
UNIT 8 QUALITATIVE RESEARCH

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8.1 INTRODUCTION

As you know, events concerning education phenomena are very complex in nature. They involve mostly sociological and behavioral manifestations of human relations in specific contexts. The methods adopted to explore the meaning and processes of educational phenomena are basically qualitative in nature. Most of the information in education is in the form of verbal and other symbolic behaviour. The verbal data gathered through questionnaires, observation or interview are mostly qualitative in nature. These data provide depth and detail which emerge through direct quotation and careful description of phenomena.

Unlike scientific explanations to educational phenomena qualitative research concentrates on understanding the process of dynamic situations and intervenes with the reality in its natural setting. The procedures adopted are of humanistic nature. Of late, major attention has been paid by educational researchers to qualitative methods. Having their origin in the typical nature of inquiries in sociology, anthropology, political science and psychology, qualitative methods have been given refined shape through current literature. In this unit, you will be exposed to the nature of qualitative research, its types, context and steps involved in conducting qualitative research.

8.2 OBJECTIVES

After going through this unit, you will be able to:

- define qualitative research
- discuss needs and relevance of qualitative research in education
- explain main features of different types of qualitative inquiry viz, biography, phenomenology, grounded theory approach, ethnography and case study
- describe basic procedural details of such methods
- design qualitative research in the context of any educational problem.

8.3 DEFINITION OF QUALITATIVE RESEARCH

As you know, the emergence of qualitative methods of research is of recent origin. Social scientists, anthropologists and sociologists have given a shape to the concept of qualitative research mostly during the end of twentieth century. The procedural clarity is still in the process of refinement. Clarity of the definitions of qualitative research is as follows:

1. In the initial stage of conceptual analysis of qualitative research there was a trend of defining qualitative research as an opposite pole of scientific (quantitative) inquiry. Quantitative research deals with a few variables and many cases whereas qualitative research is carried out with a few cases and many variables.
2. The above definition focuses on the scope of qualitative methods of inquiry. However, from the point of view of methodological and process dimensions the following two definitions may clarify your understanding of qualitative research. Cresswell (1998) defined qualitative research in a similar tone. To him “qualitative research is an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex holistic picture, analyses words, reports detailed views of informants and conducts the study in a natural setting”.
3. Denzin and Lincoln (1994) say “Qualitative research is multi-method focus, involving an interpretive, naturalistic approach to its subject matter Qualitative research involves the studied use and collection of a variety of empirical materials – case study, personal experience, introspection, life story, interview, observational, historical, interactional and visual texts-that describe routine and problematic and meaning in individuals’ lives”.

You may trace at least four clear meanings from the above definitions.

One, qualitative research focuses on the study of complex human and social problems in totality, unlike scientific method of concentrating on study of fragmented variables or situations or events.

Two, qualitative research places the main emphasis on the researcher who narrates and interprets phenomena in terms of meanings derived from people’s experiences, events etc. Hence, human and subjective approach is highlighted.

Three, the studies are conducted in a natural setting i.e., to observe the events without making any manipulations or controls on variables studied.

Four, it involves a variety of data gathering techniques and approaches of qualitative nature viz., case study, interviews, dialogues, observations, personal experience, life story, visual data like photography etc. These data are gathered from varieties of sources.

8.4 CHARACTERISTICS OF QUALITATIVE RESEARCH

The following are the characteristics of qualitative research:

i) Multiple realities

First, qualitative research assumes that there exist multiple realities in social and educational situations. These realities exist in concrete forms. They are perceived by people differently and thus become different mental constructs for different people. In other words, realities are taken to be what people perceive them to be at a particular point of time. Since social and educational situations keep on changing from time to time, the realities too keep on changing. Furthermore, since the realities are context specific, they cannot be tangible in a generalized form.

ii) Meanings and interpretations

Qualitative research emphasises on study of meanings given to or interpretations made about objects, events and processes concerning educational situations. To them changes in terms of social and behavioral phenomena cannot be identified with the concept of physical movements which can be identified by external observation alone. Rather the understanding of human behaviour or a social phenomenon involves understanding of how men are, what they are doing or participating in an activity.

iii) Generation of knowledge

Qualitative inquiry insists on generation of knowledge resulting from the interaction between the inquirer and the respondents. The respondents answer the questions put by the inquirer in terms of their perception or meanings they attach to their actions. Moreover, interactions take place between the inquirer and his/her respondents to achieve maximum levels of responsiveness and insights concerning the problem under investigation.

