Chapter III
Method of Investigation
CHAPTER III

METHOD OF INVESTIGATION

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METHOD OF INVESTIGATION

INTRODUCTION

The methodology pursued in the present study is outlined in this chapter. The study is a survey intended to obtain data pertaining to the interaction and contribution of different facets of educational phenomenon with special reference to English subject. It is hoped that the data collected will assist in ascertaining the status of English as a compulsory subject in Higher Secondary School of greater Bombay under the Maharashtra Board of Higher Secondary Education.

Outlined in this chapter are: Statement of problem, statement of objectives under study, formulation of Hypotheses, scope and limitation, Selection of sample, Development of research instruments, method of data collection and details of data analysis.

3.1 PROBLEM

English though a foreign language still occupies the position of associate official language. It is widely used for interstate, State - Centre Communication between governments, at the highest levels of State administration, in business, industry and banking, at Professional gatherings in University administration, in courts of law, in Railways and Air lines. In such a background it will be of very high utilitarian value especially for students of Higher Secondary schools.
We understand the role of different agencies as mentioned above but we seldom see them sharing their mutual experiences, reactions or wisdom.

Teachers, who function under school administrators of varied capacities, seldom are given chance or freedom to act as catalytic agents in throwing up multiple reactions arising from day to day teaching experiences, to seek solutions of problems, to expect methodological innovations or to claim curricular revision.

Hence an attempt was made to draw out the ideas, recommendations of the teachers who teach the subject and the difficulties they face in realising the set objectives through a questionnaire administered to the teachers teaching English, in higher Secondary Classes.
The Higher Secondary stage is a crucial phase in their lives as all students branch off either to higher seats of learning or take up employment, where competence in English is an asset.

This study is further significant in another aspect. Like any other educational enterprise it represents an investment in human and financial resources. It engages a large number of teachers, considerable investment on facilities, technical equipment, reading material and without exception every higher secondary school child has to learn English at least for 8 years.

It is therefore very important to study, the interactions and contribution of different variables which facilitate, the occurrence and completion of educational phenomenon, with special regard to English as a subject in Higher Secondary level. The present study, it is hoped, would highlight difficulties and problems faced by Teachers, students and Heads of Institution in realising the standardised objectives of the curricula framers, during teaching learning transmission, and thus provide in the right perspective, a sound basis for improved instruction, which will also have a significant bearing on educational planning and practice.

Taking all these points into consideration the following problem "A study of the Status of English as a compulsory subject at Higher Secondary level" was chosen for research purposes.

3.2 OBJECTIVES OF STUDY

The purpose of the study is to explore, and obtain data which would assist to establish the present status of English as a compulsory subject in Higher Secondary Schools, by identifying the difficulties and problems faced by the three variables. The
students in their efforts to acquire knowledge and skills in English as prescribed by the curricula framers, the teachers in their attempts to impart linguistic skills through educational transmission, the Heads of institutions in their efforts of supervising and contributing to successful educational transmission which takes place due to the influence/interaction of other variables like content or text book, Teaching methodology, evaluation procedure, educational environment. The results of the study it is hoped would help to draw implications primarily for educational practice and policy.

In the broad objectives of study it is attempted to arrive at conclusions pertaining:

1. To study the English syllabus prescribed by the Maharashtra board of Higher Secondary education.

2. To critically examine and evaluate the English text books prescribed by the board by experienced English teachers in order to identify and ascertain if any they satisfy these objectives or not and to what extent.

3. To find out the influence of socio-economic factors on student performance in English.

4. To find out if the personal learner factors such as sex, faculty, medium of instruction and usage of spoken English influence student performance in English.

5. To find out difficulties encountered by students in learning English subject.
6. To ascertain difficulties faced by English teachers in realisation of teaching objectives.

7. To find out difficulties faced by the Head of English department and Heads of institutions regarding teaching of English at Higher Secondary level.

3.3 HYPOTHESES

The following hypotheses are formulated for the purpose of investigation.

