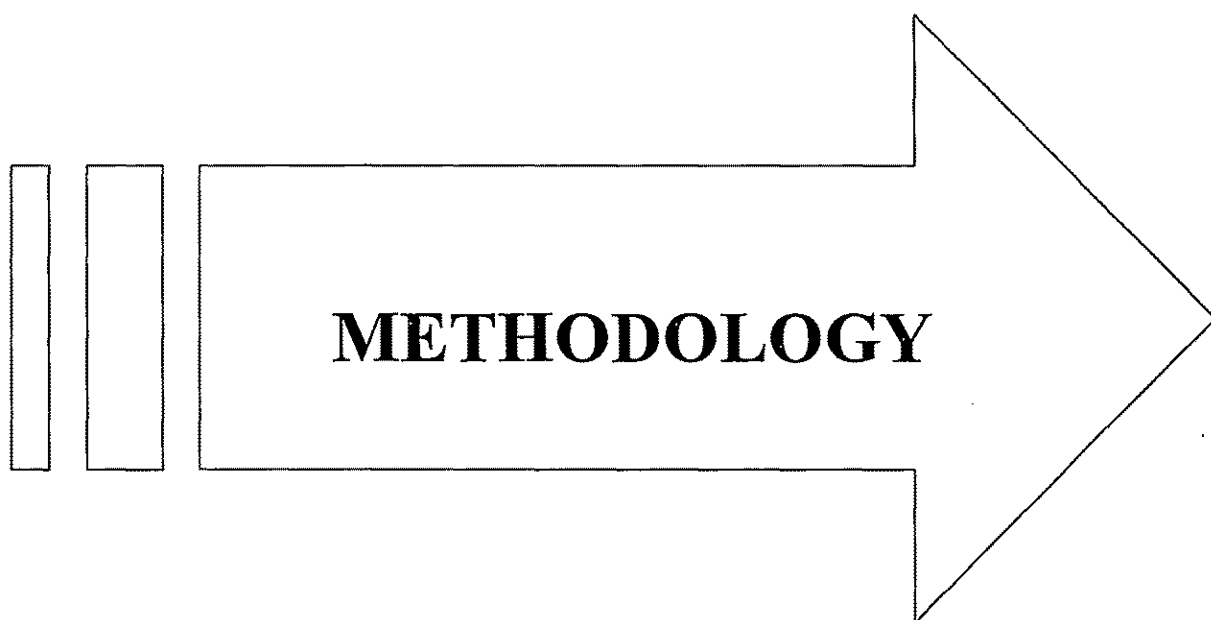


# **CHAPTER - III**



## **CHAPTER - III**

### **METHODOLOGY**

#### **3.0.0 INTRODUCTION**

This chapter deals with the methodology employed to achieve the objectives of the study mentioned in chapter one. Keeping in view the nature and objectives of the study, appropriate sample was selected and tools was developed. This chapter deals with the research design, sample, tools used, data collected and statistics used.

#### **3.1.0 RESEARCH DESIGN**

No planning of educational research can be completed without a detailed design of investigation. Design is considered as the heart and soul of the investigation. The research design may be defined as a sequence of those steps taken ahead of the time to ensure that the relevant data permits objective analysis of the different hypothesis formulated with respect to the research to the research problems.

### 3.2.0 SAMPLE

A sample is a small proportion of a population selected for observation and analysis. By observing the characteristics of the sample, one can make certain inference about the characteristics of the population from which it is drawn. As the time was short at the disposal of the experimenter, random sampling method was adopted. It included one private Senior Secondary school of Bhopal City. There were two sections of the class. One group was designated as Experimental group and another group was designated as Control group. The description of the sample for the study is given in the Table 3.3.

**Table 3.3 : Distribution of the Sample**

GROUPS	BOYS	GIRLS	TOTAL
EXPERIMENTAL GROUP	30	30	60
CONTROL GROUP	25	12	37
TOTAL	55	42	67

### 3.3.0 VARIABLES

The study was based on following variables :

#### **Independent Variables :**

Teaching Method

1. Traditional Approach
- 2- Constructivist Approach

#### **Dependent Variables :**

- 1- Achievement in Urdu

### **3.4.0 TOOLS**

In the present study, the investigator has constructed three tools keeping in view the objectives of the study. The first tool is used to measure an achievement of the students in terms of the components of Urdu language after the ten days of exposure of the students to their respective approaches. The second tool is used to measure the reaction of students towards constructivist approach after the ten days of exposure of the students by this approach. The third tool is used to measure the class-room behavior of students in first class of new approach and also after ten days of exposure to new approach.

Following tools were developed for the collection of data related to different variables.

#### **3.4.1 ACHIEVEMENT TEST**

For constructing the test of achievement, the items were framed on the basis of selected components :

1. Word power
2. Grammar in use
3. Sentence formation
4. Comprehension

The test consisted of ten multiple choice questions, five match the columns, ten true and false, five fill in the blanks, one comprehension passage and five make sentences.

**Table 3.4. Items details of the Achievement Test.**

S.No.	Types of items	No. of items	Weightage
1	Multiple choice	10	10
2	True and false	10	10
3	Matching	5	5
4	Fill in the Blanks	5	10
5	Comprehension	1	5
6	Make Sentence	5	10
	TOTAL	36	50

### 3.4.2 REACTION SCALE

To determine the reaction of the students towards new teaching strategy, Reaction Scale was developed by investigator. The Scale consists of fifteen items.

Each item having five options such as, Strongly Agree(SA), Agree(A), Undecided(U), Disagree(D), Strongly Disagree(SD). Students were asked to select one.

### 3.4.3 CLASS-ROOM BEHAVIOR OBSERVATION CHECKLIST

To observe the enter and exit classroom behavior of students, Classroom Behavior Scale was developed by investigator. The scale consists of ten items.

Each item having two columns "first day interaction" and "last day interaction", each column having three options such as, Yes, To some extent, No. Investigator, after first day interaction and after last day interaction selecting the right option based on the observation of the investigator.

### 3.5.0 PROCEDURE OF DATA COLLECTION

Data were collected with the help of tools described in the preceding captions.

Data collection included the test after the treatment which were conducted as detailed and presented in the table 3.5.

**Table 3.5. Schedule of Data Collection**

TOOLS	EXPERIMENTAL GROUP	CONTROL GROUP
Treatment	1 <sup>st</sup> February – 12 <sup>th</sup> February	-
Post-test	13 <sup>th</sup> February	13 <sup>th</sup> February
Reaction scale	13 <sup>th</sup> February	-
Class-room behavior scale	1 <sup>st</sup> February and 12 <sup>th</sup> February	

### 3.6.0 STATISTICAL TECHNIQUES

The statistical techniques used in the present study for analyzing the data are given objective-wise as under :

1. For studying the effectiveness of the Constructivist Approach in terms of :
  - (a) Achievement in Urdu, Percentile Mean, C.V. and Standard deviation were used; and
  - (b) Reaction of the students towards the Constructivist Approach Percentage was used.
2. For studying the effect of Treatment and Gender on Achievement in Urdu, 2X2 factorial design ANCOVA of unequal cell size was used.