Chapter-3
Procedure

3.1 Preface
3.2 Population
3.3 Selection of the Subjects
3.4 Research Methodology
3.5 Criterion Measures
3.6 Variables of the Study
3.7 Presentation of Data
3.8 Reliability of the Data
3.9 Experimental Design of present Research:
3.10 Implication of Training Programme
3.11 Research Tool
3.12 Construction of Aptitude of English Questionnaire:
3.13 Collection of Data
3.14 Standard of Significance
3.15 Statistical Techniques
Chapter-3
Procedure of Research

3.1. Preface:
In this chapter Population, selection of subjects, criterion measures, variables of study, reliability of data, design of the study, collection of data, administration of the test, Implications of training programme, significance of the study and the statistical techniques used for analyzing the data will be discussed.

3.2. Population:
The first step in developing any sample design is to clearly define the set of objects, technically called the population, to be studied. In the present study, the students of Higher Secondary school of Jawahar Navodaya Vidhyalayas of Saurashtra in Gujarat have been included in the population.

3.3. Selection of the Subjects:
For the purpose of this study 73 students studying at higher secondary level in Jawahar Navodaya Vidyalaya, Rajkot in the year 2014-2015 had been chosen through purposively sampling method. From 73 students 34 students were studying in standard XI and 39 students were studying in standard XII. The age of the subjects ranged from 16 to 18 years. The age of subjects were calculated from the date of birth as recorded in their institution. All the subjects were given clear explanation regarding the purpose, planning, procedure and the basic requirements of the research study. All the subjects agreed voluntarily to undergo the testing and Remedial Teaching programmes in English explained to them by the researcher. In order to avoid ambiguity, a clear picture and a thorough orientation of the rigid requirements of the experimental procedure, testing as well as Remedial Teaching schedule were explained to the subjects, so that they could extend full cooperation and efforts for the successful completion of the study. The experimental groups were…
(A) XI standard group
(B) XII standard group

Table - 3.1
Numbers of Students

<table>
<thead>
<tr>
<th>Name of the Group</th>
<th>N</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) XI standard group</td>
<td>34</td>
<td>73</td>
</tr>
<tr>
<td>(B) XII standard group</td>
<td>39</td>
<td></td>
</tr>
</tbody>
</table>

The list of students is given in annexure in sequence which is given below.

Table - 3.2
Lists of Students

<table>
<thead>
<tr>
<th>Annexure no.</th>
<th>List of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>List of student’s name of XI Standard</td>
</tr>
<tr>
<td>2</td>
<td>List of student’s name of XII Standard</td>
</tr>
</tbody>
</table>

All the students of the Schools are homogeneous in the sense that they are given uniform study environment. The facilities and the teachers are the same with qualifications. The learners are drawn from different socio economic background of castes from SC categories. The sample also has the following characteristics:

1. The entire level of standard is more or less the same.
2. The performance of the students is periodically reviewed by the Principals.
3. After the Term-I examinations the general problems of the students are discussed.
4. Arrangements in the form of special coaching for ‘slow learners’ or the weak students are made.

5. The main idea is to improve the results only in the examinations.

6. Principals are permitted to arrange additional teachers. But this was in subject like Hindi and mother tongue but not for English.

7. The teachers of the class from where the sample is drawn are regular no part-time teachers are allowed to teach English.

8. Traditional printed material for practicing and charts as educational aids are provided.

9. Contract teachers from upgraded and other schools are not employed to teach English.

This is mentioned here because such conditions affect the factors of the study (R. L. Lee, ibid.). If the above guidelines and information are seen carefully, it is clear that the discipline of the teachers, students and other facilities are satisfactory. Hence, no hypotheses are made regarding the non-academic factors. The research design and methodology are simple and every care has been taken to strictly follow it and this approach was suggested by L. A. Hill and Allen in their book earlier cited.

3.4. Research Methodology:

Research is a scientific process. Research methodology is a way to systematically solve the research problem. There are mainly three research methods which are given below.

1. Historical Research Method
2. Descriptive Research Method
3. Experimental Research Method

The present study was conducted by experimental research method. The experimental group was administered Remedial Teaching
Programme in English for a period of 5 months. Before and after implementation of Programme English Subject Test of school was taken as a pre test and post test.

