Qualitative-based Methodology to Teaching Qualitative Methodology in Higher Education

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There is no defined theory for teaching Qualitative Inquiry, and very few studies have focused on the topic. This study is a qualitative case study focused on the Qualitative Methods course that I teach at a college of education in Israel. The aim of the study is to explore and describe the course, to provide a true picture of my pedagogy, and to learn from it. The participants are 30 student-teachers, aged 25-46, who teach in elementary schools and have no previous research experience. Research tools used for data collection are 10 observations of the course lessons by a colleague; 10 open self-reflections written by participants; 10 self-reflections of the researcher who is, in this case, also the teacher; participants' feedback for the course; participants' responses to the researcher's routine comments written on students' papers; and field notes. The constant comparative method and the grounded theory techniques are used for analysis. Results show a qualitative research-led pedagogy model which is consistent with the conventional systematic outlook while fostering post-modern epistemological views, high levels of student's self-efficacy, high performance, self-direction, and integrity in conducting research. I hope my description would encourage other researchers to continue exploring new pedagogic strategies for teaching Qualitative Inquiry.

Qualitative-inquiry (QI) as a philosophy is important not only from a scholarly perspective but also as an integral part of the educational profession, since it underscores the immense and manifold complexity of human experience and social-cultural environment within which children and educators function (Denzin & Giardina, 2008). I will illustrate the close relationship between QI and teaching and the nature and perspectives of QI.

The Relationship Between QI and Teaching

QI handles the subjective encounter of the different realities of participants and researchers (Kacen & Krumer-Nevo, 2010). Qualitative researchers as well as educators believe that there is no objective observation or separation between observation and values. Approaches of QI attempt to describe the truth structured by the researcher through the eyes of the participant in the natural setting at the time of the event. So does education. Every day student-teacher encounters take place in natural, authentic settings and represent various subjective realities. Teachers attempt to restructure reality through the eyes of their students and react accordingly (Sabar, 2011). As subjective relativists, qualitative researchers are the main research tool of their study. Teachers in the classroom are in a very similar position, as the main educators who trace their students' behavior and ways of learning to enhance their development (Stake, 2010).

Just as qualitative researchers seek tacit knowledge to understand phenomena (Stake, 2005), teachers are engaged in an endless endeavor to understand their student's minds, perceptions, and predispositions in order to increase their motivation and improve their achievements. In order to reach a deep understanding of educational processes, research methods must be open, and there must be a good rapport between researchers and participants. QI methods fulfill this need. QI seeks to understand participants through their language, views, approaches, and expectations from life. Such understanding can be reached through the penetration into the participants' daily life by way of tracing actions and experiences from their own vantage point. Such understanding means the re-construction in the researcher's mind of the atmosphere, mentality, thoughts and emotions of the participants (Stake, 1988, 2005, 2010). In a similar way, teachers attempt to nurture open relationships with their students in order to understand their needs and facilitate their learning. This understanding means that in their own minds, the teachers rebuild their students' capabilities, thoughts, and emotions.

The understanding that researchers are attempting to achieve comprehends reality as an indivisible whole (Stake, 1988), which is the essence of the educator's job. In order to reach depth, it is necessary to spend a long time with the participants, which is what teachers routinely do. For these reasons, it is important that students who undergo training as professional educators not only know how to use techniques and carry out QI, but also internalize its basic nature, which is important for the progress of education (Denzin & Giardina, 2008). Teaching QI though, seems to be complex.

Teaching QI in Colleges in Israel

It seems that teaching QI in colleges in Israel is a complex mission, especially since the course on QI is offered as part of the Research Method course, which consists primarily of quantitative research methods (Yassour-Borochowitz, 2005). Students have

difficulties internalizing essential philosophical concepts of the qualitative paradigm and consequently find it difficult to conduct QI on their own. Only after they study and experience the process do they acquire a deeper understanding of the concepts of QI, and they come to view it as an empirical research (Hein, 2004). Several books on QI are currently available, but very few studies focus on the question of how to teach it. Unlike quantitative research, there is no defined theory for teaching qualitative inquiry methods (Goussinsky, Reshef, Yanay-Ventura, & Yassour-Borochowitz, 2011). Is this due to the special features of the area, which is more relative, ambiguous, or open when compared to quantitative research? Or else, could it be its short history, compared to quantitative research? Whichever it is, we ought to begin creating a qualitative pedagogy for the instruction of QI and the promotion of the field. This study is an attempt to move in that direction.

