CHAPTER IV

METHODS OF INVESTIGATION

4.1 INTRODUCTION

This Chapter presents and describes the details of the procedure and processes followed in carrying out the study in accordance with the objectives of the study. This chapter defines the population in terms of its characteristics, describes the techniques used in selecting the sample. It also provides description of research tool used, the process of data collection and statistical methods/techniques used to analyze the study.

4.2 RESEARCH DESIGN

The study was conducted by using a descriptive sample survey method of research.

Descriptive research studies are designed to obtained pertinent and precise information concerning the current status of phenomena and, whenever possible, to draw valid general conclusions from the facts discovered. They are restricted not only to fact finding but may often result in the formulation of important principles of knowledge and solution of significant problems concerning local, state, national and international issues.

Descriptive studies are more than just a collection of data; they involved measurement, classification, analysis, comparison, and interpretation. They collect and provide three types of information: (1) of what exists with respect to variables or conditions in a situation; (2) of what we want by identifying standards or norms with which to compare the present conditions or what experts consider to be desirable; and (3) of how to achieve goals by exploring possible ways and means on the basis of the experience of others or the opinion of experts.

The descriptive research method has undoubtedly been the most popular and the most widely used research method in education. It helps to explain educational phenomena in terms of the conditions or relationships that exist, opinions that are held by students, teachers, parents and experts, processes that are going on, effects that are evident, or trends that are developing. Descriptive survey is the only means
through which opinions, attitudes, suggestions for improvement of educational practices and instruction, and other data can be obtained.

Descriptive studies are of different kinds. In this study, a sample survey method of descriptive research was used. Sample survey means gathering relevant information about a smaller representation of the population under study. The data gathered through sample survey are generalized to the population of the study.

4.3 POPULATION OF THE STUDY

The whole population of units of a given type about which we wish to make conclusions forms the population under study. The population must be defined in terms of units of analysis, extent of coverage and reference time.

The population of the present study comprises of all the pre-service student teachers studying in all the seven (7) District Institutes of Education and Training (DIETs) in Meghalaya during 2013 – 14. It includes various distinct sub-groups such as first year and second year, male and female, urban and rural student teachers, belonging to different socio economic status and of varying age groups.

The details regarding the names of the Institutes and number of student teachers are presented below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of DIETs</th>
<th>No. of student teachers</th>
<th>First Year</th>
<th>Second Year</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>DIET Baghmara, South Garo Hills</td>
<td></td>
<td>19</td>
<td>23</td>
<td>42</td>
</tr>
<tr>
<td>2.</td>
<td>DIET Tura, West Garo Hills</td>
<td></td>
<td>31</td>
<td>43</td>
<td>74</td>
</tr>
<tr>
<td>3.</td>
<td>DIET Resubelpara, North Garo Hills</td>
<td></td>
<td>20</td>
<td>17</td>
<td>37</td>
</tr>
<tr>
<td>4.</td>
<td>DIET Nongpoh, RiBhoi</td>
<td></td>
<td>2</td>
<td>42</td>
<td>44</td>
</tr>
<tr>
<td>5.</td>
<td>DIET Nongstoin, West Khasi Hills</td>
<td></td>
<td>21</td>
<td>72</td>
<td>93</td>
</tr>
</tbody>
</table>

Table 4.1

District Institutes of Education & Training (DIETs) in Meghalaya and Number of student teachers during 2013-14
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of DIETs</th>
<th>No. of student teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>First Year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>6.</td>
<td>DIET Sohra, East Khasi Hills</td>
<td>14</td>
</tr>
<tr>
<td>7.</td>
<td>DIET Thadlaskein, West Jaintia Hills</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>119</td>
</tr>
</tbody>
</table>

4.4 SAMPLE OF THE STUDY

Sampling is a 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 from which it was selected. It helps to reduce expenditure, save time and energy. Sampling procedures provide generalizations on the basis of a relatively small proportion of the population. The representative proportion of the population is called a sample.

The sample selected for the present study consists of 30 student teachers belonging to 1st Year and 20 student teachers belonging to 2nd Year from each of the seven DIETs. Thus altogether, the sample includes 210 First Year and 140 Second Year student teachers from all the seven DIETs. Stratified random sampling technique was used to select sample from the population.

4.5 TOOLS USED FOR DATA COLLECTION

The instrument which is used for gathering or collecting facts for exploring new fields is called a tool. In the present study, in order to study the attitude of DIET’s student teachers towards value-oriented education, the questionnaire developed by B.Yella Reddy (2004) was adopted.

The adopted questionnaire consists of seventy (70) statements. Each statement was arranged on a five-point scale: Strongly Agree(SA), Agree(A), Doubtful(D), Disagree(DA) and Strongly Disagree(SDA). The weightage given to the five alternative responses in the scale to measure the attitude towards value-oriented education was given in the following table:
Table 4.2

Weightage given to the five alternative responses in the scale to measure the attitude towards value-oriented education

<table>
<thead>
<tr>
<th>Type of Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Doubtful</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Negative</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

In this questionnaire, the negative statements are 4, 7, 11, 15, 16, 23, 24, 28, 67 and 68. The remaining statements are positive.

As there were 70 statements, the score of an individual could possibly vary between 70 and 350 with 210 neutral points.

The **Personal Data Sheet** for collecting information related to Personal Data and Socio-demographic variables has been developed by the Investigator.

4.6 VARIABLES

In the present study, there is one (1) dependent variables and eleven (11) independent variables. These are:

1. **Dependent Variable:** There is one (1) dependent variable, viz., the attitude of DIET’s student teachers towards value-oriented education.

2. **Independent Variables:** There are eleven (11) independent variables which are as follows:
   i) Sex
   ii) Year of the Study
   iii) Age
   iv) Residence
   v) Religion
   vi) Size of the Family
   vii) Educational Qualification of Father
   viii) Educational Qualification of Mother
   ix) Occupation of Father
   x) Occupation of Mother
   xi) Annual Income of the Family
4.7 DATA COLLECTION

The study was carried out in all the seven DIETs in the state of Meghalaya. The collection of data was done during November 2013 after informing and taking permission from the Principals of the Institutions.

The teacher trainees were apprised regarding the purpose of the study. All the subjects were assured in the beginning that their responses will be treated and kept strictly confidential, and hence they were asked to provide and give their responses without any hesitation. The instruction for responding the tool was given before asking them to respond. Care has been taken to ensure that all particulars had been filled/ responded, and all items/questions were answered by the student teachers.

4.8 PROCEDURE OF DATA ANALYSIS

The data obtained are first entered in excel worksheet and the analysis is done by using S.P.S.S. (Statistical Package for Social Science) software. The following statistical procedures were used:

**Descriptive Statistics:**

The scores of the attitudes of DIET’s student teachers towards value-oriented education were calculated by means of descriptive statistics, viz., mean, median, mode, standard deviation, quartile deviation, skewness, kurtosis and graphical representation.

**Inferential Statistics:**

‘t’ test and ‘F’ test were employed to find out the significant difference in the mean scores of the attitude of DIET’s students teachers in relation to various variables, at 0.05 and 0.01 levels.

The significant levels employed with respective symbols are given below:

** Indicates significant at 0.01 level.
  * Indicates significant at 0.05 level.
  @ Indicates not significant at 0.05 level.