iv) Generalization

As stated above, the researchers do not believe in the process of generalisation as propounded by scientists. They argue that in the process of making a generalisation a lot of meaningful information existing in individual units is undermined; hence generalized knowledge does not represent real knowledge. For them, the process of knowledge generation must take into account the differences or real evidences existing in different specific situations.

v) Human relations

In the case of human relations, several intrinsic factors, events and processes keep on influencing each other constantly. Therefore, it is not possible to identify one to one cause and effect relationships at this level of naturalistic studies. The causality in social sciences cannot be demonstrated in the 'hard' sense as it is done in the case of physical sciences. Rather, only patterns of plausible influences can be inferred from social and behavioural studies.

vi) Value systems

Qualitative Researchers do not believe in value-free inquiry. The influence of value systems is recognized in the identification of problems, selection of samples, use of tools, data collection, the conditions in which data are gathered, and the possible interaction that takes place between the inquirer and the respondents.

8.5 REASONS FOR CONDUCTING QUALITATIVE RESEARCH

As a research student you may be curious to explore in what circumstances one opts for qualitative methods of inquiry in comparison to quantitative methods of inquiry. Some of the situations which prompt a researcher to opt for the qualitative method are:

- i) As you know, there are different kinds of research questions about the phenomena under investigation, such as What happens? How does it take place and Why did it take place? or What are the causes of certain effects? The first two types of questions involving What (The present context and status) and How (the process) are dealt with very well through qualitative methods. Unlike quantitative inquiry, where you may intend to explain causal relationships (Why question) through comparison of groups or to establish associations between different variables, the qualitative method focuses on exploring the intricacies involved in process dimensions of an event in totality. For example, if you are interested in understanding the curricular practices of best quality universities, the qualitative method will suit you best.
- ii) Qualitative method is also preferred in the context of initial level of theoretical research. In social sciences, particularly in education, theories are not available to explain many completed events. The variables concerning the events are not easily identifiable. In such cases the qualitative method is used to identify significant variables associated with the event. For instance, formal education practices taking place in a tribal setup vis-à-vis human and social development need to be tackled through qualitative method since different variables involved in the situation need to be explored. Identification of different variables and trends lead towards refinement and theoretical explanation.
- iii) There are certain research problems which need holistic treatment. In other words, many variables need to be studied in depth in the context of one case or unit. For instance, designing a grass root level plan for educational development of a village would require application of a qualitative method of inquiry where multifaceted data need to be gathered through various sources for intervention and development which treat the uniqueness of the concerned village.
- iv) Unlike experimental studies where a researcher intends to explain a cause and effect relationship in a controlled laboratory setting, the qualitative method is preferred to conduct the study without disturbing neutrality in setting. For instance, curricular practices of best quality schools need to be explored in natural settings through adopting qualitative methods like participant observations, visual documents, verification of project works, interviewing students, teachers and parents, etc.
- v) One of the major limitations of quantitative inquiry is associated with the study of limited variables. Moreover, those variables need to be amenable to measurement. However, if your research problem is of such type where variable are not easily amenable to measurement and extensive data situations, you will have to opt for qualitative inquiry.
- vi) The nature of certain problems is such that your role as a researcher plays a vital subjective role than objective and impersonal role. For instance, in the process of exploring meaning of certain behavioural exposures with its motives your role is to be valued with a lot of significance since you will have to describe the event from the participant's point of view. Moreover, in such a process you can explore the reality, being a part of it as well as interacting with situations. You will have to depict the situations as an active learner and not by passing judgment as an expert. Such kind of studies demand application of qualitative methods in comparison to quantitative methods.

Check Your Progress

Notes: a) Space is given below for writing your answers.

b) Compare your answers with those given at the end of the unit.

1. Differentiate between quantitative studies and qualitative studies.

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2. What are the basic factors of qualitative studies ?

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3. Why should you choose the qualitative method in educational research?

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8.6 TYPES OF QUALITATIVE METHODS

Many varieties of traditions of qualitative studies exist in social sciences. They have been categorized by Creswell (1998) in the context of their forms, terminologies and focus as under:

- Biographical study
- Phenomenological study
- Grounded Theory study
- Ethnography
- Case study

8.6.1 Biographical Study

Main features

Biographical study is the study of an individual and his or her experiences as narrated to the researcher or found in different sources. You can come across biographical writings in different fields like literature, history, anthropology, sociology, education, psychology etc. Biographies are presented with different perspectives like literary, historical, anthropological, sociological, educational, psychological as well as of interdisciplinary nature. The focus of biography remains on telling and inscribing the stories of others. It explores history of life e.g. accounts of major achievements of life.