Every year anew, many questions arise such as: Which chapters must be taught in QI? What should be their order? Should we teach one methodology in depth and others more superficially? Is it possible to change one's concepts about research in one semester (three months)? Questions of this kind are being raised by researchers all over the world (Preissle & Roulston, 2009), and there is no agreed answer. Qualitative researchers do not share a single approach. Each researcher is first and foremost a professional who obviously wishes QI to be taught in a way which is appropriate for his/her profession. Yet, it is generally accepted that the main goal of such mandatory courses is to enable students to carry out research work in their areas of specialization and that the time assigned for research in the curriculum is too short for reaching it (Eisenhart & Jurow, 2011).

And last, most of our graduate students are teachers without prior research experience, some skeptical as to the importance of research for improving the education profession, which opens a gap between them and a minority of students who are interested in research. I have been teaching this course for ten years, changing and refining it along the way. Consequently, I have embarked on the path of exploration, discussions, and dialogue with colleagues and students alike in order to create a special methodological course that would challenge students to learn and carry out a QI and thus contribute to the students' and teachers' professional enhancement.

The Conventional and Critical Perspectives in Teaching QI

Literature on QI deals mostly with processes and procedures of conducting a research study (Stake, 1988, 2005, 2010), traditions and currents (Sabar, 2011), techniques and approaches (Creswell, 2002; Denzin & Giardina, 2008; Kacen & Krumer-Nevo, 2010), and discussions of a particular approach, such as the grounded theory (Charmaz, 2006; Glaser & Strauss, 1967), ethnography (Wolcott, 2009), action research (McIntyre, 2008), or qualitative assessment (Patton, 2002). The literature deals with manuals for particular techniques such as the ethnographic interview, participant observation, discourse analysis, systematic self-reflection, and steps of carrying out a qualitative exploration study or writing.

Eisenhart and Jurow (2011) describe a long list of additional subjects covered by researchers of QI, but they observe that there is hardly any mention of pedagogic approaches or teaching strategies for QI. They note that the scarcity of literature devoted to the instruction of QI from the 1980s to the present reflects a division of the QI community into two major polarized approaches: (1) those who tend towards the conventional direction with regard to research designs and techniques and thus practice QI while emphasizing multiple methods of data collection or explanation, and (2) those who put the emphasis on teaching beliefs, critical approaches, values, ethics and teaching post-modern epistemological principles. The latter are of the opinion that QI is in itself subjective and therefore cannot be, and does not have to attempt to be, systematic and transparent in the way conventional research is. Research of this type is considered post-modern research in which texts are the research objects and the emphasis is on making declarations, telling stories, or initiating action. Such a position implies, at least, a different use of methods and the data generated by them, and maybe even new methods (Eisenhart & Jurow, 2011). Until 1990, most of the teaching of QI was conventional and systematic. The purpose of instruction was to relate to theories and understand *how one does research* (Glesne, 1999). Hurworth (2008) found that teachers write in their syllabi *what they are going to teach* but hardly ever deal with their teaching design or pedagogical decisions concerning QI instruction.

Another clear outcome of the overviews and surveys conducted from 1999 to 2008 indicated that most of the teachers who taught QI required their students to submit a research project or at least a mini-project as part of the course requirements (Glesne, 1999; Hurworth, 2008). Researchers explain that hands-on project management provides students with insights about QI and leads them to reflect on their assumptions, while observations and interviews allow them to gain a deep view of other

people's experiences. Likewise, the actual application of research methods trains the intelligence in high-order thinking versus technical thinking (Glesne, 1999). In fact, a research project as part of course requirements in QI has become so important that it often carries a weight of 50-75% of the course grade, like some kind of a pedagogic symbol or ingredient, according to an investigator who coined the term "signature pedagogy" (Shulman, 2005, p. 52). This can be seen as an emergence of a pedagogy through which practitioners train to carry out QI work. This pedagogy consists of the following three principles: (a) students are trained to think, perform and act with integrity; (b) researchers write that involvement in authentic research activity is the most suitable pedagogy for improving cognitive skills, developing higher order thinking, implementing concepts and strategies, analyzing, synthesizing, and assessing (Preissle & Roulston, 2009); (c) learning by doing in the real world is the most enjoyable for students, raising their awareness of the philosophies underlying the different complexities of the research and demonstrating the fact that research is a process designed within context, giving students the confidence to apply research techniques and help them to integrate the fundamentals of the paradigm (Blank, 2004).

Discussing the issues mentioned provided the inspiration for this case study aimed at exploring the Qualitative Methods course that I teach at the college. I intended to take a critical look at the course, have a true picture of my pedagogy, and learn from it. The research questions were the following: (a) How do I teach QI? (b) What are the methods and techniques used? (c) What are the principles of my instruction?

