Chapter-4

DESIGN OF THE RESEARCH

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References
4.1 Introduction:

English language teaching course books (textbooks) play an important role in many language classrooms. As Hutchinson and Torres suggest: “The coursebook (textbook) is an almost universal element of English language teaching. Millions of copies are sold every year, and numerous aid projects have been setup to produce them in various countries… No teaching-learning situation, it seems, is complete until it has its relevant coursebook (textbook)."^1

The above statement, thus, makes it evident that in any ESL/EFL classroom the coursebooks (textbooks) are important components which not only represent the heart of any ELT programme but also offer considerable advantages-for both the students and the teachers. But in recent years there has been a lot of debate throughout the ELT profession on the actual role of materials in teaching English as a second / foreign language (TESL / TEFL). Arguments have encompassed both the potential and the limitations of materials for ‘guiding’ students through the learning process and curriculum as well as the needs and preferences of teachers who are using textbooks.

Other issues that have arisen in recent years include textbook design and practicality, methodological validity, the role of textbooks in innovation, the authenticity of materials in terms of their representation of language, and the appropriateness of subject matter, and cultural components. As many of the coursebooks are actually too contrived and artificial in their presentation of the target language, the language models and dialogues are unnatural and inappropriate for communicative or cooperative language teaching because they do not adequately prepare students for the type of
pronunciation, language structures, grammar, idioms, vocabulary and conversational rules, routines and strategies that they will have to use in the real-world. At the same time the scripted unauthentic language found in many textbooks does not lend itself to communicative practice but instead can lead to an oversimplification of language and unrealistic views of real-life situations. Too many textbooks are often marketed with grand artificial claims by their authors and publishers yet these same books tend to contain serious theoretical problems, design flaws and practical shortcomings.

Whether or not one accepts the value of text-books, it must surely be with the qualification that they are of an acceptable standard or level of quality and appropriate to the learners for whom they are being used. It is absolutely essential, therefore, that we establish and apply a wide variety of relevant and contextually appropriate criteria for the evaluation of the text-books that we use in our language classrooms.

Keeping in mind all these, therefore, the researcher in this chapter will study and evaluate objectively Yuvakbharati -a course book in English introduced for higher secondary level in Maharashtra. Moreover, the purpose of this chapter is to determine the overall pedagogical value and suitability of the coursebook Yuvakbharati enabling the students to attain the course objectives and ultimately to learn the language.

4.2 Objectives of the study:

The study attempts to evaluate objectively the curriculum of English prescribed for higher secondary level in Maharashtra. As the new curriculum of English has been prepared keeping in view the recommendations of the National Policy on Education-1986, the
National Curriculum Framework for School Education-2000, the National Curriculum Framework-2005, and the policy of the state government. Further, it attempts to understand the basic philosophy behind the new curriculum consisting in the coursebook Yuvakbharati.

The main objective which guided the study was: ‘to study whether the learners are able to attain the course objectives to acquire English language’. The course objectives are:

To enable the students:

i) To develop his/her language skills to a fair degree of proficiency.

ii) To acquire communication skills in English useful in real-life situation.

iii) To enrich his/her vocabulary.

iv) To use English with appropriate grammatical forms.

v) To develop reference skills and inculcate self-study habits.

vi) To use English not only as a library language but also as an important language of communication.

vii) To cultivate a broad, human and cultural outlook.

4.3 Hypothesis of the Study:

The present study attempts to test the following hypothesis:

i) The learners are able to attain the objectives of the course curriculum to acquire the English language., and

ii) The present curriculum consisting of the coursebook Yuvakbharati is an adequate document for teaching-learning of English at higher secondary level in Maharashtra.
4.4 Population:

The primary purpose of a research is to “discover the principles that have universal application”, but to study a whole population to arrive at generalizations would be impracticable, if not impossible. J.W. Best and James V. Kahn go on to say that “some populations are so large that their characteristics cannot be measured”. While Nick Moore assumes that it is “seldom possible to survey the complete population”. In a general sense, population is usually considered as consisting of human beings. However, in statistical use it is thought of as consisting of any kind of members. Therefore, a population “is any group of individuals that has one or more characteristics in common that are of interest to the researcher. The population may be all the individuals of a particular type or a more restricted part of that group”. “population in this context means” as Nick Moore says “all the people or objects under observation”. However, according to E.F. Lindquist a population may be defined as “any identifiable group of individuals or as any collection or aggregate of comparable measures”.

