# CHAPTER -- IV

# PROCEDURE OF THE RESEARCH

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#### CHAPTER -- IV

#### PROCEDURE OF THE RESEARCH

#### IV.1 INTRODUCTION

In the first chapter of this dissertation, the researcher has introduced the problem of research. The second chapter is devoted to describe the various aspects of questioning which is the main theme of the research study. The third chapter is devoted to review of related researches. The researcher, therefore, feels that it is now right time to introduce to the reader with the procedure adopted for the present research study. Hence this chapter.

In the following paragraphs the researcher has described the procedure she has adopted for the research work on hand.

Thus, this chapter reveals the research design, data collection, pre-test, post-test, experimental treatment and evaluation of pre-test and post-test.

#### IV.2 RESEARCH DESIGN

Research is directed towards the solution of a problem.

The ultimate goal is to discover cause and effect relationships between variables.

Research has three purposes and these three purposes give three types of researches.

- 1) Basic research in a laboratory is carried out to set a theory.
- 2) Applied research has a purpose to improve a product or process, to test theoretical concepts in actual problem situation.
- 3) Action research is focused on immediate application, not on development of theory or general application. Its purpose is to improve the school practices.

# Types of Educational Research

There are three types of Educational Research.

- 1) Historical research describes what was. The process involves investigating, recording, analysing and interpreting the events of the past for the purpose of discovering generalization that are helpful in understanding the past 67 the present and to a limited extent in anticipating the future.
- 2) Descriptive research describes what is, describing, recording, analysing and interpreting condition that exists. It involves some type of comparison or contrast and attempts to discover relationships between existing nonmanipulated variables.

3) Experimental research describes what will be when certain variables are carefully controlled or manipulated. The focus is on variable relationships. As defined here, deliberate manipulation is always a part of the experimental method.<sup>1</sup>

Experimental research provides a systematic and logical method for an answering the question "If this is done under carefully controlled condition what will happen?" 2

Experimental design refers to the conceptual framework within which the experiment is conducted. An experimental design serves two purposes.

- It provides opportunity for the comparison required by the hypothesis of experiment.
- 2) It enables the experimenter to make meaningful interpretation of the study through his statistical analysis.

All experiments have certain variables. The experimenter controls some variables and find out the outcome of the changing variable. Educational experiments are different from the laboratory experiments. There are three types of experimental designs.

- 1) Pre-experimental design.
- 2) True experimental design.
- 3) Quasi experimental design.



Pre-experimental design is least effective. It provides no control group, no equal group.

True experimental design is most effective. It employs randomization to provide control of the equivalence of groups and exposure to treatment.

Quasi experimental design is less effective but it is useful when randomization is not feasible.

Quasi experiments are experiments that have treatment, outcome measures and experimental units but which do not use random assignments to create the comparison from which treatment caused change is inferred. The comparison depends on equivalent groups that differ from each other in many ways other than the presence of a treatment whose effects are being tested. It is assumed that statistical controls are adequate substitute for experimental control.

As the random assignment was not feasible the researcher decided to conduct the experiment with following design.

The pre-test, post-test non equivalent group design.

E 
$$0_1$$
 X  $0_2$   $0_1$   $0_3$  Pre-test

C  $0_3$   $0_4$   $0_2$   $0_4$  Post-test

This design is often used in classroom experiments when experimental & control group are naturally assembled.

In this experiment experimental group is provided with the experimental treatment (X) while the control group is not given it at all. The difference between the means of pre-test and posttest scores are tested for statistical significance.

# IV.3 SAMPLING PROCEDURE

# Population -

The research study is meant for those teacher-trainees from B.Ed. colleges from two districts viz. Sangli and Kolhapur of Shivaji University who have offered Methodology of Teaching English as their first method.

Hence the population of the present research study comprises of all the teacher-trainees from the colleges of Education from those two districts who have offered methodology of teaching English as their first method.

There are 18 colleges of Education in these two districts. Generally every college is given permission of 10 teacher trainees for each method and so the number of population approximately is 180 teacher - trainees who have offered Methodology of English as their first method.

