have been well-trained in quantitative traditions, either through this course work or the pervasive assumptions of their institutions and departments that equate quantitative inquiry with viable research (Miller, et al. 1998). Many faculty members have also been trained primarily in the positivist tradition and are more supportive of studies that operate in a familiar paradigm (Heppner, Kivlingham & Wampold, 1992; Locke, Spirduso & Siverman, 2000).

Since contradictory alternative frameworks are highly resistant to change (Champagne, Gunstone, & Klopfer, 1985), students' first exposure to qualitative research may be disruptive as they are faced with positions and definitions that contradict their previous assumptions and expectations about the essential nature of research. It requires a major shift in research paradigm (Denzin & Lincoln, 2000) to a perspective that recognizes the unique experiences and meaning constructions of individuals as viable subjects for research (Elliot et al., 1999).

If they are to accept the viability of qualitative research, learners may need to break with habits of thought that have become automatic throughout their study of research and recognize that the paradigm they have taken for granted has "as much prescriptive as descriptive power" (Hoshmand, 1989, p. 9). They must re-consider their definition of science in their academic lives (Locke et al., 2000) and determine if the assumptions about research that have served as their perceptive filters are congruent with their other belief systems.

Background: The Nature of Conceptual Change

We wanted to understand how graduate students developed their views of the qualitative research paradigm. Literature on conceptual change was particularly relevant, since the principles described in that research illuminate the process of shifting paradigms.

Realities and expectations of professionals grow from the assumptions and perspectives they have been trained to pursue and are based on a process of consensual negotiation (Kuhn, 1996); therefore any major changes in these assumptions and expectations are dramatic events marked not only by new information, but also by shifts in what Pintrich, Marx and Boyle (1993) call “conceptual ecology” (p. 172). Learners strive to maintain coherence and consistency in their theories in order to construct viable intellectual frameworks that are more powerful than existing perspectives (Strike & Posner, 1992).

Previous research, much of it focused on how learners come to understand science, has emphasized the difficulty learners have in reframing existing theories. Chinn and Brewer (1993) described six positions learners may choose to take as an alternative to conceptual change. These positions, derived from numerous studies, range from simply ignoring the information to accommodation of peripheral change in ways that force only minor modifications on an existing conceptual system or theory (Chinn & Brewer, 1993).

Three major dimensions influence whether or not learners are willing to change their theories to accept new information. The nature of the existing theory is critical, particularly in its level of entrenchment (Vosniadou & Brewer, 1992), in the ontological belief systems that support it (Chi, 1992), in the epistemological commitments aligned with them (Posner, Strike, Hewson & Gerzog, 1982), and in the related knowledge that depends on these theories (Lord, Ross, & Lepper, 1979). The new theory must be characterized by plausibility and quality, and the data that supports the new theory must be credible, unambiguous, and the evidence of it occur frequently enough to be convincing. Learners also must be willing to consider the new theory through deep rather than superficial processing strategies (Chinn & Brewer, 1993).

The affective dimensions of conceptual change, particularly the role of interests and value beliefs, make it a “hot” rather than a “cold,” or entirely cognitive process, in the terms used by Pintrich and his colleagues (1993). Learners “have intentions, goals, purposes and beliefs that drive and sustain their thinking” (p. 191), which have a powerful impact in either constraining or facilitating conceptual change. The usefulness of the new theory and learners’ personal and professional interests play important roles in either supporting or undermining possible conceptual shifts.

The system of beliefs typically held by students trained in the quantitative paradigm may or may not be based on an articulated understanding of the nature of knowledge and of how we come to know (Hoshmand, 1989). They approach a class in qualitative research methods with a conceptual framework—a theory—that organizes these beliefs. Their commitments to the quantitative perspective may involve epistemic and motivational dimensions as well as cognitive ones (Kruglanski, 1989). Many of these connections are contradicted by their encounter with qualitative assumptions and methods. Entrenchment of their prior definitions of research, the professional context that supports a quantitative ecology and ontological and epistemological beliefs that can be inferred from their existing theories of research can make the assumptions of the qualitative perspectives difficult to accept. The inherent ambiguity of much of qualitative

methodology, which is by nature fluid and interpretive, can also make this approach to research unconvincing to one who holds a well integrated prior theory.

