CHAPTER- IV

METHODOLOGY

4.1.0 Introduction:

Methodology of the study is the blueprint of the research activity. Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. Research Methodology describes the various steps of the plan adopted by the researcher to solve the research problem. It depicts a true picture of the manner in which the problems are formulated, the definition of the terms, the choice of subjects for investigation, the validation of data gathering tools, the collection, analysis and interpretation of data, and the process of inferences and generalizations.

According to Good, ***Barr and Scates (1941 p.207)*** methods of research may be classified from many points of view, such as the field to which applied, the place where it is conducted, nature of the data collected etc. Historical research, descriptive research and experimental research are the main three categories of research. Historical method of research is one which provides a method of investigation to discover, describe and interpret what existed in the past. Historical research aims to apply the method of reflective thinking to social and economic problems still

unsolved by means of discovery of past trends and events; facts and attitudes. According to Redcliffe Browne ,'Historical method may be defined as a system in which present day events are studied with reference to the events that took place in the past.' That means historical method seeks to find explanation of questions of current interest by an intensive study of the past where past always contains the elements of the present and past, present and future are all well interlinked.

History is a meaningful record of human achievement. It is not merely a list of chronological events but a truthful integrated account of the relationships between persons, events, times, and places. Education too, has a history of its own which has progressed under the influence of such forces. Thus, in the field of education also history is used to understand the past and to try to understand the present in the light of past events and developments. Historical research is useful both for theoretical and practical purposes and has made important contribution to various branches of nature as well as social sciences. Historical research attempts to establish facts so as to arrive at conclusions concerning past events. This is usually accompanied by an interpretation of these events and their relevance to present circumstances and what might happen in the future. Hence, the main purpose of the historical research is to arrive at an

accurate account of the past so as to gain a clearer perspective of the present as well as to partially predict and control our future existence.

In the field of education historical research plays a vital role. To know the perspective of education in present as well as in future, it is necessary to know and understand educational achievements and trends of the past. One of the major functions of education is to maintain the cultural heritage and historical research is the best means of being well acquainted with past culture. Historical research helps understand the dynamics of educational system. To know the ever going changes occurring in the field of education one has to pay due attention to historical research as the main concern of it is with the 'past' or 'what was'. Historical research also helps find out the deep rooted causes of present day education system. It brings educational reforms in the light of the past. The purpose of historical research is to arrive at an accurate account of the past. It studies important information related to the effects of certain past educational practices and may suggest programmes for future action covering the past experiences. Historical research tells about the scientific study of education and removes the educational prejudices and misconception. It also provides professional training and equipments to the teachers as well as educational administrators and enlightens the functions and the roles of social institutions from time to time.

Historical research mainly covers the three different approaches**: (a)** Historical approach which refers to the origin of historical facts in support of the new concepts to be developed. **(b)** It includes biographies of great man, monographs of places and ideas, thoughts and trends. **(c)** Historical techniques which refers research that is conducted on the basis of historical records and documents. Historical methods of research also covers the subdivisions like historical, legal, documentary, bibliographical, biographical, ideational, institutional and organizational. In historical research, first of all the researcher has to select a problem related to the history of individual, institutions, law, curriculum, text books, important thoughts and concepts that have influenced the field of education during a specific period of time. In historical research, the researcher formulates hypothesis in explaining events, conditions or phenomena of the historical period. The hypothesis may not be formal to be tested; rather they are written to explain the statement tentatively on any event or conditions. After this the researcher has to collect relevant data available for the research project. In historical research data could be collected from both primary and secondary sources. Generally data are collected from primary sources like events, tools, pictures, paintings, furniture, buildings, official records, autobiography, diaries etc. And the secondary sources are the accounts of an events provided by a person who is directly or indirectly contacted with the past events.

Thus, the historical research provides very useful information that goes a long way towards the solution of the problems. There are some problems in the field of education also which can only be investigated by historic al method as the researcher is compelled to fall back upon past data since he cannot create these afresh. Again, historical data is not repeatable under any circumstances and as a result it is an advantage of historical research that it offers the past data under the then prevailing conditions and affords an opportunity to the researcher to view these observations in the past setting.

