

## **CHAPTER - 3**

**DESIGN OF T-F RESEARCH**

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### **3.1 Introduction**

The planning of the educational research cannot be completed without a detailed design of investigation. This is to be considered as the heart and soul of the investigation. In fact it is the blue print of the detailed procedure of testing the hypothesis and analysing the obtained data.

**According to Tuckman (1978),**

“A research design is a specification of operations for the testing of hypothesis under a given set of conditions.”

The purpose of this study was to analyse the students’ oral reading miscues (errors) and to study the comprehension of the students under two modes of text presentation i.e. aural and normal (reading).

The research has been designed to investigate accuracy in the form of miscues (i.e. substitutions, insertions, omissions, reversals, self-corrections. In addition to these errors repetitions & hesitations errors have also been taken into consideration.

Due to lack of time, manpower and money the study was conducted on small sample. Two English medium schools of Bhopal city were selected for the study.

For comparison purpose equal numbers of boys and girls were used within each of three grades (III, IV and V). The schools were selected from same locality and age group of children was confined to 8-12 years only.

### **3.2 Statement of the Problem**

“A study of miscues, aural and reading comprehension of the children at primary stage.”

### **3.3 Objectives**

The study, was designed to achieve following objectives :

1. To analyse the miscues (errors) in the form of substitutions, insertions,

omissions, reversals, refusals, self corrections, hesitations, repetitions .

2. To find out the aural (listening) comprehension of the children studying in grade III, IV and V.
3. To find out the reading comprehension of the children studying in grade III, IV and V.
4. To study the patterns of the miscues (errors) committed by boys/girls.
5. To study the patterns of the miscues (errors) committed by different grades (i.e. III, IV and V).
6. To compare the aural and reading comprehension of boys and girls.
7. To compare the aural and reading comprehension of students of different grades (i.e. III, IV and V).

### **3.4 Variables**

Variables are attributes or qualities which exhibit difference in magnitude, and which vary along some dimensions. The following variables were taken into consideration to conduct the study.

#### **1. Independent variables**

- (a) Gender (Boys and Girls)
- (b) Grade (III, IV and V)

#### **2. Dependent variables**

- (a) Reading accuracy in form of following miscues; substitutions, insertions, omissions, reversals, refusals, self-corrections, hesitations, repetitions .
- (b) Comprehension : Aural and Reading.

#### **3. Controlled variables**

- (a) Socio-economic factor
- (b) Age

In order to control these variables schools were selected from same locality and age group of children was confined to 8-12 years.

## Sample

The technique of selecting sample together with its size is an important aspect of research and this enhance the reliability and validity of research findings. The adequacy of a sample will depend upon our knowledge of the population or supply as well as upon the method used in drawing the sample. Samples are of two types : possibility and non possibility.

Sampling for this study was purposive. The sample of this study included two English Medium Schools of Bhopal city. A sample of 60 students was selected from Grade III, IV and V.

The study was in two phases :

### Phase I

Visited the schools and with the help of teacher concern 30 boys and 30 girls with reading problem were selected. (10 each from grade III, IV and V)

### Phase II : Administration of the Test

Table 1. Sample of the Study

Grade	Gender
III (N = 20)	Boys (N = 10) Girls (N = 10)
IV (N = 20)	Boys (N = 10) Girls (N = 10)
V (N = 20)	Boys (N = 10) Girls (N = 10)
<b>Total</b>	<b>N = 60</b>

### 3.6 Research Questions/Hypotheses

The present study was in two parts :

- \* Part I of the study was concerned with the analysis of the students' oral reading

miscues (errors).

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- \* Part II of the study was concerned with the comprehension of the students under two modes of text presentation i.e. aural and normal (reading).

The research questions concerning part I of the study were :

1. Does reliance on the different available cue system differ with the students of different gender (Boys and Girls) ?
2. Does reliance on the different available cue system differ with the students of different grades (III, IV and V) ?

The following hypotheses have been formulated concerning part II of this study :

Key H<sub>0</sub> = Null Hypothesis

H<sub>1</sub> = Alternative Hypothesis

**H<sub>0</sub> (1) :** There is no real difference between the mean scores obtained by the boys and the girls on aural comprehension.

