CHAPTER III
METHODOLOGY

III.0 Introduction.

Research may be defined as the application of the scientific method in the study of problems. The terms ‘Research’ and ‘Scientific Method’ are sometimes interchangeably.

Research is considered to be more structured and systematic process of carrying on a scientific method of analysis that is directed towards discovery and development of an organized body of knowledge. It is a planned activity to obtain answers to meaningful questions about phenomena or events through the application of scientific approach. Research is an objective, impartial, empirical and logical analysis, and recording of controlled observation that may lead to the development of generalizations, principles or theories, resulting to some extent in prediction and control of events that may be consequences or causes of specific phenomena. Research is scientific, and as such, is not satisfied with isolated facts, but seeks to integrate and systematize its findings. It is concerned with the objective verification of generalisations. Such verification requires logical analyses of problems and devising of appropriate methodologies for obtaining evidences.56

III.1 Methodology.

Methodology is the most significant part in contributing towards the quality enrichment and drawing of scientific and conclusion of any study. In order to conduct some research there are numerous methods and procedures to be adopted. However, it is the nature of the problem under the investigation, which determines the adoption of a particular method that is most appropriate.

A methodology is a must to initiate the process of study, to acquire knowledge in depth, to make personal synthesis, to make scientific investigation, etc. Effectiveness of any kind of study depends on the kind of methodology and procedure followed in conducting the

56 Koul, Lokesh; “Methodology of Education Research” Vikash Publishing House Pvt. Ltd; New Delhi, 1998; pg 10
investigations. A good study should follow a sound methodology, without which the obtained objectives may not be useful for the purpose.\textsuperscript{57}

III.2 Population.

The term \textbf{population}, in an ordinary sense and simple explanation means all the inhabitants of a place; a particular group within the total inhabitants of a particular place or area. But from statistical point of view, it means the whole of total quantity of something. It means the universe of something. Population generally means the aggregate or totality or whole of something, or total number of things, beings, matters, etc. it is the whole quantity. In research, generally the whole or universe or the totality never can be studied within a very short period of time. Therefore, for systematic and scientific study, samples are collected according to the demand and necessity of research problem undertaken for study. To study a particular problem, no researcher can study the whole population one by one to draw general conclusion.\textsuperscript{58}

The population targeted in this present study comprises the teachers of secondary schools of West Khasi Hills District that belong to Government, Deficit, Adhoc and Private secondary schools. The total population is 528. The names of the schools and their different management are mentioned below:

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Type of Management</th>
<th>Number of Schools</th>
<th>Number of Teachers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1</td>
<td>Government</td>
<td>4</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>2</td>
<td>Deficit</td>
<td>7</td>
<td>64</td>
<td>38</td>
</tr>
<tr>
<td>3</td>
<td>Adhoc</td>
<td>39</td>
<td>105</td>
<td>121</td>
</tr>
<tr>
<td>4</td>
<td>Private</td>
<td>30</td>
<td>74</td>
<td>83</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>80</td>
<td>263</td>
<td>265</td>
</tr>
</tbody>
</table>

Source: District School Education Officer.

\textsuperscript{57} Koul, Lokesh; “Methodology of Education Research” Vikash Publishing House Pvt. Ltd; New Delhi, 2009; pg 206

\textsuperscript{58} Sarma Mukunda. “Research Methodology, Assignment, Seminar Paper & Project”: Ebh publishers (India), M.N. Road, Pan Bazar, Guwahati. p.160
III.3 Sample.

The term sample has originated from an old French term ‘essample’ which means ‘example’. Sample, in brief, is a small part or quantity intended to show what the whole is like. In other sense, it is a specimen taken for scientific testing. A sample, thus is a miniature part of the whole or universe, i.e. population. It is a small quantity of the whole. In research, a sample is the representation of the object, matter, things, beings or human individuals selected for observation and analysis. In a sense, it is a smaller representation of the whole.59

The sample of the present study comprises of 275 teachers from 42 schools of West Khasi Hills District belonging to different managements and the investigator has decided to use a random technique for selecting her sample which is popularly known as ‘Stratified Random Sampling’. The tables below are Sample Schools along with the total number of teachers which are selected for the study.