Conceptual change research also explains why the qualitative paradigm would be particularly attractive to some individuals. Although they may have had long-term exposure to, and work within, the quantitative paradigm, the beliefs these people hold about research may not be deeply connected to other dimensions of themselves as persons and professionals. Exposure and knowledge do not necessarily result in closely held beliefs or well-integrated, useful, perspectives. It is possible that the traditional approach to research has not been incorporated into their ontological and epistemological belief systems. They may not have meaningful connections to the research perspectives they have been taught because the precision of positivist methodology does not fit well with the emerging psychology of learning evidenced in a variety of fields, including psychology, cognition, and counseling (Hoshmand, 1989). A study of qualitative methods has the potential for connecting these people to a world of research to which they could become committed.

The experience of learning to do qualitative research has been addressed in studies that emphasized the nature of the process. Ely, Anzul, Friedman, Garner, and Steinmentz (1991) documented the experiences of doctoral students as they learned to do qualitative research as a research team. Recognition that the creation of qualitative dissertations requires procedures and steps skills unique to the paradigm has resulted in at least one text focused on the process, including first hand comments and accounts from student about how to handle the experience and the process (Melroy, 2002). There are countless articles and books describing the nature of qualitative research, including the epistemological, ontological, and methodological perspectives and a wide variety of qualitative approaches.

Accounts of the nature of the initial conceptual shift, the intensity of the experience, and the factors that influenced individual responses to qualitative research assumptions, however, need further investigation. We were particularly interested in understanding what it was like for students to encounter a research paradigm contrary to the one they had been taught and in describing the nature of the reflective and analytical processes that influenced their receptiveness to this alternative paradigm. We expected at least two benefits from this study. First, understanding this process can help teachers support the learning of qualitative methods in programs that have historically emphasized quantitative methodologies. Second, understanding the experiences of one group of students can be useful for others when they first encounter the alternative paradigm.

In this study, using a phenomenological tradition designed to uncover the essential meanings of the experience, we explored the nature of conceptual change for graduate students with backgrounds in quantitative research as they attempted to make sense of qualitative research methodology.

Course Description and Teacher Perspectives

Participants in this study had the opportunity to take one introductory course in qualitative methods, which is required for the Ph.D. degree in counseling and educational psychology. It is an elective for students in other programs. I chose paperback volumes of Denzin and Lincoln's (1998) *Handbook of Qualitative Research* as the basic course for the text. Three major goals framed the class: I wanted to encourage students to consider qualitative

research as a viable inquiry approach, to enable them to read and evaluate qualitative reports, and to be able to conceptualize an original qualitative investigation.

I support a Constructivist paradigm as a researcher and as a teacher. Lincoln and Guba (2000) state that this view includes a relativist ontology, a transactional and subjectivist epistemology, and a hermeneutical and dialectical approach to methodology. I believe that researchers do their best work when they operate within the paradigm that is consistent with their beliefs and when they pursue questions that are of real and personal interest. My intent was not to convert any student to an exclusive acceptance of qualitative methods or rejection of quantitative methods, but to encourage them to ask questions about their own research identities and to locate personally and professionally important questions. I hoped that they would create a research identity that would allow maximum flexibility in their research options.

I recognize that my approach to research identity is not without controversy. Some (e.g., Ponterotto & Grieger, 1999) support this approach, assuming that inclusion of multiple perspectives is enriching and valuable; the nature of the question should direct the purpose and nature of the inquiry (Hoshmand, 1989). Others see this approach as a view inconsistent with contrasting understandings of the nature of truth and reality that inform each paradigm (Rennie, 1999). This group emphasizes that researchers' understanding of truth and reality, rather than the nature of the question, should drive the nature of the investigation.

Students who enrolled in this class in qualitative research typically expected to learn about another method of research rather than another paradigm of inquiry. Most were not prepared for the disruption of existing ideas and views of research presented by qualitative research (Webb & Glesne, 1992). Consequently I focused on paradigm shift first and most intensely.

