



Research in Education: A Special Account of Qualitative Approach

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ABSTRACT

Researches in the discipline of education utilize the methods of behavioural sciences and social sciences. Yet some researches take the advantage of the methods of humanities, the methods which are based on the phenomenological paradigm. Two types of research emerge: one, quantitative and two, qualitative. Quantitative research is based on logical positivism whereas qualitative research is based on the phenomenological paradigm. The qualitative research emerged in 1970s. The subjective experiences are the most important and necessary part for this research. It aims at providing very thorough and detailed description of persons' experience. In qualitative research, data collection is done in natural setting and the research follows an inductive and holistic approach. The process of the research is emergent where the role of the researcher is very important. Sometimes, triangulation is also done to assure completeness of findings or to confirm findings. The content analysis is most suitably utilized. The present paper is an outcome of library study.

Keywords: Research methods, educational research, quantitative research, qualitative research, positivism, interpretive paradigm

Meaning of Educational Research

Research, in general, is considered as an art of scientific investigation. It is an academic activity which is completed by explaining the problems, formulating suggested solutions, collecting, organizing and evaluating data and thus, reaching conclusion. It is a process of arriving at the solution of a problem. It is the most important process for the advancement of knowledge for bringing progress. Specifically, research in the discipline of education is the systematic application of scientific method for the solution of problems related to education. It helps the educator to achieve his goals very effectively. Educational research has a definite

purpose and deals with the problems in education regarding students and teachers. It utilizes interdisciplinary approaches for the problems. It is a scientific study which attempts to organize data qualitatively and quantitatively. The laboratories of educational researches are-classrooms, schools, colleges and various departments of education. Educational research includes students, teachers, educational managers and parents. It covers the education from formal to non-formal.

Types of Educational Research

All types of research approaches include the elements of observation, description and the analysis of certain occurrence. Analysing this aspect, educational research has been classified by *Best and Kahn* in to four types. According to them, all studies fall under one, or a combination, of these following types:

- ❖ Historical Research
- ❖ Quantitative Descriptive Research
- ❖ Qualitative Descriptive Research
- ❖ Experimental Research

A research may include both quantitative and qualitative methods.

Foundation of Research Methodologies in Education

The expansion of degree preparation made the institutions of higher learning to focus on research beyond the study of teaching techniques. They adopted research methods associated with science. Scientific methods have trust on numbers and statistics. The data collected and the methods of analysis are quantitative. This scientific method is named as- quantitative methods, traditional research paradigms or positivism. Traditional ways of doing research dominated the field of research in education until 1980s. After it, qualitative research in education emerged as a separate field. Basically, the approaches to qualitative research are based on case study and ethnography but now they include multiple approaches.

Researches in the discipline of education utilize the methods of behavioural sciences and social sciences. Yet some researches take the advantage of the methods of humanities, the methods which are based on the phenomenological paradigm. In this way, research methodologies can be divided in to two major paradigms:

- (i) Logical-positivism
- (ii) Phenomenological or interpretive paradigm

Logical-positivism or positivist paradigm is based on the assumptions of natural sciences. It focuses on the description of the scientific method, hypothesis testing etc. On the other

hand, phenomenological or interpretive paradigm uses a variety of interpretive research methodologies.

Positivism emphasizes on the objective measurement of social issues. It is based on the assumption that the reality consists of facts and the researcher can observe and measure reality in an objective way and the process of data collection is not influenced by the researcher. He is assumed to be value-free due to separation of facts from values. Logical-positivism adopts the epistemological approach. In this approach, a researcher formulates a hypothesis from theoretical concepts or statistical models and he, then, operationalizes and tests the hypothesis by collecting empirical data. After this, he evaluates if the evidence supports the hypothesis or rejects it. This hypothesis testing approach which is termed as experimental approach is seen as the most essential process for social science researches. A criticism is made on the assumption of objective measurement in this type of research paradigm. It is criticised that the objective measurement process separates the researcher from the researched and thus, fails to acknowledge the interactive and co-constructive nature of data collection with human beings. Here subjective perspectives of human beings are minimized. The process is in such an objective way that humaneness of the researcher is ignored.