1. There is no significant difference at 0.05 level between the difficulties faced by commerce, arts and Science students,
   i. To speak English
   ii. To read English
   iii. To understand the meaning in English
   iv. To know what to write in English
   v. To arrange ideas properly in English
   vi. To write correct language in English
   vii. To write correct spelling in English
   viii. To express clearly in English

2. There is no significant difference at 0.05 level between problems encountered by commerce, Arts and science students in areas pertaining to:
   i. Content of the English reader
   ii. Home assignments in English
   iii. Teaching methodology in English
   iv. Correction procedure in English
   v. Writing and correction of composition in English
   vi. Preparation for tests and examinations in English
3. There is no significant difference at 0.05 level between the difficulties faced by female and male students.
   i. To speak English
   ii. To read English
   iii. To understand the meaning in English
   iv. To know what to write in English
   v. To arrange ideas properly in English
   vi. To write correct language in English
   vii. To write correct spelling in English
   viii. To express clearly in English

4. There is no significant difference at 0.05 level between problems encountered by female and male students in areas pertaining to
   i. Content of the English reader
   ii. Home assignments in English
   iii. Teaching methodology in English
   iv. Correction procedure in English
   v. Writing and correction of composition in English
   vi. Preparation for tests and examinations in English

5. There is no significant difference at 0.05 level between the difficulties faced by vernacular and English medium students.
   i. To speak English
   ii. To read English
   iii. To understand the meaning in English
   iv. To know what to write in English
   v. To arrange ideas properly in English
vi. To write correct language in English
vii. To write correct spelling in English
viii. To express clearly in English

6. There is no significant difference at 0.05 level between problems faced by vernacular and English medium students in areas pertaining to:
   i. Content of the English reader
   ii. Home assignments in English
   iii. Teaching methodology in English
   iv. Correction procedure in English
   v. Writing and correction of composition in English
   vi. Preparation for tests and examinations in English

7. There is no significant difference at 0.05 level between difficulties faced by students from Higher Secondary Classes attached to schools and those attached to Degree Colleges.
   i. To speak English
   ii. To read English
   iii. To understand the meaning in English
   iv. To know what to write in English
   v. To arrange ideas properly in English
   vi. To write correct language in English
   vii. To write correct spelling in English
   viii. To express clearly in English
8. There is no significant difference at 0.05 level between problems faced by students from Higher Secondary Classes to schools and those attached to Degree Colleges in areas pertaining to:
   i. Content of the English reader
   ii. Home assignments in English
   iii. Teaching methodology in English
   iv. Correction procedure in English
   v. Writing and correction of composition in English
   vi. Preparation for tests and examination in English

9. There is no significant difference at 0.05 level between the mean scores of English subject of commerce, Arts and Science students.

10. There is no significant difference at 0.05 level between the mean scores of English subject of female and male students.

11. There is no significant difference at 0.05 level between the mean scores of English subject, of English medium and vernacular medium students, of commerce, Arts and Science streams.

12. There is no significant difference at 0.05 level between the mean scores of English subject of female and male students of English and vernacular medium.

13. There is no significant difference at 0.05 level between the mean scores of English subject of Commerce, Arts and Science students speaking English.
   i. At home
   ii. with friends
iii. With strangers
iv. At the outset

14. There is no significant difference at 0.05 level between the mean Scores in English subject of female and male students speaking English
   i. at home
   ii. With Friends
   iii. With strangers
   iv. At the outset

15. There is no significant relationship found to exist at 0.05 level between father's qualification and English marks scored by
   i. Commerce female students
   ii. Commerce male students
   iii. Commerce students in total
   iv. Arts female students
   v. Arts male students
   vi. Arts students in total
   vii. Science female students
   viii. Science male students
   ix. Science students in total

16. There is no significant relationship found to exist at 0.05 level between father's income and marks scored in English by
   i. Commerce female students
   ii. Commerce male students
   iii. Commerce students in total
17. There is no significant relationship found to exist at 0.05 level between mother's qualification and marks scored in English by
   i. Commerce female students
   ii. Commerce male students
   iii. Commerce students in total
   iv. Arts female students
   v. Arts male students
   vi. Arts students in total
   vii. Science female students
   viii. Science male students
   ix. Science students in total

18. There is no significant relationship found to exist at 0.05 level between non-working and working mothers and English marks scored by
   i. Commerce female students
   ii. Commerce male students
   iii. Commerce students in total
   iv. Arts female students
   v. Arts male students
   vi. Arts students in total
vii. Science female students
viii. Science male students
ix. Science students in total

19. No correlation is found to exist at 0.05 level between the mean English scores and mean total scores of
i. Commerce female students
ii. Commerce male students
iii. Commerce students in total
iv. Arts female students
v. Arts male students
vi. Total arts students
vii. Science female students
viii. Science male students
ix. Total science students
x. Total female students
ix. Total male students

3.4 SCOPE AND LIMITATION

The study has provided scope for both male and female students of all three faculties namely science, commerce and Arts students of Std XII attached to schools and Degree colleges.

