CHAPTER III

METHODOLOGY

Research is a scientific and organised search for relevant information and knowledge on a specific topic. The word research means in simple sense searching again for something new or to modify the existing one. It is an original contribution to the ocean of knowledge for its development. It is the search for truth or knowledge through methodical and organized method of finding solution to a problem is research. Best and Kahn (2006; page no: 25) defines research as “the systematic and objective analysis and recording of controlled observations that may lead to the development of generalizations, principles, or theories, resulting in prediction and possibly ultimate control of events”.

The Advance Learner’s Dictionary of Current English lays down the meaning of research as a “careful investigation or inquiry especially through search for new facts in any branch of knowledge.” (Kothari, 2008; page no: 1).

Educational research is considered to be a significant key that open new dimensions in the field of education. It is that attempt that direct towards advancement of scientific behaviour in any educational institution. The researcher should not only take the present situation in one hand but also should form new
hypothesis for the future. Thus it is regarded as the sovereign solvent of educational problems.

“The ultimate purpose of all educational research is the discovery of procedures, rules and principles relating to the various aspects of education. Critical reflective thinking is required in which discovery facts and principles may be utilized, as well as original data. Thus, the answering of any question about education by means or critical reflective thinking based upon the best data obtainable may properly be called educational research.” (Good; 2008; page no11)

3.01: RESEARCH METHODOLOGY

The methodology of educational research is a vast field growing literature combining various elements to suit different problems relating to a variety of study in different direction of education. Research methodology is an approach that analytically solves the research problem in scientific way. In it researcher study various steps that are essential to adopted along with the justification behind using it. In the nutshell, research methodology studies about research methods as well as the logic behind the use of these methods in a particular study, and explain why particular method or technique is useful rather than the other.

In research the broad approach to inquiry remains the same in spite of the fact that the research content and paradigms may differ. The research journey has to undergo the basic stages i.e.,
a) Deciding what to do
b) Planning how to do
c) Actually doing

Research process involves certain sequenced steps which are necessary to effectively carry out the research. In fact there are certain practical steps through which one must undergo in the research journey in order to find out the fact or knowledge about the research question. There are basically eight steps in research process. However these steps do not necessarily follow each other in any specific order. Yet, the following steps provides a useful procedural guideline regarding the research process

1. Formulation of research problem
2. Review of related literature
3. Formulating objectives and hypothesis
4. Conceptualizing the research design (Including sample design, construction of tools for data collection)
5. Collecting data
6. Processing data (Analysis data and test hypotheses, if any)
7. Generalisation and interpretation (Findings and conclusion)
8. Preparation of research report
**3.02: DESCRIPTIVE STUDY**

The term ‘description research’ is a type of research that aims at describing the things, events and phenomenon under investigation. Descriptive research focuses on knowing and describing things related to the present situation rather than those belonging to the past. Descriptive study is design particularly to obtain relevant and precise information concerning the current status of phenomena and whenever possible, to draw valid general conclusion from the fact discovered. They are restricted not only to facts finding but may often in the formulation of important principles of knowledge and solution of significant problems concerning local, state, national and international issues. It basically deals with the relationship between variables, the testing of hypotheses and the development of generalizations, principles, or theories that have universal validity. They make an attempt to find out generalized attributes.

Landman (1988) “Descriptive research is thus a type of research that is primarily concerned with describing the nature or conditions and degree in detail of the present situation” (Mangal and Mangal; 2015:70)

The descriptive research is predominantly suitable in behavioural sciences as behaviour cannot be studied in a realistic setting. They are non-experimental in nature as they deal with the relationships among non-manipulated variables. The main focus of the research work lies first on seeking answers to the question like
who, what, where, when and how of an existing phenomenon or characteristics of the population and then describing it in the form of report writing. Descriptive studies investigate phenomena in their natural setting. It does not aspire to develop an organized body of scientific law but provide information useful to the solution of local problem and at times provide data to form the basis of research of a more fundamental nature.

The descriptive nature analysis is of great value in solving problems in relation to education. It helps to give explanation of the educational phenomena in terms of the conditions or relationships that exist, opinions that are held by the people who are related to these educational phenomena.

According to Best and Kahn, “A descriptive study describes and interprets what it. It is concerned with the conditions or relationships that exist, opinions that are held, process that are going on effects that are evident, or trends that are developing. It is primarily concerned with the present, although it often considers past events as they relate to current conditions.”(Best and Kahn; 2014 Page no 118)

3.03: RESEARCH DESIGN OF THE STUDY

Research design is the systematic strategy of investigation to obtain solution to research problem. It is define as complete scheme or blue print which facilitates the smooth function of research work.
The present study is based on descriptive study method due to its specific nature and characteristics of study. The very purpose of the investigation was not to develop a body of organised knowledge but to focus on educational backwardness of slum children and their major educational problems. Both the qualitative and quantitative analysis of data as per objectives constituted the prime effort of the researcher.

