Chapter – 3

Research Design and Procedure

3.0.0 Introduction

The success of the study is depends on beautiful and systematic research design. Investigator attains success by a fully panned design of the whole study in a sequence and proceeds in it step by step.

In the previous chapter review of related literature and summary of the pre-researches along with the significance of the present study is discussed in detail.

3.1.0 Origin of the Study

Investigators motivate to conduct study in area in which they felt any problem. The background of research is prepared from the unsolved problems.

In reality educational research is the base of education. Today’s students are constantly face think about career selection and especially which curriculum should select after curade-10 and 12. Everyone has chance/ opportunity according to their interest. If this selection would be big any pressure and comparison then it waste time, energy and money and many a times students should victim of disappointment proper actions should take for the selection of career according students energy and limitations or interest and attitude. Investigator selected the present problem of the study with aim to know students profession interest.

3.2.0 Population

“Population means all the members of people, incidents and objects of a well defined group”. – Dr. K.P. Pandey.

It is difficult to proceed for problem solving till the population not defined, sample is selected from the new defined population can implement the finding. In other
words population is the group or classes which members have one or more than one characteristic are same.

In the present study, the students of grade-11 a general stream and science of Gujarati medium secondary schools of Gandhinagar district of year 2011-12.

3.3.0 Selection of sample

The collected data are very important in any research or even equal importance of the sample from which the data have collected. Henry E. Garrett writes the importance of sample like,

“Various techniques have been derived for obtaining sample which will be representative of population”.

There are many sampling methods if the sample selected related to the subjects of the study then the finding of that study can implement the population of sample should representative of the population.

In this study, first the list of higher secondary school was obtained because the study is about vocation interest of higher secondary school students. From this list rural area schools and urban area schools are classified and also prepared a list according to area.

1. General stream schools and hi science stream schools according to area by lottery random sampling method the list of schools included in sample is given in appendix.

2. One class of grade-11 was selection from selected schools and in the school with more than one class; one class was selected by lottery method.

All the students of selected class were included as sample. Thus, total 520 students were comprised as sample in this study.
Table – 3.3.1

Sampling Method

<table>
<thead>
<tr>
<th>Number</th>
<th>Method</th>
<th>Use Where</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lottery Method</td>
<td>Selection of Schools</td>
</tr>
<tr>
<td></td>
<td>Easy Random</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Lottery Method</td>
<td>Selection of class of Schools</td>
</tr>
<tr>
<td></td>
<td>- by picking up chits</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Cluster Method</td>
<td>Selection of Students</td>
</tr>
</tbody>
</table>

Table – 3.3.2

Description of Sample

<table>
<thead>
<tr>
<th>Area</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Boys</td>
</tr>
<tr>
<td>Class - 11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science Stream</td>
<td>50</td>
<td>27</td>
<td>75</td>
</tr>
<tr>
<td>General Stream</td>
<td>54</td>
<td>35</td>
<td>112</td>
</tr>
<tr>
<td>Total</td>
<td>104</td>
<td>62</td>
<td>187</td>
</tr>
</tbody>
</table>

3.4.0 Research method

There are various research methods. Survey method in used to know the present condition of any problem.

“Survey method is 1. to decide sequence of data which data collected 2. How to collect and 3. From whom to collect.

The present study is about to know students interest so, survey method vocation has employed.
3.5.0 Construction of Tool for Data Collection

In research process, after deciding of problem and objectives there is need to think over from whom to collect data or now? These questions are very important in context of the study is based on the reliable data and the reliable data collected by a reliable tool. Thus, the effectiveness of study is based on tool. In many studies a new tool is constructed in case of the unavailability of readymade tool for the data collection.

The present study was about the study vocational interest of higher secondary school students and so on investigator has developed vocational interest inventory for data collection. The below mentioned steps followed for construction of tool.

1. Selection of Interest Areas

In tool construction support of the following interest areas were taken.

Outdoor vocation, - technical, mathematical, scientific vocation, explanatory, artistic, literary, music, clerk, social service, work for home vocation, entertainment vocation.

2. Collection of items

Items were collected from the selected interest areas i.e. magazines, Sandesh newspaper’s Career Guidance supplementary.

3. Opinion of Experts

Opinion of schools, experienced and subject experts of research are very important for developing new research tool for data collection and gave an improving mistakes and drawbacks in research tool. All this help to make perfect tool for data collection. In this study experts’ opinion were taken for vocational interest inventory and that is given in table – 3.3.3.
4. Editing of Items and Construction of First form of Tool

Collected items were edited with necessary changes and then the components were edited. Then component was given edited form.