Students were initially asked to consider their current definition of "good research". Terms such as "reliable" and "valid" and "objective", "generalizable", and "statistically significant" were mentioned. The first three meetings of the class were designed to encourage students to consider the alternative paradigm of qualitative research. The focus was first on the Positivist and Post-Positivist dichotomy (Guba & Lincoln, 1989). Students read articles Denzin and Lincoln's *Handbook* (1998) to identify the contrasting perspectives in epistemology, ontology, and methodology, in particular. They also discussed different approaches in the "moments" described by these authors and considered where they personally connected to the competing paradigms the authors described. The premises and procedures recommended for qualitative research served as a lightning rod for discussions about credibility in research and truth, encouraging those who felt strongly about the topic to articulate certain components of their own beliefs

Some researchers and teachers prefer to minimize specific methodological approaches within qualitative research in favor of a general qualitative method (McLeod, 2001). However, I have found that consideration of basic traditions gave students in an introductory course a clearer sense of procedures for actually doing qualitative research. The framework provided by Creswell (1998) made the qualitative approach comprehensible and accessible to students who were more familiar with proscribed procedures of the positivist traditions. This approach helped them recognize the questions implied by different kinds of qualitative inquiry.

Ethnography, Phenomenology, Grounded Theory, Case Study, and Biography, Creswell's (1998) identified traditions, were studied with essays in the *Handbook* with recognition that there is no right way to classify qualitative methods, and that approaches are necessarily emerging. Students considered the broader issues and the applications of these

perspectives in qualitative studies with the understanding that each was to be applied flexibly, and that understanding the data was more important than rigidly adhering to prescribed procedures.

Student projects included reflective journals to describe their thoughts as they studied qualitative research, thorough reviews of two articles from different qualitative methodological traditions and a proposal for an original study based in one of the traditions we studied.

The greatest challenge for me was to “do it all” in a 3-credit course. Shifting paradigms, understanding some methodology options, and creating a proposal in one semester created an intense course. Although students were positive about their learning, it was clear to me that their responses to and affinity for qualitative research varied.

Class discussions led me to wonder what experiences and perspectives learners brought to the class that influenced their response to qualitative methods. Why did some students respond with such enthusiasm to this alternative paradigm, and why were some seriously skeptical about its value? What could I and other teachers of qualitative methods learn from understanding the conditions that were most important in students’ willingness to give these methods open-minded consideration?

Methods

Creation of the Study

With the initial intent of further understanding these issues in order to improve the class, I invited four students to serve as co-researchers in this project. These students were purposefully selected because their reflective journals, class participation, and qualitative proposals indicated that they found the paradigm attractive. All had some background in empirical research and had previously conceptualized “real research” in terms of the scientific paradigm, with concepts of reliability, validity, generalizability, for example, framed in positivist terms.

By the conclusion of the course, these students/co-researchers had embraced the qualitative paradigm. They became an integral part of the study, which can have an important impact of maintaining study quality (Heppner et. al, 1992). All four used language that indicated they were most comfortable with the ontological, epistemological and methodological perspectives of the Constructivist paradigm as described by Lincoln and Guba (2000). They were rich sources of insights for understanding how the paradigm shift occurred. Coincidentally, all four were Counselor Education doctoral students, whose views of their professional responsibilities included understanding individual’s constructions and reconstructions in therapeutic settings.

Process

The four students reviewed their respective individual journals from the class and individually wrote synthesis essays that represented their conceptual growth, frustrations, and current understandings of qualitative research. I read and analyzed these essays, making use of constant comparative analysis, to identify recurring themes. My analysis and interpretation of these themes formed the basis for two focus group discussions to clarify and elaborate on the insights as I had interpreted them. Each focus group interview was transcribed, validated by the individual participants and the focus group, and used as a basis for further discussion.

At this point, it became clear to all of us that this informal study for course improvement would not be complete without insights from the rest of the students in the class who were still available. As a group of five co-researchers, we designed an interview protocol that reflected the insights gained to date. The four co-researchers used this protocol (Appendix A) to interview the eight other class members, using pseudonyms; interview assignments were unknown to the instructor. The interviews were transcribed, and then returned to the participants for verification. In summary, the data collected included four written essays produced by the initial participants, transcripts of three focus group discussions, and transcripts of interviews with eight additional class members. All procedures were approved by the Human Subjects Committee of the University.

Phenomenology

We chose to pursue the study using a phenomenological method, since this interpretive and naturalistic approach attempts to identify the essential meaning of a particular experience for an individual within a group of individuals. It allows examination of experiences from many perspectives until the essence of a phenomenon can be described (Moustakas, 1994). This tradition fit well with our interest in the nature of individual experience and the influence of learners' existing beliefs about credible research on their responses to qualitative research methods. We wanted to capture the essence of the experience of individuals as they read the assignments, participated in the discussions, and tried to make sense of the new paradigm and to identify any themes that described the essential nature of those experiences for the learning community. Practically speaking, the number of participants available to us fit with recommendations (Creswell, 1998) and the interview mode of data gathering, allowing individuals to speak of their experiences in as much depth as was comfortable for them, was a reasonable source of information in our context.