4.2.0 Exploration of Documents:

Historical research can be qualitative or quantitative or may be the combination of both. The determinants of the types are the issue addressed and the data. For example, research on the relative school performance during the depression as compared to the years just before it should probably include a quantitative analysis and on the other hand, Whitehead's (1996) description of the life and work of the Reverend Bartholomew Booth from 1760 to 1785 is appropriately qualitative. Qualitative research is a process where the researcher observes a phenomena time again and collects relevant data in order to draw conclusions. It opens the path of promoting progress through advanced knowledge. Qualitative research enables man to keep affinity with

immediate surroundings. Thus, qualitative research is connected with qualitative phenomena, i.e. phenomena relating to or involving quality or kind. These types of research aim at discovering the underlying motives and desires, using in-depth interviews for the purpose. Various techniques involved in qualitative research are word association tests, sentence completion tests, story completion tests and similar projective techniques. It is especially important in the behavioral science where the aim is to discover the underlying motives of human behavior. Thus, through these types of research various factors which motivate people to behave in a particular manner or which make people like or dislike a particular thing can be analyzed. In 1990 Strauss and Corbin defined qualitative research as, "any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification''. Thus, qualitative research is particularly helpful in identifying the scope of research that should be pursued to fully understand the views, opinions and attitudes that may be encountered.

The interpretation of qualitative research is unique and inductive in nature and observes real life situation. It is based on phonological in inquires. Qualitative research is generally concerned with smallest number of cases and focuses on specific situation, institution, community and group. These types of research have a holistic approach to understand

phenomena. In qualitative research, the data are usually gathered using less structured research instrument. The findings of qualitative research are more in-depth since they make greater use of open-ended questions. As the results are based on smaller sample sizes so very often do not represent the population. The analysis of results is much more subjective.

The aim of qualitative research is to understand meaning in broad terms, attitudes, prejudices and organizational climate. It also aims at understanding the context related to behavior, expression of thought and selection of problem. The qualitative research aims at studying inter-relationship among different factors responsible for phenomena or behavior. There are various types of techniques of qualitative research, such as (i) Experience survey, (ii) Case study, (iii) Pilot study.

The experience survey is one where the researcher may ask question to gain a greater insight into a particular problem to any knowledgeable person who is supposed to be able to shed light on the question both within the organization and outside. This is usually done through an informal, free-flowing conversation. This type of survey is only meant to help formulate the problem and clarify concepts, not develop conclusive evidence.

The case study is a comprehensive description and analysis of one or a few situations that are similar to the one being studied, the emphasis is on

an entire organization with great attention paid to detail in order to understand and document the relationships among circumstances, events, processes and decisions made. The case study method as a social research method was first introduced by Frederic Le Play. It is a form of qualitative descriptive research and derives valuable data from participant observations, non-participant observations, structural schedules, all sorts of documents, historical records, diaries, letters etc. without scientific and adequate sampling design. The case studies provide a wider range of personal experience to the researcher to understand the dynamics of social and organizational structure and processes. This type of research brings out the presence of new variables and other new questions for further research and emphasizes detailed contextual analysis of a limited number of events or conditions and their relationships. Case study is a sort of qualitative research method to examine contemporary real life situations and provide the basis for the application of ides and extension of methods. Case studies may be classified into Illustrative case studies, exploratory case studies, Explanatory case studies, Cumulative case studies and Critical instance case studies.

Pilot study is a technique where data are collected from a limited number of subjects selected from the population. There are various kinds techniques such as In-depth interview, Focus group, Brain storming,

Panel, Projective technique. These are some of the techniques of the qualitative research. Qualitative research is of great importance in the field of education. It helps determine the standard of the field under study.

4.3.0 Data from Primary Sources:

After the finalization of the research design the researcher has to collect accurate and reliable data from different sources to achieve the desired objectives. There are different types of data and methods of collections to suit the research problem as well as the research process. An appropriate method of collection of data depends on the research design as well as the nature of research. Primary sources are witness accounts and are the only solid bases of historical enquiry. They are reported by an actual observer or participant in an event. "Finding and assessing primary historical data is an exercise in detective work. It involves logic, intuition, persistence, and common sense…." (Tuchman, 1994, p.319) The primary data are those which are collected afresh and for the first time, and thus happen to be original in character. Thus primary data are original observations collected by the researcher or his agents for the first time for any investigation. The primary source gives data in greater details. There are several methods of collecting primary data. Important ones are:

(i) Observation Method, (ii) Interview Method, (iii) Through Questionnaires, (iv) Through Schedules etc.

4.4.0 Observation Method:

The observation method is the most commonly used method especially in studies relating to behavioral sciences. Under this method, the information is sought out by way of investigator's own direct observation without asking from the respondent. The information obtained under this method relates to what is currently happening. This method is independent of respondents' willingness to respond. Observation may be structured or unstructured. The structured observations are too much formal and designed to provide systematic description to test causal hypothesis. On the other hand the unstructured observation is mainly associated with participant observation and it is often an exploratory technique. Again, observation may be participant observation or non-participant observation. In the participant observation the observer observes by making himself, more or less, a member of the observations he is observing so that he can experience what the members of the group experience. But when the observer observes as a detached emissary without any attempt on his part to experience through participation what others feel is non-participant observation. Another type of observation is

disguised observation where the observer observes in such a manner that his presence may be unknown to the people he is observing.

