

# **Qualitative Research in the United States**

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#### Key words:

qualitative research, research genres, theory, methods, the language of inquiry, critical issues, computeraided qualitative data analysis, mixed-methods **Abstract**: As we stand poised to enter the next millennium there is perhaps no better opportunity to reflect on the beliefs, values and techniques that are shared and debated by qualitative researchers throughout the United States. This paper explores some of the challenges facing those who pursue qualitative inquiry in the course of completing a graduate research degree: how we learn about research methodology and how we think about, use, and support the use of computer software research tools. The paper explores some of the assumptions inherent in the language of inquiry and discusses critical issues that qualitative researchers struggle with and continue to debate.

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History, if viewed as a repository for more than anecdote or chronology, could produce a decisive transformation in the image of science by which we are now possessed.

KUHN, 1962

## 1. Introduction

In the post-war period of the 1950s and 1960s, higher education in North America experienced massive expansion. In the United States, between 1965 and 1975 the student population grew from 6 million to 11 million (FINNEGAN, 1993). In the 30 year period from 1963 to 1993, there was a three-fold increase in the overall number of doctorates awarded by US universities (BOWEN & RUDENSTINE, 1992). It is these doctoral programs that provide the training ground for higher education researchers. [1]

Historically, higher education research has been funded through government expenditures. Since 1965, federal expenditures for research and development in higher education have risen at a constant exponential rate of about 2% per year. However, these funds are not distributed equitably across all higher education institutions. "Over 95% of federal expenditures for research and development (R & D) are distributed to 10% of four-year colleges and universities." (LEWONTIN, 1997) In 1990, 10 universities received 24% of the federal expenditures on R & D and 50 universities received 64%. The 15 universities receiving the largest amount of funds has not changed substantially since 1975 (LEWONTIN). The largest funding initiatives have taken place in the physical and life sciences and in new military technologies, leaving the majority of four year institutions and humanistic fields of study with few resources for conducting research. With fewer external incentives available for those in humanistic fields of study to engage in qualitative inquiry, personal motivation tends to drive what is essentially, a labor of love for many qualitative researchers.

I feel torn between passionately pursuing authentic qualitative research that I believe is valuable, doable, scholarly, and beneficial, and having to defend it in some quantitative way that detaches me from the soul of what I believe can be achieved much more effectively. [2]

In recent years, with expansion of the number of institutions of higher education qualitative inquiry in the US has grown and crosses a number of disciplines and fields of study including, but not limited to, the following:

| accounting             | industrial relations | nursing                  |
|------------------------|----------------------|--------------------------|
| anthropology           | information systems  | organizational studies   |
| arts                   |                      | political science        |
| business               | library science      | psychology               |
| communication studies  | linguistics          | public health            |
| counseling and therapy | management           | social and public policy |
|                        | marketing            | social work              |
| education              | media research       | sociology [3]            |
| human development      | medicine             |                          |

Within the disciplines and fields of study that embrace qualitative approaches to research there are multifarious interpretations and perspectives of the epistemological, ontological and methodological frameworks through which we plan and organize our research endeavors. Even within my own field of education there are many dimensions and contexts in which researchers conduct qualitative research:

- adult education counseling & human development curriculum studies educational administration educational leadership education in the professions educational policy & politics educational psychology
- educational technology history & historiography learning and instruction postsecondary education program development school evaluation social context of education teaching, teacher education [4]

There are again as many ways of conducting qualitative research. JACOB (1987) identifies five major qualitative research traditions: cognitive anthropology, ecological psychology, ethnography of communication, holistic ethnography, and

symbolic interactionism. TESCH (1990) identifies 27 approaches using criteria such as the nature of language, patterns in human experience, and the meanings we attribute to a particular context. CRESWELL (1997) in his recent book, *Qualitative Inquiry and Research Design*, identifies five different traditions of qualitative inquiry: biography, case study, ethnography, grounded theory, and phenomenology. Given the breadth and scope of qualitative inquiry it would be inappropriate for me to position this discussion in claims of knowledge that are either expert or representative of these varied understandings researchers bring to the field. [5]

A thesis central to positioning this discussion is the unapt dichotomization of quantitative and qualitative research traditions. KUHN (1970) suggested that the world view we bring to our understanding of science ultimately influences how we conduct our research. A frequently articulated credo in discussions of research methodology is that the most appropriate research design is one which best fits the question or problem at hand, yet in some disciplines such as psychology, researchers "seem to have first made the decision to use scientific methods and then framed their disciplinary questions according to what could be studied using that method" (SLIFE & WILLIAMS, 1995). When method is put first, the focus shifts to questions of "how" instead of "why" and it suggests a neglect of the epistemological and theoretical foundations upon which practice must necessarily rest. Although PATTON (1996) has argued that this debate over method has "run out of intellectual steam", nonetheless, each new generation of researchers must develop an understanding of these paradigmatic issues. [6]