The study is limited to the schools and Colleges which follow the curriculum of Maharashtra state secondary and Higher Secondary Education Board in greater Bombay.
3.5 SAMPLE

In order to explore and examine the positing of English subject in Higher Secondary classes, and difficulties faced by students, teachers and Heads of institutions, the latest available lists of schools and Colleges offering XI and XII was obtained from the Government Office. The Higher Secondary Schools and Colleges offering plus two numbered 78.

Out of these the sample of students for the study were drawn from 14 colleges and 8 Schools which totally works upto 35 per cent of the total schools and Colleges offering plus two in the city of Bombay following the curriculum prescribed by Mawharashtra State Higher Secondary Education Board.

Pursuing the methods of stratified random sampling, a sample of 1439 students was drawn in such a way as to arrive at an equal representation of boys and girls from all the three faculties.

Further based on the percentage of results of these schools and Colleges at the Higher Secondary Board examination in the previous three years.

They were further distinguished in three categories. High - The institutions having results about 80 percent, Medium - The institutions having results between 50 percent to 80 percent and low - The institutions having results below 50 percent. The data are presented in the following table.
Table 1
Faculty wise & Sex wise number of students included in the sample

<table>
<thead>
<tr>
<th>Performance Level</th>
<th>Number and type of Institution</th>
<th>Faculty</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Commerce</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>High Performance</td>
<td>Schools</td>
<td>21</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Colleges</td>
<td>70</td>
<td>65</td>
</tr>
<tr>
<td>Medium Performance</td>
<td>Schools</td>
<td>22</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Colleges</td>
<td>64</td>
<td>62</td>
</tr>
<tr>
<td>Low Performance</td>
<td>Schools</td>
<td>25</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Colleges</td>
<td>22</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>22</td>
<td>224</td>
</tr>
</tbody>
</table>

3.6 DATA GATHERING TOOLS

3.6.1 Questionnaire for students

The whole educational process is planned for the benefit of the student, and the process is not accepted to be complete unless the outcome is realised from the student. Hence it was necessary to prepare and administer a questionnaire to the students in order to understand their problems.

In the questionnaire for students, questions, 1 to 3 were aimed at acquiring details regarding students personal bio-data, socio-economic background. Questions
4 to 8 were regarding their linguistic, and reading habits, questions 9 and 10 required them to voice opinion whether they like learning English if so why, ad secondly whether they felt it was necessary to teach English as a compulsory subject in higher Secondary level.

Students difficulties in different areas of English were aimed to be assessed by Question 11 where the student had to indicate with a tick mark his area of difficulty.

Question number 12 listed down certain areas like text books, home assignments, teaching, correction, composition and preparation for tests and examination as problem areas and asked the students to indicate their problem areas and what their problems exactly where.

In question No.12, Sub-questions 1 to 33 dealt with assessment of teaching methodology followed by the English teacher through the students in which each questions was provided with three possible answers such as yes/some times/ No and the student was required to indicate the answer by a tick mark in the appropriate box.

Sub-questions number 34 to 37 were provided to obtain general information regarding note books used and students study habits.

Sub question 38 was framed to provide information regarding facilities in schools like availability of

1. Class rooms
2. Desks and Chairs
3. Black board
4. Bulletin Board
Students were instructed to indicate with double tick mark under each box if the facilities mentioned were sufficiently available, and a tick mark they were available but insufficient, and a cross mark if it was not available.

Sub-question 39 to 47 were to obtain student opinion about the English text book, Opinion on areas like content, vocabulary, structures, exercises, print, interest and information provided in the lessons, and students were required to indicate their answers with a tick mark on the appropriate box whether they agree, disagree or are undecided about the statement given.

Sub question 48 was aimed to find out the student opinion regarding availability of text books in the beginning of the academic year by indicating with a tick mark in the appropriate column.

(The copy of the questionnaire is incorporated in Appendix c).

