CHAPTER III

METHODOLOGY

3.0 INTRODUCTION

This chapter deals with the methodology used in the present study. Here the investigator has discussed about selection of the research sample, research design, tools used in the study and statistical measures used for analyses of the data for the study on, “An Experimental Study to Assess the Effectiveness of Intervention on the Writing skills in English”.

Based on the findings of various studies, the investigator felt the need of exploring difficulties in written English of elementary students from rural Kerala. The disparity existing between urban and rural students in language proficiency can be seen in the review done in the earlier chapter. There is notable difference between both the groups in language learning which needs immediate attention of the researcher. Why are these children facing so many difficulties in English language learning in spite of similar curriculum, same infrastructure of school, teachers having the same qualification and equivalent services? What factors are responsible for this? These questions basically motivated the investigator to concentrate exclusively on the difficulties faced in learning English by rural students and to find whether intervention can help them to overcome these difficulties.

3.1 OPERATIONAL DEFINITION OF THE TERMS:

Intervention: The meaning of ‘Intervention’ given by UNESCO is any material or input used for overcoming the difficulties faced by the students in learning.
Operational Definition of the Term: Here in this study it is based on the students’ difficulties faced in the areas of writing covered in pre-test. The investigator has developed the intervention on difficulties identified on the basis of performance in the pre-test in the areas of vocabulary, spelling, grammar, composition and handwriting in written English. These problems may be due to Malayalam medium schools from rural area, belonging to first generation learners, having limited access to study material and the students falling below 50 percentile on the pre-test scores were considered for experimental group.

3.2 OBJECTIVES

This study focuses on the following objectives:

1. To identify and classify the students from Government and Government aided schools into experimental and controlled group on the basis of performance in the pre-test of English writing skills.

2. To match the students into experimental and controlled group on the basis of their scores on intelligence, anxiety and socio-economic status scale.

3. To develop and provide intervention for overcoming the writing difficulties faced by the students in the experimental group.

4. To find the effectiveness of intervention in overcoming the difficulty encountered by the students in the pre-test.

5. To compare the performance of girls and boys in the writing skills before and after intervention.

6. To compare the performance in the writing skills of students from rural and urban areas.
3.3 VARIABLES

The investigator has selected some variables as predictor variables and some as criterion variables. In the predictor variables, investigator has selected Intelligence, Socio-Economic Status and Anxiety level of students.

The criterion variable is performance of the students in the pre and post test scores.


Hence, it is established that Intelligence plays a greater role in the achievement. So the investigator has taken the Group Test of Intelligence to assess the intelligence level of the students.

The status of the family has been controlled inspite of most of them being first generation learners and also belonging to rural area. To increase the reliability of the investigation the investigator matched the students’ socio-economic status for both the experimental and controlled groups. Studies have revealed that children of parents having higher socio-economic status are found to do better in academic achievement. (Ruddell and Ruddle, 1995; Abraham 1974; Singh, 2002; Panigrahi, 2005)

Anxiety is the third predictor variable that the investigator has selected for the present study. To check this predictor variable, the investigator used Sinha’s Comprehensive Anxiety Scale and the groups were matched in terms of their anxiety level found on the scale. The investigator while reviewing related studies found that anxiety is a good predictor of academic achievement. (Mehrotra, 1986; Singh, 2002;
Faber and Spence, 1953; Raper and Barlow, 1992; Griel, 1996; Bolognini, 1995; Alliance, 2001; Chang, 1997).

Hence, in the present study the investigator attempts to not only study the effectiveness of intervention in writing but also how far these variables influence writing.

3.4 RESEARCH DESIGN

This is an experimental study with pre-post design. The investigator has selected rural and urban Malayalam medium schools of Kannur district but after getting evidence from lot of studies reviewed that the disparity between the rural and urban is a well established fact. Therefore the investigator compared the difference between the two on the basis of pre-test level.

3.4.1 Sample Selection

The investigator surveyed the schools and selected rural and urban school with Malayalam medium, following the same syllabus, board of examination, infrastructure, and equivalent number of teachers with same basic qualification and years of teaching experience. This was done to minimize the methodological errors arising due to the differences in the above stated areas. The number of schools selected was two as the investigator wanted to devote more time to the duration of intervention for both schools. Therefore only two rural schools one Government and other Government aided with Malayalam medium was selected for the study.

Two-hundred students were selected from Government and Government aided schools on the basis of performance on the pre test. The pre-test was based on the
language components of spelling, vocabulary, grammar, composition and handwriting in English.

For getting a clear picture between the rural and urban students, the investigator selected another 100 students from urban area for comparison. This school was also matched in terms of type and facilities, only the location was different. The comparison was done only on the basis of pre test.