Methods

Participants, Design Tools and Procedure

The participants were 30 student-teachers, aged 25 to 46, who attended my course at the College of Education. They teach a variety of subjects in elementary schools and have average-high socioeconomic status. Prior to this Qualitative Methods course, the students had attended a one-semester Quantitative Methods course, as is usual for student-teachers in colleges in Israel. They were resigned to the absolute benefits of quantitative research and had difficulty shifting gear to take an equally empirical view of qualitative design. They perceived qualitative research as too subjective and time-consuming, with limited generalizability of

findings. I chose to study my class as a case from which to attempt to understand my pedagogy in teaching QI.

This case-study uses methods consisting of systematic, yet flexible, guidelines for collecting and analyzing data to construct abstractions. The flexibility and the openness of the qualitative approach enabled high levels of subject participation in the study and disclosure of tacit knowledge (Sabar, 2011).

Research tools used for data collection were 10 naturalistic 60-minute observations of my course lessons by my colleague; 10 open self-reflections written by participants; 10 self-reflections written by the researcher who is, in this case, also their teacher; participants' feedback for the course; participants' responses to the researcher's routine comments written on students' papers; and field notes. The open teacher-student relationship allowed students free expressions and high levels of participation. All participants gave written informed consent for participation and were promised the results of the analysis if they wished to receive them. Code numbers were used to maintain privacy. The research lasted a whole semester, containing 12 meetings of two hours each.

Data Analysis

Constant comparative analysis (Shkedy, 2011; Stake, 2010) and grounded theory techniques (Glaser & Strauss, 1967) were used for inductive development of a concept map. The unit of analysis was an idea. The units/themes were examined and gathered under criteria, which were grouped under categories using three-phase coding: initial, axial and selective coding (Ayalon & Sabar, 2010; Charmaz, 2006; Givthon, 2006). The constant comparison of units was adapted, changed, and redesigned as the study proceeded and resulted in a refined list of categories that were developed into conceptual abstractions called constructs.

Analyses began during data collection and continued after its conclusion. Constant literature updates and consultation with experts were part of the analysis. Core constructs containing dense descriptions of evidence were formed. Theoretical saturation was reached when the same constructs were repeated in multiple cases and no new aspects emerged from the units (Charmaz, 2006). The qualitative methodological frame used for analyses was the criteria-oriented methodology (Guba & Lincoln, 2005; Shkedy, 2011).

Results

First Order Categorization

Three main results emerged from the analysis:

1. The emerging 60 criteria out of 3100 units were coded into six main constructs: (a) methods and techniques, (b) research principles and design, (c) exposure to post-modern beliefs and outlooks, (d) presentation and discussion of outcomes, (e) critique of methods and techniques, and (f) ethical issues. The first quote is an example of a critique of methods and techniques: "I've read that auto-ethnography; it is literature, not research!" (Class observations) This second quote is an example of an ethical issue: "She won't let me talk to her daughter anymore, she realized I discovered the truth about her" (Student note). Of the six main constructs, only *methods and techniques* and *principles and design* contained criteria of distinct importance; therefore, two more analyses were performed.

2. The analysis of the *methods and techniques* construct revealed the following themes: choosing research subjects, asking questions, integrating material, conducting discussions, using research tools, collecting and analyzing data, drawing conclusions, performing peer assessment, and writing and presenting research. This result answers the second question and will be discussed later.

3. The analysis of the construct *research principles and design* elicited the following qualitative principles: the researcher is the primary research "tool," and the qualitative inquiry is contextual, responsive, reflexive, recursive and reflective. It addresses vulnerability and fairness, and it fosters curiosity. This result answers the third question and will be discussed later.

To conceptualize my pedagogy and thus answer the first main research question, a second-order analysis was performed. It specified possible relationships between the categories that had been previously developed (Shkedy, 2011). The concept map was then sampled.

The Second Order Theoretical Categorization

The second order theoretical categorization was based on the existing six core categories revealed earlier. Additional questions emerged: How do we analyze data skillfully? Are there better ways of doing what we are doing? A notion that would organize and explain the pattern of first-order emerging concepts was needed. The following example written under the category of *methods and techniques* might illustrate that missing element:

> Teacher: If your unit of analysis is a sentence, then you have here two units.
> Student: Thanks for the quick answer." (Teacher's and student's written comments)

It was the *way* of instruction, that I called the "Teacher-Student Reciprocity Model" around which all constructs were constantly and dynamically active. Its high prevalence in all the categories was essential to the reframing of the final conceptual map. I cut the segments that described that practical element and put them together. A new category emerged. All categories and their properties were related to that core category. The six constructs were then examined on the horizontal and vertical axes in light of the research-led conceptual perspective to teaching (Hurworth, 2008), which I adapted at this stage, bringing new light to the whole picture of current categories. A refined different structure formed the final model of instruction.