3.6.2. Questionnaire for Teachers

Mere customary study of objectives and their actual performance may not have a profound influence on educational practice and better performance. It is necessary to view the inter connection between and among various agencies involved in strengthening and upholding the standard of education and parts there in.
Questions regarding their academic, professional qualifications, teaching experience, interest and participation in extra curricular activities, in service training and preference of job were asked under the heading personal bio-data.

Under the sub heading reading habit a few questions regarding reading of newspapers, magazines, books and usage of dictionary were asked.

In order to ascertain their communicative skills, questions regarding language used at home, school, class, with friends, with strangers were put forth. They were asked to put a tick mark in the column under which the appropriate language was mentioned.

Fourteen questions were framed in the questionnaire to assess to school climate of the schools/colleges chooses as sample. out of this seven questions were open ended and seven were closed ones offering Yes/some times/No as answers, requiring the teachers to tick the appropriate box.

Availability of teaching aids was assessed by questions in Section V under which the minimum requirement of schools facilities were listed and teachers were asked to use double tick mark to indicate sufficient availability of each teaching aid a tick mark to indicate that the aid was available but insufficient and a cross mark if it was not available.

The physical facilities, teaching aids, and library facilities listed under this questions were:-

1. Availability of class rooms to teach students
2. Ventilation of class rooms
3. Availability of desks and chairs in each class
4. Availability of Black board
5. Availability of Bulletin boards in school
6. Availability of tape recorder
7. overhead projector
8. Library
9. Availability of librarian
10. Availability of sufficient number of books to borrow in the library.

Question number VI Sub headed library facilities proceeded to assess the availability and working of the school/college library, questions regarding availability of English books, reference books in English were asked to find out whether the teachers had the habit of using their library and questions like how many tickets were given per person and how many books were borrowed per ticket and time allotted to keep a book were put forth to give an insight into the working systems of the librarian in the respective schools and colleges.

In order to ascertain facts regarding basic fulfilment of teaching requirements such as preparation of scheme of work for each year, writing of teaching notes, student attendance, checking of teaching notes, writing of compositions and usage of teaching notes, seven questions were asked out of which 4 were closed ones which required the teachers only to put a tick mark in the correct box as regarding their answers there was possibility of variations. The 8th question under the same heading required the teacher to write in 5 lines on how teaching of each prose, poetry and grammar was performed in class. This question was included to assess the teaching procedure used in class.
Question number VIII under sub heading note books proceeded to find out the number of note books used for English, method of giving notes, books used for preparation of notes, allotting home assignments and regarding details of tests and return of answer papers. Sub-division IX containing six questions under the heading text books aimed at gathering information regarding availability of text, opinion about syllabus in English and English text. Answers such as yes/No Yes/Some time/No, fully agree, partially agree/Disagree were offered as choices wherever it was suitable. These questions aimed to assess the opinion on areas of the text books such as content matter, structures vocabulary, exercises, print, and information on element of interest provided.

Sub-division X posed a single question in which the teacher was required to answer whether she/he felt English should be a compulsory subject at higher Secondary stage or not and were asked to give reason whatever their answers might be. Answers to these question were expected to reaffirm the need to have chosen this topic for study.

The last sub-division XI listed down anticipated problem areas of language teachers and asked teachers to mention if they have any problem in those areas and if so what measures they suggest in tacking them effectively. There was also scope given to teachers to list any other problems they faced other then those which has been listed in the questionnaire.

This questionnaire though exhaustive had to be administered to provide all the necessary information pertaining to the study which was a survey of all variables at work thus contributing to the assessment of the status of English at higher Secondary level in Bombay.
(The copy of the questionnaire for teachers is incorporated in Appendix d)

3.6.3 Interview with the head of the Department and Head of Institution.

The effective overall functioning of the school and its performance depends largely on the Head of the institution. Similarly the responsibility of the English department is shouldered by the Head of the department. As they are often very busy and most preoccupied among the three respondents selected as sample, instead of a printed questionnaire, an interview was conducted by the investigator with prior appointment and appropriate questions to elicit information regarding the teaching of English at +2 level, and difficulties if any in achieving their objectives were put forth. About five to ten questions were asked.

The interview schedule is incorporated in Appendix (e and f).