3.4.2 Methodology Followed in the Investigation

To develop a pre-test for identifying difficulties in different areas of writing in English of standard VIII students, the investigator followed the following steps:

Investigator critically analyzed the English textbook from class III-VIII to get an idea of the content complexities. Then the investigator identified some of the areas for developing the test items. The total number of items selected initially were 75 based on the relevance of content, difficulty level etc. and the draft test was given to experts for their opinion. Based on their opinion, test was revised and was tried out on students of standard VIII students. On the basis of split half method, difficult and easy questions were dropped out based on the analysis of students performance. Hence the final test had 25 items.

Pre-test was conducted on selected students from Government and aided Government school and based on their performance the difficulty areas were identified. It was found that students faced difficulties in spelling, vocabulary, grammar, composition and handwriting.

Based on the difficulties identified in the study, the investigator developed interventional activities for overcoming the difficulties in writing skill. Investigator

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conducted intervention class 1 hour daily from Monday to Thursday on rotation basis for a period of 3 months starting from the mid of September to mid of December.

The controlled group attended the regular teaching.

After 3 months of intervention, conducted by the investigator, post test was given to see the effectiveness.

3.4.3 Tools

**Pre-Test:** The pre-test was developed in English, to identify the difficulty areas in the writing skills of the VIII grade learners and was given to the whole sample of 200 students, 100 from Government and 100 from Government aided school.

The same pre-test was also administered to another 100 more students studying in the same type of school but in urban area only for comparison.

The pre-test was prepared by keeping in view all the qualities of test preparation. Expert opinion and guidance was obtained from subject experts and educationists.

Before preparing the test item, a blue print was prepared giving weightage to objectives, content and difficulty level. On the basis of the blue print the test items were prepared.

**Table 3.1 Blue print of the pre test construction**

<table>
<thead>
<tr>
<th>Content</th>
<th>K</th>
<th>U</th>
<th>A</th>
<th>S</th>
<th>E</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary</td>
<td>¼ (4)</td>
<td>¼ (10)</td>
<td></td>
<td>¼ (6)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Spelling</td>
<td>¼ (8)</td>
<td>¼ (12)</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Grammar</td>
<td>¼ (8)</td>
<td>¼ (6)</td>
<td>¼ (6)</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Composition</td>
<td>¼ (2)</td>
<td>¼ (12)</td>
<td>¼ (6)</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Handwriting</td>
<td></td>
<td>¼ (4)</td>
<td>¼ (8)</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

Key: K = Knowledge – Number of items; U = Understanding - ¼ mark for each item; A = Application; S = Synthesis; E = Evaluation; T = Total
After accepting the experts opinion, the investigator revised the test.

Try Out of the test items:

(a) **Selection of the Sample:** For the final selection of the test, try out of the test item was necessary. For this a sample of 80 students of which, 20 were very good, 40 were average and 20 were below average, was selected.

(b) **Administration of Test for try out:** The time allotted during the try out was considerably more. The time taken by the students was recorded and an average was fixed. The difficulty in language and directions for understanding the test items were carefully noted down and taken into consideration to modify the items for the final test.

(c) **Evaluation of answer scripts:** The questions given in the test were answered by the students in the initial try out. The answer sheet of the students was scored with the help of a key developed by the investigator. Further the answers of the students were credited with marks following all or none principle. This meant that no partial credit was given to any wrong answer. Full credit of $\frac{1}{4}$ was given to each correct answer; while the wrong or omitted one was given ‘zero’ credit.

(d) **Item Analysis:** The purpose of item analysis of a test was mainly two fold:

(i) Difficulty value, that is, to what extent the candidate achieved correctness of responses to the items and

(ii) Discriminating power, that is, how far the responses to the question item might help ranking of candidates in order of merit and how far an item can demarcate the high achievers from the low achievers.
Difficulty value of test items – The difficulty value was considered to be a very important aspect of a test item which was required to be investigated.

The researcher felt that if responses to a test item could be classified as either correct or incorrect, the difficulty value might be commendably defined as the proportion of correct responses, that is the ratio of the number of correct responses to the item. Thus the difficulty value of each item of the test had been found out.

Discriminating value of test items: The next step taken by the investigator was to determine the discriminating value of each test item as an important measure of item analysis. This was done by taking into account the differences of the lower group and the upper group responding to an item.

The investigator computed the upper –lower index of each item with the help of the formula

\[ \text{UL} = \frac{\text{RU} - \text{RL}}{\frac{1}{2} \text{N}} \]

UL = Upper–lower index

RU = Number of right answers in the upper limit

RL = Numbers giving right answers in the lower group.