**H<sub>1</sub> (1) :** There is a real difference between the mean scores obtained by the boys and girls on aural comprehension.

**H<sub>0</sub> (2) :** There is no real difference between the mean scores obtained by the boys and the girls on reading comprehension.

**H<sub>1</sub> (2) :** There is a real difference between the mean scores obtained by the boys and the girls on reading comprehension.

**H<sub>0</sub> (3) :** There is no real difference between the mean scores obtained by grade III and IV students on aural comprehension.

**H<sub>1</sub> (3) :** There is a real difference between the mean scores obtained by grade III and IV students on aural comprehension.

**H<sub>0</sub> (4) :** There is no real difference between the mean scores obtained by grade III and IV students on reading comprehension.

**H<sub>1</sub> (4) :** There is a real difference between the mean scores obtained by grade III and IV students on reading comprehension.

- H0 (5) :** There is no real difference between the mean scores obtained by grade III and V students on aural comprehension.
- H1 (5) :** There is real difference between the mean scores obtained by grade III and V students on aural comprehension.
- H0 (6) :** There is no real difference between the mean scores obtained by grade III and V students on reading comprehension.
- H1 (6) :** There is a real difference between the mean scores obtained by grade III and V students on reading comprehension.
- H0 (7) :** There is no real difference between the mean scores obtained by grade IV and V students on aural comprehension.
- H1 (7) :** There is a real difference between the mean scores obtained by grade IV and V students on aural comprehension.
- H0 (8) :** There is no real difference between the mean scores obtained by grade IV and V students on reading comprehension.
- H1 (8) :** There is a real difference between the mean scores obtained by grade IV and V students on reading comprehension.
- H0 (9) :** There is no real difference between the mean scores obtained by the boys and girls of grade III on aural comprehension.
- H1 (9) :** There is a real difference between the mean scores obtained by the boys and girls of grade III on aural comprehension.
- H0 (10) :** There is no real difference between the mean scores obtained by grade III on reading comprehension.
- H1 (10) :** There is a real difference between the mean scores obtained by the boys and girls of grade III on reading comprehension.
- H0 (11) :** There is no real difference between the mean scores obtained by the boys and girls of grade IV on aural comprehension.
- H1 (11) :** There is a real difference between the mean scores obtained by the boys and girls of grade IV on aural comprehension.
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- H0 (12) :** There is no real difference between the mean scores obtained by the boys and girls of grade IV on reading comprehension.
- H1 (12) :** There is a real difference between the mean scores obtained by the boys and girls of grade IV on reading comprehension.
- H0 (13) :** There is no real difference between the mean scores obtained by the boys and girls of grade V on aural comprehension.
- H1 (13) :** There is a real difference between the mean scores obtained by the boys and girls of grade V on aural comprehension.
- H0 (14) :** There is no real difference between the mean scores obtained by the boys and girls of grade V on reading comprehension.
- H1 (14) :** There is a real difference between the mean scores obtained by the boys and girls of grade V on reading comprehension.
- H0 (15) :** There is no real difference between the mean scores on aural comprehension and mean scores on reading comprehension scores among boys.
- H1 (15) :** There is a real difference between the mean scores on aural comprehension and mean scores on reading comprehension scores among boys.
- H0 (16) :** There is no real difference between mean scores on aural comprehension and mean scores on reading comprehension scores among girls.
- H1 (16) :** There is a real difference between mean scores on aural comprehension and mean scores on reading comprehension scores among girls.
- H0 (17) :** There is no real difference between mean scores on aural comprehension and mean scores on reading comprehension scores among III grade students.
- H1 (17) :** There is a real difference between mean scores on aural comprehension and mean scores on reading comprehension scores among III grade students.
- H0 (18) :** There is no real difference between mean scores on aural comprehension and mean scores on reading comprehension scores among IV grade students.
- H1 (18) :** There is a real difference between mean scores on aural comprehension and mean scores on reading comprehension scores among IV grade students.
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**H0 (19) :** There is no real difference between mean scores on aural comprehension and mean scores on reading comprehension scores among V grade students.

**H1 (19) :** There is a real difference between mean scores on aural comprehension and mean scores on reading comprehension scores among V grade students.