3.6.4 Tests Conducted for Students

The following tests constructed by Smt. Joice Chandra was found to satisfactorily evaluate the fulfillment of standardised objectives of the curricula framers and hence they were administered to the chosen group of sample. They were:

a. Writing Competence Test in English objective type-WCT(O)
b. Writing Competence Test in English Composition Type-WCT(C)
c. Grammatical Competence Test (GCT)
d. Reading Comprehension Test (RCT)
e. Vocabulary Test (VT)
3.6.4.1 i. Part A

Writing Competence Test in English (Objective Type) - WCT (O)

A set of 40 objective type test items in five sections on different discourse features - style, register, rhetorical function, organization, shortening and expansion.

Writing Competence Test in English (Objective type)

Section I of WCT (O) required the ability to employ the right style by choosing from among the several grammatically correct alternative ways of expressing ideas the one that is most natural and frequent in native speaker’s speech and writing.

An example of the items follows:

Select the phrase or clause which best completes the sentence;

The new magazine be published

a. Twice each month
b. One in every two weeks
c. Once a fortnight

Although the three options are perfectly accurate Grammar-wise, the third alternative will invariably be chosen style-wise.

Both the sub-sections of Section II included items requiring the ability to state meanings as briefly as possible. The first sub-section contained test items requiring students to replace a clause or phrase by its single-word equivalent choosing it from the given list of words; the second is a set of production items that required the ability to shorten given phrases of clauses into single words.
The third section was concerned with function (purpose communicative value/ illocutionary force or simply force) of utterances. For instance, one way of interpreting the question.

Shall we go for a walk? is to regard it as a suggestion which is its function or communicative value. Similarly, in writing, the functional markers employed by the author to achieve coherence signal rhetorical function. For example, expressions such as 'on the other hand', 'as a result of', and 'to put it differently', signal respectively the logical relationships of contract, cause and effect and reformulation. Of the two items in this section on functions, the first was a matching item requiring students to fit a few functions to their linguistic realizations or markers: the second entailed the production of linguistic markers suited to given rhetorical functions.

The fourth section contained a description of an event with five pairs of words/expressions. One of each such pair was a colloquial expression. Students were required to select from each pair the word that belonged to the register of the written medium.

Lastly, as a measure of the ability to organise paragraphs, the sentences of one short passage were given in a jumbled order requiring the students to rearrange them in the right order.

An overview of the content of the WCT (O) will be found in Table 2.
Table 2

Overview of writing competence test (Objective Type) WCT(O)

<table>
<thead>
<tr>
<th>Section</th>
<th>Description and Type of Item</th>
<th>No.</th>
<th>Max. Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Identification of features of style-Multiple choice</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>II A &amp; II B</td>
<td>Expression of meaning briefly shortening - completion (Recognition) Completion (Production)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>III</td>
<td>Recognition and Production of Function</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>III A</td>
<td>Matching function with linguistic markers</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>III B</td>
<td>Production of relevant linguistic markers signalling rhetorical function - completion type</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>IV</td>
<td>Register - Identification of words that fit the written mode-either or type</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>V</td>
<td>Organisation of paragraphs; ordering of sentences in the passage.</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>

3.6.4.2 ii Part B

Writing competence test in English (Composition) - WCT (C)

Part B of the writing test in English tests composition writing - description, narration, exposition, - by means of situational composition which presents the student with a specific situation and context in which to write and thus provide him with the necessary stimulus and basic information required for writing. It is possible to obtain greater degree of reliability in the scoring of 'situational composition' since it is easier to compare different performances when the writing task is determined more exactly (Jones L.1977). The written takes in this part include summarising, expansion of hints into a discourse, rewriting a dialogue into a narrative, producing
discourse using details found in given tables and graphs (information transfer from non-verbal to verbal representation) Widdowson 1978, production of an essay on a given topic incorporating the student's own views after a careful consideration by him of contrary views expressed in two letters written from two different standpoints, another rhetorical transformation task.

An overview of the Content of the WCT (C) will be found in Table 3.