There are different connotations linked with biographical study viz., individual biographies, autobiography, life history, oral history. In all these cases the researchers must take care of objectivity in expression with little research interpretation. It must be written in a scholarly way with a strong historical background of the subject and chronological organisation. The account must be presented artistically from the perspective of presenting details in a lively and interesting manner.

Steps of Biographical Studies

Different steps involved in writing biography are:

- (i) The first step is to identify the experiences in an individual's life to be arranged chronologically in different stages of life.
- (ii) The researcher gathers concrete contextual materials through interviews. He gathers stories.
- (iii) The stories are organized around different themes. The themes indicate major events of individual's life.
- (iv) The researcher explores the meaning of these stories.
- (v) He also looks for larger structures to explain cultural issues etc.

8.6.2 Phenomenological Study

Main features

Phenomenological study's focus remains on describing the meaning of live experiences for several individuals about a concept or the phenomenon. It is said that through phenomenological approach the researcher explores the structures of consciousness in human experiences. Here experiences contain both the outward appearance and inward consciousness based on memory image and meaning.

Steps of Phenomenological Studies

The procedural details of phenomenological studies are listed as under:

- i) At first the researcher must recognize his or her own pre-conceived ideas about the phenomena to understand it through the voices of several experienced persons.
- ii) Second, he writes research questions that explore the meaning of that experience for individuals.
- iii) Third, the researcher collects data from individuals who have experienced the phenomenon under investigation. Usually the data are gathered through long interviews of 5 to 25 experienced persons.
- iv) Data are analysed in the form of statements and units. Then the units are transformed into clusters of meanings. Finally such analysis is linked with general description of experiences incorporating what was experienced and how it was experienced.

8.6.3 Grounded Theory Study

Main features

This kind of study aims at discovering or generating a theory. Here theory means an abstract analytical scheme of phenomenon. In other words, a theory is understood as a plausible relationship, as any concept or sets of concepts. In this case, theory is discovered in the context of a particular situation. This situation is one in which individuals interact, take actions, or engage in a process in response to a phenomenon. The researcher intends to explore how people act and react to a phenomenon. The process involved in data collection can be through continuous visits to the field, interviews with participants, in-depth observations of activities etc. The researcher develops and interrelates categories of information and writes theoretical propositions or hypotheses.

Through the grounded theory method, a theory is generated in the context of a phenomenon being studied. Hence, the researcher goes beyond one step ahead of understanding the complexities of processes involved in a situation. He tries to help others to comprehend such complexities with the help of a theoretical framework developed by him. Such a theory is evolved towards the end of the study. As stated

above, the theoretical framework may be depicted in the form of a narrative statement, a series of hypotheses or propositions or in the form of a visual picture.

For example, the researcher studies the complexities involved in the teaching learning processes where the sole responsibilities of such processes are shared by learners under the guidance of a teacher. The researcher would like to build a theory in this context through application of the grounded theory method, and shares different steps involved in this method.

Steps of Grounded Theory Study

- i) In the context of a particular situation, the researcher makes several visits to the field, makes in-depth observations and conducts interviews. The data collection process continues till the researcher comprehends the totality in a situation. However, the major focus remains on in-depth interviews.
- ii) With the help of data available, the researcher makes categories of information. A unit of information composed of events, happenings, and instances is presented in the form of one category.
- iii) Often it happens that during the data collection process the researcher analyses the data and gradually categories are formed on specific instances or happenings. Hence the data collection process and data analysis are integrated on many occasions.
- iv) After data analysis, the researcher may like to be back to the field to gather more information, analyse the data and so forth. Hence, this zigzag process continues till a saturated state is identified for arriving at a theoretical framework.
- v) Towards the end of the study, the researcher presents an elaborate theoretical framework to understand the complexity of an event.

8.6.4 Ethnography

Main features

Ethnography can be understood as a description and interpretation of a cultural or social group or system. Here the focus of the study remains on examining the patterns of behaviour of a group, its customs and ways of life. This method involves prolonged observation of events where the researcher becomes a part and parcel of the day-to-day lives of the people. One to one interviews with the members of group corroborated with participant observation can form the base of such a method. The researcher makes use of ethnography to study the meanings of behaviour, language and interactions of the culture sharing group. For instance, educational processes of particular tribe or a rural village can be studied applying ethnography where cultural and behavioural interactions involved in education processes can be studied in totality. As an outcome, the researcher comes out with a report almost in a book form.

