Variations in Qualitative Research and the Consideration of a Schematic Definition

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As qualitative research has grown in popularity there has been a corresponding proliferation of methodological definitions and empirical applications associated with those studies that operate under the label of "qualitative." Although there are many ways in which qualitative studies are conducted, it is still common to find qualitative research defined as a unitary endeavour. The purpose of the present paper is to provide a schematic description that illustrates the range of definitions and practices found in qualitative studies. A schema composed of six components illustrates a sample of choices that must be made and pathways that may be considered when conducting a qualitative study. The selection of components discussed addresses various aspects of qualitative research, ranging from epistemological positions to representational modes. Practical examples and theoretical arguments are considered in order to demonstrate the way in which qualitative research can vary within and across the six components. Finally, definitional boundaries for qualitative research are linked to distinctions between the broader notions of inquiry and methods.

In "The Handbook of Qualitative Research in Education" LeCompte, Millroy and Preissle (1992, p.xvi) observed that the growth of qualitative research "...has been accompanied by considerable confusion of definitions, overlap of methods, agenda, and even attenuation of focus among its practitioners." Wolcott (1992, p. 27) claimed that "...qualitative researchers in education have never agreed among themselves to make more of the difference among their approaches...or to emphasize their commonality in order to effect a common front." Defining the boundaries of qualitative research is a difficult affair and the common approach of definition by contrast (e.g., qualitative versus quantitative, positivism versus naturalism) is now regarded as a facile way to resolve the difficulty (see Hammersley, 1992; Howe & Eisenhart, 1990).

Commenting on the diversity of qualitative research, Jacob (1988) argued that different qualitative studies may be derived from different disciplinary perspectives and that "continuing to discuss qualitative research as if it were one approach can only increase confusion in the education literature" (Jacob, 1988. p.23). More recently, LeCompte and Preissle (1993) described eight theoretical perspectives, ranging from functionalism to behaviorism, that could be used to underpin qualitative studies in education. Although the very existence of "qualitative" as a methodological category suggests a distinct form of research, lines of apparent demarcation that separate qualitative studies from other studies become questionable when one observes the diverse combinations of epistemologies, disciplinary perspectives, data collection methods and analytic practices observed within qualitative research. Not surprisingly, there are many debates about the characteristics of qualitative research (e.g., Eisner & Peshkin,1990). Regardless of what judgements are rendered upon the academic debates on the nature of qualitative research, the number of qualitatively based research projects and associated publications (see Chan,1995) found in the field of education continues to increase. The combination of increased use and continued debate has spawned innumerable methodological hybrids that fall under the label of "qualitative research".

It has been argued that the confusion and lack of agreement commonly ascribed to qualitative research may be related to a failure to distinguish between the notions of methods and inquiry (see Sherman, 1992). Methods are basically a set of data collection practices, a systematic way of transferring information from "out there", in the world of participants, to "in here", in the world of the
researcher. Alternatively, the idea of inquiry conveys an epistemological disposition and a methodological inclination. As Sherman suggests, there is consistency among those who emphasize the inquiry aspects of qualitative research just as there is agreement among those who choose to focus on the methods aspects. However, when one considers the field of qualitative research as a whole the two discourses of method and inquiry collide and what results is a picture of apparent inconsistency. Admittedly, understanding that qualitative research can be defined at both the levels of inquiry and method does help us understand the origins of this apparent inconsistency. However, the effects of embracing different definitional positions, intentionally or unintentionally, has not been well described.

The purpose of the present paper is to provide a descriptive framework for qualitative research that addresses the diversity found in its many applications. The overall objective is to develop a model which examines the implications of the inquiry-method distinction. In this sense, the present paper provides a portrait of the range of conceptions, practices and outcomes that may be considered in the course of a qualitative study.

Variations in Qualitative Research: Components of a Schema

While there are many ways to describe the variations found among qualitative studies, the schema developed here focuses on six components. The six components were selected because they constitute a reasonably comprehensive set of fundamental questions and practical events to describe variations that can exist between qualitative studies.