To limit the population with a considerable and homogenous sample, the researcher decided to select ten higher secondary schools from five different blocks in Nanded district for this study. Thus, the researcher selected two higher secondary schools from each blocks viz- Ardhapur, Bhokar, Hadgaon, Kinwat and Mudkhed where the questionnaire for the teachers and the test for students were to be administered. These schools comprised students belonging to rural, semi-urban, urban areas coming from different socio-economic backgrounds. In addition, both sexes were represented. Thus, the teachers and students in these five blocks of Nanded District formed the population of this study.
4.5 Sample:

Sampling is an essential aspect of surveying and as is mentioned earlier, it is seldom possible to survey the complete population. A sample is a small proportion of a population selected for analysis. During the recent times sampling technique has been increasingly used in the field of education to obtain information necessary in answering certain questions about a specific population. “A sample is a group selected from the complete population to make the task of surveying… more manageable”. "A sample” according to John W. Best and James V. Kahn “is a small proportion of a population selected for observation and analysis. By observing the characteristics of the sample, one can make certain inferences about the characteristics of the population from which it is drawn”.10

Careful sampling of a limited number of teachers (i.e. 25) and students (i.e. 200) was made, though it cannot be claimed to be exhaustive, but it was adequate for its purpose of the study. It is often stated that samples of 30 or more are to be considered large samples and those with fewer than 30 small samples11. The sampling in this study was based on stratified random sampling of teachers and students population at higher secondary level in different five blocks of Nanded District. Ten higher secondary schools from five blocks i.e. two from each block were selected randomly. All the students covered in the sample survey were from the 12th class. Samples were chosen at random from girls and boys present at the time of administration of the test. Thus, the survey represented the state of Maharashtra on the basis of random sampling.
4.6 Preparation of Tools:

The present research was based on the survey method so as to get the facts about the situation or a picture of conditions that prevail in the state of Maharashtra. The primary function of surveys is to collect information which can then be analysed to produce conclusions. Therefore, the term survey suggests the compiling of evidences relating to existing conditions. According to Sukhia Mahrotra, the survey method “gathers data from a relatively large number of cases at a particular time”. Keeping in mind all the important aspects of this method, the researcher decided to adopt this method for accomplishing this study. To achieve this, the following tools were prepared.

4.6.1 Preparation of Questionnaire:

In order to elicit the information regarding the English language teaching situations in Maharashtra a questionnaire for the teachers of English at higher secondary level was prepared. It was designed in such a way that it enabled the researcher to ascertain English language teachers’ background information like academic qualification, age, languages that they know, and their teaching experience etc., the aims and objectives, and the priorities in teaching English and its various aspects; the method used in teaching of English, their preference to different types of dictionaries, their views about the presentation of items of vocabulary and grammar in the coursebook; the instructions provided in the coursebook about various activities; and their opinions about the adequacy or the inadequacy of the coursebook Yuvakbharati etc.
These being the assumptions, it became apparent that for accomplishing the study of ELT in Maharashtra, some survey had to be made to examine the situation, to probe the present situation of ELT, and to discover the weaknesses in its teaching so as to suggest measures that would promote the English language teaching and learning. Therefore, the researcher administered the questionnaire to teachers of English at higher secondary level.

This is not to claim that they are an exhaustive tool but they were, considered as efficient and sufficient for the purpose of the research.

4.6.2 Administration of Questionnaire:

On the basis of the stratified random sampling adopted in the study the questionnaire was prepared and administered in various higher secondary schools in different blocks of Nanded district. This ensured that an adequate representative rate of response, that would reflect the true state of views among those most directly involved in the teaching of the coursebook Yuvakbharati in Maharashtra, has been achieved. The questionnaire has been attached to the thesis as Appendix-I.

The researcher made all the attempts to administer the questionnaire by personal contact. Nevertheless, it was not possible to distribute all the questionnaires to the teachers of English by the researcher himself. Therefore, some of them were administered by arrangement with visiting educators and by post services. There was a great deal of co-operation and in general, the rate of response was reasonable although some of the questionnaires which were sent by post were not returned at all; while some of the questionnaires were returned incomplete. Thus, the rate of response in general was
adequate for the purpose of the study. The researcher received responses from 25 teachers of English.