Based on Vygotsky (1978), social learning precedes development. The teacher collaborates with the student to facilitate meaning construction in the student, as cognitive development stems from guided learning. This is how learning becomes a reciprocal experience for student and teacher. The model I used to teach qualitative methodology will then be called the teacher-student reciprocity model.

The analysis of the properties of the core category showed a unique guided and collaborative performance based instruction which combines the conventional and the post-modern approaches and composes my QI pedagogic model, which will be discussed below.

Discussion

All research questions were answered. My QI instruction model emerged, with its methods, techniques and principles. In the following section I will discuss the three of them: (a) the teacher-student reciprocity model, (b) the content and process of learning, and (c) the principles of performing QI as its teaching guidelines.

The Performance Oriented Teacher-Student Reciprocity Model

The model that emerged from the analysis is centered on students' experience of conducting research with formative guidance using a teacher-student reciprocity model from the beginning to the end of the course, as shown in Figure 1.

The Formative Guided Performance containing 40% of the research units is the instruction's core action

Figure 1
The Performance-Oriented Teacher-Student Reciprocity Model of QI Instruction and Learning
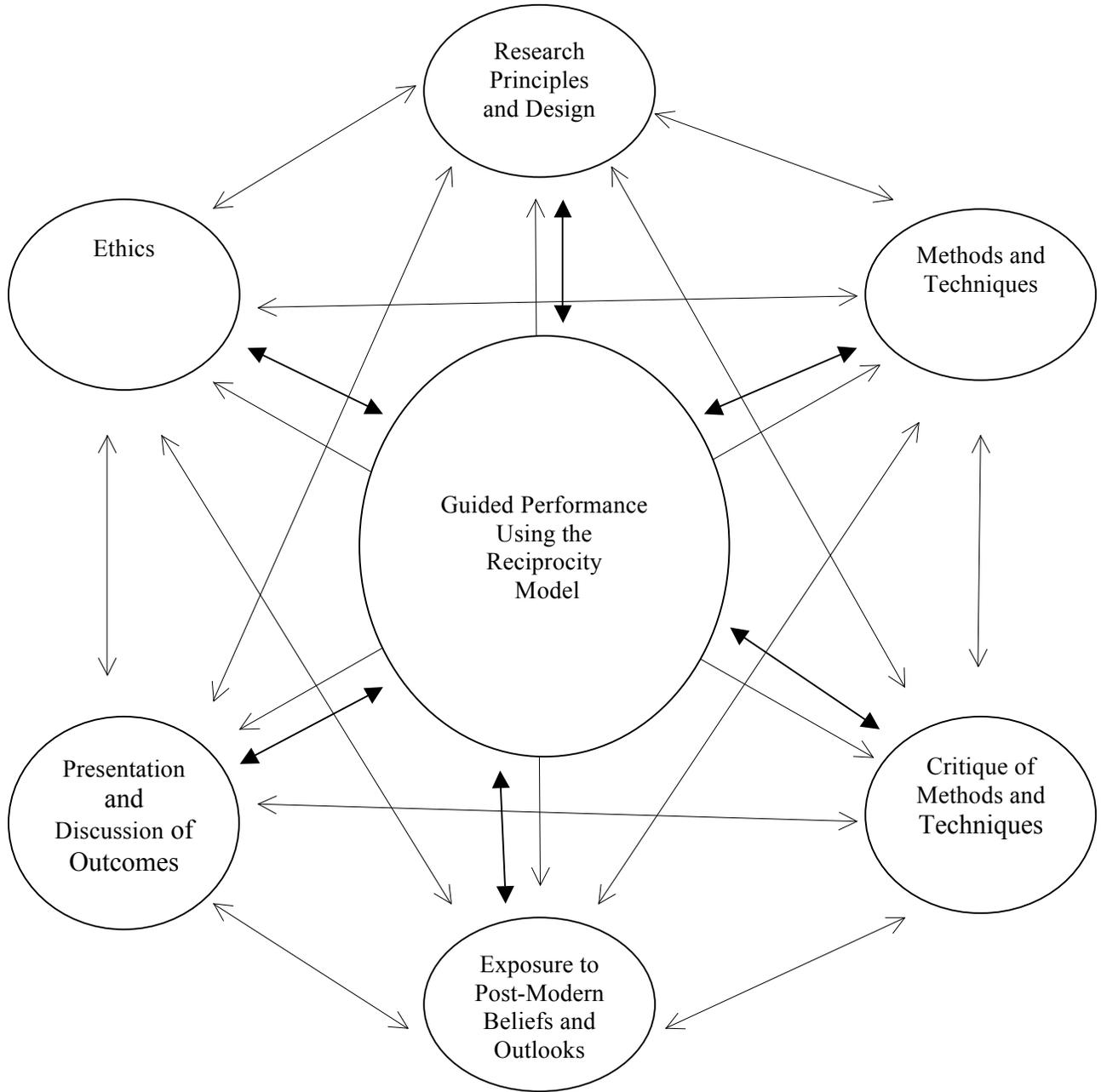
around which six elements are constantly and dynamically active. Formative guidance means constant guidance that is capable of alteration by constant growth and improvement. The elements depicted in the model are linked to each other and to the core action: Implementation methods and Technologies (12%), Research Principles and Designs (11%), Exposure to Post-modern Beliefs and Outlooks (9%), Critique of Methods and Technologies (8%), Presentations and Discussions of Student Outputs (10%), and Ethical Issues (10%). The model will be discussed and illustrated through the following points:

