

## Chapter III

### METHODOLOGY OF THE RESEARCH

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#### 3.1 What is Research Methodology?

Research methodology is the specific procedures or techniques used to identify, select, process, and analyze information about a topic. In a dissertation, the methodology section allows the reader to critically evaluate a study's overall validity and reliability. The methodology section answers two main questions-

- How was the data collected or generated?
- How was it analyzed?

#### 3.2 Methods of Research

Research methods may be understood as all those methods or techniques that are used for conducting the research. In other words, all those methods which are used by a researcher during studying his/her research problem are termed as research methods.

Since the objective of the research is to solve a given problem, the available data and unknown aspects of the problem have to be related to each other to make a solution possible. However, keeping this in view, research methods can be put into the following categories.

##### Surveys

Surveys involve collecting information, usually from fairly large groups of people, using questionnaires but other techniques such as interviews or telephoning may also be used. There are different types of surveys. The most straightforward type (the "one-shot survey") is administered to a sample of people at a set point in time. Another type is the "before and after survey" which people complete before a major event or experience and then again afterward.

##### In-depth Interview

This is the most common qualitative research method. It is a personal interview that is carried out with one respondent at a time. The advantage of this research is that it provides a great opportunity to gather precise data about what people believe and what their motivations are. The researcher can ask questions and follow-up questions during interviews which can help

them to collect relevant information. Such methods of interviews can be performed directly (face-to-face) and indirectly (through phone, mail, letters, etc.).

### **3.3 PURPOSE**

The purpose of this study is to investigate the problems related to the implementation of ICT the at upper primary level by teachers in govt. state board school of M.P. in Bhopal district. This chapter deals with the methodology employed to achieve the objective of the study mentioned in chapter one.

- Methodology of the study
- Population
- Sample
- Tools
- Administration of tools

### **3.4 METHODOLOGY OF THE STUDY**

This is a status study where the techniques of inductive research are being used to find out the “Challenges faced by teachers for implementation ICT at upper primary level” in govt. state board school of M.P. in Bhopal district.

#### **Inductive Research**

In an interview, a researcher collects the data that is relevant to his/her topic of interest. After data collection, the researcher looks for patterns based on his/her observation and develops a theory or hypothesis.

The inductive approach also involves the three steps

- Firstly, identify the different challenges faced by teachers in implementing ICT
- Secondly, try to find out the causes of the challenges that hinder the implementation of ICT.
- Finally, make a general view about the relationship between challenges and their causes.

**Variables-** Independent variable- Challenges faced by the Science Teachers.

Dependent variable- Implementing ICT at the upper primary level.

## **POPULATION**

In the study, 30 upper primary teachers have involved from the M.P. board govt. schools of Bhopal.

## **SAMPLE**

Data is collected from a selected sample and the sample is the representation of the population. In this study, samples are taken on a random basis. The only target to select the sample (teachers who are teaching at the upper primary level.

## **TOOLS**

A researcher requires many data gathering tools or techniques. There are many different types of tests available and many different ways to classify them.

For the present study, a questionnaire and interview schedule were prepared by the researcher himself and administered to teachers of the upper primary level. The tools used for this study consist of a closed-ended questionnaire and open-ended questions for the interview schedule.

## **ADMINISTRATION OF THE TOOL**

Before administration, the teachers in question were supposed to attempt. The significance of the questions and necessary instruction were given before the start of the interview session. The teachers were made clear that these questions are designed to help them and the information would be given by them is completely confidential that only used for research purposes so that they can give their responses honestly and the information taken by them will be original for validation of the research. After this researcher asked questions from the teachers thy study was conducted on both male and female teachers. There was no fixed limit for the interview with open-ended questions.

**3.5 Data Collection:** According to this study, the primary data is used. The primary data for this research study will be collected through a questionnaire and interview schedule; the data from the questionnaire and interview schedule were collected from 30 respondents. In addition, this collected data lead this research study to the exploration of the impact of challenges faced by teachers on implementing ICT. At the same the time, a literature review of this research study will provide the secondary. Source of secondary data, which is, from here form published research articles.