8.6.5 Case Study

Main features

Case study as a method of research focuses on indepth study of a unit or case in totality. The case may be an individual, programme, an event, an institution, an activity, etc. The case study method was originally used in medicine to examine the patient's previous development, his health and physical state from the beginning and many other factors in the past, besides making a careful study of the patient's present condition and symptoms. Freud used the case study method to assist his subjects in solving their personality problems. The published detailed accounts of his interviews with patients and his interpretations of their thoughts, dreams and actions provide excellent examples of case studies. The investigation of a case is of exploratory nature. It involves detailed, in-depth data collection employing multiple sources of information concerning all pertinent aspects of a case. It is also interpreted that a case may be a unique and

bounded system. This means the case under investigation is bound by time and place. The uniqueness of a case refers to the typical characteristics of a case, such as a quality institution or an ashram school, a particular programme or course of study, or university or an innovation etc. The researcher tries to explore in detail about what events occur, and how they occur. Multiple sources include observations, interviews, audio-visual materials, documents, records, etc. A case is to be studied in a given context, i.e., study of a case is conducted within its setting. The setting may be a physical setting, social, historical or economic setting, etc. As a whole, the case study helps a researcher to understand the complexities of an event or events with contextuality and develops insight about with the nature and process dimensions of the events studied. In the Indian context, such a method has been used in the case of doctoral and research projects like:

1. "A study of distance education in an Indian university". This study's focus is an identification and description of different underlying factors. Contributing towards success of distance education programme of all university as a whole.
2. "A case study of management processes of National Adult Education Programme in Orissa". This study aims at description of the management processes interlinked with national level, state level, district level, project level and village level adult education programmes in terms of the different dimensions of management like policy making, planning, communication, staffing, direction, co-ordination, budgeting and evaluation.

Besides these kind of case studies we have come across some other studies like 'A case study of school products in Delhi', 'A study of school involvement in a village of Nagaland', 'Case studies of innovative institutions at secondary level in Tamil Nadu', 'Management of Medical Colleges – A case study'. From the above you can see that the case study method in educational research may focus either on the study of an educational programme or on a set of processes of an institution, in the context of development of learning skills, language competencies, reading comprehension of students. Guidance counsellors or social workers conduct case studies for diagnosing a particular condition or problem and recommending therapeutic measures. They gather data from a particular individual and confine their interest to the individual as a unique personality.

Steps of Case Study

Case study is conducted by adopting the following steps:

- i) First, the researcher identifies the uniqueness of the case to be studied or a number of cases to be studied. Whether a normal case is to be studied or an unusual and typical case is to be studied is decided at this stage.
- ii) Keeping in view different contexts and perspectives of the problem, the researcher delimits what is to be studied within the scope of investigation.
- iii) Once the dimensions of a unit are identified for investigation, the researcher locates different mechanisms of gathering different varieties of evidences from different sources. After identification of the case and content, the present status of the case is determined through direct observation or record. Here the researcher goes far beyond casual observation or superficial description. For example, to make a case study of a delinquent child, the first thing the researcher has to do is to survey the present status of the child by making an assessment of his physique, cognitive and non-cognitive factors. The mechanisms to be chosen may be observation, interviews, document surveys, audiovisual recordings, projective and non-projective tests, etc. The observation can be participant in nature as employed in ethnography. It can be direct observations. Data may be gathered through various sources like gathering evidences from participants, functionaries and stake holders of a programme, institutional records and documents, observation of events taking place etc.

- iv) Data gathered through multiple sources are subject to qualitative analysis. It can be a holistic analysis of the entire case or analysis of a specific aspect of a case.
- v) Data analysis involves descriptive procedures. The themes or issues are identified. Interpretations are made about the case in its given contexts. It also involves narration of events chronologically and giving an account of events in totality. The detailed perspectives of significant events concerning a case are highlighted through such narrations.
- vi) In case of study of number of cases the analysis is done in two phases. First is analysis of data concerning the themes of each case separately i.e., within-case analysis which follows the first is doing a thematic analysis across the case. This is called cross-case analysis.
- vii) In the final step the researcher reports about the experiences and findings of the case.