N = Number of examinees of each group.

The researcher took 27% students from each of the upper group and lower group. Thus the discriminating value of each item was found out separately.

(e) Final selection of the test items: The researcher selected the items for the final test after careful analysis of the items by finding out the difficulty value and discriminating indices of the test. The items having discriminating values less than
0.20 were eliminated from the test. Thus 15 items were deleted. The final test had 25 items.

(f) **Representation of the Blue Print:** A blue print of the final English test was prepared. It contained five major dimensions.

Table 3.2: Blue Print of item numbers and marks

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Item Number</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spelling</td>
<td>1, 2, 3</td>
<td>¼ (20)</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>4, 5, 6, 7</td>
<td>¼ (20)</td>
</tr>
<tr>
<td>Grammar</td>
<td>8, 9, 10, 11, 12</td>
<td>¼ (20)</td>
</tr>
<tr>
<td>Composition</td>
<td>13</td>
<td>¼ (20)</td>
</tr>
<tr>
<td>Handwriting</td>
<td>13</td>
<td>¼ (20)</td>
</tr>
</tbody>
</table>

**Determination of the Objectivity, Reliability and Validity of the Test**

**Objectivity:** One of the important characteristics to decide if the test is a good test is objectivity. But the concept of objectivity has undergone some change. Previously, objectivity of a test was that a test which was not biased, not influenced by examiner’s personal opinion, attitude on judgement, was an objective test. Today concept of objectivity of a test depends upon not only to be impersonality but also mentioning of specific objectives. The test should ensure objectivity in construction, objectivity in administration and objectivity in scoring.

(a) **Objectivity in construction:** While construction, the test would be said to have objectivity in construction when the test items were selected in such a way that they would correspond to their respective objectives.
The students were evaluated in this study with the help of test items based on specific objectives. The test items were objective based. Hence objectivity in construction was maintained.

(b) Objectivity in Administration: In order to maintain the objectivity in administration of the test in the present study, the tests were administered in each school during same periods of school hours on different days. Both physical and environmental conditions were controlled as far as practicable. The atmosphere and the hour of the day selected for administration of the test were same. The objectivity in administration was also maintained by giving same type of direction to each student.

(c) Objectivity in Evaluation: In maintaining objectivity in scoring, scoring principles were framed with the help of experienced teachers and experts in this field, and the answer papers were evaluated by investigator herself on the basis of the scoring keys of the test.

Reliability: The term reliability referred to the consistency of score obtained by the individual when re-examined with the same test on different occasions. The researcher in this study employed the test–retest method for finding out the reliability of the test. The test was re-administered on 25% students randomly selected from standard VIII. Retest was administered fifteen days after the first administration of the test to minimize the effect of memory of the test item. The overall conditions were controlled in both the situation to minimize the psychological variations. The hours of the day selected by the researcher for administration and re-administration of the tests were also the same. The reliability coefficient was found to be 0.68.
Validity: The validity of a test would mean the efficiency with which it would measure what it intent to measure when compared with accepted criteria. The researcher made use of content validity for the test.

The investigator analyzed the objectives, content units and the test items and the same was judged by a jury of experts. Moreover confusion or any ambiguity that appeared in connection with certain items were applied and tried out upon a small sample of students. The test was revised and modified accordingly from suggestions given by experts.

Thus the pre-test included the following items

Vocabulary: The items under the vocabulary section included grade level questions with different items specific to vocabulary testing were given. There were 20 items total with \(\frac{1}{4}\) marks assigned to each item of the test. It included word meanings, word usage, synonyms and antonyms

Spelling: In spelling testing, words selected were dictated. Here the students were asked to listen and write the words dictated. In this section there were a total of 12 words of \(\frac{1}{4}\) marks each. This subtest also included fill in the blanks (homophones), writing plurals etc.

Grammar: The investigator used situations according to the level of the students such as sentences to check word order, parts of speech and other grammatical elements. There were 20 items and each carried \(\frac{1}{4}\) marks. The items given in this section covered different aspects of grammar.

Composition: The students were given topics to write under their grade level. In composition the marks were based on the performance of students on four aspects.
The maximum marks awarded for composition was 5 on the criteria of fluency of idea, vocabulary, structure, content and punctuation.

**Handwriting:** This was also an aspect that was looked into. For assessing handwriting the composition paragraph was looked into since the other questions were objective based. The marks awarded for handwriting was 5. It was distributed according to the criteria of spacing, formation of words, clarity and legibility.

**Post-test:** The post-test was administered after the intervention conducted for three months.

Apart from the pre test and post test, other variables like intelligence, anxiety and socio economic status of the family were also considered. Hence brief description of the tools used for assessing intelligence, anxiety and socio economic status is given below.

