Chapter - III

METHODOLOGY

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3.1 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 tool was developed . This chapter deals with the research design, sample, tool used, data collected and statistics used.

3.2 Research Design

The research design is the detailed plan of an investigation. In fact it is the blueprint of the detailed procedure of testing the hypothesis and analysing obtained data. 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 problems.

Research design refers to the systematic scheduling of the time at which treatment is administered to subjects and at which observations are made on the performance of the subjects . This careful scheduling of the treatment and observations can be very helpful in reducing the threats to the internal validity of research.

3.2.1 Design of the Study

The design followed for the study is experimental two group design. The input given to the both groups were the two approaches of teaching English. The investigator used pre-test control group design to find out the effect of structural approach in teaching English among students of class VI.

Two groups of students were equated on the basis of Pre-test. One of the groups, called experimental group, was exposed to Structural approach and other one ,control group, was taught through Traditional approach. Then Post-test is taken to see achievement.

Table 3.1 Design of the study

Characteristics	Control Group	Experimental Group
Entry status	Pretest	Pretest
Treatment	Traditional approach of teaching	Structural approach of teaching
Terminal status	Post test	Post test

3.3 Sample :

Most of the educational phenomena consists of a large number of units. It would be impractical to observe each unit of the population under controlled conditions in order to arrive at principle having universal validity. Some populations are so large that their study would be expensive in terms of time, money, effect and manpower. Sampling is a process by which a relatively small numbers of

individual objects of events is selected in order to find out something about the entire population from which it was selected.

An appropriately chosen sample size enhances the reliability and validity of research findings. Commonly used sampling techniques are random sampling, stratified sampling, quota sampling and purposive sampling.

For conducting the present study, keeping in view the limitation and resources available with the researcher, the method of purposive sampling has been used. Kerlinger (1979) stated that purposive sampling is characterized by the use of judgement and a deliberate effect to obtain representatives samples by including presumably typical areas on groups in the sample.

Sample of the study is drawn from two schools. They are
1)   Sane Guruji Vidhyamandir Niholod
2)   Rana Pratap High school, Dhule.

The size of the sample depended purely on the enrolment and attendance of the students in class VI in respective schools. A preliminary sample of 76 students in both the samples was obtained to which tools were administered. But due to continuous absence during the period of intervention and Pre-test or post-test data obtained from 6 students is rejected and results of only 70 students are analysed for final results.

Table 3.2 Details of sample (General)

Group	Boys	Girls	Total
Experimental Group	21	14	35
Controlled Group	21	14	35
Total	42	28	70

Table 3.3 - Details of sample (Locale)

Group	Urban	Rural	Total
Experimental Group	20	15	35
Controlled Group	20	15	35
Total	40	30	70

3.4 Variables :

A Variable is something that varies .It is property that takes in different values. Variables are the conditions or characterizes that the experimenter manipulates controls or observes. There are following type of variables: -

(I) **Independent Variables** :- The independent variables are the conditions or characterization that the experimenter manipulates, controls or observes. The independent variables in the present study are teaching approaches.

Teaching approaches :- In this study teaching approaches are Independent variables. The experimental group was taught by the structural approach and the control group was taught by the traditional approach.

(II) Demographic Variables: - The demographic Variables are the quantity and characteristics of the people especially in relations to their age and area. The demographic variables in the study are

(a) Gender (Girls and Boys)

(b) Area Urban and rural.

(III) Dependent Variables :- The dependent variables are the conditions or characteristics that appear disappear or change as the experimenter removes or changes independent Variables .The effect studied was in relations to the achievement in English language .hence, dependent variables of the study is students achivement.

(IV) Controlled Variables :- The variables whose effect are neutralized or controlled are called control variables. The researcher made two group on the basis of an achievement in the pretest. The previous knowledge is neutralized at both group. similarly the students are of same class. Their age is neutral. Thus two variables are controlled .

3.5. Tools Used :

To select or construct appropriate tools for the study is an important aspect of any research study. Sometimes, the researcher uses tools which have been constructed by others, which are standardized; sometimes the researcher has to construct tools to fulfill her / his purpose.