The components, which are introduced in the form of questions related to the research process, are labelled as follows:
1. Philosophical Positions,
2. Methodological Orientations,
3. Data Collection Methods,
4. Technical Procedures,
5. Analytical Perspectives and

It is perhaps important to note that although the components are presented sequentially, this is not meant to imply that qualitative research, or any research for that matter, must proceed in a linear, non-recursive fashion (see Denzin, 1994).

Philosophical Positions

What is the basic set of assumptions about the nature of knowledge that one embraces when performing a qualitative study?

The discussion of philosophical positions is concerned with the epistemological assumptions associated with a given empirical activity. There are a number of positions one may embrace, wittingly or unwittingly, while conducting a qualitative study. It is often argued that qualitative research evolved from Weber’s sociology where emphasis is placed on the development of understanding (Verstehen) and from Heidegger’s phenomenology that stressed the importance of the everyday world (Lebenswelt) in which we live and act. These ideas are meant to stand in contradistinction to Comtean positivism where social happenings are treated in a fashion similar to physical phenomena (see Smith, 1983; Firestone, 1987). Ordinarily, the claim is made that the quantitative approach is supported by positivism or realism while the qualitative approach is supported by naturalism, constructivism or some other non-positivist philosophical perspective (Firestone, 1987; Howe, 1985; Smith & Heshusius, 1986). While this bifurcated view may hold in some instances, it does not necessarily apply as a rule for practice. It is not at all uncommon, for example, to find researchers who conduct qualitative studies, regardless of their positivistic beliefs. Philosophical positions and methodological practices commonly considered antithetical to one another may be more related than many of us would like to think. In developing such an argument, Roman (1992, p.568) claimed that “...naturalistic ethnography often constitutes an extension of rather than a break from positivism.” Roman provides a persuasive series of arguments that translates into the possibility of qualitative research being joined to either naturalism or positivism. Despite proclamations about the “death of positivism,” it has been argued that many researchers continue work from a positivistic philosophy (see Phillips 1983, 1990; Schrag, 1992).

As Chan (1995, p.3) has argued "...the acceptance of the conventional distinction between quantitative and qualitative research paradigms should not be taken as a one-to-one mapping of positivism-constructivism epistemological divide..."
A third perspective from which one may proceed has been referred to as "ecumenicalism" by Miles and Huberman (1984). Of paramount importance when operating from this perspective is the idea of utility. The fundamental premise here is that it is important to collect as much useful information as possible, regardless of epistemological dictates. Qualitative researchers who work in this way are less concerned with basing their studies on a single epistemological position. The justification for this third type of philosophical position may be derived from arguments about the integration (e.g. Howe, 1985) or disintegration (e.g. Miles & Huberman, 1984) of epistemological arguments. In either case, the philosophical boundaries that have traditionally separated different kinds of research are ignored.

Methodological Orientations

What are the general orientations used for transferring information from the world of the participants to the world of the researcher?

The researcher's methodological orientation defines her/his general approach to investigating a given research problem. One's methodological orientation represents the nexus between epistemology and method. While methods deal with data collection activities, methodology is concerned with the justifications and arguments associated with those data collection activities. Most qualitative researchers, particularly ethnographers, aspire to conduct studies that are contextually derived (Mishler, 1979), participative (Strauss and Corbin, 1990) and are characterized by long periods of data collection that allow the researcher to understand context. Additionally, it is often stated that qualitative researchers utilize an inductive approach (Lincoln and Guba, 1985). However, it is also possible to work from an orientation that relies more strongly on a deductive, more theoretically determined approach. In their description of qualitative inquiry Goetz and LeCompte (1984a, p.4) claimed that "deductive researchers hope to find data to match a theory; inductive researchers hope to find a theory explaining their data."

The dichotomy described by Goetz and LeCompte (1984a) may be extended to describe another distinction in methodological orientation. In the inductivist mode, the research tends to be participant centered. The individuals studied assume a more active role in the construction of theory. The voices of participants are preserved and the authority of their explanations is respected. In contrast to this, the deductivist mode of research tends to be more researcher centered. The investigator maintains the position of authority. Distinctions between these two methodological orientations shows how the research project may be affected by views about the primacy of voice and explanatory authority.