In the United States, graduate study provides a primary training ground for higher education researchers and unlike graduate programs in Australia and Britain, course work is one of the required components of degree completion. Course work helps graduate students become familiar with various approaches to research as they develop a focus for their research. My own research on the complex interaction of personal, social and institutional factors that shape the doctoral experience and ultimately enhance, or diminish, degree persistence has framed my understanding of research issues graduate students wrestle with during the course of their studies. It is from this perspective then, that I write. It is my purpose here to raise what I believe are important questions about how institutions of higher education are educating the next generation of qualitative research scholars, that is, how we as researchers come to know what we know about qualitative research. [7]

## 2. Learning about Research Methodology

In November 1999, I invited participants in the *Qualitative Research for the Human Sciences* discussion list, QUALRS-L, to respond to a web-based query. The purpose of the query was to identify a range of department practices and course offerings around the teaching of research methodology, and to better understand the nature of any resistance, reluctance, or lack of understanding of qualitative research that students and faculty encounter in their departments. The web query generated 75 responses from students and faculty across 16 different fields of study. The pattern of feedback from US respondents was similar to that of respondents from other countries. The feedback was also consistent with my observations over the past decade through <u>my own research on graduate</u> <u>education</u> and from knowledge my husband and I have gained as moderators of the Graduate Studies List of the American Educational Research Association. [8]

Departmental offerings of research methodology courses vary widely within institutions and across the country. In undergraduate programs students are more likely to be exposed to quantitative approaches to research. Pick up any general research methods book for the social sciences and the dominant focus is most likely on quantitative methodology. [9]

Even at the graduate level this is often true as exemplified by this comment from the recent web-based query:

Our department is committed to the quantitative paradigm and less emphasis is given to the qualitative. [10]

As one professor indicates below, many graduate programs require a single general survey research methods course that addresses both quantitative and qualitative perspectives, but even these courses are more likely to emphasize quantitative methodologies:

I, particularly at the master's degree level, will sometimes focus on general research course that covers both qualitative and quantitative approaches to research; however, the emphasis is more often on quantitative perspectives. [11]

The <u>World Lecture Hall</u> web site lists courses offered online and although the site is not necessarily a representative indicator, it presents this same picture: statistics is a self-contained category of online offerings whereas courses in qualitative methodology are found embedded within the disciplines. I looked at two courses at random at this site from the field educational research, <u>Research Methods</u> and Introduction to Educational Research (Broken link, September 2002, FQS). Both course descriptions reflect the dominant quantitative paradigm.

Education Research Methods, World Lecture Hall Introduction to Educational Research (Broken Link, FQS, Sept. 2002) (Excerpt from course description) The importance of ethical practices in research will be discussed. Basic measurement concepts will be described, as well as sampling procedures, developing and writing research hypotheses, and the different ways in which numerical data are analyzed and reported in studies. Various research methodologies and designs will be introduced. [12]

Many graduate programs offer only quantitative, statistically oriented research methods courses and this is particularly evident in psychology-related fields that tend to pattern themselves after the natural sciences through a dominant focus on the experimental method. At the doctoral level and sometimes at the master's level, programs will offer two doctoral research methods courses, one quantitative, one qualitative. However, students are often required to take an advanced level statistical course and in many instances this view is presented as the only legitimate view of research, as the only lens through which one can understand the world.

One of my committee members required that I take the second quantitative course rather than Qual. II in my program of study. He said I was welcome to take Qual. II in addition to Quant. II, but that he just didn't believe I would leave the program with the understanding of research needed to function in higher education. [13]

This student observes a frequently articulated rationale for requiring course work in quantitative methodology.

... they thought [the statistics course] would make me a better "consumer" and a more capable advisor on down the road (their rationale was, how could I advise a student who was doing quantitative research if I didn't understand it?) [14]

Of course, we could use the same rationale to require course work in interpretive methodology but rarely do I see this position articulated. Nonetheless, such an argument raises an important question about the goals of graduate training and whether there is a need in some disciplines for mixed-methods approaches to training. Should graduate programs provide future faculty with the skills and knowledge base to conduct work comfortably within the context of a mixed-methods approach? How might we operationalize such a goal in the context of doctoral training which admittedly is a highly specialized process? [15]

## 3. Research Tools and Support

The emphasis on the quantitative data analysis is also evident in the research tools most commonly available to students. Statistical packages like SPSS are readily accessible on most campuses and often there are knowledgeable support personnel to assist students with statistical software. This same easy access to software and support is much less likely available for qualitative software packages. In most programs students are left to their own devices to seek out and evaluate qualitative software, fund the software purchase, and pay for training seminars offered, in many cases, by software developers and third-party trainers.