Participants

The four students who became co-researchers were all Counselor Education graduate students. Other class members who participated included two more from Counselor Education, one from Clinical Psychology, three from Educational Psychology, and two from Adult and Higher Education. [Appendix B links pseudonyms with programs].

Ethical Concerns

Ethical issues and risks are greater in qualitative research because of the shared involvement and responsibility felt by researchers and participants (Deyhle, Hess, & LeCompte, 1992). There is some legitimate concern for teachers in using their own students as participants in a research study (McLeod, 2001). Students may feel that they have to participate or that they are constrained in the comments they can make, given the automatic power differential between teacher and student (Adler & Adler, 2002).

The initial group was formed as an exploratory discussion team selected to assist with course improvement; all were interested in the topic since as future professors of higher education, they may well have opportunities to teach qualitative methods. In this case, anonymity

was not a pre-requisite for the study (van den Hoonaard, 2002). The original researcher's relationship with the first four participants emerged as a team of co-researchers (Merriam, 2002).

In the expanded study, involving additional class members, every possible measure was taken to allow students to participate or not, as they chose, and to protect the anonymity of those who did choose to be involved. One of the co-researchers sent an email to class members explaining our interest and asking that they respond if they were interested in the study and available for an interview. Eight of potentially twelve students responded [three were no longer in the area, one was not interested] and were interviewed by the co-researchers and transcribed by them using a pseudonym.

In spite of the pseudonyms and access to transcripts rather than tapes, it was impossible for me, as the instructor, not to recognize perspectives and comments and connect them to class discussions (Weinberg, 2002). Such recognition is always a possibility in qualitative research that closely connects researcher and a small number of participants. Our consent form was created to assure students that no relationship would be altered because of comments made and provided contacts for complaints if appropriate (Snyder, 2002). We also included verification steps that allowed participants to edit their transcripts if they felt any of their comments were potentially dangerous.

Verification

Verification was achieved in this study in a variety of ways. Triangulating factors included multiple investigators and a variety of sources of data (Seale, 1999) including essays, focus group interviews and individual interviews, and literature on conceptual change. All participants at every level verified the accuracy of the transcriptions of their interviews. During data analysis, the five of us met regularly to discuss emerging insights, to refine and clarify our understandings (Seale, 1999).

Data Analysis Procedures

We used phenomenological data reduction procedures as described by Moustakas (1994). Each researcher independently analyzed each transcript, horizontalizing the data and extracting significant statements, applying equal weight to each. We independently created themes and textural descriptions of the essential components of participant experiences. Our initial analysis of the data focused on the unique experiences of each individual and their degree of positive response to the qualitative paradigm. At this stage, we created a matrix that allowed us to identify essential elements for a positive response. This level of analysis was useful in helping us understand the unique experiences of each class member and served as a basis for further analysis.

Following these discussions, we each re-visited the individual portraits looking for themes that were influential for all of the participants in order to uncover the deeply held beliefs and orientations that influenced their responses to qualitative research—to find the patterns. We met for follow up discussions to synthesize the ideas we had independently identified from the words and ideas of the participants. Although we often used different terms to characterize what we perceived, it was not difficult to find descriptive terms on which we all agreed to form composite pictures of the experiences (van den Hoonaard, 2002). As themes were identified, we were all able to find specific statements from individuals that supported our insights, and to

arrive at shared meanings (Hoshmand, 1989). The discussions eventually resulted in imaginative variation (Moustakas, 1994) as we interpreted different possible meanings for the themes and eventually integrated them into structural descriptions of the experiences of class participants, resulting in essential themes.

Throughout data analysis, we made every attempt to bracket our preconceptions, a strategic move to suspend assumptions in order to view data with a minimum of bias (Gubrium & Holstein 2000). This approach allowed us to approach the words of participants honestly and to allow the data to speak for itself.

Essential Themes of the Change Process

Four distinct yet overlapping themes emerged: (1) the nature of previous experiences with research (2) perception of personal styles and learning preferences (3) congruence with the ontology, epistemology and philosophy that support qualitative research, and (4) perceptions of qualitative research as viable, acceptable, and fruitful in professional lives.

