

## **Chapter - III**

# **Methodology**

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### METHODOLOGY

#### 3.1 Sampling

Sampling is the process of selecting a number of individuals of items for a study in a way that the individuals of items represent the large group (population) from which they were selected. The individuals or items selected comprise 'Sample' and the large group is referred to as 'Population'. The purpose of sampling is to gain information about a population of interest as subject.

"Sampling is the selection of certain percentage of a group item according to a predetermined plan" ..... Bogardus

A good sample must be as nearly representative of the entire population as possible and ideally it must possess the entire characteristics of the population from where the sample has been drawn.

In the present study Ist researcher study the review of literature, later on researcher select a problem for his study. For this study Ist researcher select primary school for the presentation of multimedia programme & then comes to conclusion for selection of problem.

In this study, researcher used random sampling Technique. For this researcher select one Tahsil form amravati District from Tehsi researcher select eight primary schools, out of 15 primary schools randomly. During selection of the schools six schools from urban area & were selected two from these schools 125 students were selected for the collection of data. This study e was conducted on VII standard students only, for present study a self made questionnaire was & prepared then this can be fill up by the students of VII standard students after presentation of the Educational Multi-media Programme in there class.

In the present study researcher select urban & rural schools from warud Tahsil of Amravati district in Maharashtra State for the collection of data. The

researcher met to the concerned school Principal and gave him detailed information about the study and purpose of the study.

After giving the detail information to the concerned school Principal, demo was conducted before the students of VII class and science teachers. Then self made questionnaire was fill up by the students to collect a data. Similarly interview was conducted for the teacher to know there views about EMMP.

Name of schools, Number of students & experience of teachers those who are selected randamly are mentioned in table No. 3.1.1

| Sl.NO. | Name of the school   | urban /Rural | Total No. Students in VII Class | No. of students selected Randomly | No of teachers selected for interview in each school |
|--------|--|--------------|---------------------------------|-----------------------------------|--|
| 1.     | Shanti Niketan English School warud                          | U            | 31                              | 13                                | 1  |
| 2.     | Shrimati Jankidevi Gandhi Kanya Vidyalay warud               | U            | 29                              | 14                                | 1  |
| 3.     | Parvatibai Dharmadhikari Kanya Vidyalay warud                | U            | 32                              | 17                                | 1  |
| 4.     | Namdevrao tukarmji Radake high school                        | U            | 35                              | 17                                | 1  |
| 5.     | Orange city convent warud                                    | U            | 26                              | 15                                | 1  |
| 6.     | Jagrut Vidalay, Kala & M.C.V.C. Kanistha Mahavidyalay, warud | U            | 30                              | 16                                | 1  |
| 7.     | Yasantrao Nail High school, Jarud                            | R            | 32                              | 16                                | 1  |
| 8.     | Abhimanji Kalmegh High school Magruli peth                   | R            | 28                              | 17                                | 1  |
|        | Total  | U=6<br>R=2   | 243                             | 125                               | 08   |

## 3.2 Tools

A researcher requires many data gathering tools or techniques. Each tool is suitable for the collection of certain types of information. One has to select from the available tools those which will provide data he seeks for testing hypothesis<sup>(1)</sup>.

"Lokesh Kaul. "

"A tool is appropriate for collection of certain type of evidence or is appropriate for collection of certain type of evidence or information.

For the present study the researcher was prepared items of the questionnaire and interview schedule after an in-depth consultation with his guide. For the present study, tools was the questionnaire and interview schedule which serve as stimuli to respond in front of students and teachers. The questions to be stated clearly to minimize misinterpretation. The investigator prepared one set of questionnaire for students and second set of interview questionnaire for teachers. Students questionnaire consisting of 30 Nos of items in Hindi & English language and teachers interview questionnaire consisting 10 Nos of items in Hindi & English language.

### Preparation of tools

During preparation of tools at Ist 55 items was given for the verification, out of these 55 items 30 items was selected by the experts. Then these items used as questionnaire for the collection of data . Similarly, for teachers interview 20 items was given for the verification, out of these 10 items was selected to conduct a interview.

After preparation of 30 items questionnaire this can be applied on one of the elementary school in Bhopal and then it is valid by the experts for the collection of data.

In present study the questionnaire were administered to a sample of 125 students and interview schedule were administered to a sample of 8 teachers from 8 Nos of elementary schools of the concerned area noted earlier.

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(1) Methodology of Educational Research. Third Revised Edition, New Delhi, Vikas.

### **3.3 Educational Multimedia Project**

This study is conducted on EMMP to assess the views of students and teachers regarding the different components of multimedia. This study gives us direction about usefulness of educational multimedia teaching in different classroom situations. Criteria of this study was to study quality, format and treatment of the various components given in educational multimedia programmes.

Components and criteria of this study are mentioned below.

- |    |                     |                             |
|----|---------------------|-----------------------------|
| I  | Components of study | 1. Animation                |
|    |                     | 2. Project activities       |
|    |                     | 3. Quizzes                  |
|    |                     | 4. Graphical representation |
| II | Criteria of study   | 1. Quality                  |
|    |                     | 2. Format                   |
|    |                     | 3. Treatment                |

### **3.4 Administration Of The Tools**

After development of questionnaire & interview schedule the investigator went to randomly selected elementary schools of the delimited area for the administration process involving the teachers and students. The instruction regarding questionnaire & interview schedule were explained by the investigator. The doubts of the subjects were clarified and they were suggested to give free frank and unbiased responses without any hesitation. Then the investigator collected the filled questionnaire from students and recorded interview of teachers in recorder who were selected randomly.

### **3.5 Collection Of Data From The Students (quantitatively)And Teachers(Qualitatively)**

The investigator adopt a survey method to access the effect of multimedia in teaching & learning process of VII class students. The investigator has a face-to-face interaction with the students. While giving demo on

multimedia. The investigator had met with the required number of teacher in Warud Tehsil to collect their views about multimedia. The interview schedules were administered to the randomly selected teachers and later the responses were collected from them and also the investigator made personal verbal discussion with them.

### **3.6 Statistical Techniques Used**

After collecting the responses from students and teachers. Separate tables were made and each statement in the table was worked out in percentage. From this percentage investigator generalized the concept about multimedia teaching in classroom.