A researcher's methodological orientation may also lead her/him to be more or less concerned with the amount of control exerted over the situation studied. Some qualitative studies are conducted in everyday settings while other studies may control and manipulate certain aspects of the environment. The work of Rogoff and Lave (1984) on the "everyday cognitions" provides a variety of examples of studies that exert little or no control over the situation studied. A qualitative study that demonstrates a greater amount of control can be found in investigations of cognitive processing (e.g., Palinscar & Brown, 1989) where some tasks were arranged and the environment was more controlled in the hopes of eliciting certain behaviors.

Data Collection Methods

What specific techniques and procedures are used to elicit or secure information on a given topic?

The data collection methods most commonly ascribed to qualitative inquiry are interviewing, observation and archival research, or as described by Wolcott (1992) "listening, watching and reviewing." A fourth method not specified by Wolcott involves the search for artifacts (see Petko & Petko, 1978). The application of these qualitative data collection methods to educational situations is well documented (see Goetz & LeCompte, 1984a; LeCompte & Preissle, 1993). In comparison to other components, there is a reasonable amount of consistency around the data collection component. Most qualitative studies will use some combination of interviewing, observation, archival review and artificial search. This unity notwithstanding, one may still find variations. For example, some interviews may assume a conversational tone while others are highly standardized and tend to be an oral form of a written questionnaire. Some varieties of observation may employ checklist procedures. In other research settings the use of a checklist would be unsuitable, for either practical or epistemological reasons. Ultimately though, one will find that variations that do exist are a matter of degree and not type.
As a codicil, it is important to note that the singular attention to data collection methods may lead individuals to overemphasize the centrality of technical aspects of qualitative research. They are central only because they are most commonly used, not because they are the most important aspects to think about when trying to understand the nature of qualitative research. To understand data collection practices properly, they must be considered in relation to other aspects of qualitative research.

**Technical Procedures**

*What variety of practices are used to record and document the phenomena observed and the words spoken?*

Technical procedures refer to the logistic aspects of data collection. The use of the word technical is meant to point out the mechanics of qualitative research. Technical procedures are what we use to transfer information or experience from a person or place in the field to a location which may be accessed by the researcher or someone else at some future point in time. Note that the data collection method of interviewing, for example, does not necessarily specify the way in which information obtained will be transferred and preserved. Some traditional examples of the technical procedure used in qualitative research are tape-recording, field notes and running notes. More recently the use of photography (English, 1988) and video-recording (Erickson, 1992) have been described.

There is little variation from the basic set of technical procedures used to capture data. However, as in the data collection component, there is some variation within procedures. Methods of tape-recording can vary (e.g., microphone placement) and field notes may be written with varying degrees of temporal proximity to the phenomenon studied. They may be written concurrently, immediately after removal from the situation, or on regularly scheduled intervals (e.g., every evening). There are also a variety of procedures for using video-recording and photographic equipment (e.g., camera placement, event or scene selection). The final decision made by each researcher depends on a host of issues including time constraints, the need for complete confidentiality, funding resources and, of course, the nature of the phenomenon under investigation.

**Analytical Perspectives**

*What perspectives and practices are used to guide the process of organizing and selecting data?*

The idea of analytical perspectives is meant to describe the strategies one may employ to derive meaning from the data. One perspective, commonly used in qualitative research, is referred to as the interpretative approach (see Eisenhart, 1988; Smith & Heshusius, 1986). Where mere description provides representations, interpretations provide speculations and connections. Taylor (1979, p.27) states that "... a successful interpretation is one which makes clear the meaning originally presented in a confused, fragmentary, cloudy form."

Examples of formal interpretative methods are offered by hermeneutics (Bleicher, 1980; Packer, 1985), symbolic interactionism (Blumer, 1969; Woods, 1992), and semiotic analysis (Manning, 1987). In consideration of a disciplinary perspective, Denzin (1989) described interpretative methods derived from historical analysis, literary criticism and sociology. The inductively based constant comparative approach described by Glaser and Strauss (1967) is commonly cited as an interpretive method that permits one to discern themes in the data. When one uses interpretive approaches, information is analyzed beyond its manifest meaning. For example, Geertz (1973) argued that "thick descriptions" are generated from an interpretation of symbolic action derived from semiotic analysis (see de Saussure, 1983). Interpretive perspectives tend to produce expansive descriptions because it is thought that phenomena must be understood in terms of the complex networks of symbol systems in which their meaning develops.