Instructing and learning through doing. The proposed model centers on the performance experience. Both instructor and student, engaged in research experience the joy of analyzing materials, reflecting, comparing, evaluating, or criticizing in order to reach good performance. The students are instructed on an ongoing basis and improve their work by actually doing it. By the last class session they are able to submit the finished work. Students and instructor communicate in writing via a computer and by telephone. During the work questions arise concerning principles, techniques, methods, ethics, beliefs, outlooks, and their interrelations. Students' work is rewritten, and refined through the process of formative guidance. When students feel confident about their performance, they can give free rein to abstract thinking, accepting new ideas, and critical thinking. A solid foundation allows risk taking and boldness. The following is a passage written after performing data analysis:

> I feel I am doing it well; I keep correcting my work according to the comments I get. I do reflective thinking; I compare, and draw conclusions. Last Sunday my instructor told me to recheck my analysis. She would not tell me what she had seen; she just told me to look for it myself. And at one point, after categorizing the evidence again, the penny dropped! I had an insight. How didn't I see that earlier? It was fantastic. I discovered something I had not seen before. They call it "tacit knowledge." I understand what I am doing and I am not even confused with the new ideas discussed in class today. (Student reflection)

Guided performance using the teacher-student reciprocal model. The teacher-student reciprocal methodology is somewhat like a rapid response correspondence between the instructor and the student. A student submits his/her work; the instructor checks it and provides constructive comments at the following class session without delay: "You shouldn't put the same sentence in two categories. You must decide to

which category it belongs and delete it from the other one. Otherwise, your analysis would not be valid" (a teacher's comment).

The instructor's immediate response to the student's work increases the student's motivation to make an effort and to progress. The individual student–teacher correspondence, which is enabled by the teacher-student reciprocal methodology, makes the students feel that the teacher wants them to succeed so they invest more effort in their work and resubmit their work without delay: "That I could make as many corrections as I needed enhanced my motivation to invest in the project. It showed that you really cared about my success" (student feedback).

This methodology includes also face-to-face meeting in a class workshop: The instructor and a student discuss the student's work while the other students sit in a circle around them as a supportive learning community who are allowed to intervene to make suggestions and comment. Sometimes the instructor comments on errors common to several students or raises a shared problem, with a discussion following. Discussions cover issues of research principles, designs, techniques, and new outlooks that students encounter while reading materials on different aspects of QI. The six areas surrounding the directed performance in the model either arise from the performance or come from reading and provide a multilateral cross-pollination.

The course duration is short, but in fact students spend much time outside of class working on their research. This instruction model gives the students the confidence that the instructor/professor/doctor is always there for them. Such investment bears fruit. The availability of an open channel for advisement, feedback, and help impacts the self-efficacy of the student to perform the study. Self-efficacy is one's faith in his ability to perform a task, and it has the potential of effecting changes (Bandura, 1997; Katz, 2012). Formative comments by the instructor helped the students enter learning situations highly self-efficacious and determined to achieve specific goals. Throughout his/her work the student monitored his/her performance and overcame failures. The high self-efficacy for learning in the initial stage materialized in successful achievement which, in a circular process, served as the foundation for high self-efficacy beliefs in the next learning (Zimmerman, 1998). The following is taken from a student's reflection: "Recently, I don't get as many comments as earlier. It boosts my self-confidence. I get great one-on-one coaching. I have never experienced this before" (Student reflection).