1) The Nature of Previous Research Experiences

Participants identified two important dimensions of previous research experience. Predictably, some students with years of connection to and operation within the quantitative paradigm found the most initial conflict with the new perspective. Their eventual comfort with the contrasting view depended partially on the length and depth of experiences with quantitative research. An even greater impact, however, was exerted by the amount of satisfaction participants with previous research experiences.

Some of the participants described the power of the quantitative approach of previous research experiences. Gary, for example, came from “a masters program where you didn’t go anywhere near qualitative and if you even mentioned it, there was quite a heavy backlash . . . it wasn’t even considered Sunday reading . . . you didn’t acknowledge it . . .” Peter’s masters’ program was similar, encouraging him to believe in the need for observable truths to characterize research. According to him “just telling what you see is not evidence enough for supporting a hypothesis . . . knowledge is evidence.”

Others with experience conducting research in programs that were strongly quantitative held a different view. In her earlier graduate work Susan selected a topic for her Specialist’s thesis that was close to her heart. She began the investigation expecting to find direction to help clients experiencing that dilemma, but found her quantitative research experience disappointing because it gave her little direction to help reduce their pain. Since that research experience was disappointing, she had come to view research as a professional responsibility rather than as particularly rewarding activity.

As a member of a research team at a large university, Jane had conducted, analyzed, and published research that was entirely quantitative. She had held a rigid belief that the only research that existed was quantitative, a belief that was encapsulated and isolated from her other dynamic experiences in graduate school. She wrote, “I dutifully accepted, internalized and somehow compartmentalized in a mental vault, safe from the tide of conflicting views . . . my version of good research remained amazingly unscathed throughout my changing views of life. Only a small part of my psyche protested the loss of voice inherent . . . silent and unacknowledged.”

2) Personal Style and Learning Preferences

As least some of the responses to a research paradigm in contrast to previously held perspectives can be traced to how the participants perceived themselves in terms of personal styles and preferences. In particular, participants emphasized their views of the purposes of research, their perceptions of the connections between themselves as individuals and the expected roles of academics and professionals, and the learning contexts in which they felt most comfortable.

Some participants expressed discomfort with the degree of engagement and flexibility demanded by qualitative research work. Missy, in particular, experienced the expectations of qualitative research as threatening. "I have never been . . . a touch-feely type of person . . . I'm not into the social . . . I have always been a person who lives by rules . . . I like order, I'm a conformist. I try not to rock the boat and so for me, quantitative type of things leave out all those emotions, all those feelings . . . its more of an answer that I can do something with . . . the way I've been trained . . . it's part of the work I've done. That's just me. I have lived a very regimented life."

Carl recognized, and was even attracted to, issues and questions that could be pursued in qualitative research, but he too saw drawbacks in the demands it makes on the researcher. "Qualitative is . . . such an emotional thing. And I would rather have something that I can demonstrate, taking myself out of the study . . . [so that] I don't have any emotional investment that this will work."

A few participants criticized the intellectual processes involved in qualitative research. Gary stated that he could "extrapolate more from a quantitative viewpoint. It maybe fits my thought process and my way of learning a little better . . . To me, the best way to go is through practical. . . you construct it in such a way that you know it is somewhat accurate. [Quantitative research demands] a certain type of critical thinking skills in your methodology, in how you make decisions." He felt less comfortable with the more flexible data analysis of qualitative research.

Others, however, found qualitative research to be congruent and consistent with their personal and professional styles. Diana thought that exposure to qualitative research. . . helped to anchor in me as the person into research. It wasn't as sterile [and was] more consistent with my personality-- that I could be part of the research instead of trying to isolate myself away from the research. . . ."

Julie found qualitative research comfortable because it fit with her preference for "living with transparency" and its emphasis on "understanding rather than knowing," which she said led her to be more willing to ask questions and probe research topics more deeply. She saw the approach as consistent with "the essence of my life—my connection with others." In qualitative methods she discovered the "passion" she needed to make a major research project meaningful.

In his essay, James said that he found qualitative research attractive partly because of his perceptions that it was consistent with what he was studying as he prepared to be a professional counselor; he saw the movements in research paradigms as consistent and parallel with the movements he had studied in counseling theory.

3) **Epistemology and Philosophy**

Belief systems and holistic views of themselves as individuals, their theories of knowledge and reality, and the agreements by which they perceived the world is organized played a powerful role in participants' responses to qualitative research.

Missy told the interviewer a story about grounding herself for a rule infraction, even though no one else was aware of her crime. Her explanation was that "I've just been a rule obeyer. And I don't overstep the lines."