**Intelligence (1998):** The Group Test of Intelligence developed by Dr. Pramila Ahuja was used. The test was in a booklet form consisting of seven tests of which the first one was practice test and the remaining were proper tests. Each test had sufficient examples and instructions. The test was verbal in nature and there were sufficient choices. The separate answer sheet of 2 pages was used while conducting the test. After each test, a straight horizontal line is given which enabled the students to distinguish easily where one test section ended and the other began.

The reliability coefficient by test retest method was found to be $0.852 \pm 0.013$ and through split half method was found to be $0.892 \pm 0.009$. 
Validity or the internal consistency of the test was established on the basis of thorough item analysis. The validity coefficient was found to be $r = 0.494 \pm 0.042$ (N = 371).

**Socio-Economic Status (1987):** The investigator made use of the test developed by Dr. S. P. Kulshreshtha and Priya Dey (1987). The test was called the Socio-Economic Status Scale. There are 10 questions in all with ample choices. The questions are related to the educational qualification of the parents and siblings, income of the parents, kind of house and number of luxury items available in the house.

The reliability and validity of the test was found to be 0.85 which was quite high. The scale had content validity as the items of the scale were collected as a result of interaction with the farmers, other villagers, experts etc and thus the concepts were widely covered.

**Anxiety Scale (1973):** The investigator made use of the anxiety scale developed by Dr. Sinha. The scale had 90 items which had a response of Yes/No. Every ‘Yes’ carried one point, and a ‘No’ zero point. The level of anxiety could be found by adding the correct response and then looking against the table. The reliability of the test was 0.85 and validity was found to be 0.62 which was significant beyond 0.001 level of confidence.

The socio-economic status scale and the anxiety scale were in Hindi and had to be translated into Malayalam and correlated. Both the tests were translated into Malayalam by language experts. The tests were administered to 30 students with Malayalam mother tongue. Some schools offered choices of Hindi and Malayalam as
second language. The tests were administered on separate days but at the same time. Answer sheet was given along with the test. Clear instructions were given and doubts of all sorts were cleared. The correlation between the original version and translated version of the anxiety scale and socio economic status scale was found to be 0.72 and 0.60 respectively.

3.4.4 Selection of the Sample

The sample for the study was obtained by administering the pre test in English. Two-hundred students were randomly selected from standard VIII from Government and Government aided school with Malayalam medium of instruction. On the basis of their pre-test score the students were grouped into the experimental and controlled groups. Thus the two groups matched in terms of the pre-test scores. Both the groups were also given the test of intelligence, anxiety test and the socio economic status scale. The scores were tabulated and the influence of these variables was seen on writing skill of selected students. The final sample had 100 students in the experimental group and 100 in the controlled group from Government school and Government aided school. Thus 100 students in the experimental group comprised of 50 from Government and 50 from Government aided school. Similarly 100 students of the controlled group were half from Government school and half from Government aided school.

On the basis of the scores of intelligence, anxiety and socio economic status scale, both the groups were matched into their categories for finding the influence of these factors on their post-test performance. The experimental group was given 4
hours per week intervention on writing skill whereas the controlled group attended regular classes.

3.4.5 Intervention

The experimental group underwent the intervention provided by the investigator for three months. This started after the first term examination. By this time the admissions were complete and classes had become regular. The intervention classes started from the month of mid of September to mid of December. The investigator met the students four days a week and also the time factor was considered. If it was morning class one day, next day it was afternoon. This was done with the awareness that time influences learning, so rotation of the class was maintained. Investigator could not make use of computer and LCD as the school was situated in a rural surrounding.

3.4.5.1 Objectives of Intervention

The objectives of the intervention programme were the following:

1. To provide interventional activities for overcoming the difficulties identified on the basis of pre-test for the improvement of performance of students in the following aspects of written expression.

   (a) Spelling

   (b) Vocabulary

   (c) Grammar

   (d) Composition

   (e) Handwriting
2. To study the effectiveness of intervention through pre and post test on improving the writing skills in English in the following aspects.

(a) Spelling
(b) Vocabulary
(c) Grammar
(d) Composition
(e) Handwriting

3.4.5.2 Guidelines Underlying the Intervention Programme

After the final sample was selected, the investigator used the interventional material based on the following principles. These were considered while writing the lesson and administering them to the selected students.

These guidelines were followed:

• Each step taken was small and manageable so that it helped the student in moving forward by understanding the activities.

• The investigator saw to it that the students recalled the earlier learning and related it to the new one.

• Appropriate activities were designed to provide adequate practice for the better visual discrimination and developing self confidence so that anxiety could be reduced.

