

### **3. METHODOLOGY**

# CHAPTER THREE

## RESEARCH METHODOLOGY

### 3.0.0 INTRODUCTION:

It is a way to systematically solve a research problem. It is a science of studying how research is done scientifically. Essentially it is the procedure by which the researchers go about their work of describing evaluating and predicting phenomenon. It aims to give the work plan of research. It provides training in choosing methods materials, scientific tools and techniques relevant to the solution of the problem. Methodology would be descriptive survey.

### 3.1.0 IMPORTANCE OF RESEARCH METHODOLOGY:

It is necessary for a researcher to design a methodology for the problem chosen. One should note that even if the method considered in two problems is same the methodology may be different. It is important for the researcher to know not only the research methods necessary for the research under taken but also the methodology.

### 3.2.0 RESEARCH DESIGN:

*“Research design is a mapping strategy. It is essentially a Statement of the object of the inquiry and the strategies for collecting The evidences, analyzing the evidences and reporting the findings.”*

A research design is an arrangement of conditions for

- Collection and analysis of data in a manner that aims to combine a
- Relevance to the research purpose with an economy and procedure. In
- fact the research design is the conceptual structure within which
- research is conducted; it constitutes the ‘**blue print**’ for the collection,
- Measurement and analysis of data.

My research design that is preferable for the study would be descriptive survey method.

A descriptive research design can use a wide variety of research methods to investigate one or more variables. Unlike in experimental research, the researcher does not control or

manipulate any of the variables, but only observes and measures them. **Survey** studies are *usually used to find the fact* by collecting the data directly from population or sample. It is the most commonly used descriptive method in educational researches. The researcher collects the data to describe the nature of existing condition or look forward the standards against existing condition or determine the relationships that exists between specific events.

Many a time survey study intends to understand and explain the phenomena in a natural setting or provide information to government / other organization or compare different demographic groups or see the cause and effect relationship to make predictions. For this it requires responses directly from respondents of large population in general. The kind of information requires decides the coverage of geographical area for data collection and whether it is a extensive or intensive one. Extensive survey carried out when researcher want to make generalization, whereas intensive survey is done for making estimation. Survey researches demands various tools to collect the data from samples. They are ranging from observation, interview to questionnaire. So the kind of survey study needed for any study is based on its purpose, nature of data and population and sample of the study.

### **3.3.0 SAMPLING**

Sampling is a process used in statistical analysis in which a predetermined number of observations are taken from a larger population. Researchers usually cannot make direct observations of every individual in the population they are studying. Instead, they collect data from a subset of individuals – a *sample* – and use those observations to make inferences about the entire population. Ideally, the sample corresponds to the larger population on the characteristic(s) of interest. In that case, the researcher's conclusions from the sample are probably applicable to the entire population.

#### **3.3.1 METHOD OF SAMPLING:**

The method of sampling is been divided majorly into two and sub –divided into four respectively.

#### **Probability Sampling Methods**

1. Simple random sampling
2. Systematic sampling
3. Stratified sampling

4. Clustered sampling

#### **Non-Probability Sampling Methods**

1. Convenience sampling

2. Quota sampling

3. Judgment (or Purposive) Sampling

4. Snowball sampling

Thus, my study is based on **convenience sampling method.**

**CONVENIENCE SAMPLING:** A convenience sample is a type of non-probability sampling method where the sample is taken from a group of people easy to contact or to reach. This type of sampling is also known as grab sampling or availability sampling. There are no other criteria to the sampling method except that people be available and willing to participate. In addition, this type of sampling method does not require that a simple Random sample is generated, since the only criteria are whether the participants agree to participate.

### **3.4.0 POPULATION OF STUDY**

By population, we mean the aggregate or totality of individuals for which inferences are to be drawn in a study. Population of the present study consists of the following:

- Progressive academic record of a specific class having got admission under RTE Act 2009 from 2015 to 2020 of Imperial International School, Khachrod, Ujjain, MP
- Progressive academic record of a specific class having got admission under RTE Act 2009 from 2015 to 2020 of Raj Rajendra Public School, Khachrod, Ujjain, MP

#### **3.4.1 Selection of the Sample Units**

In the present study the sample may be defined as “A selected number of students admitted under RTE Act 2009 of the specific schools from 2015 to 2020.”

### **3.5.0 TOOLS AND TECHNIQUES**

After collection of data, the next step is the classification and analysis of the data.

“An analysis of the data is equally important. A careful planning of the analytical framework should, therefore, be envisaged by the researcher. The approach adopted in the study is basically analytical and descriptive in nature.

On the basis of the objectives of the study and according to the Hypotheses, the collected data was tabulated. On preparation of the tables, accounting tools and techniques - like percentages, ratios, averages, trend analysis, etc. were calculated.

For the statistical analysis of the data, the following tools and techniques were used:

For tools:

Tools would be **secondary data** of students' academic report cards.

For techniques: **descriptive statistics.**

### **3.6.0 Statistical Techniques:**

The role of statistics in research is to function as a tool designing research, analyzing its data and drawing conclusions from there. In order to arrange and thrash out the essence from the collected data and to make the data meaningful, the following statistical techniques were used:

Descriptive statistics:

- Mean
- Standard deviation
- Percentage