4.5.0 Interview Method:

This method involves presentation of oral-verbal stimuli and reply in terms of the same stimuli. That means it is a process of communication or interaction in which the subject or interviewee gives the needed information verbally in a face-to-face situation. This method can be used either through personal interview or over telephone. Personal interview requires a person known as the interviewer asking questions generally in a face-to-face contact to the person or persons. Through this type of method of data collection more and more information can be obtained and it provides an opportunity to the interviewer to question thoroughly from certain areas of inquiry. Interview can also be focused interview, clinical interview, and the non-directive interview. The telephone interview method helps the researcher to collect information over telephone which saves the time and also cheap in comparison to other method. Prepare for the interview, conducting the interview and recording the interview are the techniques of interview method.

4.6.0 Questionnaire:

It is a device consisting of series of questions dealing with some psychological, social, educational, etc. topics sent or given to an individual or a group of individuals with a view to obtaining data with regard to some problems under investigation. Goode and Hatt (1952, p.33) state the term questionnaire refers to a device for securing answers to a series of questions by using a form which the respondents fill themselves. It is a popular means of collecting data and is widely used in educational research to obtain information about certain condition and practices, and to inquire into opinions and attitudes of an individual or a group. A questionnaire is either administered personally to a group of individuals or it is mailed to them to save a great deal of time and money in travel. In face to face mode, the person administering the tools has an opportunity to establish rapport with the respondents, to explain the purpose of the study to the respondents, and to explain the meaning of the questions to the respondents that may not be clear to them. On the other hand, the mailed questionnaire is probably both the most used and most abused data gathering research tool. The researcher collects the data through mail when the individuals from whom the researcher wishes desire information cannot always be contacted personally without the expenditure of great deal of time and money in travel. A mailed

questionnaire is mostly criticized because of an unfavorable reaction it generates among the respondents, to answer the questions from strangers on the subjects they me less interested. It may be regarded as lazy man's way of gaining information. And as result of this, a small portion of mailed questionnaires are returned, and therefore, the data obtained are of low validity. Hence, to avoid this limitation, Best suggests that a mailed questionnaire may be used with a group of respondents who have a genuine interest in the problem under investigation, who know the sender, who have some common bond of loyalty to a sponsoring institution or organization.

4.7.0 Schedules:

This method of data collection is almost like questionnaire. The difference lies in the fact that schedules are being filled in by the enumerators who are specially appointed for the purpose. These enumerators along with the schedules go to respondents, put to them the questions from the proforma in the order the questions are listed and record the replies in the space meant for the same in the proforma.

Except these there are some other sources of primary data, such as official records and other documentary materials, oral testimony, relics' etc. Official records and other documentary materials include records and reports of legislative bodies and state departments public instruction,

principals, presidents, deans, educational committees, school newspapers, letters, samples of student work, and recordings etc. Oral testimony includes interviews with administrators, teachers and other school employees, students and relatives, school patrons or lay citizens, and members of governing bodies. And relics include buildings, furniture, teaching materials, text books, examinations, samples of student work etc.

4.8.0 Data from Secondary Sources:

Secondary sources are the works that interpret the primary data. According to W.A.Neiseanger, "A primary source is a publication in which the data are published by some authority which has gathered and analyzed them. A secondary source is a publication reporting data which has been gathered by other authorities and for which others are responsible." In simple words secondary data is one which is collected by some earlier agency but is used and analyzed and any other for its own use. Data which are primary at one time may be secondary at another time. Once the primary data have been used, the original character and significance have also been lost and the same data become the secondary one. Secondary sources are the reports of a person who relates the testimony of an actual witness of, participant in, an event. These types of data are information gathered for some other purposes other than the

purpose under consideration. Secondary data may be classified in terms of its sources-either internal or external. Internal or in-house data are secondary information acquired within the organization where and for whom research is being carried out. External secondary data are obtained from outside sources. Collection of the secondary data is easy because the researcher needs only to locate the source of the data and extract the required information. There are a number of secondary sources, such as, index and bibliographies, dictionaries, encyclopedias, handbooks, directories etc.

In historical research especially, the researcher must adopt a critical attitude toward the sources he or she has reviewed. The researcher can never be sure about the genuineness and accuracy of historical sources because a memo may have been written by someone other than the person who signed it. A letter may refer to events that did not occur or that occurred at a different time or in a different place. Again, a document may have been forged or information deliberately falsified. In historical research the researcher has to face the key questions like: was the document collected by him/her really written by the supposed author and is the information contained in the document true? First question is related to External Criticism and the second one to Internal Criticism.