For example, in a study first the researcher gathers evidence through participant observations and interviews. He notices certain trends and puts them into different cluster themes. Then he tries to place these themes in different groups and makes more abstract categories at the last stage of inquiry. Hence with the help of an inductive approach the researcher's initial level ideas and questions are refined in due course of investigation.

A summative view of different qualitative methods

Different research methods have their uniqueness with regard to the focus of studies. As stated above, **Biography** is used to explore the life of an individual where as **Phenomenological Inquiry** is used to understand the essence of experiences of persons about a phenomena. **Grounded theory** approach is adopted to develop a theory grounded in data from the field. **Ethnography** aims at describing and interpreting a cultural and social group. **Case study** is used to develop an in-depth analysis of a single case or multiple cases. However, all these methods adopt qualitative techniques of data collection such as interviews, observation, study of documents, relevant records, etc and incorporate descriptive and narrative approaches of data analysis.

Check Your Progress

Notes: a) Space is given below for writing your answers.

b) Compare your answers with those given at the end of the unit.

4. Give one example of each of the following:

- i) Biography
- ii) Phenomenological study
- iii) Ethnography
- iv) Case study
- v) Grounded theory approach

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5. What are the common points of different kinds of qualitative studies?

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8.7 CONTEXT OF QUALITATIVE METHODS

All the kinds of qualitative methods have a common framework of ontological, epistemological, axiological, rhetorical and methodological perspectives.

- i) From the point of view of assumptions regarding nature of reality, the qualitative inquiry values subjective and multiple social realities. It presumes that reality cannot not have existence being separated from the perceiver / researcher. Rather, reality is constructed by individuals involved in research situations. Unlike assumptions of single reality as emphasized by scientific inquiry the concept of multiple realities is emphasized in the qualitative paradigm of the researcher. Through qualitative inquiry, multiple realities are narrated by representing diverse perspectives on the phenomenon. Hence diversified constructed realities are the focus of qualitative model of inquiry.
- ii) In qualitative methods the role of researcher is visualized as inseparable from the problem under study. The qualitative researcher interacts with the situation he/she studies. The researcher becomes a part and parcel of situations studied. He almost tries to find the meaning by being very close to the reality. Hence the gap between observer and observed is minimised. He shifts his status from objective and external observer to insider.
- iii) From an axiological point of view, qualitative research emphasizes on value loaded inquiry. Since the researcher is the sole instrument of investigation it is natural that his values and biases influence the process of inquiry. Hence, field studies conducted by qualitative researchers reflect their values and biases in presentation of data and interpretation.
- iv) The language of qualitative research is artistic and literary in nature. Unlike scientific reporting where an impersonal third person presentation is emphasized, the qualitative studies are reported in informal style using the personal voice. Qualitative terms are presented in narrative form rather than presenting a definition along with its explanations instead of using the terms like internal validity, external validity, generalizability, the qualitative terms like credibility, transferability, dependability and conformability are used in reporting of the studies.
- v) The qualitative research paradigm emphasizes an inductive logical approach. The researcher studies a given situation. He identifies categories from data gathered through interaction with the situation rather than confirming predecided categories through gathering evidences.

8.8 COMMON STEPS OF CONDUCTING QUALITATIVE STUDIES

The steps in conducting qualitative studies are i) identifying problems and research questions ii) designing sources of data, sample and data gathering techniques iii) conducting field study or collecting data and iv) data analysis and reporting.

i) Identifying Problems and Research Questions

At the first stage the researcher identifies a problem to be investigated. It emerges from a thorough analysis and review of literature and the experiences of the researcher and experts on several issues and problems. The major process of research, at this stage, is identified with building the central question of the study and subsequently linking it with a number of sub-questions.

While identifying a central question the researcher puts in open-ended and non-directional queries. The queries focus on the “What” and “How” aspects of the phenomena under investigation. The exploratory questions highlighting the “process” aspects or “meaning” aspects are considered as the main theme of the investigation.

Following the central question, a small number of sub-questions are identified at the first stage of research. There can be a number sub-questions, keeping in view the scope and focus of the study.

For instance, in the context of a phenomenological study of understanding professional ethics of teachers, the researcher may ask sub-questions like:

1. What does professional ethics mean to an experienced teacher?
2. What do the teachers do to upgrade professional ethics?
3. Describe one person with high professional ethics.