4.6.3 Compiling Data related to ELT in Maharashtra:

The researcher compiled data related to ELT in Maharashtra. These data might enable the study to evaluate objectively Yuvakbharati—a coursebook in English used for higher secondary level in Maharashtra during 2007-2012. These data were compiled from various sources and departments. The researcher made every attempt to include the latest reports and policies related to ELT in India and especially in Maharashtra. This might help the researcher to probe the teaching of English, its aspirations and realities.

4.6.4 Preparation of Test for students:

The aim of the present study, as mentioned earlier, was to evaluate the coursebook Yuvakbharati introduced for the 12\textsuperscript{th} standard in Maharashtra. The method employed for this was survey method to accomplish the research.

In addition to the survey through questionnaire and compiling of data, the researcher also decided to administer a test of English to the 12\textsuperscript{th} class students. This was to examine the adequacy or inadequacy of the course curriculum which was included there in the coursebook Yuvakbharati to learn the language. The test was prepared to find out the students’ performance in attaining the various course objectives to learn the language. It was hoped that this will give more clear picture of ELT situation in Maharashtra. For the reasons mentioned above, the researcher designed the test which was mainly modeled on the H.S.C. Board examination question paper pattern making some internal changes in the items presented. The items included there in the test paper were
considered to be suitable for the purpose of the study. The test paper consisted total seven questions. The test paper has been attached to this thesis as Appendix-II.

Question No. 1 in the test paper was set in the same manner as to the question No.1 in H.S.C. Board examination paper. This question was based on the reading comprehension of the seen passage selected from the coursebook Yuvakbharati. The passage in part A of this question was followed by two factual, two inference, one personal response, three grammar and two vocabulary questions. Part B of this question dealt with three grammar questions based on articles, prepositions, and reported speech. The students were asked to write the answer of these questions in the space provided in the test paper itself. The maximum marks assigned for this question were fifteen.

Question No.2 in the test paper was set by making a change in part B. Part A was based on a seen passage for reading comprehension selected from the course book Yuvakbharati. The passage was followed by three factual, one inference, one personal response, three grammar and two vocabulary questions. In part B, the researcher made a change. Instead of setting a question on note-making as in the H.S.C. Board Examination question paper, he set a question on summary writing. This question also carried fifteen marks.

Question No.3 in H.S.C. Board examination question paper was based on reading comprehension of an unseen passage selected from within the general range of students. But the researcher in the test paper set a question on seen poetry selected from the coursebook for reading comprehension. This passage too, was
followed by two factual, four inference, and one personal response type questions. The maximum marks assigned to this question were ten.

Question No.4 in the H.S.C. Board Examination paper was based on the seen poetry which was set to test the comprehension skill of the students of English. But in the test paper, the researcher changed the content of this question by setting a question on rapid reading for reading comprehension of a passage selected from the coursebook Yuvakbharati. The passage too, was followed by two factual, one inference, and two vocabulary type questions. Part B of this question was set on writing composition based on the above extract. The content of this question is the same as to the content of H.S.C. Board Examination question paper.

Question No.5 and Question No.6 were based on one unseen passage each for reading comprehension selected from within, the general range of students. It was followed by three factual, four inference, one personal response, and two vocabulary type questions respectively. Part B in question No.5 dealt with note-making; whereas in question No.6, it dealt with report-writing. Both of these questions carried 15 marks each.

The last question i.e. Question No.7 in the test paper dealt with the writing skill. In part A the students were asked to write a letter on any one of the given subjects. The students were free to choose either a formal or an informal type of a letter. This question carried 05 marks.

In part B there were two questions. In the first question the students were asked to develop a story with the help of a given outline. The maximum marks assigned to this question were 08. This
question is not included there in the H.S.C. Board examination question paper.

In the second question three titles on options of free composition i.e. essay-writing were given and the students had to select only one and to write about it in not less than 250 words. The aim of this composition was to examine the frequency of errors in their writing. The researcher made every effort to select appropriate composition topics. The maximum marks assigned to this question were 07.