The Centre does not endorse or have copies of any qualitative software, neither does the central Information Technology Services. I might be able to convince the Centre to purchase a license for general use, it is frustrating not being able to have training and or support offered by the ITS for qualitative software. Training in SPSS is readily available, as is the software. The end result is that to get the work done, obviously my end goal is to complete my thesis successfully, I will need to spend time and money obtaining the software and training myself. In addition to the scanning required material, this exercise will be very costly. [16] The lack of support for computer-aided qualitative software is problematic for a number of reasons. First, and perhaps most problematic, is the risk of separating method from interpretation. If we become too easily distracted by the mechanics of the process we risk confusing technical complexity with the rendering of meaning. [17]

We have developed some pretty clear mental models of how we can use computers and software like SPSS for quantitative data analysis. The idea that computers function as sophisticated mathematical calculators has, in a short period of time, permeated all aspects of our culture and even when we might not understand the particulars of a piece of software, there is a broad-based acceptance of the underlying principle that "number crunching" is what computers do best. [18]

Unfortunately, the same cannot be said for qualitative research software. We have few, if any, prior mental models for using software for qualitative research and our understanding how computers might accomplish this task is fuzzy at best. Even among highly experienced researchers it is not unusual to encounter confusion about the extent to which the computer or the researcher controls the analysis with qualitative software. We might adopt an incompatible research logic, confusing word counts with qualitative research or, working from a mathematically-based mental model of data analysis, we might think that all we have to do is "plug in" the qualitative data, apply the appropriate algorithm, and wait for the software to "crunch" the results. [19]

We also lack a shared language for talking about our craft. Given the breadth of traditions we bring to qualitative inquiry, this may not be surprising but it is tremendously problematic and obfuscates our thinking about how we might effectively use computers for qualitative work. For example, concepts like coding, whether approached as a deductive exercise in content analysis or an inductive, synthetic process, are subject to considerable discussion. Do word counts and other methods of quantifying data provide appropriate representations of qualitative research? Do hierarchical data structures shape qualitative data in ways that distort our thinking? Is the concept of "analysis" or hierarchical representations of data even appropriate to qualitative research, or, as SHANK (1999) suggests, is "synthesis" more reflective of the way we might approach our craft? Graduate students often find themselves caught between these two world views:

I am just about to defend my doctoral dissertation which is a qualitative, descriptive study. My committee who claims to have much experience in qualitative research clearly wanted a more quantitative form of representation of the entire study not to mention the data.

My study is designed as a qualitative study which adapts existing categories for use on this area (for which they were not initially designed). My committee is quite focused on establishing interrater reliability despite the need to adapt the categories as I go.

I am doing a qual. research for my dissertation. The outside member on my committee is from the Psych. dept., which is wholly quantitative. He thinks qualitative

methods are not scientific or rigorous. He thinks qualitative studies are "easy" compared to quantitative. Here I sit, more than a year after collecting data, still analyzing, while my colleague, who collected her data after I did but did a quantitative study, has defended and will have graduated a year before I do. [20]

Confounding this problem are the claims by software companies that would have us believe we can use their products to generate some kind of computerized interpretation of the data in the name of qualitative research. Language borrowed from the quantitative tradition suggests both conceptual and methodological confusion.

HyperRESEARCH is a solid code-and-retrieve data analysis program, with additional theory building features provided by the Hypothesis Tester.

Hypothesis Testing: Utilize the Artificially Intelligent "Expert System" provided by the Hypothesis Tester to perform in-depth analyses of your coded data to see whether the coding supports your hypothesis. [21]

KELLE (1997) points out, that such beliefs arise "from various misinterpretations of the role of theories and hypotheses in the qualitative research process .... the notion of hypothesis testing would be rather misleading here, if one understands it as an attempt to falsify an empirically contentful statement." Instead he suggests that hypothetical propositions in qualitative research "are sometimes very vague assumptions and conjectures about possible relations between certain domains."