• Group activities were designed to generate self confidence in the students.

• Earlier responses of students were taken as a base for development of writing skills.
• Investigator served as facilitator to the students in organizing writing skills.

• Lot of freedom was given to the student to explore the world of words and come out with their own queries and doubts.

• Games and activities were not only fun and enjoyable but also helped in improving the vocabulary and in reinforcing the concepts.

• The learning material was more on multi sensory modalities (visual and auditory etc).

• The interventional interval was constant and regular.

• Children were encouraged on following the cognitive strategies like solving puzzles to increase vocabulary and learn spelling, doing picture composition.

• Benefit of self appraisal was provided to the students.

• Intervenotional activities helped in simplification of the rules especially in spelling.

• Students were encouraged to use dictionaries.

• Students were encouraged to read more for the improvement of their vocabulary and visual discrimination.

• Occurrence of mistakes was nullified with proper and immediate feedback for correction.

• Communicative approach was used by the investigator.

3.4.5.3 Phases of the Intervention Programme

The main study was conducted in three phases namely, planning interventional programme for improving the writing skills, the execution of the programme and assessing the effectiveness of the programme.
Phase 1 - Planning Interventional Activities for Improving Writing Skill

In order to meet the first objective of the interventional phase, the investigator had taken the following steps:

1. The investigator on the basis of pre test performance, analyzed the difficulties faced by the students in terms of spelling, vocabulary, grammar, composition and handwriting.

2. In the second phase, investigator took the sessions 4 times a week for 1 hour daily in one school. It was found that students made errors while writing sentences. The investigator discovered that children with moderate intelligence also struggled in presenting syntactically and semantically correct sentences and also made spelling, grammatical and handwriting errors.

3. In the third phase, the investigator assessed the effectiveness of the programme.

Phase 2: Approaches and Strategies Employed for Developing the Intervention Programme

The approaches and strategies that have been incorporated and followed in developing interventional programme in the present study are discussed below:

Communicative Approach

English is taught as second language in schools and communicative approach is not generally followed especially in rural areas where the work is simplified by giving the mother tongue equivalent. This makes the child to learn more of the mother tongue. The investigator followed the communicative approach to language teaching and also switching over to learner centered approach from teacher centered. Here the learner learns the language incidentally and through interaction with peers and adult,
thereby improving his expressive language. Thus, there is growth of all the language skills namely, listening, speaking, reading and writing. To enhance the development of the language the child should have constant exposure to the language. In the present study no direct instruction or explanation for the rules governing the second language was given, rather all the language skills directly or indirectly got enhanced in the process of interaction made by the investigator through various activities adopted for intervention.

For developing the writing skills there was need for systematic instruction. It is noticed that when there is a developmental delay of oral language, it results in slower vocabulary growth (Calts, Hu, Larriver and Swank, 1994), reduced rate of vocabulary acquisition and difficulty in acquiring words with multiple meanings and figurative language as well as word retrieval difficulties was also evident. Comprehension problems were noticed both orally and in writing (Calts, 1996; Snyder and Downey, 1991)

**Cognitive Approaches**

Cognitive approach is suggested to facilitate better presentation. Flower and Hayes (1980) model was followed, which involved three main processes namely, planning, text production and reviewing. Planning involved three sub processes of setting goals, generating content and organizing text. Text production included the physical process of writing and the production of correct sentences. Reviewing included evaluation and revision both of the text already written down and of goals and ideas not yet written.
Another strategy that is referred to in this study is the PASS (Preview of knowledge and goals, Asking and answering, Summarizing and Searching for errors) propounded by Ellis (1994), which shapes the writing process from the creative beginning stages to editing the final product. This process involved (1)P – Preview of knowledge and goals, review of main ideas and details and prediction of the best order of presentation; (2)A- Asking and answering, topic and reader related questions, problem solving questions (3) S-Summarizing, the message in the last sentence; (4)S- Searching for errors and correcting them.

**Improvement of Language Components through Communicative and Cognitive Approach**

**Approaches to improve spelling**

The linguistic approach to teach spelling was followed to give the idea of the phoneme–grapheme correspondence. Spelling rules, generalizations and patterns that apply to whole words are taught.

Along with the linguistic approach, phonic approach was also followed. The students were taught to associate a sound with a particular letter or combination of letters. It gave the student an idea of how to spell the word according to syllables.

Gillingham method of using the alphabetic system with repetition and drill was also followed (Gillingham and Stillman, 1997).

Apart from this, investigator encouraged the students for developing a favourable attitude towards spelling and good study habits.

