Chapter – III

Procedure

3.1 Introduction:

The chapter deals with the procedure of the whole research work. It is very important to know the way of research is conducted. In this chapter the researcher deals with the research methodology, tools, statistical measure, sample, sample design, procedure of research. This chapter describes in detail all about methodology followed in the present research study. It is a systematic approach adopted by the researcher to conduct the research work. Research methodology also can be further defined as, “The procedure by which researchers go about their work of describing, explaining and predicating phenomena are called methodology.” Methodology guides the researcher to adopt style of conducting research work and it is adopted as per the nature of the problem.

3.2 Research Methodology:

There are basic three methods of research

1) Historical method
2) Survey method
3) Experimental method

The researcher has selected two methods for the present research work.

1) Survey method
2) Experimental method
3.2.1 Survey method: (Reason of using survey method)

The researcher has used the survey method because the first objective of the research problem deal with present information about using the communicative approach by the teachers who were teach English subject in class room. The researcher want to know the present condition of students in teaching learning process while using communicative approach in class. So there is need of use survey method.

3.2.2 Experimental methodology: (Reason of using Experimental method)

(Quasi-Experimental) The researcher has studied various methods and decided to go with experimental method. Because the third & fourth research objective deal with implantation of E-program and to know the effect of E-Program in developing communicative approach of the students. So Experimental methodology is useful for the present Research problem.

According to the objectives of the research problem the researcher has choose the experimental method. When the researcher considered the objectives of research study such things came across those are, To develop E-Program, To implement the E-Program, To Study the effect of E-Program in developing communicative approach. When one wants to study the effect of such things experimental method should be used. To study the effect of E-Program about the communication skill of the students of seven standards, the experimental method is the right method. So the researcher used experimental method too.
3.2.3 Characteristics of the Experimental Method:

a) Experimental Method in social sciences is a method of testing hypothesis.

b) By Experimental Method the researcher tries to isolate compels social phenomena.

c) In Experimental Method we see the effect of a variable keeping other things equal.

d) It helps in scientific study of relationship between cause and effect.

3.2.4 Experimental Design:-

The researcher has selected the one group per test and post test design, this is commonly used in experiment. Comparison of the pre test and post test scores allows the researcher to evaluate how effective the E-programmers is in the development of the communicative approach. Experimental design is the blue print of the procedure that enables the Researcher about relationship between independent and dependent variables.

Researcher can select the design for the experiment according to the purpose of the research to be conducted. The selected design works for the researcher as the Blueprint to solve the practical problems in implementation of the experiment. In the present research one group pre test-post test design is selected by the researcher which is a type of pre-experimental design as it proves most adequate and correct in educational settings. The researcher wanted to measure the improvement in spoken English of Marathi medium students. Researcher found this
design suitable as it enabled the researcher to test the performance of the subjects before and after the implementation of the program. i.e. treatment.

Experimental Design O1 X O2 where, O1 is Pre test, O2 is Post test and X is treatment

In this design the subjects are exposed to pretest before implementation of the E-program. Then the researcher gives the treatment i.e. conducts the E-program. After completion of the E-program, researcher again exposes the subjects to post test. Same procedure is as followed by the researcher to study.

3.2.5 Variables: -

Variables means those though factors which are going to affect the learning process. Variables are the conditions or characteristics that the experimenter manipulates, controls and observes. The independent variables are the conditions that the experimenter manipulates in his attempt to ascertain their relationship to observed phenomenon. The dependent variables are the conditions that appear, disappear, or changes. The experimenter introduces, removes or changes independent variable. In educational research an independent variable may be a particular teaching method or a type of teaching material. The dependent variables are the measured changes in pupil performance attributable to the influences of the independent variable there are two types of variables Independent and Dependent variables.
3.2.6: **Independent variables:** E-Program

3.2.7: **Dependent variables:** Communication skill, communicative approach.

3.3: **Tools of the Research:**

   a) Questionnaire, for teachers and Opinionnaire Experts from the Education field.
   
   b) Pretest, E-Program and Posttest. Observation Schedule.

3.3.1 **Questionnaire**

3.3.1.1 **Questionnaire for teachers:**

   The researcher has used the self-made tool questionnaire. Questionnaire is used for collecting information for the First objective that is to know the objectives of teaching communicative approach for seven standard. When the researcher was going to develop the tool at that time the researcher took references form the related materials, hand book, text book, and syllabus copy. Then the researcher develops the questionnaire. These questionnaire were certified by the following Experts -

   1) Dr. Deshapande M. D.

   2) Dr. Kallawe M.

   3) Dr. Mashake R.

   4) Dr. Deshapande

   5) Dr. Mane. D.S.

   6) Prof. Mishra S.G.
Then the researcher frame the questionnaire for the English subject teachers, then it was administrated to the English subject teachers.

3.3.1.2 Opinionnaire for the Experts: -

The Researcher wants to know the opinion about the developed E-program. So the Researcher selected some expert English teachers from the Osmanabad district and shown them the developed E-program. After getting the opinions about the E-program the researcher developed Opinionnaire and gave it to some selected experts from the education field as well as some teachers of seventh standard.