One type of QI in each course. Instruction is reserved for providing training and practice in the most thorough way exclusively in one selected methodology every course. Skills and techniques are being learned

systematically as one main approach which is learned in depth: students use it in their work, and from it they proceed to study the field as a whole. In the following course, another methodology will be the performance core while other methodologies will be learned and discussed but not performed. This makes the instructor's and student's job somewhat easier. The teacher-student reciprocal methodology cannot be used with students working in several methodologies in such a large group without many more instructing hours. The research assignment in the course is performed as an anchor assignment. It is conducted from beginning to end via the individual correspondence between teacher and student and under the individual guidance of a single instructor. The dedicated and systematic focus on one methodology contributes to the students' self-assurance and to the absorption of the material (Katz, 2012). In a positive environment of a learning community, students open themselves up to hear and discuss other innovative post-modern epistemological principles. "Investigating yourself is a revolutionary idea; I am not ready for it yet." (Observation)

This semester I taught QI through "collaborative action research," whereas, for example, a case study or ethnography has been learned but not actually performed. Action research represents a paradigm that recognizes the professional knowledge of the teacher as an area in a dynamic process of developing and growing, and it relates to issues arising from the teacher's experience at school (Elliott, 1995). One of many ways offered for fostering reflectiveness in teaching and teacher training is providing teachers in training with the experience of conducting action research in schools (Zimmerman, 1998).

A uniform context of research for each course. A central topic was chosen for the performance of student research. That was a school environment, and a shared topic for the current course was "motivation to learn." Topics that had been chosen for previous courses included the following: classroom climate, verbal abuse, or disabled children. A uniform research environment helps students in the joint learning of the area, which is manifested practically in collecting materials for the current literature review while still giving students the free choice within that environment to choose their preferred specific subject. Each student presented briefly in class four theoretical sources for the topic he/she chose, thereby providing each of them accessibility to much more theoretical material in a short time. The uniform context allowed in-depth exploration of a large amount of material in a short time.

Conducting research in a conventional systematic way while being exposed to a range of postmodernist topics and outlooks. A common mistake in the teaching profession is the opposition to

any standard method and the constant search for special, creative methods. A profession is defined by its standard practice. There is nothing wrong with maintaining such practice provided we keep improving it over time. Down the road it is necessary to expand the range of alternative methods by presenting examples of other studies, methods, and concepts. There is a lot of room for creativity, provided the professional teacher maintains the standard practice and develops it (Stigler, 2002). Thus, once confidence in the systematic process is established, there is room for a new form of thinking, as recorded by the instructor:

> I have provided them scaffoldings of activities and skills in a well-structured and organized process, which led to new ways of looking at the world. I wanted them to assimilate the reflection as a habit, and therefore I have created opportunities for them to share with us stories from their personal experiences. Now they can cope with new ways of looking at reality. (Teacher reflection)

Considering the constructs surrounding the *guided performance* as one whole, *exposure to post-modern outlooks*, *criticism*, and *ethics* constitute 45% of the evidence, *methods* 20%, *principles* 18%, and *students' presentations* 17%. This places my pedagogy towards the center on the conventional post-modern methodology scale.

Flexibility of the model. Each course, which is conducted democratically, develops differently as a function of the students' inclinations and preferences. The directions, depth of thinking, and intellectual ability cause the learning to develop in different directions. Each course goes from a different vantage point to the general essence and reaches points that may not have been discussed at all in the previous course. One course may cover more material, and another may cover less but might go deeper in a certain direction. The pedagogy does not change if the methodology changes in the subsequent course. This flexibility provides for the moderating instructor life-long learning. In every course something different takes place. The instructor must be attentive to developments dictated by the community of learners, of which he is a member, thus improving the quality of teaching. If the foundation given to the students is solid and deep, they can do the rest on their own. A student said, "I enjoyed the organization and clarity of the inspiring discussions" (Observation). This constitutes the answer to my main research question.

Content and Process of Learning

The content of the current course consisted of performing a collaborative action research. Alongside

the learning we have initiated activities and imparted research skills that will be described below.

Course content. The course content learned systematically followed the sequence of performing a research project: integration of literature material, collection and analyzing of data, and writing and presentation of the work. Innovative topics, new approaches, values, ethics, post-modern epistemological principles, or creative writing were exposed, learned, and discussed simultaneously. Raising the topics was timed and sometimes coincidentally as a result of students coming across them in their readings. But the fact that students were required to think and discuss them, and that this learning served their thoughts rather than required their performance, caused them to like it. They said, "It tasted like more" (Teacher's reflection).

The learning process. The students worked in a variety of ways: in pairs, in groups, and individually. Some of the main activities of the students during the performance of the course include choosing the research topic, writing the literature overview, and asking questions. "One could sense how the student was actually internalizing the difference between an open and a closed question while correcting his/hers aloud. It was a pleasure to see how they responded, critiqued, and helped to draft" (Teacher reflection).

Using research tools and analyzing data were performed by using the ping-pong method systematically and deeply until reaching its mastery. Analyses were presented to the class, which as a support group gave its constructive commentary. Students had opportunities to communicate as researchers. "Over time it was possible to see that they developed expectations to share their stories to a wider audience, not only to the instructor or their peers"(Teacher reflection).