The investigator used simple language and pronounced clearly and distinctly and repeated desirably.
Use of Cognitive Approach

Difficult words were written on board, later on flash cards.

After the student was sure of using the learnt word, that word was taken off and the student was asked to visualize it in the mind.

Then students were encouraged to write it down from memory.

Students were also given manipulative to tell difficult spellings and asked to arrange the manipulative to form correct spelling.

New words were incorporated into copying and reading passages.

Colour chalk pieces were used to highlight the difficult words or the area of errors made by the student frequently.

Non-phonetic words were taught as a whole. Example, the word ‘laugh’ only ‘l’ is easy and the ‘augh’ was taught as a whole.

Structured dictation lessons were included. This helped children in gaining a sense of form, arrangement, sentence construction, continuity and organization of thoughts.

Frequent reinforcement of the words was done through oral repetition.

Children were encouraged to spell the words carefully to avoid errors.

Spelling games were introduced which not only motivated the students but also increased their liking for the subject.

Approaches to improve vocabulary, word usage and grammar

As vocabulary, word usage and grammar are related areas, the skills in these areas were focused simultaneously. Vocabulary is concerned with the words the students comprehend and uses in speaking and writing. Word usage is the appropriate
selection of the vocabulary in terms of accepted standards, and grammar is the way in which words are structured or organized to form a complete thought.

Spoken language was encouraged as the written composition reflects the vocabulary, usage pattern and grammar the child use in speaking. Oral language was given more emphasis.

Mistakes made while speaking was corrected, self correction or peer correction was encouraged. Sufficient reinforcement was given for overcoming hesitation in using the words in speech.

Activities were given based on the common errors which the group made.

The Process Approach by Graves (1985) was followed for grammar. Along with grammar, skills in spelling, capitalization, punctuation and handwriting were focused.

Graham and Harris (1994) offer few instructional recommendations for developing an effective writing programme for the students with poor written expression. This incorporated the communicative and cognitive approaches to language learning:

- Put aside time for written instruction.
- Sufficient exposure to students to different writing tasks.
- Conducive and friendly environment.
- Integrating writing with other language skills.
- Students should be helped to develop goals for improving their writing products.
Along with these

- Correct uses in speech and writing were stressed.
- Correct uses in number, gender and tense were followed.
- Errors were corrected as and whenever they occurred.
- Socially unaccepted vocabulary and usage were discouraged.
- Group activities and pair activities and were given to motivate the students and develop interest in the language.

**Approaches to Improve Handwriting**

Cox (1992) suggests that “a strong kinesthetic memory may reinforce the visual memory of letter shapes for reading”. Some students who have better kinesthetic memory than visual memory learn to write more easily than they learn to read.

The difference between the mother tongue letters and the English letters was pointed out and students were encouraged to write the letters independently without influencing each other. Reinforcement at regular intervals helped in bringing about a desirable change.

Attention was given to qualities such as neatness, legibility, clarity, size of letters, spacing among letters. Self correction was encouraged.

**Approaches to Improve Composition**

**Use of Communicative Approach**

Students were encouraged to think in English.

- The investigator started the composition with jumbled up sentences. The students had to arrange the words in the correct pattern (S-V-O).
• Sentences were given and the students were asked to add one additional word to it appropriately.

• Topics were given and every day student quickly had to give a sentence on it orally.

• Students were encouraged to read aloud their ideas and views.

• After reading the whole passage, substitutions of new vocabulary items was encouraged.

• Picture composition was given and first students were insisted to speak about it orally and then after that to write about it.

• Students were encouraged to think about what is to be done by asking questions to oneself like, “What is the topic about? What should I write about it? Where should I start? How long should be my paragraph? Should I add any reasons? (Emig, 1978).

• Topic selected were from day to day life of the students.

**Cognitive Approach**

• “Brain storming” on the topic was done. Students had to write down all the words that come to their mind on the topic and later construct sentences.

• During the brain storming session (5 minutes) focus was not on spelling but when written in sentences the students were encouraged self-correction of the spelling.

• Students were encouraged to locate the verbs, nouns, adjectives, articles, conjunctions and other parts of speech to make them recall the concepts.

• Students had to put their sentences in proper order. Composition was done as a pair work instead of individual activity.
• Towards the later phase of the programme students were given specific time to plan, produce the content and review the written passage. (Flower and Hayes, 1980).

• Students were encouraged to think in English as well.

For the sake of convenience, the investigator has compartmentalized the language components and how different approaches were used in teaching these, has been mentioned separately. In the actual classroom teaching, both the approaches went on hand in hand to get the maximum results. After the intervention, post-test was done and details were analyzed. The details of the analysis are given in the next chapter.

