The role of qualitative research in education

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Research is multifaceted and multilayered. As educators it drives the professional decisions that we make. In higher education it is important that we seek ways to expose as many of our constituencies as possible to research, so that students and teachers access these empowering tools and use them to make better profesional decisions.

Quantitative research prescribes as deductive perspective to data gathering and problem solving. But that is just one part of the puzzle can be constructed.

- My talk today will have three parts:
- 1. I will, give you a brief historical context of qualitative research.
- 2. I will operationally define qualitative research and discuss the similarities and difference between qualitative and quantitative research.
- 3. I will offer you some criteria to consider in developing and evaluating a qualitative research proposal.

Let us begin with an historical context. During the early part of the 20th century most disciplines used quantitative rather than qualitative methods to carry out research. In education, it has only been since the 1970's that qualitative research has emerged as a credible way to collect data. Many arguments took place in research and evaluation circles about the value of qualitative research. It became increasingly clear as social scientists assessed teaching and learning that by using only quantitative methodologies the affective or human elements of implementation were lost.

As educators we were implementing change in the culture, but we did not gain an understanding of what worked and what did not work. In the United States, much federal money was allocated to support programs in shools, but the result were not clear. We were not capturing the stories of the teachers, students, and administrators who were living through the changes. It was during that time that educators turned to the disciplines of sociology and anthropology to look for ways to collect data and formulate hypotheses. Educational researchers began to use qualitative research methods.

But what do we mean when use the term qualitative research? For those of us who use this methodology, we always consider the cultural context. The qualitative paradigm's defining principle is a commitment to understand the phenomenon being studied in the ligth of the perceptions of those involved.

It place the influence of culture and context in the center and requires that the researcher account for the motives and meaning of others. The introduction of qualitative research methods such as unstructured interviews and observation reflects this desire to capture the participant's perspective. It is based in a theorical orientation that acknowldges the existence of many belief systems.

Geertz (1973) in his Interpretation of Cultures stated that "Believing with Max Weber", that man is

an animal suspended in webs of significance he himself has spun, I take culture to be those webs, and the analysis of it to be therefore, not an experimental science in search of law, but an interpretive one in search of meaning.

Another social scientist, Robert Coles said:

"The people who come to see us bring us their stories. They hope they will tell us them well enough so that we hear is their story". (Coles, 1989, 7)

Qualitative researchers seek to make sense of personal stories and the ways in which they intersect. We believe that:

- Any social entity is complex and subtle,
- Intensive study of a given phenomena over a long period of time is essential for genuine understanding of that phenomena,
- People and institutions must be studied holistically and not in isolation from other forces that may influence them,
- The most effective way to study a given phenomena is through direct, on site, face to face contact with the people and events in question, and
- The behavior of human beings in a given context is relatively meaningless without some understanding of the meanings that those observed give to the behavior.

Persons often turn to qualitative research after they have studied statistics. They find that statistical studies do not answer the kinds of questions that they have been formulating. There is perhaps a certain state of mind best suited to carry out qualitative research. Usually those interested in human behavior and enjoy observing and interacting with others. They have the patience to actively listen so that the persons they interview trust them to hear their stories. Also, they must have the perseverance to sift through data in order to make meaning of the information that they have gathered. Qualitative research is labor intensive. Effective researchers spend many hours out in the field. They live and breathe the topic that they are investigating. A person may have subjective reasons to use qualitative methodology, but the main reason that one should consider its use should be determined by research question to be answered. That is, some problems or questions lend themselves to qualitative research rather than quantitative research.

Let us consider an example. A reseacher is employed to determine the impact of a change that has been implemented in a secondary school's curriculum. Teachers have shifted from a traditional curriculum to one that integrates the use of technology in problem based learning situations. A quantitative researcher may review the curriculum course of study and the implementation plan and then construct a paper/pencil survey. The survey is mailed to a randomly selected sample. Thirty - five per cent of the sampled population returns the survey and the researcher analyzes the data using a statistical software package. The end result will be to draww some conclusions based on the numerical data that is generated.