In the present study, the researcher has constructed two tools keeping in view the objectives of the study. The first tool is to use in

pretest to have preliminary knowledge of the students. It is based on the previous units taught to the children in these two schools selected for the study. The format of the pre-test contains five aspects of English language. The 2nd tool is used to measure an achievement of the students in terms of the components of English language after the ten days of exposure of the students to their respective approaches.

3.5.1 Construction of Tool :

Achievement Test in English Language (ATEL)

The syllabus of the English language for class VI is analysed keeping in view objectives of the teaching English language and competencies of the students. Three components of language teaching.

- Namely listening reading, writing and have been - given due waitage.

The achievement test consists of following components of English language.

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

In the first draft the researcher constructed 15 items. These were given to two teachers who were teaching English to class VI in the schools. The Two teachers suggested certain modifications to constructed tool, which were in turn discussed with the supervisor. On

the basis of suggestions it was restructured by deleting 5 items. Hence, the modified version contained 10 items. The time limit was 1¼ hours. The final format of achievement test consisted of match the pairs, fill in the blanks with appropriate words, find the word in the matrix, find appropriate parts of speech and write it in the box etc. The find format of the tool in given in the form of table below :-

3.6 Tools description :

Sr. No.	Name of the Sections	No. of questions	Marks allotted	Time allotted (Tentative)
1.	Word power	3	10	15 Min.
2.	Grammar in use	3	10	15 Min.
3.	Sentence formation	2	10	15 Min.
4.	Compression	1	10	15 Min.
5.	Listening Comprehension	1	10	15 Min.
	TOTAL	10	50	75 Min.

3.6 Tryout :

In an attempt to establish reliability of the tool, the tool administered on 10 students of class VI of the Mohali school. This Suburban Local was selected with the view that the tool, thus tried out, will be appropriate for administration on the students of both urban and rural locale. Due to time and resource constrains, it was not possible for the researcher to try out the tool on the locales separately.

When the tool was administered, firstly it was revealed that the students could not understand the directions clearly and failed to answer questions. After probing the students with their teachers it

become known that the students were not well conversant with the English language, so as to understand all the directions and questions clearly. The reason for this being the students hasn't had the exposure to English language earlier. The teacher used translation approach to teach English. After confirming the fact ,the tools were rewritten with examples for each item separately. Those rewritten tools were then administered for the tryout on the same of 10 students.

3.97 Data Collection

Data was collected with the help of the tools described in the preceding section. The tools were administered personally by the researcher, spread over two sessions in the same day in each school.

The researcher first established a rapport with the staff and then the students in each school. After taking the students into confidence they were motivated to answer the questions with ease and honesty. The students were psychologically prepared by the researcher to do their utmost, to sincerely respond to the items of tools and leave no unresponded. They were also assured that the whole process had nothing to do with their required examination.

An illustration of each question was given on the test sheets but, these were further reinforced by having them read out to the students before they start answering. An example of an each item which was given in the test was illustrated on the blackboard also to make sure that the students understood it fully. The time given to the students for answering the questions was 1 hour and 15 minutes.

After taking pretest, the two groups were made on the basis of achievement in the pretest. These two groups were taught successively for seven days by the two methods. Then, an achievement test was taken by the researcher. Table 3.5 gives the detailed schedule of data collection and intervention of the two methods.

3.5 Schedule of Data Collection

Sl. No.	School	Period of Activities		
		Pre-test	Treatment of Both group	Post-test
1.	Sane Guruji Vidyan	8-2-2006	9 to 19-2006 (Forenoon)	20-2-2006 (Forenoon)
2.	Rana Pratap H.S., Dl.	8-2-2006 (Afternoon)	9 to 9 - 2006 (Afternoon)	20-2-2006 (Afternoon)

3.8 Tabulation of Achievement Test in English Language (ATEL) :

With the completion of field work the next task was to score the test sheets and tabulate the obtained data for statistical processing and analysis. Items in ATEL were segregated in the various components described of each student was tabulated in the data sheet.

3.19 Statistical Technique :

This tabulated data was then processed for obtaining mean, standard deviation and t value of the component - wise score to analyse the difference as aimed in the objectives of the study.