These kind of questions become the guiding force for the next steps of research.

ii) Design of the study

At this stage the researcher develops an open sketch of sampling, tools and techniques to be adopted, sources of data etc.

Unlike a scientific investigation where the design is built prior to conduct of the study, the qualitative researcher develops an open and flexible approach. At this stage of inquiry, the following considerations are kept in mind by the researcher.

a) Sampling

Purposive sampling techniques are used for identification of informants' responses of the study. For instance, in the case of a phenomenological study the researcher identifies all participants who experience the phenomena being studied. Moreover, the researcher examines the individuals who can contribute significantly to develop a theory in the context of a grounded theory. In the case of a case study, the researcher likes to gather evidence from diverse situations which display multiple facets of the case. Hence, he picks up a heterogeneous group of respondents who are stake holders of the system. As a whole, it can be said that keeping in view the nature of questions involved in the study, the researcher identifies the appropriate sample. The sample size may vary from problem to problem.

b) Forms of data

The researcher must be clear about what kinds of data are to be gathered for investigation. Mainly, they can be categorized under the following four heads:

1. evidences about the surroundings, situations, activities, events and performances, etc. through observations;
2. evidences or experiences as explored through interviews;
3. evidences on developments; performances, demography, rate of participating, nature of progress recorded or noticed in various kinds of documents, publications, write ups etc; and
4. physical trace of evidence, behavioural dynamics, expression, feelings, emotional outbursts, etc. to be trapped by audio-visual data gathering devices.

The investigator must keep an open mind while employing various data gathering devices keeping in view the nature of data that emerge during the data collection process /field work.

iii) Data collection process

As stated earlier, mainly four kinds of data gathering devices are adopted by qualitative researchers viz., observation, interviews, document analysis and audio-visual gadgets. The researcher must be competent enough to deal with these different qualitative techniques of data collection.

a) Interviewing

The researcher adopts informal interviews keeping in view the sub-questions related to the issues and themes involved in the study. Identifying sample respondents to be interviewed purposefully is the first step. Whether a researcher goes for one-on-one interview or focus group interview is to be kept in mind. For smoothening the process of the interview, the researcher may make use of an interview protocol / format with open-ended questions and ample space between the questions to write responses of the interviewers comments. The researcher may opt for using audio cassette recorders or a telephonic device for interviews.

b) Observing

The qualitative method mainly makes use of participant observation technique where the researcher gets an opportunity to witness the events being a complete insider. While ethnography insists on this kind of observation, in the case of study the researcher may opt for direct observation. In employing the observation technique the researcher must be careful about identifying the site to be observed, identifying who or what to observe and how long, the observation protocol to be used, the role of the observer i.e., participant or outsider are to be thought about during the data collection stage.

Moreover, the recording of observations i.e., portraits of the informant, physical setting, particular events and activities, researcher's reactions must be kept in mind while adopting observation techniques.

c) Documentation

While adopting this technique the researcher must examine which materials are relevant to the study. He will also have to explore the means of how to trap evidences or having accessibility to relevant documents. As in case of historical studies, the researcher will have to be careful about authenticity of documents and the validity of information presentable therein.

d) Visual devices

As a field worker the qualitative researcher must be acquainted with using various kinds of audio-visual recording practices. While using them he must be careful about the sensitivity of situations, ethical aspects, uniformity, etc.

All these devices are used to gather evidences in natural setting with a view to studying the emerging total picture of the situation.

iv) Analysis of data and reporting

Data collection and data analysis go on side by side in qualitative studies. Different techniques of data analysis include:

- a) Review of data and representing data by case, by subject and by themes in the form of description, diagrams, tables and graphs.
- b) Initial codification and categorization and further minimizing categories.
- c) Frequent appearance of codes, development of categories, development of analytical frame work for theorization.

a) In this approach the researcher makes a thorough review of information as noted in the observation formats or interview schedules, notes, etc. He points out key points and writes reflective notes on the basis of an initial review. Sometimes it motivates the researcher to verify certain points by making further interaction with the informants. The researcher translates the ideas of informants into metaphors.

Furthermore, the researcher presents descriptions in the form of tables, graphs, pictures, figures, diagrams, etc. He represents the case by themes or by specific subject areas.