Emergence of interpretive paradigm is a reaction to these drawbacks of positivism. The interpretive aspect means that the approach seeks to understand people's lived experience from the perspective of people themselves. It is referred as 'emic' perspective or 'inside' perspective. A qualitative researcher does not focus on facts. He seeks to understand subjective meaningful experiences and the meaning of social actions within the context in which people live.

Based on the above-mentioned paradigms, research is divided in to two broad research approaches:

- (i) Quantitative Research
- (ii) Qualitative Research

Quantitative research is based on logical positivism whereas qualitative research is based on the phenomenological paradigm. Still, there emerges another form of research i.e. mixed methods research. All three research approaches are explained below.

Quantitative, Qualitative and Mixed Methods Research

Quantitative approaches dominated the forms of research in the social sciences from the late 19th century up to the mid-20th century. The researchers started taking interest in qualitative research during the latter half of the 20th century. The mixed methods research developed along with the qualitative research.

Quantitative approach tests objective theories by examining the relationship among variables. In turn, these variables can be examined by using statistical procedures. In this type of inquiry,

theories are tested inductively. The approach is based on the measurement of quantity or amount and it is used for the phenomena that can be expressed numerically. The procedure of the research includes generation of data in quantitative form which can be subjected to rigorous quantitative analysis in a formal and rigid fashion.

Qualitative approach tries to explore and understand the meaning individuals or groups ascribe to a social or human problem. During the data collection or interview, not only scheduled questions but emergent questions are also asked. Data collection is done in the participant's setting, not in an artificial situation. Data analysis is done inductively building from particulars to general themes.

Mixed methods approach utilizes the elements of both quantitative and qualitative research approaches. In this research, both forms of data are gathered. It is assumed that the combination of quantitative and qualitative approaches provides a more complete understanding of a research problem as compared to any one of these research approaches.

Qualitative Research

Researchers link the early development of ideas related to the qualitative research to the writing of Immanuel Kant who published his "Critique of Pure Reason" in 1781. He put forward an argument that the world can be known in many ways other than the direct observation. He, further, adds that people use these ways all the time. Qualitative research has generally been associated with this belief. Another key contributor to the development of interpretivism and qualitative research tradition was Wilhelm Dilthey. During 1860s and 1870s, he emphasized the importance of understanding and studying people's 'lived experiences' which occur within a particular historical and social context. Max Weber (1864-1920) tried to build a bridge between interpretivism and positivism. From the late nineteenth century and throughout the twentieth century, qualitative methods developed and became more widely adopted. Early qualitative research often took the form of ethnographic work within sociology and anthropology. This form of qualitative research quickly developed and became famous in both America and Britain.

Later, in the middle of the twentieth century, many community studies were conducted. The development of ethnomethodology and symbolic interactionism also took place within sociology. There has been a strong tradition of oral history or the use of people's 'life stories' within historical studies. By 1970s, a debate started whether positivism or scientific method is a suitable approach to study human behaviour or whether it is possible to control variables in experimental research involving human subjects to achieve ambiguous results. These challenges encouraged the use of qualitative research to overcome the limitations of positivistic approach. The qualitative research in education emerged as a separate field during 1980 and developed after it. Within the last decade of the twentieth century, qualitative methods

were more widely accepted in Britain. Since then, there has been explosion of interest in this research method. Qualitative methods are now being used in number of fields. Traditions of qualitative research are given below along with their disciplinary origin in brackets:

- (i) Ethnography (Anthropology/ Sociology)
- (ii) Phenomenology/ Ethnomethodology (Philosophy/ Sociology)
- (iii) Conversational Analysis (Sociology/ Linguistics)
- (iv) Discourse Analysis (Sociology)
- (v) Protocol Analysis (Psychology)
- (vi) Symbolic Interactionism (Sociology/ Social Psychology)
- (vii) Grounded Theory (Sociology)
- (viii) Echogenics (Social Psychology)
- (ix) Constructivism (Sociology)
- (x) Critical Theory (Sociology)