The names of the colleges are given below:

- 1) Shri Maharani Tarabai College of Education, Kolhapur.
- Acharya Jawadekar Shikshan Shastra Mahavidyalaya,
   Gargoti.
- 3) Balasaheb Ganpatrao Kharade College of Education, Shivaji Peth, Kolhapur.
- 4) Vasantrao Naik College of Education,
  Dasara Chowk, Kolhapur.
- B.Ed. College,Peth Vadgaon,Tal. Hatkanangale, Dist. Kolhapur.
- 6) Savitribai Phule Mahila Shaikshan Shastra Mahavidyalaya, Kolhapur.
- 7) Chattrapati Shivaji College of Education, Rukadi, Kolhapur.
- 8) Ichalkaranji Shikshan Shastra Mahavidyalaya, Ichalkaranji, Dist. Kolhapur.
- Shikshan Shastra Mahavidyalaya,
   Kagal, Dist. Kolhapur.
- 10) Jagruti B.Ed. College, Gadhinglaj, Dist. Kolhapur.

- 11) Yashwant Shikshan Shastra Mahavidyalaya, Kodoli, Tal. Panhala, Dist. Kolhapur.
- 12) Kalpavriksha Shikshan Shastra Mahavidyalaya, Jaysingpur.
- D.K. Shinde
  Shikshan Shastra Mahavidyalaya,
  Gadhinglaj, Dist. Kolhapur.
- 14) Smt. Putalaben Shah
  College of Education, Sangli
- 15) Vasant College of Education,
  Urun-Islampur,
  Dist. Sangli.
- 16) Mahila Shikshan Shastra Mahavidyalaya, Tasgaon, Dist. Sangli.
- 17) Kai. Sou. Malatidevi Vasantrao Patil Mahila Shikshan Shastra Mahavidyala, Miraj, Dist. Sangli.
- 18) Shikshan Shastra Mahavidyalaya, Vita, Dist. Sangli.

#### Sample -

An Experiment involves the comparison of the effects of a particular treatment with that of a different treatment or of no treatment. In a simple conventional experiment, reference is usually made to an experimental group and to a control group.

In this research study, the sample was not a random one. It was a Non-probability sample.

The researcher has a full time service in Late Sau. Malatidevi Vasantrao Patil Mahila Shikshan Shastra Mahavidyalaya and it was not possible for her to select a random sample because of administrative limitations and assigning individuals to experimental and control groups. Hence she has selected the available groups and the status of the groups was tested on the basis of t test on pretest.

The sample selected is as given below:

| Group                 | Name of the college   | No.of<br>subjects | Total<br>Number |
|-----------------------|---|-------------------|-----------------|
| Experimental<br>Group | Late Sou. Malatidevi<br>Vasantrao Patil Mahila<br>Shikshan Shastra Mahavi-<br>dyalaya, Miraj. | <b>16</b>         | 16              |
| Control<br>Group      | 1) Kalpavriksha B.Ed.<br>College, Jaysingpur,<br>Dist. Kolhapur.                              | 10                | 16              |
|                       | <ol> <li>Vasant College of<br/>Education,<br/>Islampur,<br/>Dist. Sangli.</li> </ol>          | 6                 |                 |

# IV.4 DATA COLLECTION

First of all the researcher collected the lesson notes of the teacher - trainees from the sample and studied the errors of framing questions. These were from the lesson notes of the practice lessons.

The errors were of the following types:

- Errors of question word.
  e.g. Who did Ganpat help ?
- 2) Errors of auxiliary verbs.e.g. What did he proud of ?
- Errors of main verb.e.g. What did he decided to do ?
- 4) Errors of the construction of the question.
  e.g. Why Helen Keller was famous ?
- 5) Unnecessary use of passive voice.
  e.g. Where was Matharaka lived ?
- 6) Errors of the questions not suitable to the context in its tense.
  - e.g. Who help Dhondiba ? (It should be in past tense).

The common mistakes are given in the appendix

This data helped the researcher to conduct the experimental treatment as well as preparing the pre-test and post-test.

#### IV.5 PREPARATION OF THE PRE-TEST

Pre-test is a must in a quasi experimental design where there is one control group and one experimental group.