For this purpose stratified random sampling, convenience sampling and purposive random sampling techniques were applied to obtain information. The present study intended to study if the slum children have availed the facilities as given under ‘Right to Education Act, 2009’ along with the awareness of the parents and school regarding the same. The ultimate intention of present study is to design paradigm of action to give a realistic picture of the educational scenario of the children living in the slums of Guwahati city. Hence, it would be helpful to the Government of Assam in its decision making process to bring reforms and take necessary steps to bridge the gap between the slum children and mainstream children.

3.04: POPULATION

“A population is defined as a group of individuals with at least one common characteristic which distinguishes that group from other individual.” *(Research in Education; Best and Kahn; 10th edition; page no 13). The primary purpose of
research is to discover principles that have universal application, but to study the entire population to arrive at generalizations would be impractical, if not impossible.

In this study the population covers all the children under the age group of 6-14 years living in urban slums of Guwahati. Since there is no official information on the exact number of slum children in the age group of 6-14 years, thus from the no of slums in Guwahati city, the sample of slum children was taken. There are 217 slums in Guwahati city as according to the GMC report 2012. Out of these 99 are notified slum while the rest fall under the category of non-notified slums. However, one may note that according to this data, while the number of slums has increased, the slum population has decreased. The provincialised primary schools in Guwahati were also included as the population for the study. However a criterion is follow to select the schools. Only those schools were taken as which is located in or nearby slums.

Table 1: Numbers of Slum population

<table>
<thead>
<tr>
<th>Year</th>
<th>No. Slum</th>
<th>Population</th>
<th>Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>26</td>
<td>1,60,000</td>
<td>N/A</td>
</tr>
<tr>
<td>2009</td>
<td>90</td>
<td>1,67,769</td>
<td>N/A</td>
</tr>
<tr>
<td>2012</td>
<td>217</td>
<td>1,39,296</td>
<td>26069</td>
</tr>
</tbody>
</table>
3.05: SAMPLE

A sample is a proportion of the population that is selected for observation and analysis. It is a collection consisting of apart or subset of the objects or individuals of population which is selected for the purpose of representing the population. Sampling is the process by which a relatively small number of individuals or measures of individuals, objects, or events is selected and analysed in order to find out something about the entire population. The present study comprises of 637 samples out of which 301 slum children, 301 parents of slum children and 35 schools located in or nearby slum areas.
3.06: TECHNIQUES OF SAMPLING

The sample for the study was selected in the following manner. Guwahati city was selected as the study area. There are four political assembly constituencies in Guwahati city: Jalukbari constituency, Guwahati West, Guwahati East and Dispur constituency.

The sampling was done in three stages- the first method was by using the technique of stratified random sampling where the population had been stratified proportionally on the basis of four assembly constituencies. In this particular study, the political constituencies (assembly) were regarded as strata’s. From these four strata’s, 20% of the total population was selected as the slum sample i.e., 43 slum out of 217 total slums (*Source: GMC report 2012*).

There are 24 slums in Jalukbari constituency, 85 in Guwahati West, 49 in Guwahati East and 56 in Dispur constituency. From the total number of slums in each constituency slum sample has been drawn. In Jalukbari constituency 5 slums were selected, 17 slums were selected from Guwahati West, 10 slums from Guwahati East, and 11 from Dispur constituency.

In the second stage, out of the 43 slums selected in the first stage, 301 slum children of the age group 6-14 years and 301 parents of the slum children were selected as samples by the technique of convenience sampling. Convenience
sampling technique was applied as the list of population was not available for children of the slum areas of the age group 6-14 years.

In the third stage, 35 Government/provincialised primary schools located in or nearby the selected slum areas were selected purposively.

3.07: TOOLS USED FOR DATA COLLECTION

In any research the researcher have to use special technique or instrument for the collection of research data. The instrument employed for collecting data are known as tools. The selection of suitable instruments or tools is of vital importance for carrying out successful research. These tools and technique of data collection vary in their complexity, design, administration and interpretation. Each tool is appropriate for the collection of certain type of evidence or information. The researcher has to select from the available tools which provides data he requires for the testing of the hypotheses. The major data gathering tools of research may be broadly classified into questionnaires, observation, interview schedule, psychological tests, socio metric techniques etc.

The researcher has to select from the available tools but in some cases, he may find that the existing research tools do not suit the purpose and so he may have to modify them or construct his own tool. Hence keeping in view the main objectives of the study, the researcher had used the following types of tools
a. Self-structured interview schedule for children.

b. Self-structured interview schedule for parents.

c. Self-structured interview schedule for school authority.

With the help of the above mention tools, relevant information and data were collected. The self structure interview schedules were developed by the investigator. A thorough study was done and expert opinions were taken by the researcher to develop these tools for the study.