Phase-3: Effectiveness of the Intervention

The major findings at the interventional phase are discussed below **Spelling:**

There was significant improvement in the spelling skills of the students. They were able to apply the rules, thereby improving their performance. The subjects were able to identify their mistakes when words looked incorrect and could try alternate spellings. Words were repeated more than once so that students could identify the sound and recall the letters forming the word. Meaningful drill in this area helped the students to overcome the difficulties faced in learning spelling.

The specific areas that showed improvement were as follows:

The students could distinguish the voiced from the unvoiced sounds. During the intervention words with sounds like /h/, /i/, /k/ were repeated. Students identified the sounds and could try the spellings and enjoyed the session.
Frequent spelling of long and short vowels as in, ‘bang’, ‘hang’, ‘beach’, ‘reach’; ‘sit’, ‘it’, ‘fight’ were given emphasis and starting with simple words the difficulty level was increased daily. So towards the end of the intervention programme students were able to spell better and thus able to read better.

In the same way, for the r-controlled patterns and single and double consonants words were repeated and regular drill could help in overcoming the difficulties. Ignorance was one of the main cause for their poor performance but when they learnt through repeated practice, they performed well. Children enjoyed the spelling drill sessions as they wanted to evaluate their own performance.

For prefixes and suffixes, the investigator would spell the word thereby breaking it into its component parts. This helped the students to recognize the word and thus made attempt in writing. A list of common prefixes and suffixes chart was given to every student for their immediate disposal. During this session, students learnt the vocabulary as well.

Vocabulary

A significant improvement was noticed in the use of vocabulary items. In the initial stages the subjects were reluctant to try new vocabulary items. Later on they started incorporating the new vocabulary items from the sentences given to copy. There was a deliberate use of new words learned. Instead of use of few words and repeating the same words in different sentences, there was application of the new vocabulary items. Group and pair activities related to vocabulary building motivated the students.
Word building activities were very effective in building up the vocabulary. In the early stages of the intervention programme, every student had to say loudly the new words learnt. As the programme progressed, instead of saying the word aloud, they had to say all new words that could be formed from it—past forms, synonyms, antonyms. This helped greatly in building vocabulary and using them correctly in sentences.

In the intervention classes, students were made to listen to audio tapes especially short stories and songs. Students were eager to pick out the vocabulary items. Auditory input helped in retaining the words. Students were seen trying to pronounce the words as they had heard.

The activity which involved showing a picture of an object and eliciting vocabulary items associated with the word also showed an increase in output. This activity of writing words (antonyms and synonyms) by showing pictures helped in improving vocabulary.

Word building activity like giving a single multisyllabled scrambled up word and asking the students to make as many words as possible from it showed that the students were able to make monosyllabled and double syllabled words. With daily practice they were seen to memorise words. Students also learnt to distinguish among words like, ‘accept, ‘except’ etc.

Group activities, which created a competitive spirit, were seen to provide intrinsic motivation. Students were alert to participate in vocabulary building activities and use of dictionary also helped in adding more and more words.
These activities improved their vocabulary use and they were able to follow instructions.

**Grammar**

There was a tremendous improvement in writing meaningful sentences, incorporating punctuation, capitalization and grammar. It was noticed that using multisensory techniques in teaching the rules of grammar helped in quick recollection of the rules. Constant reinforcement of the rules helped the subjects memorize the rules. There was significant improvement in using capitalization and punctuations. Writing sentences from the board helped the students to follow the right structure. So modeling the correct sentences by the teacher is very advisable. Interaction with teacher in English and peer correction also gave the students the apt use of grammar.

Specific areas that showed improvement are given below-

- Students were able to identify the parts of speech and distinguish the following-
  - Conjunction from preposition and articles.
  - Adjectives from adverbs.
  - Prepositions, pronouns and articles.

- Use of exercises and charts and picture cards showed a very positive effect on the students

- Students enjoyed arranging sentences into proper order and also identifying the parts of speech. Through this exercise they could locate the different aspects correctly and this also framed the subject-verb-object order in their mind.
• Capitalisation and punctuation was also stressed. After one week of the intervention programme, students were seen starting the sentences with capital letters and ending it with a full stop (period).

While teaching types of sentences, the investigator made use of dramatization. Suitable emotions were brought on the face. This helped in making them identify the kind of sentence. Later on students were given the freedom to act out sentences. This activity helped in developing an understanding of interrogative sentences and exclamatory sentences. Students showed great excitement in trying out this activity. It helped in retaining the item learned. Along with teaching sentences, students learnt correct word order and also helped in recapitulation of other parts of speech.

• Wherever possible the investigator made use of teaching aids, and used simple English so that students could comprehend easily what was being said.