Another analytical perspectives used by qualitative researchers involves the use of some basic numerical condensation. Although use and the procedures associated with "quantification" are sometimes avoided for fear of epistemological reprisal, it is completely possible to perform statistical procedures on qualitative data (see Miles & Huberman, 1994). Such action does not necessarily represent a rejection of the foundations of qualitative inquiry. Spindler and Spindler (1992, p.69) claimed that "there is nothing wrong with quantification, when it is necessary, and many ethnographers find it essential once they attempt to make statements about the distribution of phenomena beyond the relatively small group ..." The idea that quantitative procedures may not be used in qualitative studies is a frequent source of confusion among those trying to develop an understanding of qualitative research. This perspective to analysis is viewed either as parsimonious, by those who are in favor of quantification, or as reductionistic, by those who object to quantification.
As a third analytical perspective one may consider integrating methods. The possibility and benefits of integrating interpretative and numerical perspectives have been argued extensively in the evaluation literature (see Cook & Reichardt, 1979; Rossman & Wilson, 1985). Licence to integrate analytical perspectives may be based on the arguments of Howe (1985), who suggested that we transcend the dogmatic approach to educational research. Practical arguments about the usefulness of triangulation procedures for analysis have also been presented (see Mathison, 1988). Tam (1993) provided a comprehensive set of arguments bolstered with examples that demonstrated why and how one might choose to employ quantitative methods in qualitative research.

**Empirical Derivation**

*What is the form or mode of presenting the findings derived from a given study?*

The component of empirical derivations is concerned with the end-product (see Wolcott, 1992) developed by a given researcher. Obviously, the final results generated by qualitative researchers appear as the functional outcomes of the methods of analysis used. Thus, the set of variations described in the present section are related to those discussed in the previous section. While Wolcott has discussed end-products from a methods perspective the discussion of empirical derivations presented here describes end-products in terms of styles of presentation.

A common style of reporting findings among constructivist oriented researchers makes heavy use of narrative (i.e., text based reconstructions of events). The narrative approach used by Connelly and Cladinin (1990) to describe the experiences of teachers exemplifies this form or representation. The textual style of presentation is also illustrated in what Eisner and Peshkin (1993) have daringly called a "novelistic account" of research. While Culhaz (1994) described narrative analysis, rather conventionally, according to various disciplinary perspectives (e.g., anthropology, psychology and literary studies), McLaren (1994) highlighted the political virtues and emancipatory possibilities associated with "narratives of liberation." The narrative form of representation that uses the actual words and phrases of the participants receives much support from writings concerned with the preservation of voice (e.g., Belenky et al. 1984; Gilligan, 1982; Giroux, 1988).

As noted previously, it is also possible to generate numerical summaries with findings organized into tables. Although quantitative representations may seem out of place in a qualitative study, there are no absolute rules against the use of statistics in qualitative research. Basic frequency counts and other descriptive statistics, for example, may help to convey a summary picture of how individuals’ responses were distributed across a set of categories. A third option under this component involves combining different styles of representation by integrating numerical and textual representations (see Rossman and Wilson, 1985).

### SOURCES OF VARIATION

<table>
<thead>
<tr>
<th>Philosophical Positions</th>
<th>Methodological Orientations</th>
<th>Data Collection Methods</th>
<th>Technical Procedures</th>
<th>Analytical Perspectives</th>
<th>Empirical Derivations</th>
</tr>
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<td>INTERVIEWING</td>
<td>Tape Recording</td>
<td>Interpreting</td>
<td>Narratives</td>
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<td>Inductive</td>
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<td>ARTIFICAL REVIEW</td>
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<td>CHECKLISTS</td>
<td>Numbers &amp; Words</td>
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<td>Utility Based</td>
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<td>DIARIES</td>
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*Fig 1*
A Schematic Illustration: Integration of Components

The arrangement of the six components along a continuum, as shown in Figure 1, provides a picture of a sample of the variations found in studies that have been referred to as “qualitative.”