3.5. **Criterion Measure:**

The following criterions of measurement were selected for this study.

1. The effectiveness of remedial teaching programme in English was measured by the English subject test of School. The score was taken in mark.
2. Aptitude of English was measured by self made ‘Aptitude of English Questionnaire’.

3.6 **Variables of the Study:**

3.6.1 **Independent Variable:**

Remedial teaching programme in English

3.6.2 **Dependent Variable:**

1. Score of English subject test
2. Aptitude of English

3.7 **Presentation of Data:**

How much effect does the training creates on subject? In which group training was affected? Does it increase or decrease? One can come to know from the presentation of data and analysis. The presentation of data is given in annexure in sequence which is given below.
Table-3.3
Score of English subject Test

<table>
<thead>
<tr>
<th>Annexure no.</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Score of English subject Test of XI Standard</td>
</tr>
<tr>
<td>4</td>
<td>Score of English subject Test of XII Standard</td>
</tr>
</tbody>
</table>

3.8 Reliability of the Data:

The reliability of data was ensured by establishing the instrument reliability, tester's competency and reliability of test and subject’s reliability.

3.8.1 Instrument Reliability:

All the instruments used for measuring dependent variables were considered reliable and precise enough for the collection of data needed for the study.

3.8.2 Tester's Competency and Reliability of Test:

The tester’s competency was evaluated together with the reliability of the test. The test was administered in the presence and supervision of teachers who teach in Jawahar Navoday Vidhyalaya, Rajkot and with proper guidance of Researcher.

3.9 Experimental Design of present Research:

Research design is needed because it facilitates the smooth sailing of the various research operations, thereby making research as efficient as possible.
yielding maximal information with minimal expenditure of efforts, time and money. There are mainly three types of research design, which are given below.

1. Pre-Experimental Design
2. True-Experimental Design
3. Quasi-Experimental Design

In this study researcher tried to examine the effect of independent variable on dependent variable. So True-experimental Design applied in study. There were two groups made through purposively sampling methods. So the experimental design of present research was selected two groups, Pre test – post test. It shows in table-3.4.

### Table – 3.4
Experimental Design of present Research

<table>
<thead>
<tr>
<th>Experimental Group</th>
<th>Pre-Test</th>
<th>Independent Variable</th>
<th>Post-Test</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>XI-standard</td>
<td>English Subject Test of XI standard</td>
<td>Remedial Teaching Programme in English</td>
<td>English Subject Test XI standard</td>
<td>Between Pre test and Post test</td>
</tr>
<tr>
<td>XII-standard</td>
<td>English Subject Test of XII-standard</td>
<td>Remedial Teaching Programme in English</td>
<td>English Subject Test of XII-standard</td>
<td>Between Pre test and Post test</td>
</tr>
</tbody>
</table>

The pre test and post test were taken before and after an experimental period of 5 months.
3.10 Implication of Training Programme:

The XI and XII students were administered 60 minute’s Remedial teaching programme in English (6 days in a week) for a period of 5 months. Daily attendance was taken by researcher.

3.10.1 Remedial Teaching Programme in English for Standard XI:

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Time</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>Monday to Saturday</td>
<td>3.00 pm to 4.00 pm</td>
<td>- Reading passages, - Note making - Summary</td>
</tr>
<tr>
<td>Second</td>
<td>Monday to Saturday</td>
<td>3.00 pm to 4.00 pm</td>
<td>Writing /composition in the form of - article - report writing - Letter writing</td>
</tr>
<tr>
<td>Third</td>
<td>Monday to Saturday</td>
<td>3.00 pm to 4.00 pm</td>
<td>Grammar - determiners, - tenses - clauses - modals - voice</td>
</tr>
<tr>
<td>Fourth</td>
<td>Monday to Saturday</td>
<td>3.00 pm to 4.00 pm</td>
<td>Conversation skills - Listening - Speaking - Reading</td>
</tr>
<tr>
<td>Fifth</td>
<td>Monday to Saturday</td>
<td>3.00 pm to 4.00 pm</td>
<td>Long reading text and novel</td>
</tr>
</tbody>
</table>
### Remedial Teaching Programme in English for Standard XII:

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Time</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Month</td>
<td>Monday to Saturday</td>
<td>4.00 pm to 5.00 pm</td>
<td>-Reading Passages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Factual Passages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Discursive passages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Literary Passages</td>
</tr>
<tr>
<td>Second Month</td>
<td>Monday to Saturday</td>
<td>4.00 pm to 5.00 pm</td>
<td>Advanced Writing Skills</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Composition</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Report writing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Letter writing</td>
</tr>
<tr>
<td>Third Month</td>
<td>Monday to Saturday</td>
<td>4.00 pm to 5.00 pm</td>
<td>Long Reading</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Text</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Novel</td>
</tr>
<tr>
<td>Fourth Month</td>
<td>Monday to Saturday</td>
<td>4.00 pm to 5.00 pm</td>
<td>Conversation Skill</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Listening</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Speaking</td>
</tr>
<tr>
<td>Fifth Month</td>
<td>Monday to Saturday</td>
<td>4.00 pm to 5.00 pm</td>
<td>Revision of above</td>
</tr>
</tbody>
</table>

**Content Analysis of the Remedial Teaching and Utility of LSRW Skills:**

This is not a content evaluation of the course, course material (text book, workbooks) and the results of the sample studies of the sample. The case studies of students who are weak in certain areas of ‘English Grammar and Usage are made and remedial teaching plan has been identified and designed. The main hypotheses clearly identify the following errors in the Middle School and Secondary School levels as:
1. Students need exposure to English language learning. They desire to have instructions in English.
2. Students desire to learn English and make deep, hard work in certain areas is also disappointing.
3. Students are not aware of the market value of English. Some of them are not aware of their position in the Public examinations, and its consequences.
4. Main effort of the students and the teachers is limited to complete the syllabi as early as possible to achieve set results target.

The Remedial teaching schedule designed in this study has the following objectives of Testing:

1. Questions are set to test the proficiency of English Grammar and usage.
2. Only sample and direct questions are asked.
3. Objective type questions requiring one word answers
4. Direct questions from small passage to test the student’s comprehensions are given 10% weight age (Written-test on Black Board).
5. Question requiring answers of a sentence or two are set with 20% weight age (Orally tested among focus groups.)

This is to make sure that they study all the lessons. This is to neglect their “guessing and cramming” efforts. However, though memory is not tested, students learn answers by by-hearting. There is little effort to practice and understand grammar items. General dislike of English and certain methods that make them work hard are noticed in the sample standard. This seems to be due to the influence of the home, friends, films and even political situations. But the scope of their interference or the influence of the mother tongue i.e. Gujarati is not standard. Effort has
been made to compulsorily follow the plan and ‘work-out’ exercises designed based on the ‘First Generation Learners’ learning attitude.

### 3.11 Research Tool:

To test the hypothesis of the study the researcher used two tools, which are given below.

1. **English Subject Test:** To assess the effectiveness of remedial teaching programme researcher was used English subject test of school as research tool.

<table>
<thead>
<tr>
<th>Annexure no.</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>English subject Test Paper of XI Standard</td>
</tr>
<tr>
<td>7</td>
<td>English subject Test Paper of XII Standard</td>
</tr>
</tbody>
</table>

2. **Aptitude of English Questionnaire:** To assess the Aptitude of English in students researcher used Aptitude of English Questionnaire as research tool. Questionnaire is given in annexure no. 5.

### 3.12 Construction of Aptitude of English Questionnaire:

During the research process, according to the objects of the research study researcher get the data with the help of which tool it call say research tool. Research tool is an important part of research work. According to the objects of the research study, researcher selects the standardized tool for the collection of data but if the tool is not available, researcher constructed the tool. In this
Research Study researcher constructed one research tool, the name of tool is Aptitude of English Questionnaire. For the construction of this questionnaire researcher has followed these steps.

**Collection of the Statement:**

Researcher was clear about the various aspects of his research problem. For the collection of data researcher used some techniques which were given below.