A qualitative researcher makes the subjective assessment of attitudes, opinions and behaviour. Some of the elements of qualitative research are:

- (i) The qualitative research aims at explaining and understanding human phenomena, human interaction and human discourse. It provides an in-depth and interpreted understanding of the social world through people's experiences.
- (ii) A qualitative researcher studies every aspect of a situation or thing, hence in its entirety. It does not discover specific variable. Holistic approach is the unique characteristic of a qualitative research.
- (iii) Qualitative research is conducted in natural setting, not in artificial situation.
- (iv) Qualitative research makes depth study of a few things rather than examining many things on the surface.
- (v) The most suitable techniques for data collection are- in-depth interview, focus group discussion and observation.
- (vi) A traditional approach to research i.e. scientific method employs deductive approach, whereas qualitative research uses inductive thinking.
- (vii) Traditional research follows linear order as- research questions, literature review, data collection, data analysis and writing conclusion. But qualitative research does not follow fixed order. It is nonlinear and has multiple beginning points.

- (viii) Qualitative research has dynamic characteristic. It does not follow single way of doing things. The research has flexibility. Already set plan of conducting research can be changed during the research process.
- (ix) In traditional scientific method, data is analysed in numbers. In contrast, words describe qualitative research.
- (x) In the whole process, the researcher plays most important role. The research in such situation is a function of researcher's insight and impressions.
- (xi) Sometimes, triangulation strategy is also used to assure completeness of findings or to confirm findings. It is an approach to research which uses a combination of more than one research strategy in a single investigation.

The most important task in a qualitative research is the collection of qualitative data and making inferences. This task includes:

- (i) **Designing Research Instrument:** An 'Interview Schedule' or 'Question Guide' or 'Field Guide' is the instrument for in-depth interview or focus group discussion or observation. They are to be designed according to the objectives of the study. They are likely to be changed during the process of data collection.
- (ii) **Participant Recruitment:** This process includes two stages- defining appropriate study population and identifying strategies for recruiting participants for the study population. Through the research questions and study of research literature on the topic, a researcher will identify who can provide relevant and detailed information regarding the topic of study. In qualitative study, small number of participants are purposively chosen. Gatekeepers, formal and informal networks, snowballing and research-based recruitment are the commonly used strategies for the recruitment of participants. Gatekeepers are the persons who have good knowledge about the characteristics of community members and they have sufficient influence on the community members to encourage them to take part in a study. They may be religious leaders, local political leaders, local service providers and such others people. Networks include religious group networks, ethnic group association, professional association, recreation network etc. Snowballing is chain sampling based on the assumption- 'a chief knows a chief'. Research based recruitment can be used in studies that use multiple research methods in a single study.
- (iii) **Data Collection:** Data collection is done through interview, focus group discussion or observation technique, through one or the combination of more than one. The research instrument for conducting in-depth interviews is interview guide. It is prepared according to research questions and objectives. In focus groups, small groups are brought together to focus on a certain issue. Focus groups enable close scrutiny and

lengthy discussion. In participant observation, a researcher joins the group of the study participants and observes them.

- (iv) **Data Analysis:** As a result of data collection, a researcher has a lot of raw data in the form of transcriptions of interviews, focus group interviews and observations and data from questionnaires and other schedules. They are not findings. Findings emerge from the analysis of data and this process includes managing data and analysing the managed data. Content analysis of the textual data is done. It is not merely the reading and taking notes but the careful identification of key issues, labels and themes.

CONCLUSION

Educational research employs various methods of research for the solution of different types of educational problems and generation of theories in education. As education itself is a multidisciplinary study, it borrows the methods of researches from its four foundational disciplines i.e. sociology, psychology, philosophy and history. It not only utilizes methods of these four disciplines but also the methods of other behavioural sciences, mathematics, social sciences and humanities. According to the purpose of research, an educational researcher follows the process of both the quantitative and qualitative research approaches.

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