This Opinionnaire is based on two following objectives.

1) To know the utility of E-program to Seventh Standard Students.
2) To know the role of E-program in developing communicative approach of the Seven Standard Student.

As per the above objectives the researcher framed the Opinionnaire tool for the experts in education field.

3.3.1.3 Test (Pre and Post):-

For the present research work the researcher used experimental method to study the effectiveness of the E-program in the development of the communication skill of the students’.

The researcher has given the pre-test to the students of the 7th std. then the researcher has taught to the students by using E-program for nearly one year in the class room then the researcher has taken the post test of the students.
3.3.2 Observation tool:

The researcher has used this tool to collect the data through observation of the students while speaking individual and in the group discussion in the classroom. According to the self-made observation tool.

**Observation schedule for the Students**

<table>
<thead>
<tr>
<th>Communicative Approach</th>
<th>Listing skill</th>
<th>Speaking skill</th>
<th>Able to communicate in English</th>
<th>Take active part in teaching learning process.</th>
</tr>
</thead>
<tbody>
<tr>
<td>proper</td>
<td>Improper</td>
<td>proper</td>
<td>improper</td>
<td>proper</td>
</tr>
</tbody>
</table>

**Experiment:-**

1) Preparation of E-program based on the textbook, and communicative approach.

2) Interpretation of data collected through survey.

3) Preparation of Pretest

4) Administration of Pretest

5) Implementation of prepared E-program

6) Administration of Post-test

7) Organization, analysis and interpretation of Pre-test and Post-test scores.

3.3.3 Development of E-Program:-

The E-program is self-made Computer Software which is developed in accordance to develop seventh standard students
communication Skill in English language the researcher took help for developing software from the software developers from the education field.

The researcher made a plan according to the seventh standard level. The researcher studied about the text book, handbook, and syllabus and about objectives of seven standard students. Then the researcher made a manual about the Software and as per the manual the developers develop E-Program for the seven Standards.

### 3.3.4 Objectives of E-program:-

1) To give listening exposure to the students.
2) To create confidence in students.
3) To create interest about English language among the students.
4) To enable the students to communicate their ideas confidently.
5) To enable the students to complete the given dialogues in English Language.
6) To enable the students to use English for practical purpose.
7) To enable the students to describe and ask questions about the picture.
8) To enable the students to share their ideas, views and to react and talk Confidently.

### 3.3.5. Screen image of E-Program:

The screen image of the E-Program is very simple to operate to students. When the E-Programs image came on the computer screen it increase the aspiration in the students mind that today we are going to learn something new by using computer. On the screen page there are some pictures according to the units from the text book. These pictures
are very attractive in appearances so that its develop interest in the students in learning process, the E-Program have good quality pronunciation, it have good visualization, when the E-Program started the pictures moves on the screen.

**Procedure for developing E-program -**

In the beginning the Researcher Studied about the seven standard text book its objectives, teaching methods, Approaches, carefully. Than the researchers selected some units which are related with communicative approach. when any teacher want to use communicative approach in the class while teaching at that time she or he must needed the support material, but very few teacher used support material while teaching in the class room those teaching aids are models pictures, images, flash cards etc.

The researcher want to do such E-Program which become innovative support material for developing communicative approach of the students. This E-Program became innovate way’s to develop communication ability of the students. All these things are noticeable about the E-Program.
1. Appearance of E-Program on the screen at that time images are seen on the screen which indicates that the unites of selected from the text books like the priceless pearl master of craft and including Writing skill too.
2. **The Greatest Travelers:** When the students click on the screens that students seen the picture of Arctic tern seabird then some images are also here when Students see a book image & Students click on it Students heard the lesson About the Arctic tern students get the information about the Arctic tern. When they finished the listening of lesson they come across the test. They solve the test.

The researcher had given such themes in the class to discuss in group as well as same point for individual Speaking test.
3. **Master of Craft** – When students click on the screen image students heard about the story of king & queen. Than the P.P.T. also present on the screen. Students become active in the Teaching learning process. When the test appearance on the screen students solve it by themselves.

The Researcher had given same point to speak on it. Some point are also given for group discussion which were needful to the development of students communication ability in English Language.
4. **The priceless pearl** – when students click on it students came across that the book image came on the screen that students listen the lesson with P.P.T. after the listening the students come across the test that students solve the test.

   Than the Researcher had given same related point to the lesson to discusses in group and some themes to speak individually in the class for developing speaking ability of the students.
5. **Running through Rain** – When students clicks on the screen students came across that the book images it started the poem. The objective of listen poem is to enjoy the sound effect as well as the entertainment is part of teaching learning process.

The researcher want to achieve the objective of reciting the poem to develop listening skill.
6. When the image appearances on the screen that a little girl come on the screen. When the students clicks on it the table come across on the screen which become support material for developing writing skill. This writing table helpful for the students that they develop knowledge contraction by oneself. After it students make the Sentence structure with there own Knowledge.