- b) The process of codification or categorization involves developing a short list of tentative codes that match a text segment. Elaborate lists of codes are arrived at in the initial stage. Then categorization of facts and themes takes place by identification of common codes. Furthermore, the categories are reduced to identify major themes and present them in narrative forms.
- c) Another data analysis technique indicates preliminary counts of data and determines how frequently each code appears in the total data. Then the researcher identifies categories and develop analytical frameworks with a view to generating theories. In the whole data analysis procedure, a spiral approach is followed to identify categories, reflecting, cross-questions, reading, interpreting etc.

Check Your Progress

Notes: a) Space is given below for writing your answers.

b) Compare your answers with those given at the end of the unit.

6. How does a researcher identify research questions?

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7. What are the different sources of data used in qualitative studies?

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8. How is participant observation different from general observation?

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9. What are the different data analysis techniques used in qualitative studies?

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8.9 VERIFICATION OF TRUSTWORTHINESS OF QUALITATIVE RESEARCH

Unlike standard procedures followed in establishing the objectivity and validity of quantitative research, you will come across many qualitative approaches to verify the trustworthiness of qualitative research. Generally, the following verification procedures are employed for studying trust worthiness of such kind of studies :

- i) **Prolonged engagement and persistent observation:** Researcher’s prolonged interaction with informants and participatory observation wins the confidence of the informants. Hence, this procedure minimizes the possibility of vagueness of data, prolonged engagement in the field helps the researcher to reflect on the genuineness and authenticity of data, on gathering relevant data and on making purposeful use of evidences.
- ii) **Rural explanations:** Once the researcher (after qualitative analysis) has described the patterns and their explanations, it is important to look for rival or competing themes and explanations both inductively and logically. Inductively, it implies looking for other ways of organizing the data that might lead to different results. Logically, it involves searching for other logical possibilities and then finding if those possibilities can be supported by the data. However, while

considering rival hypotheses and competing explanations, the strategy to be employed by the researcher is not attempting to disprove alternatives, but to look for data that support alternative explanations. In this strategy, the researcher should give due weightage to supporting evidence look for the best 'fit' between data and analysis.

- iii) **Triangulation:** It is another significant technique of verification where the researcher makes use of multiple and different sources, methods and theories in order to provide corroborating evidence. In other words, through triangulation, evidences are corroborated from different sources to throw light on a theme or perspective. It involves comparing and cross checking consistency of data derived by different means at different times using qualitative methods. It means (i) comparing observational data with interview data; (ii) comparing observational data with questionnaire data; (iii) what participants of a programme say in public with what they say in private; (iv) checking for consistency the opinion of the participants about a programme over a period of time and (v) comparing the opinion of the participants of a programme with others who are associated with programme in one capacity or the other. The triangulation of data sources within qualitative methods will seldom lead to a singly totally consistent picture. But such triangulation is helpful to study and understand when and why there are differences.
- iv) **Peer view or debriefing:** The methodology followed in the study with emphasis on subjective approach gets cross-examined by the peer researchers. The peers review the study, present their views in debriefing sessions. Such an operation helps the researcher introspect on the study in the context of peers reflection on the procedural dimensions and reporting.
- v) **Design checks:** The nature of research design and methodology also contribute to distortion in results. Sampling gives rise to three type of errors. The errors may be due to : (i) distortion in situations that were sampled for observation; (ii) distortion introduced by the time periods during which observations took place; (iii) distortion because of selectivity in the people who were sampled either for observation or interviews. Thus the researcher must be careful to limit results of his study to those situations, time periods, people and contents for which data are applicable.
- vi) **Negative case analysis:** Unlike quantitative study where the hypothesis is set prior to conduct of the study the, qualitative researcher keeps on refining the working hypotheses in due course of conducting the study. Hence context specificity is kept in mind for refining the initial hypotheses till the completion of the data collection process and its analysis. The search for negative cases and instances that do not fit within the identified pattern and their understanding is also competent in the verification and validation of results.
- vii) **Clarifying researcher's bias:** It is presumed that the researcher himself recognizes his bias and subjectivity. Hence in view of making it transparent the researcher comments on past experiences, prejudices, and orientations that influenced the interpretation and approach to study.
- viii) **Member checks:** Through this technique the entire study's report with its prime data base, analysis and interpretations is presented before the participant respondents who can judge the accuracy and credibility of the account. They are asked to provide critical observations on the research work.
- ix) **Rich and thick descriptive presentation:** The researcher describes in detail the participants or setting under study. Hence, the readers get a clear picture of the setting. They get chance to examine the findings that can be applicable or transferred to other similar settings.