The pre-test is useful 1) to know the entering behaviour of the two groups 2) and to prove the equivalence of the groups on statistical base. If the difference between the means of the scores of experimental group and control group after pre-test is not significant it means that the two groups are equivalent and it raises the standard of the experiment in its effectiveness.

The pre-test was prepared with great efforts. Following objectives were put forth while preparing the pre-test.

To test

- i) the knowledge of teacher trainees about the tense.
- ii) the knowledge of teacher trainees about auxiliaries.
- iii) the use of structure of question (construction of question).
- iv) the proper use of question words.
- v) the use of questions in particular context.

Following types of questions were asked.

- 1) Statements were provided and a question was to be prepared to get the underlined part of these sentence as its answer.
- 2) Statements were given to add question tags.
- Questions were given to find out the mistakes in the construction and to correct it.
- 4) Teacher-trainees had to prepare questions with given question words suitable to certain passage.

The pre-test was made valid by getting it checked by the experts. They were,

- 1) Dr. H.K. Gurav, from College of Education, Karad.
- 2) Prin. N.B. Bhosale, Kalpavriksha B.Ed. College, Jaysingpur.
- 3) Shri B.M. Hirdekar, Education Department, Kolhapur.
- 4) Shri V.G. Pendase, Balwantrao Marathe High School, Miraj.

It had fifty questions in all and fifty marks each question having one mark. The period was one hour.

It was administered on both the groups with help of the principals of the colleges.

After administration of the pre-test and checking of the papers a plan of experimental treatmnt was implimented on experimental group.

The main objectives of the study were as given below:

- 1) To find out the ways and means to enable teacher\_trainees to ask questions free from grammatical mistakes.
- 2) To enable teacher-trainees to master the structure of question pattern.

The researcher prepared a plan from this point of view which included both learning and practice.

# IV.6 PLAN FOR EXPERIMENTAL TREATMENT

The researcher prepared a plan for fifteen days during which she gave an experimental treatment to the experimental group for developing the skill of framing questions.

Objectives of teaching for experimental treatment.

To enable the teacher trainees to learn the essential elements in questions e.g. i) tense, ii) auxiliaries, iii) question words, iv) construction of the question, v) passive and negative construction of question, vi) rules of question tags.

- To enable the teacher-trainees to practise the construction of question.
- 3) To enable the teacher- trainees to prepare questions with related matter and to apply them in their teaching.

With the consent of the principal the programme was conducted in the college in following way.

# IV.7 EXPERIMENTAL TREATMENT PROGRAMME

- 1st day: The first day was devoted to teach 'tense' in general and present tense in particular. Following points were discussed & practised.
  - 1) The concept of tense.
  - 2) The use of present tense.
  - 3) The types of present tense. Simple, Continuous / Progressive, Perfect and Perfect Continuous.
  - 4) Use of be have/has have been/has been ing form and participle.
  - 5) Use of s or es with verb in simple present tense.
  - 6) Practice in sentences.



2nd day: On this day following items were taught.

- 1) Past tense.
- 2) The use of past tense.
- 3) The types of past tense.
  Simple, Continuous/progressive, perfect and perfect continuous.
- 4) Various forms of simple past tense and use of ed.
- 5) Use of was/were, had, had been, ing form and participles.
- 6) Practice of past tense in sentences.

3rd day: On this day future tense was discussed in details. Following points were taught.

- 1) Use of future tense.
- 2) Types of future tense.
  Simple, Continuous/Progressive, perfect and perfect continuous.
- 3) Construction of future tense use of will/shall, will be/shall be, will have/shall have, will have been/shall have been.
- 4) Practice of these various types given through various sentences.
- 4th day: Practice of sentences using all the three tenses was given on this day in following manner.

- 1) A chart showing all tenses together.
- 2) Change the tense as directed in the brackets.

5th day : On this day Auxiliary verbs and their use was discussed. Following points were included.

- 1) Meaning and function of auxiliary verbs.
- 2) Various auxiliary verbs. e.g. make, have, can, do, will, may etc.
- 3) Auxiliaries and their use in questions.

6th day : On 6th day questions beginning with auxiliary verbs were taught.

The construction of such questions.
Auxiliary + Subject + Verb + Object or Adverb etc.

e.g. Do you like it ?

May I come in ?

Are you going to market ?