4.6.5 Administration of Test:

Since the purpose of the test was to make it part of the survey of ELT, it required a representative sample so that the researcher might be able to generalize about the adequacy or inadequacy of the coursebook Yuvakbharati for the teaching and learning of the English language at higher secondary level in the state of Maharashtra. However, it was not possible to cover all the districts from the state in this study. The researcher, therefore, selected 5 blocks viz. Ardhapur, Bhokar, Hadgaon, Kinwat and Mudkhed from Nanded district for the administration of the test. Some school administrators were reluctant to allow the researcher to conduct the test even after the researcher had already visited them for seeking permission. They gave excuses like the intensive engagement of the school time-table, the annual examination, and absence of most of the students, etc. Initially, the researcher had planned to administer the test in at least 15 higher secondary schools in these five blocks of Nanded district. But due to circumstances beyond the researcher’s control, he administered the test to 200 students in ten higher
secondary schools, selecting two from each of these five blocks of Nanded district.

The administration of the test was accomplished with the cooperation and willing help of the staff in each school during the month of December 2011. Some general considerations regarding the administration of the test and the size of the selection of the required sample were observed. The classroom tests were preceded by short talks on the importance of the English language and its various skills, the common problems faced by the learners of English, the causes of the problems and the ways and means to overcome them. This was a kind of warm-up. The students were also instructed orally that they had to start when they were asked to do so, to read carefully before attempting the questions in the test paper and to keep the test turned-over on the desk after completing the task. Moreover, strict supervision was made by the researcher and the subject teacher to check the students from copying. The time allotted for the whole test was three hours.

To administer the test in a perfect way, the researcher made every effort to make the test readable. For this the researcher took care to print and Xerox the test paper neatly and clearly. The letters were bold and clear enough to help the students deal with the test properly. Great efforts were made to make the administration of the test as perfect as possible.

4.6.6 Analysis of Data:

Data collected from the field through observation, surveys, experiments, records,… etc., may involve rational, linguistic and statistical analysis. The present study being a linguistic study, does not involve rational analysis which is used in literary, historical, and
content studies. Therefore, this study will be concerned with the other two types, i.e. linguistic as well as statistical analyses.

The technique of linguistic analysis used in this study is the performance analysis. Performance analysis is used with data collected from language learners to find out how they perform in certain aspects of the language under certain conditions. It is mostly used with second and foreign language acquisition data collected through test. In this study, since the quantitative nominal data was used, it became necessary to use certain forms of statistical analysis, i.e., descriptive statistics to give further credibility to the results.

The following is a brief account of the various aspects of descriptive statistics used in the present study.

**4.6.6.1 The Mean or Average:**

An average or the mean represents a whole series and as such its value always lies between minimum and maximum value and generally it is located in the centre or middle of the distribution. It is obtained by adding all the values and dividing the total by the number of values. Mathematically the mean can be calculated by using the following formula:

\[
\bar{X} = \frac{\sum x}{N}
\]

**Where:**

\( \bar{X} \) = Mean

\( \sum x \) = Sum total of all X values

\( N \) = Number of values.
4.6.6.2 Standard Deviation:

The standard Deviation, the square root of the variance, is most frequently used as a measure of spread or dispersion of scores in a distribution or in variability. It aims at finding the variability of all the scores around the mean. In other words, it measures the deviation of any score from the mean. It is ‘standard’ in the sense that it looks at the average variability of all the scores around the mean; all the scores are taken into account. The larger the standard deviation, the more variability from the central point in the distribution, indicating a heterogeneous group. The smaller the standard deviation, the closer the distribution is to the central point, indicating a homogeneous group. The standard deviation tells us the standard of how far out from the point of central tendency the individual scores are distributed. For obtaining the standard deviation the following formula is applied:

\[
SD = \sqrt{\frac{N \sum x^2 - (\sum x)^2}{N(N-1)}}
\]

Where:

- SD = Standard Deviation.
- \(\sum x^2\) = Sum total of \(x^2\) values.
- \((\sum x)^2\) = Square of the sum total of \(X\) values.
- \(N\) = the number of scores.

4.6.6.3 Correlation:

Correlation is the relationship between two or more paired variables or two or more sets of data. The degree of relationship is measured and represented by the co-efficient of correlation, along a
scale which extends from 1.00 through 0 to -1.00. Correlation coefficient tells us both the magnitude and direction of the relationship between two variables (or sets of data). When two variables are positively correlated, that is, as values of one variable increase, there is a corresponding increase in values of the second variable. When two variables are negatively correlated, the variables are inversely related. This means, as values of one variable increase we can expect values of the second variable to decrease.