Hal, too, had difficulty placing himself in the qualitative paradigm, and recognized that he filtered the qualitative perspective through a world view that was governed by quantitative assumptions. "By the end of the course", he said, "I realized that I was having a hard time putting myself completely into the role of someone who's going to design qualitative [research]. I wanted to apply the stuff that I was learning to the quantitative research I was doing." However, he was receptive to the qualitative perspectives because they, along with the more familiar quantitative paradigm, made it possible for researchers to "hedge your bet against being fooled or coming to the wrong conclusions."

Carl questioned some of the assumptions required for inductive analysis of data, preferring to use the abstraction of a theory driven model of quantitative research rather than the inductive approaches that interpret individual experiences of qualitative research. "It just seemed to me to be kind of backwards or something . . . focused on the person, which is what I kind of had trouble with."

Peter thought that qualitative research was akin to story-telling rather than real research. In his opinion and expectations for viable research, a qualitative approach "does little more than provide some questions to be researched." He described a skeptical world view that demanded evidence in order to accept information, and recognized that "I needed to have that even as a small child . . . without evidence to provide the information, it's chaos."

For others, however, the qualitative paradigm provided insights not only into an alternative form of research, but also served to help them conceptualize themselves as individuals in their professional fields. James wrote "conceptualizing qualitative research helped me continue to discover who I am and what I believe in. [It was] a multi-dimensional learning experience."

Jane found that the study of qualitative research led to a "metamorphosis of self-understanding [that was] unique to me and my experience. I realized that, to me, meaning is the essence of life, the perspective from which we humans make decisions and engage in behavior . . . and meaning is the property of the individual . . . phenomenology spoke to me like an old friend who had been waiting patiently for my arrival."

Study of qualitative research led Anna to further insights and connections between her belief system and the demands of systematic research. "The philosophy tied directly to the research [and] made a whole lot of sense. I could relate it to other things . . . it all came together at this one time. It's like an epiphany or something." Diana also emphasized the "consistency" of this research approach with her views of herself as a person and a professional.

Theresa saw a dichotomy in her evolving views of qualitative research. Her initial impatience with the "mush" approach she perceived in the qualitative paradigm gave way to a realization that a qualitative approach is "very consistent with how I view the world. . . . At work, I am basically doing qualitative research . . . I could write a case study on every kid I interact with." Although she continued to be attracted to quantitative representations of knowledge she

came to accept the viability of the alternative paradigm. "Once I got into what qualitative research was really about, through all the philosophy stuff, I like it. Because it does appeal to me. . . the is the real stuff of life. And statistics can be very misleading."

4) Professional Viability

Professional usefulness and viability was critical in determining how accepting participants were of the qualitative paradigm. Some participants believed that they would have less credibility as a professional if they pursued qualitative research, even when they found the paradigm philosophically attractive. According to Gary, "In terms of just a world view, [qualitative perspectives] fit quite well. In terms of practical application . . . practical application is something else. . . that's the way I was trained."

Gary spoke for those participants who approached the pursuit of qualitative research with caution, either in dissertation work or when they establish their professional careers in an academic world. "The decisions that you make go through the [quantitative] process are more defined and widely accepted. . . . At this point . . . in the qualitative realm there is still a lot of ambiguity."

Qualitative research methods, however, opened doors professionally for other class members. It served to unite research with their professional personas. Diana said "I realized that every situation is an opportunity for qualitative research . . . we are always observing and learning and trying to find causes and draw hypotheses. So it didn't seem foreign anymore. Now it just seemed like something useful to do with the analytical process that happens throughout daily living." Julie saw that qualitative research fit her own sense of herself as a person and a professional and had the "potential to fill in some research gaps."

Susan saw new ways to connect research to professional practice in the assumptions of qualitative research methods. "As a counselor, I believe in the power of the human story . . . people are so much more than numbers on a page. Qualitative research methods allow for all the things that I believe in to be counted and validated . . . the voices of those experiencing a phenomena. Be heard . . . fits very closely with my own theoretical orientation of counseling and the process of change."

Qualitative studies engaged other class members as it affirmed the importance of their professional skills within the world of research. James explained in his essay: "One incredibly important thought that I noted . . . was that I began to feel more confident in my abilities to do "good" research. . . I had finally found a way to capture the most important part of our lives, the meaning we give to things." He made immediate use of his understanding of qualitative research because he could "apply it to my professional field of counseling . . . a field that allows this type of non-linear, reflexive thinking, qualitative research fit. I . . . tried it on personally, tried it on professionally and found that it satisfied my needs as a person and a professional."