3.08: PREPARATION OF TOOLS

On the basis of analysis of literature, previous research studies, opinion of subject experts in the concerned field and personal observation of the researcher, the researcher selected the necessary items for preparing the tools. Items were constructed to access the awareness of ‘Right to Education Act, 2009’ and the educational problems. The statements and items were arranged rationally in terms of each aspect. Hence, the preliminary drafts of interview schedules for slum children, parents of the slum children and school in slum areas were made. The drafts were presented to subject experts of the concerned field. Personal meeting of the investigator with the subject expert was arranged for discussion about each item incorporated in the Interview Schedule. On the basis of the opinions and suggestions of the subject experts, necessary modifications were made as per requirement.
3.09: INTERVIEW SCHEDULE FOR CHILDREN

The interview is a process of communication or interaction in which the subject or interviewee gives the needed information verbally in a face to face situation. An interview helps to collect direct information regarding a particular problem or situation or event. However, it differs from ordinary conversation which occurs naturally but a planned and constructed conversation.

The skillful interviewer legitimately introduces himself to the interviewees and tries to establish the rapport and confidence with the interviewees. The investigator explains the purpose of the study and carefully asks the question and gathers the necessary information. In case of any misinterpretation and confusion, the investigator clarifies it.

In this study interview schedule was used as the primary tool to obtain the necessary information regarding the educational backwardness as well as education problems of the slum children. The fundamental component of the interview schedule were sorted out on the basis of literature review, previous research studies, opinion of subject experts in the concerned field and personal observation of the researcher. There are total 11 items in the interview schedule for the children. The content of the interview comprises

- Profile of the slum children
- Rights and facilities as provided according to the ‘RTE Act, 2009’
• Reason behind their school dropouts
• Educational problems.

For scoring the interview schedule for children, a manual key is done for convenience of the study. All the items were given a score and the responses of were calculated as ‘+1’ for ‘Yes’ responses and ‘0’ for the ‘No’ responses. The items which state the reasons behind the school dropout and the educational problems of the slum children were given ‘1’ as a score.

The reliability of the interview schedule is 0.87.

3.10: INTERVIEW SCHEDULE FOR PARENTS

The interview schedule for the parents was constructed by the researcher to collect information regarding the demographic profile of the parents, educational status, and awareness regarding ‘RTE Act, 2009’ and different governmental schemes and policies, educational problems faced by the parents. There are 12 items for the interview schedule for parents. The content of the interview comprises:

• Information Blank
• Profile of the parents
• Educational status of the parents
• Awareness regarding Right to Education Act, 2009 and other governmental schemes and policies.

• Problems faced by the parents regarding education of the children

For scoring the interview schedule for parents, a manual key is done for convenience of the study. All the items were given a score and the responses of were calculated as ‘+1’ for ‘Yes’ responses and ‘0’ for the ‘No’ responses. The items which state the reasons behind discontinuation of their ward studies and the problems faced by the parents regarding education of their children were given ‘1’ as a score.

The reliability of the interview schedule is 0.86.

3.11: INTERVIEW SCHEDULE FOR SCHOOL AUTHORITY

The interview schedule for the school authority was constructed by the researcher to collect information regarding fulfillment of guidelines regarding RTE Act 2010 and problems faced by the school authority. There are total 16 items in this interview schedule for the school authority. The content of the interview comprises:

• Information blank

• Information regarding fulfillment of guidelines regarding RTE Act 2010

• Problems faced by the school authority
For scoring the interview schedule for school, a manual key is done for convenience of the study. All the items were given a score and the responses of were calculated as ‘+1’ for ‘Yes’ responses and ‘0’ for the ‘No’ responses. The items which state the problems faced by the school authority were given ‘1’ as a score.

The reliability of the interview schedule is 0.94.

3.12: DATA COLLECTION

Primary as well as secondary data were collected to study and analyse the educational backwardness of slum children. Data were collected from the slum children and their parents. Along with this, the schools situated in or nearby slums were also interviewed for the same purpose.

At first slum children of the age group 6-14 were identified in the slums taken as sample. Then the investigator explained the very purpose of the investigation to the slum children and their parents. It was told that the information will be kept confidential and used for research purpose only.

The researcher has visited the schools located in or nearby slum areas to collect the necessary information. He has taken due permission from the head of the institution and collected the necessary information required for the present study. All the respondents willingly obliged and cooperated with the investigator in the
data collection process. In fact the researcher had also developed an informal relationship in the process. In this way the data was collected from the 301 slum children, 301 parents and 35 schools. The data collection period was from August, 2015 up to November, 2016.

3.13: COLLECTION OF SECONDARY DATA

In course of the study the investigator also visited various libraries, and office for collection of secondary data. The libraries visited were

- Krishna Kanta Handique library, Gauhati university
- Omeo Kumar Das Institute of Social Change and Development library, Guwahati
- The National Library, Kolkata

Secondary data was also collected from various offices of the city.

- Directorate of Economics and Statistics
- Guwahati Metropolitan Development Authority
- Guwahati Municipality Corporation

3.14: STATISTICAL TECHNIQUES

The following statistical techniques were used to analysis and interpret the data quantitatively as well as qualitatively.
- Simple Percentage
- Chi-square
- Graphical representation i.e., bar diagram and pie diagram