

## Chapter 3

### Methodology of the Research

---

#### 3.1 Introduction

The present study adopted descriptive research with survey technique for data collection. Snowball sampling method was used to collect the data. This methodology helped the research scholar to obtain general results with the samples. The main reason for employing survey methodology enabled the research scholar to collect data using questionnaire from a small sample of the population in a short period. This paper presents the design and procedure adopted to study the user-friendliness of E-Learning tools/applications in teaching Mathematics online.

#### 3.2 Method of the Research

This is a study where the technique of Descriptive Survey Research is being used to find out the user-friendliness of E-Learning tools/applications in teaching Mathematics online.

#### 3.3 Population and Sample of the study

**Population:** Population cannot be defined in this study.

**Sample:** The sample was taken as per the availability. It is not confined to a particular location. The sample has 40 Mathematics teachers from different parts of the country.

**Method of selecting the sample:** Snowball sampling method was used to select the Sample. I contacted a few Mathematics teachers who gave the contacts of other Mathematics Teachers and so on. I could contact 40 mathematics teachers teaching in different parts of the country.

#### 3.4 Tools for collection of Data

Initially Research scholar decided to collect data through Questionnaire for Mathematics teachers, Observations of the online classes of at least 10 mathematics teachers and Interviews of those Teachers. But it could not be possible to take observations due to lockdown and summer vacation of Schools. So the only tool was questionnaire, which was prepared and given to the teachers through Google Forms link. To calculate the user-friendliness of E-learning tools/applications, four categories were used, which were -

1. Easy
2. Moderate
3. Difficult
4. Never Used

### 3.5 Procedure of the study

**Tool prepared:** Questionnaire was prepared on Google Form for Mathematics Teachers. After preparing the questionnaire, the research scholar shared the link of the questionnaire through Whatsapp, Telegram and Gmail. The questionnaire was administered personally for each teacher.

**Data Collection:** The medium of collecting data was Online mode and the application used for collecting was Google Forms. The responses are collected in the tool and that can be exported in the form of a spreadsheet.

**Data Analysis:** Through spreadsheet and Bar Graphs the data was analysed, which are easily created by the Google forms itself.

### 3.6 Conclusion

In this Chapter, the research scholar has decided the method of the research and the sample of the study. The research scholar has also decided the tool that is to be used for the data collection and has made the tool. She has also decided the procedure of the study that through Google forms (online mode), the data is to be collected and analyzed.