Study of qualitative research also strengthened Anna's view of herself as a researcher. "I felt affirmed for what I knew because I could make the connections . . . for what I would know as a researcher." This group of students recognized that they were competent and qualified to use their own skills and insights as researchers in a professionally viable way. They came to see research, in Diana's words "in everything I do."

This group also found new meaning in the research process itself. Anna stated that working in the qualitative tradition gave significance to her required research work: "What becomes more important is that I do something that I find meaningful that can make a difference

for people. “Jane wrote “. . . qualitative research is more consistent with discovering the meanings in life that are most important to me. I am less interested in probabilities and more interested in the essence of the lived experience.”

Discussion: Changing Conceptual Ecologies

Every community, perhaps the academic community in particular, operates from a “conceptual ecology” (Pintrich et. al. 1993) that guides perceptions of experience, values, choices of tasks, and self-perceptions. The research identity of an academic scholar has powerful implications for career decisions (Ponterotto & Gieger, 1999). It determines what questions academics ask and the methods they are likely to pursue in order to find answers. The appropriate scope of inquiry is defined by the prevailing values in academic settings.

According to Kuhn (1996), during scientific revolutions scholars see different things when they look at the familiar in new ways. The emergence of an alternative paradigm that shifts the fundamental questions of the nature of research has epistemological, conceptual, and ideological components (Hoshmand, 1989).

The students who participated in this study were intensely involved in the complexity of this paradigm shift. They were asked to consider their theories of good research and re-assess the standards by which they judged its credibility, in some cases contradicting a “research culture” (Ponterotto & Grieger, 1999, p. 51) they had taken for granted. For these students, the challenge to accept a qualitative research paradigm demanded a significant shift in their understanding of what it meant to function as a researcher in an academic setting.

All our participants had some previous involvement in quantitative research, some more extensive than others. However, the *amount* of previous experience did not appear to be important for this group. Instead, the *nature* of their experiences within that paradigm was most powerful. Those who remained skeptical about the value and credibility of qualitative research found quantitative studies satisfying and believed that important questions could best be addressed by these studies as framed by the positivist tradition. Those who embraced the qualitative perspective discovered a more satisfying way to address their different questions of interest and preferences for proceeding as researchers. They saw connections between research and professional development that had previously eluded them (Ely et. al, 1991).

The nature of those previous experiences and the integration of their beliefs in the positivist paradigm influenced the degree to which these people found the alternative view of research intelligible or plausible. Those who found personal congruence in the expectations and assumptions of quantitative studies were less willing to accommodate qualitative research as an intelligible and systematic since it contradicted deeply held ontological and epistemological beliefs. Their views were consistent with the three value beliefs—interest, utility and salience—identified by Eccles (1983). Participants who found qualitative research most intelligible and plausible were those who held belief systems that supported an inductive, relativist, and interpretive sense of the world. Qualitative research was congruent with assumptions about the world that they already held (McLeod, 2001); they recognized the ethical, value laden, and personal enterprise of research (Ely et al., 1991).

The importance of world-view congruence was the most powerful and comprehensive theme to emerge from the data, an insight that has been supported consistently by the writings of Guba and Lincoln (1989), and Denzin and Lincoln (2000) and others. Those who found the assumptions of qualitative research consistent with their own life assumptions responded to the

paradigm with a mixture of relief, empowerment, delight, and enthusiasm (McLeod, 2001). They felt affirmed as researchers, and as individuals who previously felt themselves somehow detached from, or at least peripheral to one of the major expectations in the academic world. Some of them clearly formed a new sense of themselves as academic professionals (Ely et al., 1991).

Most participants who came to value the qualitative paradigm did not feel it necessary to devalue quantitative research. Most continue to participate in statistical studies. The excitement they felt was the result of their understanding of a viable alternative approach that expanded the methods of framing a study and the nature of the skills and procedures that can be used in systematic research. They were willing to achieve what Ponterotto and Grieger call “a symbiosis of paradigms” (1999, p. 54). This “compromised view” (Hoshmand, 1989, p. 11) is not consistent with some positions that emphasize the incompatibility of the two paradigms, (e.g., Guba & Lincoln, 1989; Sciarra, 1999), but the approach has served them well as they negotiate a role for qualitative inquiry in an academic climate that has historically valued positivist methods. Professional viability in the future was a pervasive concern for some of these participants; they had legitimate concerns about others’ possible lack of understanding of larger academic communities (Ely et al., 1991).