There were given

Strongly like

like

Neutral
Dislike

Strongly dislike

According to five point scale for each item

Table – 3.3.4
12 Interest Areas in Vocational Inventory

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Interest Area</th>
<th>Vocations of Interest Areas</th>
<th>Item No. in Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vocation in work in open space</td>
<td>Work in lorry, care taker in farm and orchard or sanctuary etc.,</td>
<td>1,13….25 etc.,</td>
</tr>
<tr>
<td>2</td>
<td>Technical Vocation</td>
<td>Mobile repairing, computer related vocation etc.,</td>
<td>2,14.. etc.,</td>
</tr>
<tr>
<td>3</td>
<td>Mathematical related vocation</td>
<td>To run Math tuition class, to collect or work at toll tax etc..</td>
<td>3,15,. 27 etc.,</td>
</tr>
<tr>
<td>4</td>
<td>Science related vocation</td>
<td>Work in laboratory, planning of science faire, work in science center.</td>
<td>4,16…28</td>
</tr>
<tr>
<td>5</td>
<td>Explanatory related vocation</td>
<td>Vocation related to work as sales man, to work with young children singing rhymes etc.</td>
<td>5,17..29 etc.</td>
</tr>
<tr>
<td>6</td>
<td>Artistic related vocation</td>
<td>Coloruing pictures, art design art related vocation etc.,</td>
<td>6,18..30 etc.,</td>
</tr>
<tr>
<td>7</td>
<td>Literary vocation</td>
<td>Reading, to run competitive exam classes etc.,</td>
<td>7,19…31 etc.,</td>
</tr>
<tr>
<td>8</td>
<td>Music Vocation</td>
<td>Singing songs, panning of prayer etc.,</td>
<td>8,20…32 etc.</td>
</tr>
<tr>
<td>9</td>
<td>Clerical vocation</td>
<td>To work as clerk in finance company</td>
<td>9,21..23 etc.</td>
</tr>
<tr>
<td>10</td>
<td>Social service vocation</td>
<td>Primary education, lawyer etc.,</td>
<td>10,22..35 etc.,</td>
</tr>
<tr>
<td>11</td>
<td>Vocation related to work from home</td>
<td>Gardening, tuition classes</td>
<td>11,23,25 etc</td>
</tr>
<tr>
<td>12</td>
<td>Entertain Vocation</td>
<td>Drama, beauty contest etc.,</td>
<td>12,24…26 etc.</td>
</tr>
</tbody>
</table>

5. Construction and Scoring of Second Form of Tool

Necessary changes were made in the first form of test on the bases of expert’s suggestion and opinion and second form of tool developed.

The scoring of items of vocational interest areas was as below.
Strongly like 4 Marks
Like 3 Marks
Neutral 2 Marks
Dislike 1 Mark
Strongly dislike 0 Marks

According to five point scale for each item

The students were asked to put (√) any one from the five opinions given in answer sheet at the end of inventory for each item.

6 Construction of Final Form

The final form of inventory was prepared according to experts’ suggestions and tried out. Necessary changes were made and improved items in which the students found difficulty in responding. There were 12 vocations finalized in final inventory in which 10 items were included in each area and that is given in appendix – 2.

3.6.0 Procedure of Data Collection

Data collection is the core of the whole research process. The reliability of findings is based on the collected data so the data should also collect by proper tool scientific procedure

Investigator visited the schools selected in sample and sough permission for data collection.

3.7.0 Method of Data Analysis

Analysis and interepretation process is time consuming process and activity and it requires patience and hard work. In the present study the following methods were used for data analysis and interpretation.
Percentile rank was obtained from the score in answer sheets. Frequency distribution was prepared on the bases of it and from that Mean, SD was found out. Hypotheses were tested by the significance of CR.

**3.8.0 Experiences of Investigator**

The details of the experiences of investigator are as following.

1. The selection of research tool is not as easy as it seems during selection of sample.
2. Some difficulties were in seeking permission of schools for data collection.
3. Students co operated in data collection.
4. Teachers were also supported during data collection.
5. In nutshell the difficulties can not considered as problems as overall experiences is good. Investigator learnt a lot from this experiences and help investigator in future too.

**3.9.0 Conclusion**

In this chapter origin of the study along with population, samples, research method, construction of tool, data analysis were discussed.

In the next chapter – 4 analysis and interpretation of data according to the objectives and hypothesis of the study is presented.
References

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