... concepts from other methodological traditions like "hypothesis testing" are implemented, and the role of the computer in the analytic process is sometime overemphasized. Thereby, notions ... like "third generation" computer programs, or software for qualitative "theory building", may add to the wrong idea of qualitative computer software as doing "qualitative analysis" instead of clarifying their basic, usually very straightforward functions. Software programs ... are tools to mechanize clerical tasks of ordering and archiving texts used in the hermeneutic sciences now for hundreds of years. To be clear about this issue we should address these programs as software for "data administration and archiving" rather than as tools for "data analysis." And we should think about whether the growing economic competition between software developers may go against our need for a realistic picture of the possibilities of methodological techniques, since it fuels the motivation to present straightforward techniques of data management as groundbreaking methodological innovations (KELLE, 1997). [22]

It is not easy for novice researchers to be clear about what methodological approaches might be possible with a particular piece of software and how such methods are grounded epistemologically. How does the novice user begin to make informed choices about which qualitative software packages are congruent with his or her approach to analysis? What will the end product look like? How appropriate will it be? These challenges, however, need not deter us from recognizing the magnitude of difference in data management power that such software makes possible, or from developing effective methods for using software for qualitative research. [23]

### 4. Looking Ahead: The New Millennium

As I indicated at the outset, not only has the number of institutions of higher education expanded in the latter part of the century, but colleges are adding courses on qualitative research to their program offerings. Where departments include leading scholars in qualitative methodology, there are more likely to be several course options for students to choose from and minimum requirements are more likely to exceed one or two courses. The <u>Social Foundations Program</u> at the University of Georgia, Athens, is one example of such a program.

Research training for doctoral students in the social foundations of education will match their areas of specialization and their research topics. Students will obtain training in one or more research traditions including quantitative methods, qualitative methods, historical research, symbolic logic, computer skills, and legal research. In some cases, students may substitute foreign language proficiency as a research skill. Although students will have a range of research methodological skills, all students will master the research methods of a social foundations of education discipline sufficiently to complete dissertation work using those methods. Rigorous methodological study and application is the hallmark of this graduate program in the social foundations of education. Students must take a minimum of 12 hours in research methods. [24]

The Internet and the web provide a world-wide community for sharing resources and engaging in collegial discourse about the many challenges of qualitative inquiry. <u>Research Discussion Groups</u>, both discipline-based and interdisciplinary fields proliferate on the World Wide Web. Such groups provide an important platform for novice researchers to interact with and learn from established scholars. [25]

Extant genres of qualitative research have also received new attention in recent years. Focus group interviewing techniques have been used increasingly over the past decade as both a self-contained method for conducting qualitative research and in conjunction with other research methods (MORGAN, 1996). Multiple research strategies, or mixed-methods research, constitutes a smaller body of literature that is receiving increased attention. Triangulation, the antecedent to a mixed-methods approach was conceptualized by DENZIN (1970) to encompass multifarious methods and forms of data, as well as multiple investigators and the use of multiple theories. Some software applications like NUD.IST (Nonnumerical Unstructured Data Indexing, Searching and Theorizing), originally designed solely for qualitative, textual analysis are being used increasingly to integrate a mixed-method approach to data analysis. And although gualitative research and mixed-methods approaches remain subject to the practical constraints of funding bodies, peer acceptance, limited financial resources, as well as the skills researchers bring to their work, the long term effect, in no small degree, has been to decenter the canons of modern science. [26]

In closing, I would like to share with you, some thoughts by Jules LAPIDUS, President, <u>Council of Graduate Schools</u>, about preparing future scholars for a life of research. His comments below are taken from Doctoral Education: Preparing for the Future, 1997 [Broken link, FQS, 04/07/14].

#### Preparation for Research

American graduate school are very good at preparing students for research, clearly among the best, if not the best in the world. There is not always agreement about motives or context. Is the product the research result or the researcher? Are the graduate students there to help the faculty with their research, or is it the other way round? The answer, at least in the U.S., is yes to all of the above. We have prided ourselves on the ability to produce research and researchers as part of the same process. To do that, we have developed a system that involves coursework coupled with doing research under the supervision of an established researcher. Until recently, this has been a uniquely American idea. Students truly are prepared to do research in their area of specialization. They are required to demonstrate that they know the literature and the techniques, and furthermore, that they understand how to solve problems in their fields. Several other countries are adopting or adapting this approach, and developing coursework components in what were formerly research only programs.

But the research experience has to extend beyond mere technical training. This has been expressed most clearly by John Ziman (1968): "To be a member of a team directed by a distant and very busy leader, building just one technical link in a complicated experiment, is an inadequate apprenticeship to the art; it is as if the pupils of Rubens were to be accounted artists after five years of painting-in the buttons on his larger compositions. High technical standards may be achieved by the student, without a grasp of the deeper intellectual issues."

Similarly, Boyer (1990), observed that, "Surely, scholarship means engaging in original research. But the work of the scholar also means stepping back from one's investigation, looking for connections, building bridges between theory and practice, and communicating one's knowledge effectively to students."

The point here is that graduate education must be more than a simple apprenticeship, and that research, in this context, must be more than a technical exercise for producing research results. It must be a vehicle for preparing scholars. [27]

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