Table 3

Overview of writing competence test (Composition Type) WCT(C)

<table>
<thead>
<tr>
<th>Section</th>
<th>Description and Type of Item</th>
<th>No.</th>
<th>Max. Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Expansion of hints into narrative</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>II</td>
<td>Summarising</td>
<td>1</td>
<td>2½</td>
</tr>
<tr>
<td>III</td>
<td>Long passage</td>
<td>1</td>
<td>2½</td>
</tr>
<tr>
<td>IV</td>
<td>Rewriting a dialogue into a narrative</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>V</td>
<td>Producing an essay on a given topic using students own view softer considering two contrary views on the same topic expressed in two letters expressing contrary views.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>VI</td>
<td>Information transfer from a non verbal representation (Table) to verbal representation</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>7</td>
<td>40</td>
</tr>
</tbody>
</table>

3.6.4.3 Grammatical Competence Test (GCT)

The test of the ability of produce correct grammatical structures contained 40 discrete point objective type test items divided into 5 Sections of tests of recognition
and production abilities. Students were tested for their ability to understand and use grammatical signalling devices such as inflexional affixes, word order and functional operatives in simple and complex sentences. The grammatical structures covered by the tests include: tense, voice, question types, gerund, participle, direct/indirect forms, simple complex sentences, degree of comparison, sequence of tenses, modal/primary auxiliaries, pronouns, prepositions, plurals, relative clauses, conditional patterns, Wish-patterns, order of adjectives, order of adverbs and co-ordination/subordination. An overview of the grammar test is presented in Table 4.

Table 4
Overview of Grammatical competence test (GCT)

<table>
<thead>
<tr>
<th>Section</th>
<th>Description and Type of Item</th>
<th>No.</th>
<th>Max. Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GRAMMATICAL STRUCTURE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Recognition - Multiple Choice Completion Type</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>II</td>
<td>Production - transformation Type</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>III</td>
<td>Recognition of errors Multiple Choice - Error recognition type</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>IVA</td>
<td>Production - Sentence Completion in Short Exchanges</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>IVB</td>
<td>Production - Completion</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>V</td>
<td>Recognition - Word Order</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>

3.6.4.4 Reading Comprehension Test (RCT)

The Reading measures were composed of various types of objective items. The first section of the reading test comprehension at sentence level or, in other words,
interpretation of fairly simple sentences but involving the abilities to paraphrase and make inferences. An example of the item follows:

The metal is tin which we mix with copper to produce bronze:

a. We make copper by mixing tin with bronze
b. Bronze and Copper both have tin in them
c. We mix Copper with bronze to get tin
d. Bronze is made by mixing tin with Copper.

The second test containing four short passages followed by one multiple choice item each requiring the ability to identify reference or cohesive links between pronominal forms such as pronouns, demonstrative, etc. and what they refere to in the earlier part of the given text.

An example of items testing reference follows:

After the famous musician, Mozart, had died one living creature followed his coffin to the grave. It was his faithful dog.

‘It’ refers to (a) coffin (b) dog (c) living creature (d) grave.

The third section contained a passage of continuous prose of about 400 words which was followed by:

a. 5 multiple choice items and 5 true/false items requiring the ability to locate stated facts or details (factual comprehension) and to infer unstated details from stated details (inferential comprehension).
b. 5 multiple choice items to test the ability to interpret words in context or the ability to collect the meanings of unfamiliar words from the contexts in which they occur.

c. An item requiring students to arrange events in the order or their happening.

The importance of the last-mentioned item-sequencing or unscrambling jumbled sentences of paragraphs has not generally been recognised. It is a challenging item involving recognition of devices or signals of logical coherence and grammatical cohesion employed by the writer.

An overview of the content of the RCT is presented in Table 5.

**Table 5**

**Overview of Reading competence test (RCT)**

<table>
<thead>
<tr>
<th>Section</th>
<th>Description and Type of Item</th>
<th>No.</th>
<th>Max. Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Interpretation of simple sentences - Multiple choice type</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>II</td>
<td>Identification of Reference/Cohesive links - Multiple Choice</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>IIIA 1 to 5</td>
<td>Factual and Inferential Comprehension of a lengthy continuous prose passage</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>IIIB</td>
<td>Multi-choice type</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Factual</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Inferential True-false items</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>IVA 6 to 9</td>
<td>Inferring meanings of words/Interpretation of words in context-multiple Choice type</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>IV C</td>
<td>Ordering of events involving recognition of logical/coherent and grammatical cohesive links or relationships</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>
3.6.4.5 Vocabulary Test (VT)

The vocabulary Test contained 50 items requiring the abilities to define given words, to recognize synonyms of given words, to identify antonyms of given words, to form words using prefixes, to spot mistakes in spelling, (spelling sense), to select words suited to context and to discriminate between synonyms.