The Researcher had given such table practice in the class for the development of students writing skill.
3.4. Statistical measure:

Percentage for analyzing the data collected through survey method.
‘t’ test for hypotheses testing, Critical ratio to check the mean difference between the pre test and post test achievement of the students.

3.4.1 Percentage (%):
Percentage is a commonly used statics. It expresses information as a portion of whole. This is a good way to show relationships and comparisons and tends to be easy for interpretation.

3.4.2 ‘t’ test:
The test of the significance of the difference between two means is known as ‘t’ test.

3.4.3. Critical Ratio: When there are two groups of sample, which are large in size than the technique of C.R or t is the same and their values are also same for a given example. But while verifying the significance of the value of CR it is not essential to take into account the value of degree of freedom (df) while for verification of the significance of t-value it is absolutely essential to take into account the value of df. In other words if the size of sample is large than the index of signification is denoted by CR and if the size of sample is small than same is denoted by t.

3.4.4. Chi-Square:
The $X^2$ test applies only to discrete data, counted rather than measured values. It is a test independence, the idea that one variable is not affected by, or related to, another variable. The is $X^2$ is not a measure of the degree of relationship. It is merely used to estimate the likelihood
that some factor other than chance (sampling error) account for the apparent relationship. Because the null hypothesis states that there is no relationship (the variables are independent) the test merely evaluates the probability that the observed relationship resulted from chance. As in other tests of statistical significance, it is assumed that the sample observations have been randomly selected.

The computed $X^2$ value must equal or exceed the appropriate table’s critical value to justify rejection of the null hypothesis or the assumption of independence at 0.05 or the 0.01 level of significance.

3.5. Population and sample of the research:

Population means the whole area of the research work. For the research study Osmanabad District is the whole population. The researcher needs the sample for her research study because the sample is the representative of the population. Form the whole populations the researcher selected sample because it is not possible to the researcher to select the whole population for research study so the researcher used random sampling method for selecting Teachers, students and Experts as follows:

3.5.1 Sample of Teacher:

A sample is a small portion of a population selected for observation and analysis. Sample always helps to draw certain inferences based on the representative characteristics of sample. Good sample always represents the population from which it is selected 30 Expert teachers who have teaching experience above 10 years of Osmanabad district. 117 teachers were selected out of 1068 who were
teach English subject in Marathi medium schools of Osmanabad district.

3.5.2 Sample of Student:

440 Students of Standard seventh out of 9000, from the Osmanabad district. Randomly selected by the researcher for the present study.

3.5.3 Sample of Expert:

30 expert English teachers were selected by the researchers from the schools of the osmanabad city. The researcher had given the opinionnaire to the English teachers to study the Effectiveness of E-Program about the communicative approach. The researchers also wanted to know about the E-programs quality of educational material in comparison with the other educational software which is available in the Education field.

These Experts are well-known in education field; they have Experiences about the English subject, and English language too.

3.6. Sampling design:

Method of sampling means the way or procedure adopted for selecting Sample for research work. Selection of sampling method depends upon the need of the Individual project and various aspects included in that project such as population, Objectives as well as financial and time related aspects. In present study researcher adopted the random sampling method for both survey and experiment. For the present research work the researcher randomly selected two taluks. Form the two taluks the researcher selected six schools. From the six schools the Researcher selected 440 students as sample out of 9000, students of
seven standards of Marathi medium school form osmanabad district, it means that 5% sample size selected for the present study from two taluks. 117 English Teachers selected from the 1068, it means that sample size is 11% teachers selected by the research for the present study. 30 experts’ English teachers were selected by the researchers from 1068 teachers. it means that sample size is 3%.

3.7. Pilot Study:

The researcher has needed to do pilot study to know the barriers’ of the implementation of the E-Program in the school. Then to know about the effective and ineffective things from the developed E-Program for seven std. students. To verify the E-Program developed as per the objectives of communicative approach and its quality.

For the pilot study the researcher selected a class of seven std. of Shripatrao Bhosle High school osmanabad.

3.8 Research Procedure: -

The researcher has read the related material when the Researcher selected the problem. After the discussion about the text book of seven standard, its objectives, methods and approaches with the experts teachers, the researchers selected some units from the text book and started to develop E-Program for seven standard students. In developing the E-Program the researcher had taken the help of computer experts in Education field. When the E-program was developed then it was checked by the 30 expert English teachers from the Education Field. After it the researcher had taken the pilot study about the E-Program to know about the quality of the E-program, its effect on the students, its
role in developing communicative approach as well as to know the obstacles of implementation of the E-program in the schools.

Then the researcher had given the pre test to the students, after it the researcher taught nearly six months to the seven standard students of Marathi medium school., as well as she observed the students communication skill in the class while speaking individual and in group too. Then the researcher had given to the students post test in the class.

Side by side the researcher had taken the observations of the students and given the Questionnaire to English subject teachers to know the present condition of using communicative approach in teaching English and its objectives. In this way the researcher finished the implementation of E-program work.

3.9 Epilogue: -

In this chapter here is the discussion of the researcher procedure Methodology Sampling, Tools etc in the next chapter there is analysis and interpretation of data by testing the hypothesis.