- To study the related literature
- To take the views of experts
- To arrange the meeting with some students (samples of the study), discuss the topics and take positive and negative opinion in written form.

Researcher roughly drafted the questions and put the appropriate sequence.

**Editing of the statement and to construct the basic form of the Questionnaire:**

For the editing of the statement, researcher kept these matters in his mind.

- To select the proper statement.
- To cover the main points.
- Age and understanding level of the samples.
- Statement should be simple and not complex.
- Statement should be easily understandable.
- Statement should not have a double meaning.
- Statement should be concluded the content of the questionnaire.
- In every statement should indicate one and one thoughts.
- Statement should be short.
As a base of above mention process researcher had selected 140 statements in basic form questionnaire.

The first page of the questionnaire contained the following details:

- Title of the questionnaire
- Name, Designation and Institute of the researcher
- Name, Designation and Institute of the guide
- Introduce letter which indicate the objects of the research, methods of the response, request, proper use of the information, confidential matter.
- General information of the respondents like name, gender, birth date, standard, class, roll number etc.
- Statements were given in other pages of the questionnaire. Every statement has four options.

Experts View on the basic form of the Questionnaire and construct the second form:

To increase the effectiveness of Aptitude of English questionnaire, researchers get opinion of experts. Basic form of Aptitude of English questionnaire was send to experts. The name of experts were given below.
1. Dr. Priya Ranjan
2. Dr. M. Nikam
3. Prof. Ramakrishna Prasad

According to the experts suggestions some questions were cancelled and some questions were changed. Finally 120 questions were selected in second form of questionnaire.
Piloting the second form of the Questionnaire:

Second form of Aptitude of English questionnaire was piloted by the researcher. JNV, Jamnagar was selected for the pilot study. XI standard 30 Students of JNV, Jamnagar was selected as pilot sample.

Selection of Statements and to construct the final form of the Questionnaire:
According to the opinion of experts and piloting researcher constructed the final form of Aptitude of English Questionnaire. Total 100 questions were selected in the final form of Aptitude of English Questionnaire, which were mentioned in annexure - 3.

3.13 Collection of Data:
The necessary data was collected by administering the tests for the chosen components. All the tests were administered in the classroom. Before the administration of tests the subjects were given a chance to practice the prescribed tests so that they become familiar with the tests and knew exactly what was to be done. The use of apparatus was explained to them prior to the administration of tests. The data was collected before and after five months of Remedial Teaching in English programme. Before and after programme above mention test was taken by researcher on subjects. After taking the test whatever the data got is noted by the researcher. For the data collection of Aptitude test researcher gave questionnaire to the subjects and after some time researcher received filled questionnaire and whatever the data got is noted by researcher.

Primary data: Sample of Higher Secondary Schools: The approach is based on the improved method. This means the ‘exercises’ are designed at simple level and also at difficult level. This was the pattern of design in Walter Allen’s Living English Structure. But this study doesn’t in any way come close to it, except as prescribed Course design for the learners of Jawahar Navodaya Vidyalayas of Saurashtra. The relevant Language learning aspects are presented in
a manner that is simulated to the age, stage and mental age of the students. After administration of the ‘Questionnaires’ and collection of the ‘Response Sheets’ periodically, effort was also made to consult the secondary data experts to process Statistics concerned on the subject. The language related aspects include the skills of listener, speaker, reader and writer. However the lessons and exercises do not intend to teach or test these skills. These were shown to field experts after the collection of data. But the course design aims to introduce these sub-skills for at least 120 days in a teaching schedule of an Academic year. The main reason for this aspect is that the instruction offered during the Academic year is to develop the language ability and personality of the students but here it is towards CBSE examination and targeted results at Navodaya Vidyalayas. However, this fact cannot be ignored and this study points it as a defect of the result-oriented ‘Residential System’ that requires to be rectified.

3.14 Standard of Significance:

To find the results of this study, and to know the significance difference of t value, the significant level was taken as 0.05 which is the sufficient for knowing the results of this study.

3.15 Statistical Techniques:

To find out the effect of Remedial Teaching Programme in English and to find out the significant difference between pre and post-test means, t test was applied. To find out the difference in the Aptitude of English in subjects Frequency Analysis method was used.