The six components are meant to constitute sources of variations. The lists of key-words and phrases displayed under each component provide samples of variation that are commonly found among qualitative studies. Movement within the schema, indicated by the arrows, suggests possible relationships between various components. In this sense the schema may be regarded as a flow chart describing various pathways that individuals may follow in the course of a qualitative study.

The lines that form direct horizontal pathways are meant to reflect possible patterns of empirical action. One might, for example, expect a project grounded in positivism to be more concerned with control and more likely to engage in studies of short duration. Such a research project might logically proceed to use a quantitative approach to data analysis. The stereotypical expectation for a constructivist is that she/he would work in an inductive fashion. Similarly, qualitative research grounded in constructivism is more likely to be participant centered. It is also likely that data would be analyzed and presented in a manner that allows an individual’s conceptions to be highlighted.

While many researchers may demonstrate stereotypical patterns of practice, it is entirely possible for individuals to ignore expected patterns of action. The broken lines that run vertically suggest the potential for non-stereotypical variations of qualitative research. Horizontal pathways shown in bolded relief demonstrate the kind of consistency referred to as “paradigmatic purity” (see Wolcott, 1994). As suggested earlier, the idea of blending perspectives and integrating practices reflects an eclectic view in the interest of utility. However, such blends may also occur as the result of chance; not all educational research proceeds from such a self-reflective stance.

Conclusion

Although qualitative research is often defined within the context of a broad set of assumptions, orientations, practices and empirical outcomes (e.g., Guba & Lincoln, 1994; Lincoln & Guba, 1985; Marshall & Rossman, 1989) most of these descriptions have portrayed qualitative research as a unitary endeavour. In an attempt to construct a definition that more accurately reflects the realities of practice, the present paper describes a sample of the variations found among qualitative studies. The integrative schema proposed here characterizes qualitative research as an endeavour made up of a series of components around which the execution of a given qualitative study may vary. While it is clear that most qualitative research projects make use of some combination of the central data collection methods of interviewing, observation and archival review, those who employ these methods may have very different epistemological beliefs and a distinct set of methodological views and disparate styles of data representation.

Ultimately, how we determine the definitional boundaries of qualitative research depends on one’s point of definitional reference. If one defines qualitative research from a methods perspective then any piece of research that uses the text-generating methods of interviewing, observation and archival review may be described as qualitative. However, if one places a definitional premium on the wider idea of inquiry, then the boundaries of qualitative research are drawn more strictly since qualitative inquiry demands a commitment to a larger set of ideas. To consider qualitative research at the level of inquiry might even suggest a political orientation such as radical feminism (e.g., Roman, 1992) or neo-Marxism (e.g., Carspecken & Apple, 1992). These notions, and many others beyond those noted under “Sources of Variation,” could be included in the idea of [qualitative] inquiry.

In summary, I would argue that even though the problem of defining qualitative research may, at times, seem intractable (or irrelevant), it is important to continue the effort of defining the nature of qualitative research. I do not believe that it is sensible to side-step the question of definition and apply the rather overused label of “eclectic” to our research practices. Definition substantiates an identity and demarcates boundaries of current acceptable practice within a given community of researchers. When describing variations of qualitative research, a balance must be struck; a balance that expresses a thematic coherence while simultaneously describing the nature of variations around the theme.

Reference Notes

1Although the formulation of a research question is commonly cited as the starting point in the research process, the topic of how one decides on a research question warrants a more
detailed address than can be provided in the present paper. Informative discussions on initiating the research process may be found in various places (e.g., LeCompte & Preissle, 1993; Goetz & LeCompte, 1984b; Strauss and Corbin 1990; Webb & Glesne, 1992).

Many who claim to operate within the framework of postmodernism have argued for the dedicated exploration of individual narratives (petit recit) in place of the nonomethic findings derived from grand-narratives (grand recit) of modernist science. A detailed discussion of these arguments can be found in the original work of Lyotard (1984). A more contemporary analysis, within the field of education, appears in Usher and Edwards (1994).

References