Fostering Peer Assessment, comparisons and commentary had an impact on the students' attitude toward QI and their self-identity as future researchers, as shown in the example below:

> L: Humaneness and consideration are part of the qualitative researcher's personality, don't you think so?
> D: It must be. If not, he can't be a qualitative researcher. (From observations)

Performing action research gave them a chance to see how interventions changed attitudes and behavior. It helped developing curious and critical teachers who were efficacious enough to affect their pupils.

A brief chart of course assignments. The course assignments were: five-minute oral presentation of four theoretical resources, literature review, rationale, context of the problem, purpose, questions, participants'

description, design, tool description and use, data analysis, discussion, 15-minute oral presentation of the study, ethics, limitations of the study, and an in-depth reflection of the student on the process and on his/her professional progress regarding doing QI. Student – teacher face to face interactions occurred whenever each of the two sides wanted. Instructor availability contributed to the students' motivation to invest and progress.

The main skills imparted. The main skills imparted were important skills for performing QI: Know what data to collect and when, know which tools to use, and plan them, analyze data skillfully and present it effectively and Evaluating their work according to analytic rubrics developed self-assessment skills.

The principles of performing QI are its teaching guidelines. "I don't know a better way to explain qualitative inquiry than by the qualitative teaching of it." (Ellis & Bochner, 2011) The principles of performing QI that emerged from the data are the same principles that guide QI instruction:

The investigator is the primary research "tool." The researcher is responsible, and he is the commentator (Stake, 2010). He has the freedom to choose what to investigate; where to put the focus; and how, how much, when, and with whom to evaluate processes and outcomes. So is our instruction-learning constructivist view appropriate for nurturing the qualitative researcher (Katz, 2012). In this course the student as the researcher shaped and led the research process. His/her curiosity, monitoring, navigating, and thought control were deliberately nurtured. "If, I had an objection to the student's analysis and the student was able to convince me - I would defer to his/her arguments – he/she was the researcher!" (Teacher reflection)

QI occurs in context. Like in research, which is contextual (Preissle & Roulston, 2009), so also in teaching, the learning environment was authentic in terms of context, space, and time. It was open, flexible and varied, highlighting the connection between the object of learning and life. Each brought something different from that same context, and everybody learned from everybody's experience. When research subjects are related to social and personal reality, they become a special frame of reference raising interest and curiosity (Katz, 2012). Students chose a subject out of interest. And, indeed, they reported changes as a result of their work on their educational environment.

The process of QI is responsive. Responsiveness is the interaction between the researcher and the participants. Information flows in both directions and affects both. Responsiveness yields cognitive understandings related to the subject and research questions, as well as effective understandings related to

the participants (Preissle & deMarrais, 2011). Just as the process of QI is responsive-interactive, so was its instruction. I monitored the students carefully to the point of being able to lead them on their investigative journey. I was in the position both of a researcher and a learner when I shared with them the research work. My instruction was suitable for a variety of students, giving them the opportunity to be researchers, critics, and participants in my research as well as in that of other students in the class. Responsiveness increased the sense of involvement and commitment. Responsiveness encouraged students to take risks and improve their thinking. Thinking is a social activity shared among the members of the investigative community, but which is gradually internalized for reemergence as an individual activity (Vygotsky, 1978). The learners' deliberation with themselves grew out of the experience of collaborative learning, which helped develop self-regulation. Holding a conversation in an interactive process through personal teacher–student correspondence created new knowledge and learning horizons.

The process was lengthy and not simple. This learning space remained open and temporary. All the while, new ideas came up and the learning space became dynamic, and any new information could have led the discussion in new directions.

In addition to cognitive advantages, this collaborative feature promoted communication capabilities and tolerance of contradictory positions, which were important to us in discussions about new outlooks in QI. All of these were essential for their functioning as future researchers.

The process of the QI is reflexive. Just as in research response is immediate, so it was in our teaching. The teacher-student reciprocal model used by the instructor was reflexive. The impact of the teacher-student reciprocal instruction on students was almost immediate. There was no delay in their response. It was hard but rewarding: "They appreciated the fact that someone had been working just like them and with them. That was the strongest empowerment they received, and so did I as an instructor." (Teacher reflection) It is almost impossible to teach QI and not to be a researcher, since a large share of QI is social experience (Stake, 2010).

The process of QI is recursive. In QI as well as in life, evidence repeats itself. The more times and different ways and directions an issue repeats itself, the more powerful it is. The same applies to instruction: different issues have recurred in a variety of aspects. Some issues were discussed by students many times from different perspectives, making them more important or deeper.