A qualitative researcher will seek information about the impact of the change in the curriculum. The researcher begins by using his/her initial observations and conversations with key decision - makers to formulate research questions. The researcher may begin with one grand question such as "How do you feel about the changes that have taken place in the curriculum?" The researcher's laboratory is the school. He/she interviews the various individuals representing the roles groups of teacher, students, administrator, and comunity. Identified stakeholders or interviewees ought to span all the role groups who are affected by the implementation. The basic motivation for the researcher is to describe what he/she collects. Ultimately, the researcher seeks to provide a description of the issues surrounding the question of the curriculum change so that decision - makers can make informed decisions. The data and information that are gathered may result in more questions and undoubtedly will generate hypotheses that will need to be tested. Such an inductive way of carring out research can be used as a way to gain a larger constituency to buy into an ideaa. Rather than feeling

threatened, administrators can use the data to

strengthen their cases or points of view.

| Tabla 1. Predi | sposiciones | para la | Investigación | Cuantitativa v | s. Cualitativa |
|----------------|-------------|---------|---------------|----------------|----------------|
| | | | | | |

| Modo Cuantitativo | Modo Cualitativo | | |
|---------------------------------------------------------|----------------------------------------------------------|--|--|
| Supues | stos | | |
| Los hechos sociales tienden a una realidad objetiva | La realidad está socialmente construida | | |
| Primacía del método | Domina el objeto de estudio | | |
| Las variables pueden ser identificadas y las relaciones | Las variables son complejas y están interconectados: son | | |
| medidas | difíciles de medir | | |
| La ética se basa en el juicio del observador externo | La ética reside en el juicio del observador | | |
| Propós | ito | | |
| Generalizar | Contextualizan | | |
| Predecir | Interpretan | | |
| Explicaciones causales | Entienden las perspectivas de los actores | | |
| - | Terminan con hipótesis y teorías de base | | |
| Enfoqu | ies | | |
| Comienza con hipótesis y teorías | Son emergentes y descriptivas | | |
| Manipulación y control | El investigador es un instrumento | | |
| Utiliza instrumentos formales | Naturalistas | | |
| Experimentación | Inducción | | |
| Deducción | Busca patrones | | |
| Análisis de componentes | Procura pluralidad y complejidad | | |
| Busca el consenso de la norma | Hace uso mínimo de índices numéricos | | |
| Reduce los datos a índices numéricos | Se escriben de manera descriptiva | | |
| Estilo de escritura abstracto | | | |
| Papel del inv | vestigador | | |
| Desapego e imparcialidad | Involucramiento personal y parcialidad | | |
| Retrato objetivo | Entendimiento empático | | |

We can compare and contrast the differences between quantitative and qualitative research. Both types of researchers use similar elements in their work. They begin with a basic set of assumptions, identify a purpose, decide upon an a approach, and then implement the plan. They two methodologies pursue the process in defferent ways particularly as it applies to the role of the researcher. The qualitative researcher is personally involved and empathetic. The qualitative researcher is detached and impartial.

The researcher methods we choose say something about our views on what qualifies as valuable knowledge and our perspectives on the nature of reality? Quantitative methods are supported by the positivist or scientific paradigm, wich leads us to regard the world as made up of observable, measurable facts. In contrast, qualitative methods are, generally supported by the interpretivist paradigm that portrays a world in wich reality es socially constructed, complex, and ever changing.

Quantitative researchers seek explanations and predictions that will generalize to other persons and places. Careful sampling startegies and experimental designs are aspects of quantitative methods aimed at producing generalizable results. In quantitative research, the researcher's role is to observe and measure. Care is taken to keep the researcher from contaminating the data through personal involvement with the research subjects. Researcher objectivity is of utmost concern..

Qualitative researchers deal with multiple, socially constructed realities. The realities are complex and can be divided into discrete variables. They regard their research tasks as coming to understand and interpret how the various participants in a social setting construct the world around them. To make their intrepetations, the researchers must gain access to the multiple perspectives of the participants. Their study designs, therefore, generally focus on in - depth, long term interaction with relevant people in one or several sites. The researcher becomes the main instrument as he/she observes, asks questions, and interacts with research participants.

Past practices in Education might promp researchers to perceive some obstacles in carrying out qualitative research. One major issue is that peers and colleagues may question the trustworthiness and usefulness of the data. The skeptics may challenge the basic integrity of the methodology. This is unfortunate because there should be room for both methodologies to exist. Students must be informed of all the options and have the opportunity to choose the one that best fits his/her will upon students. If there is not a good macht between the professor and student, then the student ought to be able to change to a professor who is more methodologically compatible.

Every teacher should be a researcher. Quantitative research is a way to open doors for teachers empowering them with techniques so that they may better understand their craft. I would like to encourage you to take the risk and enbark upon qualitative research inquiry. Here are some criteria that you should consider in developing and evaluating a qualitative research proposal.

- The students' expertise in doing what thet propose.
- The research problem and/or research questions.
- The purpose and significance of the proposed research.
- A review of the relevant literature.
- The context.
- The sampling design.
- The data collection methods.
- The data analysis.
- And the provision for the use of human subjects.