<table>
<thead>
<tr>
<th>Serial Number</th>
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<td>Female</td>
</tr>
<tr>
<td>1</td>
<td>Government</td>
<td>4</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>Deficit</td>
<td>6</td>
<td>31</td>
<td>29</td>
</tr>
<tr>
<td>3</td>
<td>Adhoc</td>
<td>20</td>
<td>59</td>
<td>46</td>
</tr>
<tr>
<td>4</td>
<td>Private</td>
<td>15</td>
<td>36</td>
<td>47</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

III.4 Tool.

A researcher will require many data-gathering tools and techniques which may vary in their complexity, design, administration and interpretation. Each tool or technique is appropriate for the collection of certain type of evidence or information. The researcher has to select from the available tools, which will provide data, he requires for testing of the hypothesis. In some situation, he may find that the existing research tool do not suit his propose and he may have to modify them or construct his own. For this, the researcher should familiarize himself with nature, merits and limitations of existing research tools: and should also develop skill in the construction and use of each of these research tools.60

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59 Sarma Mukunda. “Research Methodology, Assignment, Seminar Paper & Project”: Ebh publishers (India), M.N. Road, Pan Bazar, Guwahati. p.74
60 Koul, Lokesh; “Methodology of Education Research” Vikash Publishing House Pvt. Ltd; New Delhi, 2009; pg219-220
III.4. a For Attitude Towards Teaching Profession

In the present study, in order to collect relevant data, a standardized tool that was prepared by Dr. (Mrs.) Umme Kulsum, Senior Lecturer Department of Education, Bangalore University, is used. The name of the tool is Attitude Scale Towards Teaching Profession for teachers which is used by the investigator in order to carry out the investigation successfully.

The Attitude Towards Teaching Profession test consists of 55 items out of which 25 are Favourable Statements and 30 items are Unfavourable Statements. All the items are four point of Summated Rating Scale. For the purpose of scoring, a score of 4, 3, 2 and 1 is rated for Favourable Statements and 1, 2, 3 and 4 for Unfavourable Statements respectively.

III.4. b For Interest in Teaching

A standardized tool developed by Dr. S. B. Kakkar, Govt. College of Education, Patiala is used for this test. The name of the tool is Kakkar’s Interest in Teaching Scale which is also used by the investigator for the purpose of collecting data regarding Teachers Interest in Teaching.

The Kakkar’s Interest in Teaching Scale Test consists of 27 multiple choice questions having five choices answer for each item, out of which the respondent has to mark the one choice which represent him the best. For scoring, the correct answer is awarded 1 score, and no score is given for the incorrect answer. The maximum score would be 27.

III.5 Data Collection.

First of all, the investigator secured formal permission from the heads of secondary schools under study to administer the tool to the teachers. The teachers were requested to participate sincerely in responding to all the questions of the tools. To make the investigation successful efforts were made to impress the teachers and they were told that their cooperation was most essential in this regard.

III.6 Statistical Technique.

Statistical Technique plays a very important role in analyzing and interpreting a research study. Statistical technique also allocates the investigator to find out the relationship as well as the comparison between different variables and to carry out the task of investigation successfully. Without his technique the research study may be incomplete and also may not be applicable for other to implement.
The Statistical Techniques that are used on the study are:

a) Percentage  
b) Mean  
c) Standard Deviation  
d) ‘t’ test  
e) Pearson ‘r’ Correlation Studies

**III.7 Conclusion.**

The success of any research depends to a large extent upon the kind of methodology and procedure followed. Therefore, it is very much essential to adopt a sound and systematic strategy to carry out any investigation effectively.