Conclusions

In our program we offer only one three credit course in qualitative methodology, which necessarily means that the paradigmatic shift as well as the practical applications are addressed quickly. Literature on conceptual change consistently supports the need for time and deep involvement to accommodate real change in a conceptual ecology (Posner et al., 1982). Perhaps those who found the qualitative approach untenable would have responded to a more gradual exposure to the assumptions and methodology.

Given the evidence of the power of congruent belief systems, however, (Sciarra, 1999) there is also good reason to believe that those participants who found the qualitative perspective less credible already had a strongly held and integrated belief system about knowledge and research that were consistent with quantitative definitions and processes. The quantitative view was compatible with their learning preferences and their views of the world and the nature of reality. They also believed that their existing perspective was most professionally productive.

It is notable that some of the participants connected so completely to the qualitative paradigm after such brief involvement with it. We conclude that these people, whether because of timing or previous experiences, were ripe for a move to alternative research methodology. They were willing to dramatically change their conceptual ecology in a very short time when they were exposed to a systematic form of research that connected powerfully to establish congruence between their personal and professional personas and their epistemological commitments.

As this study evolved, we recognized that the most intensely positive responses to qualitative research were from students in the Counselor Education program. In ongoing investigations, we are exploring the connections between counseling, which has in the past emphasized research using quantitative measure (McLeod, 2001) and the apparent congruence between the world views of these counseling participants and the assumptions of qualitative research.

The study we describe here supports the view that the two paradigms are based in contrasting belief systems, since participants consistently remarked on the congruence they saw—or did not see—between their world-views and this alternative methodology. For some, a study of qualitative methods offered an alternative perspective, one that could answer different questions and allow them to interact differently with participants. However, in conflict with the incompatibility approach (e.g., Rennie, 1999), most of these participants did not convert to a qualitative-only stance; instead, their comments supported the merged research identity described by Ponterotto and Grieger (1999). They were not willing to reject either approach, apparently because they saw utility in both. At least in some cases, the traditional paradigm was perceived as less risky for beginning professionals in academia.

The study was limited in that it addressed the experiences of students in one introductory class in qualitative research, which in itself was inadequate to do justice to the richness of qualitative inquiry. We have a picture of students' responses to this initial contact with the paradigm; we lack information on the long-term effects of the experience. It would be interesting to study the views of these individuals as they pursue academic careers. It would also be worthwhile to consider the degree to which the epistemological and "symbiotic" view of research identity (Ponterotto & Grieger, 1999) influenced the perspectives adopted by the participants and to understand how these insights might have been different with a professor who approached qualitative methods from a contrasting perspective.

Because of student responses to this class and their interest in knowing more about this paradigm, our Division of Counseling and Psychology has approved a second course in qualitative research. Further integration of qualitative perspectives, we believe, has the potential to strengthen the connection between research and practice and to integrate values and epistemologies into a research identity that will contribute to the knowledge base and strengthen theory and practice.

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Appendix A

Interview Protocol

Describe your experience last semester in qualitative research class.

Probes:

- First impressions?
- Changes in impression?
- Previous research and academic background?
- Life experiences?
- Timing of the class in academic career?
- Cognitive/Affective responses?

Now that you have taken this course, how do you define qualitative research?

Probes:

- Major characteristics?

Most important characteristics?
 Different from your original view of qualitative research?

In what ways is your perception of qualitative research consistent or inconsistent with how you view the world?

Probes:

What are the essential dimensions that define this congruence or incongruence?

Why do you think that is true?

View of viable knowledge?

View of Truth and Reality

Objective Truth?

Meaning-making?

What role do you see research in general playing in your professional life?

Probes:

How do you see yourself as a participant in or consumer of research?

What kind of research will you be most likely to do and why?

Personal/professional match or mismatch with qualitative methods?

Professional acceptance and support for others who pursue different research paradigms?

Appendix B

Participants' Pseudonyms by Graduate Major

Counselor Education:	Julie Jane James Susan Diana Gary
Educational Psychology:	Carl Theresa Peter
Adult and Higher Education:	Anna Missy
Clinical Psychology:	Hal

Article Note

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