Table 6
Overview of Vocabulary test (VT)

<table>
<thead>
<tr>
<th>Section</th>
<th>Description and Type of Item</th>
<th>No.</th>
<th>Max. Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>I&amp;</td>
<td>Definition of words</td>
<td>5</td>
<td>2½</td>
</tr>
<tr>
<td>II</td>
<td>Completion type</td>
<td>5</td>
<td>2½</td>
</tr>
<tr>
<td></td>
<td>Matching type</td>
<td>5</td>
<td>2½</td>
</tr>
<tr>
<td>III</td>
<td>Recognition of Antonyms</td>
<td>5</td>
<td>2½</td>
</tr>
<tr>
<td></td>
<td>Completion type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>Identification of Synonyms</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Multiple Choice Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td>Word formation - Derivation</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>&amp;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII</td>
<td>Production type/Word</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>formation-affixation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(use of prefixes and suffixes) - production type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>Selection of words suited</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>to context/Interpretation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>of words in context;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>completion type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII</td>
<td>Discrimination between</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>synonyms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IX</td>
<td>Spelling - identification</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>of wrongly spelt words</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total 50 40

3.6.5 Text books

Text books occupy a very prominent place in education. No doubt the study therefore involved the collection of data pertaining to critical evaluation of text in
order to examine the adequacy of the text in relation to standardised objectives of curricula framers such as:

a. Adequacy of vocabulary
b. Gradation and adequacy of structure and their usage.
c. Standard of the content material
d. Adequacy of exercises

The team to analyse the text books consisted of Heads of Department of 2 colleges in Bombay, 3 practicing Higher Secondary English Teachers in Madras, 2 retired lecturers of English Department one from Bombay and one from Madras.

The proforma prepared on the basis of discussions held with experienced teachers in English was personally distributed to the team of analyst and collected after a period of two months.

3.6.6 Validity

The content validity of the data gathering tools was achieved by three means: A high degree of content validity was achieved by careful analysis of coverage given to specific areas which facilitate in determining the educational process.

The questionnaire items in draft were also referred to experts in educational field, literature and practicing teachers. Students were consulted to highlight the shortcomings or difficult areas of understanding and to confirm appropriateness and
coverage of content. A few items were modified and few deleted in the light of their comments.

The third means of securing validity was to model the tools on the illustrations of items given in standard works on writing of English like that of Coles W.E.\(^5\) (1974) Dr.Freeman. S., (1984)\(^6\), Dr.Hirsch,\(^7\) E.D. (1979) and Dr.Kelly L.G.\(^8\) (1981) who were experts on language study.

3.7 PROCEDURE

3.7.1 Pilot study and item analysis

The questionnaire was first tried out on 15 students of Std. XI and XII residing in the neighbourhood of the investigator. Their responses were analysed by the investigator through personal observation while administering it to the students. The following points were taken into consideration while observing the mode of answers:

1. Time taken by the students to answer each question as well as the whole questionnaire.

2. Areas in the questionnaire which they answered with enthusiasm as well as these they felt were unnecessary.

3. Questions which they found difficult to comprehend or answer aptly.

Those questions showing low response were examined and discussed with the respondents to determine the cause for low response and were modified to evoke better response.
Those questions which were found unnecessary were deleted. (e.g.) Many questions regarding teaching and correction asked in the questionnaire which students felt irrelevant as they all unanimously agreed that neither composition was given nor corrected by their English Teachers.

The modified questionnaire was again tried out on 36 students of Higher Secondary School in Bombay and the tools was finalised.

In a similar way the questionnaire items for teachers also were distributed to 5 teachers belonging to different Higher Secondary School/Colleges in Bombay and the questionnaire was modified on the basis of their commendations by deleting irrelevant and ambiguous questions.

Further both the questionnaires were referred to experts in Educational field and English Literature to highlight the shortcomings and to confirm appropriate coverage of questions which was expected to evoke valuable and correct answers.

Out of 78 Junior Colleges and Higher Secondary Schools in greater Bombay offering plus Two 22 Junior Colleges and Higher Secondary Schools, were chosen as sample for study. This worked upto 35 percent of the total number of Junior College and Higher Secondary Schools, which were chosen on the basis of stratified random sampling. While following the method of stratified random sampling the schools and colleges were judiciously chosen so as to represent equally both sexes male and female students of all the three faculties - Science, Arts and commerce as well as different areas of greater Bombay and institutions of varied standard and reputation. The standard and reputation of the institutions were determined by two ways. Firstly the percentage of results of these institution at the Higher Secondary
exam in the previous three years was taken into consideration and secondly on the basis of the recommendations of experienced school and college teachers after discussions held with them regarding the socio-economic status of students admitted to the colleges and the academic achievements of the students chosen as sample.