- x) **External audits:** Through this process the expert consultant who is purely external and independent to the study examines both the process and the product of the account, thus assessing its accuracy.

The above indicators are employed to examine the authenticity and credibility of qualitative studies through involvement of human experiences in the process. What is more significant is that the researcher must maintain transparency throughout the study so that the scope of verifying its trustworthiness becomes wider and accessible.

8.10 LET US SUM UP

In the foregoing sections, you were shown that main features of qualitative studies are needed mainly with the purpose of understanding process dynamics of a phenomenon in contextual frameworks. Such understanding may lead towards theorizations. Different kinds of qualitative methods are used in different context, such as biographies, ethnography, grounded theory, phenomenology and case study. However, these methods follow common approaches like interviews, observation, study of documents and narrative techniques of data analysis. These methods adopt subjective human and participant experience-based techniques in contrast to that of generic methods of inquiry. However, as a researcher, you will have to be mature enough to adopt various checks and balances for trustworthiness of findings of such studies.

8.11 UNIT-END ACTIVITIES

1. Identify and state different problems / topics in the area of education belonging to each of the categories of qualitative researcher:
 - a) Biography
 - b) Ethnography
 - c) Phenomenology
 - d) Grounded theory
 - e) Case study
2. Chalk out the strategy for conducting any of these studies.
3. Differentiate between the strategies adopted in conducting qualitative studies and those in quantitative studies.

8.12 POINTS FOR DISCUSSION

1. What is the relevance of qualitative research in education?
2. What are the limitations of qualitative research?
3. How can we judge trustworthiness of qualitative research?
4. What should be the role of a researcher in conducting qualitative research?
5. Can we integrate qualitative studies with quantitative studies? Discuss.

8.13 SUGGESTED READINGS

- Best John W. (1992): *Research in Education*. 8th Indian Reprint, New Delhi: Prentice-Hall India.
- Borg, W. R. and Gall, M.D. (1986): *Educational Research: An Introduction*. Fourth Edition, New York: Longman.
- Creswell, John W. (1998): *Qualitative Inquiry and Research Design*. New Delhi: Sage.

- Denzin, N.K. and Lincoln, Y.S. (eds.) (1994): *Handbook of Qualitative Research*. California: Sage Publications Inc.
- Dorr-Bremme, D.W. (1985): "Naturalistic Evaluation", in Torsten Hussain and T.N. Postlewaite (ed.): *The International Encyclopedia of Education*. Oxford: Pergamon Press.
- Erickson, F. (1986): "Qualitative Methods of Research on Testing" in Merlin C. Withock (ed.), *Handbook of Research on Teaching*. 3rd Edition, London: Collier MacMillan.
- Galtung, John (1970): *Theory and Methods of Social Research*. London: George Allen Unwin Ltd.
- Guba, E.G. and Lincoln, Y.S. (1987): "Naturalistic Inquiry", in Michael J. Dunkin (ed.), *The International Encyclopedia of Teaching and Teacher Education*. Oxford: Pergamon Press.
- Koul, Lokesh (1997): *Methodology of Educational Research*. New Delhi: Vikas Publishing House Pvt. Ltd., pp. 187-206.
- Patton, Michael Quinn (1982): *Qualitative Evaluation Methods*. London: Sage Publications.

8.14 ANSWERS TO CHECK YOUR PROGRESS

1. Quantitative studies are mainly of explanatory nature focusing on the 'why' components. Qualitative studies focus on 'how' and 'what' components with a view to understanding in process dynamics in specific situations.
2. Natural setting, researchers involvement, visual and verbal images, process dynamics, inductive logic and participant perspectives.
3. To study complex human and social problems in totality, to observe the phenomena without making any manipulations or controls on variable, to study and explore the nature of subjective quality.
4.
 - (i) The contribution of an innovative teacher.
 - (ii) Existing curriculum transaction in a school.
 - (iii) Parents involvement in school management.
 - (iv) Study of an ashram school.
 - (v) Professionalism in teaching.
5. Using qualitative data collection techniques like interviews, observation, document analysis, photographic techniques, and descriptive and narrative approaches of data analysis.
6. Experiencing first-hand exposures, study of literature, identify central question and link sub-questions to the theme.
7. Empirical evidences as revealed through interviews and observations, demography, documents, physical trace of evidences, visual and verbal images.
8. A participant observer plays the role of being part and parcel of locality. General observer is alien to the reality.
9. Reviews, descriptions, codification, categorizations.