The process of QI is reflective. I made sure to include activities intended to help develop independent thinking skills necessary for performing analyses. I arranged for activities in which learners were required to evaluate their work, present arguments, ask questions, imagine, and clarify phenomena (Katz, 2012). The QI class fostered thinking, thinking predispositions, strategies, systematic thinking and high order thinking, which included reflective and flexible thinking (Perkins & Swartz, 1992). The use of *thinking language* was abundant. It included words that addressed mind processes and products and words that described and aroused thinking (Tishman, Perkins, & Jay, 1995). The frequent occupation with thinking turned reflection into a familiar matter of routine and a part of the classroom culture.

Given that in QI the researcher is the main "tool," reflection may sharpen, refine and increase his sensitivity (Kacen & Krumer-Nevo, 2010). Reflection is a unique, internal-qualitative, personal, complex, and mostly tacit process. I believe that learners learn best through action followed by reflection on that action.

In the same way as we strive to experience in different ways experiences of others to enrich our lives, so too is our reflective experience in learning. Reflection was used to actively construct concepts, thus producing professional knowledge. The key to professional development of the reflective teacher was based on direct personal experiences, observation of peer experience, and analysis of other people experiences (Zimmerman, 1998). Group reflection created team bonding, as stated by Routman (2002): Group reflections are a thoughtful practice for the improvement of instruction and learning (Routman, 2002).

Addressing vulnerability and fairness. One of my prime objectives was to cultivate ethical positions of good performance. My students' actions and behavior throughout and after performing the research had to meet the ethical requirements for conducting research with people. At all the stages of the QI, vulnerability and fairness were raised.

Developing a researcher's curiosity. Researchers are curious by nature, and so my pedagogy fostered curiosity and motivation. Since competency does not guarantee performance if there is no motivation to use it (Katz, 2012), the motivational orientation of instruction was important for the Qualitative Methods course. I aimed at large goals and fostered self-efficacy and collective-efficacy for performing a research. The student community constantly filtered its actions through the belief system of its members.

Data collection from different and varied sources. The evidence in the QI is collected from many sources (Sabar, 2011), so also my assessment of the student's work relied on collecting evidence from different sources that met different dimensions in a rubric. Standards that students had to meet were

discussed in class. The assessment that took place during the learning process suited an open and dynamic world of knowledge and academic self-regulation of which the learner was the center.

Summary

Most researchers basically have a mainstream view (Phillips, 2006). My QI instruction model consists of a permanent base within which students carry out their research and learn the principles and techniques, which is consistent with the conventional outlook while fostering post-modern open thinking. My model is conventional-systematic combined with post-modern open thinking. The learning climate is typical of a *democratic self-directed learning organization*. It has openness, involvement, encouragement of initiative, vitality and flexibility (Katz, 2012). If we have not conducted sufficient epistemological debates between positions and outlooks in the current course, it may have been because students in this course were not yet ripe enough for more than that. Self-confidence was encouraged, and students learned to support their positions. The opportunity to correct their work over and over again, creating a teacher-student reciprocal model of work between students and instructor, raised their self-efficacy and collective efficacy to succeed. Some of them have acquired the positions of a qualitative researcher, while others will need more experience. In sum, a large amount of investment was rewarded by satisfaction. Students served refreshments in the classroom corner and invested in creating a pleasant social environment. Class sessions had a flexible structure, which changed according to the needs. It was difficult but challenging.

Conclusion and Implications

I presented a qualitative pedagogy designed to foster researchers seeking to understand things in their authentic environment in order to improve them. This pedagogy fosters thinking, reflection, and constant formative improvement; promotes curiosity and motivation; and aims at life-long learning and functioning with integrity, as required by the qualitative professional ethics.

The theoretical contribution of this research is the emergence of a QI pedagogy that works for students at a college of education. I propose a model for teaching QI with evidence indicating students' motivation and good results towards academic advancement.

Practically, each student experienced the nature of QI methodology which revealed unexpected insights about people and places previously considered known or understood. Such insights were one of the most

enjoyable moments we all experienced as they happened to almost all of us:

> I would like to briefly express my opinion on your interesting and impressive methodology of this course. . .This experience has been a real discovery for me. Since my work is being done not following dry lectures. . .but with your patient guidance. The way you work compels me to think, correct, and deliberate, to get angry and again to think and correct. I don't feel commitment to follow instructions, but after each of your corrections to search for another view point that I have not yet noticed. After a huge amount of working hours, corrections and frustrations, having received my paper for the seventh time and searched it from top to bottom - I realized something huge - Only now I have started to work! (Student feedback)

I have learned that it is possible to set high standards for students, such as creating posters, getting feedback, and developing them as research papers in the future. From this research, I have gained a unique personal overview regarding my professional performance and development as a teacher and a researcher. I hope that my description will encourage other researchers to continue to explore and develop new pedagogic strategies for teaching QI.

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