3.7.2 Data Collection

The proforma to critically analyse the text books followed for standard XI and XII and the questionnaire for teachers aimed at collecting the personal bio-data and valuable views of the teachers had to be distributed to teachers teaching English to standard XI and XII. Further, student questionnaire had to be distributed to the students chosen as sample. In addition to this, the Head of the institution and Heads of the Department of English had to be interviewed to elicit information regarding the working of the Department, the difficulties faced in realising the essential objectives of teaching English and the performance of the students in English in General.

Hence the investigator personally visited the institutions to seek permission from the Head of the institutions to collect data from their respective institutions. The availability of the principal at only a particular time in a day caused great inconvenience as no prior appointment could be fixed over phone or even visiting the institution the previous day. Hence the time when permission was sought to collect data was utilised to put forward questions listed in the interview schedule for Heads of Institutions.

Having acquired permission to collect data, the collection was at times stalled due to the absence of the Head of the departments on that particular day due to some reason. Whenever the Head of the Department was present after a brief
discussion connected to the subject and collecting her/his valuable views the teachers who handle classes XI and XII were contacted. After brief discussions with teachers a day was fixed for distribution of questionnaire to students during English class hour. Further the questionnaire for teachers was handed over to teachers to be filled up in their leisure time and it was collected within three days by the investigator.

The questionnaire for students was administered for one or two sections of the college on a particular day.

The questionnaires were administered and filled in the presence of the investigator. Detailed instructions for answering various parts of the questionnaire were given to the students both in English by the investigator, and in Hindi wherever necessary, by the concerned English Teacher. Strict vigil was kept on the students not allowing them to discuss. Further they were orally explained the need to answer the questionnaire with utmost sincerity which was to serve as a basis for research study and will not be revealed to any one or held against them.

In a similar manner detailed instructions were given to the students for answering various papers and their doubts wherever raised were cleared before they were required to answer the paper. The tests were administered according to the following schedule.

<table>
<thead>
<tr>
<th>Week</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st week</td>
<td>WCT (C) and (O)</td>
</tr>
<tr>
<td>2nd week</td>
<td>GCT</td>
</tr>
<tr>
<td>3rd week</td>
<td>RCT and VT</td>
</tr>
</tbody>
</table>

The tests were conducted only to 135 students of 5 colleges, an equal number among them belonging to science, commerce and arts streams. It could not be
conducted in all schools and colleges chosen as sample, because administering these
tests was time consuming, and all colleges were not prepared to allow 2 to 3 hours
in a month for this purpose.

Secondly these tests were conducted only to assess prevalent standard of
performance of std XII students in English which was not the main objectives of this
study.

The answer sheets were scored according to the procedure given by the test
constructor.

The collection of data from the 22 institutions chosen as sample commenced
in the month of August. It had been planned to complete date collection of 3 to 4
colleges per week which would facilitate in completion of collection of date by
December. But this work could not be carried out according to schedule due to strike
by teachers of Higher Secondary Schools and Junior Colleges.

The non availability of the Principal, Head of Department during the time of
the investigators visit and the absence of the facility to fix prior appointment with
them over the phone in most of the institutions dragged the Commencement and
completion of data collection.

In most of the institutions teachers were very co-operative in allowing and
assisting to collect data from both teachers and students, but in few institutions in
spite of the investigators assurance of the information to be kept secret and used only
for research purpose teachers were reluctant to fill up the teacher’s questionnaire.
Hence though the sample of school and colleges there were in total around 73
teachers, complete date is available only for 65 teachers. The information from the
A questionnaire of teachers and students were decoded and entered into a master sheet based on faculty and sex. The necessary information was referred to and used for statistical analysis.

3.8 STATISTICAL ANALYSIS

The data collected was quantified and tabulated.

The statistical measures adopted for analysis of data were:

1. Descriptive analysis
2. Differential analysis
3. Inferential analysis
4. Correlational analysis
CHAPTER REFERENCE


5. Ibid.


8. Kelly L. G.; "English as a second an historical sketch" English Language teaching 25.