2) Practice in questions with auxiliary verbs in

7th day : 7th day was devoted to the teaching of interrogatives

1) Pronouns:

Who - Person
Which - Selection
What - Object

Whom - Objective case of who

Whose - Possessive case.

Which is used for both person and things.

Sentences to make use of these question words were given, Teacher Trainees were asked to prepare questions on given statements.

8th day: On this day various Interrogative Adverbs were taught.

Various interrogative adverbs and their use was discussed.

1) Adverb use

Where place

When time

How manner

Why reason

How long duration

How many countable numbers

How much Uncountable and material

How high height

How far distance.

2) Various questions were prepared by the teacher trainees using these adverbs on given statements.

9th day: Negative questions and passive questions were discussed on this day.

1) Negative questions -

1) Q word + auxiliary + subject + not + verb + 0

Passive construction

2) Q word + be + O + past participle + S

When was it given to her ?

- 2) Q word + be + past participle + S/O What was given to him ?
- 3) More practice of such questions was given to the students.

10th day: On the tenth day use of infinitive and gerund was taught and how they are used in question was discussed.

- Use of gerund according to its functions and questions based on it.
- 2) Infinitive remain unchanged.

  He wanted to build house.

  What did he want to build?

  Who wanted to build a house?

11th day: On this day what .... like questions were taught.



It is in practice now that for certain description or for certain adjective the question asked is what is it like?

- e.g. 1. What was Mantharaka like ?
  - 2. What was Bhagi like ?
  - 3. What are the donkey's legs like ?

On this day various questions were given for practice as revision work.

12th day: The twelfth day was devoted for teaching of question tags.

The following points were discussed.

- 1) Meaning and use of question tags.
- 2) Rules for preparing question tags.
  - e.g. Negative statement positive tag

    Positive statement negative tags
- 3) Use of auxiliaries in question tags.
  One has to use only auxiliary and not the main verb.
- 4) Use of pronoun, coma, question mark.
- 13th day: A great deal of practice was given on this day to prepare questions tags.

- 1) Various tenses were practised.
- 2) Various auxiliaries were practised.
- 3) Various pronouns were practised.
- 4) Both negative and positive tags were practised.
- 14th day: On this day questions on certain continuous paragraphs were practised. Question words were given and they were asked to prepare questions with those question words related to those paragraphs.
- 15th day: On this day the question pattern was drilled in various ways.

Wh word + auxiliary + subject + verb + 0 + adverb or adverbial phrase.

- 1) Why did you write this letter so late?
- 2) When did he go on that day?
- 3) Why could he not become monitor?
- 4) What was Ramesh's nature like?

To form these questions many statements were provided and the answers were underlined. Various question words and various tenses were practised.

#### IV.8 HOME ASSIGNMENT

The researcher gave home assignments to the teacher trainees. The lessons from 8th and 9th standards were given for preparing various types of questions. The teacher trainees prepared the questions and gave them to the researcher within two days. The questions were checked and returned to them.

This home assignment gave ample practice to the teacher trainees to master the structure of question pattern.

# IV.9 PREPARATION OF THE POST-TEST

Afterwards the post-test was given to the teacher trainees of both groups. The post test was prepared on parallel line of the pre-test.

The proportion of items, the marks, the sequence of the questions, the type of questions the time alloted were the same to the pre-test. After collecting the answer books the answer books were checked.

#### IV.10 EVALUATION PROCEDURE

Evaluation was done in the following way.

1) The answer books were checked.

- 2) The mean was found of every group.
- 3) The analysis was done on the basis of null hypothesis.
- 4) T test was applied to find the significance of the difference.
- 5) Percentage of correct responses was calculated and even it was tested at 0.05 significance level of percentage.

# IV.11 CONCLUDING REMARKS

This chapter was devoted to the procedure of Research.

It described the data collection, sample the pre-test and posttest, actual conducting of experimental treatment and the evaluation
of the tests held on the sample.

It will lead to the analysis. The next chapter is devoted to the analysis and interpretation of data.

# REFERENCES

- 1) John W. Best and James V. Kahn Research in Education Sixth Edition, Prentice Hall of India Private Ltd., New Delhi 1989, p.24.
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