(Level of significance has been fixed at 0.05 level.)

### **3.7 Description of the Tool Used**

In the present study the test used was developed by the investigator. While developing the test, the instructions given by Goodman (1972) were taken into consideration by the investigator.

Due to lack of time and other factors, validity and reliability of the test could not be calculated by the researcher. However other precautions were taken by the researcher. This test only fulfils the requirements of the investigator. It was administered individually. There was time limitation for the test (i.e., 20-25 minutes). The test developed is an oral test which tests the reading accuracy, reading comprehension and aural comprehension of the student. There are set A and set B with a record sheet. In set A three passages with increasing length, difficulty and questions were taken for reading accuracy and reading comprehension purpose. In set B other three passages with increasing length, difficulty and questions were taken for aural comprehension. (See appendix)

The passages were sorted out for the students from the books of similar standard other than their text books. These passages were selected and they were ranked in increasing order of difficulty after showing to the regular teachers, the guide and conducting pilot testing on students (other than sample). At the end of each passage there was a set of orally administered comprehension questions. Each passage was followed by questions. Passage no. 1 was having three, passage no. 2 was having four and passage no. 3 was having 5 questions.

The front page of the record sheet has been designed for recording and summarising the scores of reading accuracy of all the three passages of set A. In record sheet the errors committed by the individual in all the three passages were noted/recorded separately.

### **3.8 Administration of Tool**

The test was administered on 60 students (Grade III, IV and V). It was taken into consideration that the testing should take place somewhere quiet and free from



interruption and it must not be possible for anyone apart from the investigator to hear the student's voice.

The test was given in a pleasant but business like manner which avoids producing undue nervousness or tension in the reader. No. help was given to the students by the investigator.

The students were called one by one and instructions were given properly to the students for administering the test after which he or she was allowed to read the passage. Errors committed by the students were marked and it was followed by the process of recording in a cassette. Then the students were asked to read the passage silently so that they can concentrate on the passage. After reading each passage the comprehension questions were asked which are printed at the end of each passage.

The ability of aural comprehension was test by the investigator by making each student to listen the passage narrated by the investiagator and then they were ask to answer the questions which are printed at the end of each passage.

### **3.9 Scoring and Tabulation of Data**

#### **(a) Reading Accuracy**

First, a count of all the seven errors (substitutions, insertions, omissions, reversals, refusals, hesitations, repetition and self-corrections) were made from each passage of set A. Thereafter an overall record for each type of error was kept by adding up errors committed in each passage and this was recorded in the count row in the reading behaviour section of the record sheet. The mean score and SD obtained were placed in the Tables formed.

For recording, reading behaviour, first it was classified as substitutions, insertions, omissions, reversals, refusals, hesitations repetitions and self corrections. After evaluation and grading of each error, it was recorded in the appropriate boxes in the behaviour category. The reading behaviour categories on the record sheet present a profile of performance on the test. They are intended as a basis for the qualitative evaluation of reading performance.

#### **(b) Reading and Aural Comprehension**

Under this all the numbers of the correctly answered comprehension questions for

each passage attempted were added up and recorded in the box given next to each passage; then the correct answer of all the three passages were added up and total scores was noted in appropriate box.

Miscues and correct answers given by the students in this study has been depicted in tabulated form in Table 2, and Table 7.

### **3.10 Statistics Used**

In the present study descriptive statistics has been used in the form of means and standard deviation to organise, summarise and describe scores on dependent variable (reading accuracy and reading and aural comprehension) for different independent variables.

Inferential statistics in the form of 't' test has been used in order to generalise some findings.

### **3.11 Delimitations**

Every research work have some delimitations and the delimitation of this study are :

1. The sample of this study was confined to 60 students of Bhopal city only.
2. The sample of this study included only two English medium schools of Bhopal city.
3. The identification of the children with reading problem was done from the information given by the teacher concern.
4. Problem in reading accuracy, reading and aural comprehension were identified, other skills like writing, spelling and arithmetic were not taken into consideration.
5. The test developed by the investigator for reading accuracy, reading and aural comprehension has not been standardised, its validity and reliability has not been checked due to lack of time.