4.9.0 External Criticism:

The process of establishing authenticity of the data is termed as external criticism. External criticism, also known as lower criticism, checks the genuineness and authenticity of the source material. It helps to determine whether it is what it appears or claims to be original so as to save the researcher from the victim of a fraud. The purpose of external criticism according to Mouly (1963, p. 210), is however, not so much 'negative' that is, the detection of fraud-as it is the 'establishment of historical truth'. Thus, to determine the genuineness of the historical data, the researcher must possess a rich fund of historical and general knowledge. It refers to the genuineness of any and all documents the researcher uses. Researchers engaged in historical research want to know whether or not the documents they find were really prepared by the (supposed) author(s) of the document. Obviously, falsified documents can (and some times do) lead to erroneous conclusions. Several questions come to mind in evaluating the genuineness of a historical source such as:

i) Who wrote this document? Was the author living at that time?

ii) For what purpose was the document written? For whom was it intended? And why?

iii) When was the document written? Is the date on the document accurate? Could the details described have actually happened during this time?

iv) Where was the document written? Could the details described have occurred in this location?

v) Under what conditions was the document written? Is there any possibility that what was written might have been directly or subtly coerced?

vi) Do different forms or versions of the document exist?

The importance thing to remember with regard to External Criticism is that researchers should do their best to ensure that the documents they are using are genuine. The above questions (and others like them) are directed toward this External Criticism.

4.10.0 Internal Criticism:

The process of establishing the validity of their content is termed as internal criticism. Again, after the authenticity of historical documents or relics has been established, there is still the problem of evaluating their accuracy or worth and hence, the researcher proceeds to internal criticism. It is also called as higher criticism and is concerned with the validity, credibility, or worth of the content of the document. Besides, the textual criticism, it also involves such factors as competence, good faith,

bias and general reputation of the author. Internal criticism is positive in nature when the researcher seeks to discover the literal and the real meaning of the text and it is negative when the researcher tries to seek very possible reason for disbelieving the statement made, questioning critically the competence, truthfulness or accuracy, and honesty of the author. Whereas External Criticism has to do with the nature or authenticity of the document itself, internal criticism has to do with the document say. Is it likely that what the author says happened really did happened? Would people at that time have behaved as they are portrayed? Could events have occurred this way? Are the data presented reasonable? Internal Criticism also related to such questions:

i) With regard to the author of the document:

a) Was the author present at the event he or she is describing? In other words, is the document a primary or a secondary source?

b) Was the author a participant in or an observer of the event?

c) Was the author competent to describe the event?

d) Was the author emotionally involved in the event?

e) Did the author have any vested interest in the out-come of the event?

ii) With regard to the contents of the document:

a) Do the contents make sense?

b) Could the event described have occurred at that time?

c) Would people have behaved as described?

d) Does the language of the document suggest a bias of any sort?

e) Do other versions of the event exist?

4.11.0 Content Analysis:

Content analysis is a research tool used to determine the presence of certain words or concepts within texts or sets of texts. Researchers quantify and analyze the presence, meanings and relationships of such words and concepts, then make inferences about the messages within the texts, the writer(s), the audience, and even the culture and time of which these are a part. Texts can be defined broadly as books, book chapters, essays, interviews, discussions, newspaper headlines and articles, historical documents, speeches, conversations, advertising, theater, informal conversation, or really any occurrence of communicative language. Texts in a single study may also represent a variety of different types of occurrences. To conduct a content analysis on any such text, the text is coded, or broken down, into manageable categories on a variety of levels--word, word sense, phrase, sentence, or theme—and then

examined using one of content analysis' basic methods: conceptual analysis or relational analysis.

Perhaps due to the fact that it can be applied to examine any piece of writing or occurrence of recorded communication, content analysis is currently used in a dizzying array of fields, ranging from marketing and media studies, to literature and rhetoric, ethnography and cultural studies, gender and age issues, sociology and political science, psychology and cognitive science, and many other fields of inquiry. Additionally, content analysis reflects a close relationship with socio- and psycholinguistics, and is playing an integral role in the development of artificial intelligence. The following list (adapted from Berelson, 1952) offers more possibilities for the uses of content analysis:

- Reveal international differences in communication content.
- Detect the existence of propaganda.
- Identify the intentions, focus or communication trends of an individual, group or institution.
- Describe attitudinal and behavioral responses to communications.
- Determine psychological or emotional state of persons or groups.

The present study carried out by adopting and integrated apprise to knowledge and information. The nature of the study demanded a

compressive method because of the fact that it is partly historical and partly descriptive. Therefore, the researcher has no other alternative but to go for qualitative method of research.

The researcher has to adopt a content analysis procedure from the above presentation. It appears that the documentary survey then descriptive method of document analysis, the content analysis, the qualitative method as well as some qualitative figure and graph has also been drawn in this present study. Therefore, integrated approaches as well as a comprehensive procedure have been adopted in the present study.

Although various qualitative approach are available for conducting historical survey, but the present study only on fining to the qualitative method of data analysis.