• One of the areas in grammar that most of the students found difficulty with was irregular verbs. A personal list was made for reference and pasted on every students table. Oral drill of these words in a rhythmic manner helped the students retain these words.

• Students also had problem in understanding ‘tenses’. The investigator made the students learn the past forms and past participle, and with simple English taught the time factor and with numerous examples and exercises, tenses were taught. Again each student had a personal copy of the rules forming tenses. Repetition helped in permanent memorization. Students lost their apprehension in learning English.
Composition

There was a significant improvement in composing a paragraph on a given topic. The sentences written were more accurate and properly organized. Since the students had been learning English for some 5 years, they could not incorporate large ideas but only simple concepts. The vocabulary items were quite appropriate to the idea conveyed. Before writing on the topic, students were made to speak about it. This helped in improving the speaking aspect. The encouragement helped the students try to speak in the second language, and this exercise was too exhilarating to them.

The topics given were based on common themes and given below are certain specific improvements noticed.

- The brainstorming session provided the students to think on all aspects related to the topic. Later these ideas were categorized and group activity was given to form meaningful paragraph.
- Initially guided composition was given, followed by picture composition and finally individual topics were given and brainstorming provided clues for the topic.
- Instructions given to students to arrange the ideas in the order of relevance to the topic helped in developing the passage in a cohesive way.
- Teacher demonstration also gave an idea of how to proceed.

Composition topics were given as group work and there was lot of interaction and the outlines provided by groups were better than individual ones. Hence group work was encouraged till the students were confident of their writing. In the later
stages, composition was given as individual work and students wrote very effectively in whatever simple English they knew, incorporating all the rules of grammar and punctuation. The improvement in vocabulary and spellings helped in improving the composition exercises also.

**Handwriting**

This aspect was prevalent everywhere. From spelling, vocabulary, grammar and composition, handwriting was included everywhere. Positive reinforcement was given to those who followed the mechanics of writing. As a result others also tried to do better. Homework exercise of copywriting helped in improvement of the script. The improvement noticed were-

- Students were made to do peer correction and identify the mistakes. This helped in the later stages to evaluate their own piece of writing and rectify accordingly.
- Exercises on writing the alphabets with correct movement of hand helped in improving the individual letters.
- Mother tongue influence was the greatest hindrance of writing in English. The investigator could help in bringing about changes in the spacing of letters, words sentences but not 100% in the size of letters because of over influence of the mother tongue.
- Over all every piece of writing was neat, without cuts and crosses and overwriting. There was also sufficient space among the letters/words.

The intervention helped in improving all the skills of English language, from listening to speaking, reading and writing. Since the classes were communicative in
approach, it helped in improving all the aspects, though the investigator had selected only the writing aspect for the present study.

3.4.6 Procedure of the Conduct of both Pre and Post Test

The investigator had made prior appointment with the school authorities before starting the study. The Head Master and the concerned teachers of the respective schools were co-operative enough to understand the importance of the task. Necessary arrangements to suit the investigator were provided.

In order to conduct the pre-test, which was after the completion of the first term of VIII grade students, 100 students were randomly selected from school achievement records, from Government schools as well as aided Government schools. While conducting the test, proper instructions were given to the students. Before the actual commencement of the test, the investigator gave clear instructions and clarified their doubts. Teaching in English was a welcome to the school authorities whereas most of the students did not welcome this class initially as they thought it would be difficult for them to understand communication in English even though simple sentences were used. On the basis of the pre-test, students were classified into experimental and controlled group. The intervention was provided for 3 months starting from the mid of September to the mid of December. Post test was conducted after intervention.

Simultaneously after conducting the pre-test, the students were also matched in terms of intelligence, socio-economic status and anxiety level so as not to attribute the cause of performance due to these variables.
For the sake of comparison, between the rural and urban students, the pre-test was conducted to 100 more students from urban area falling in the same type of schools. Fifty students from Government and 50 from aided school were considered for comparison by conducting pre-test to make comparison based on location.

3.4.7 Scoring Key and Marking Scheme

Scoring key and marking scheme was prepared in consultation with the subject experts. Since the test items were objective type and to be answered in short sentences, scoring of the test papers was quicker and easier. Mean and standard deviation were calculated.

3.4.8 Statistical Treatment

Mean, t-test and Analysis of Linear Regression are used.

To test the formulated hypothesis, t-test was the best possible statistical treatment in this research study. Since the investigator wants to find the effect of the predictor variables like intelligence, SES and anxiety on the achievement, Linear Regression equation was made use of.

Thus all precautions were taken for conducting the tests. The intervention was based on difficulties faced by the students in the pre-test of writing in English.