- **Pearson’s Product-Moment Coefficient of Correlation (r):**

Pearson’s product-moment coefficient of correlation, one of the best known measures of association or strength of relationship between two variables, is a statistical value ranging from -1 to +1. It expresses the relationship between variables in a quantitative form. The coefficient is represented by the symbol (r).

When the two variables (or sets of data) fluctuate in the same direction, i.e. as one increases so does the other, or as one decreases so does the other, a positive relationship is said to exist. A negative correlation or relationship, on the other hand, is to be found when an increase in one variable is accompanied by a decrease in the other variable.

Pearson Product-Moment Coefficient of Correlation can be calculated by several formulas, but in this study we have adopted the raw score formula. The equation is:

\[
r = \frac{N \sum xy - (\sum x)(\sum y)}{\sqrt{[N \sum x^2 - (\sum x)^2][N \sum y^2 - (\sum y)^2]}}
\]

**Where:**

\[N = \text{number of pairs of scores.}\]
\[\Sigma xy = \text{sum of the products of paired scores}\]
\[ \sum x = \text{sum of x scores} \]
\[ \sum y = \text{sum of y scores} \]
\[ \sum x^2 = \text{sum of squared x scores} \]
\[ \sum y^2 = \text{sum of squared y scores} \]

By using above formula the value of ‘r’ is computed. The results are tested by students’ ‘t’ test by using the formula as follows:

\[ t = r \sqrt{\frac{n-2}{1-r^2}} \]

**Where:**

- \( t \) = ‘t’ test value.
- \( r \) = Correlation coefficient.
- \( n \) = number of observations.

**Interpretation of a correlation co-efficient:**

Once a correlation co-efficient has been computed, there remains the problem of interpreting it. The correlation coefficient’s magnitude can be interpreted in a number of ways. Cohen and Manion mention three ways for interpreting or evaluating the correlation co-efficient: Examining i) the strength of the relationship; ii) the statistical significance of the relationship; and iii) the square of the correlation coefficient\(^{15}\).

Assessment of the numerical value of a correlation coefficient yields clear indication of the strength of the relationship between the variables in question. Low or near zero values indicate weak relationships, while those nearer to +1 or -1 suggest stronger relationship.
Cohen and Manion mention the following general guidelines for interpreting correlation coefficients\textsuperscript{16}.

- **Correlations ranging from 0.20 to 0.35:**
  Correlations within this range show only very slight relationship between variables although they may be statistically significant. In either individual or group prediction studies such correlations are of no value.

- **Correlations ranging from 0.35 to 0.65:**
  Correlations within this range are statistically significant beyond the 1 percent level. When correlations are around 0.40, crude group prediction may be possible.

- **Correlations ranging from 0.65 to 0.85:**
  Correlations within this range make possible group predictions that are accurate enough for most purposes. Nearer the top of the range, group predictions can be made very accurately, usually predicting the proportion of successful candidates in selection problems within a very small margin of error.

- **Correlations over 0.85:**
  Correlations as high as this indicate a close relationship between the two variables correlated. Prediction studies in education very rarely yield such high correlations.

  Best and Kahn also mention, “There are a number of ways to interpret a correlation coefficient or adjusted correlation coefficient depending upon the researcher’s purpose and the circumstances that may influence the correlation’s magnitude. One method that is frequently presented is to use a crude criterion for evaluating the magnitude of a correlation”\textsuperscript{17}. 

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### Correlation Coefficient (r) Relationship

<table>
<thead>
<tr>
<th>Correlation Coefficient (r)</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00 to 0.20</td>
<td>Negligible</td>
</tr>
<tr>
<td>0.20 to 0.40</td>
<td>Low</td>
</tr>
<tr>
<td>0.40 to 0.60</td>
<td>Moderate</td>
</tr>
<tr>
<td>0.60 to 0.80</td>
<td>Substantial</td>
</tr>
<tr>
<td>0.80 to 1.00</td>
<td>High or very high</td>
</tr>
</tbody>
</table>

In this study the researcher, when interpreting the magnitude of any correlation, followed the simplest and the frequently adopted method, that is, ‘Examining the strength of the relationship’.

### 4.7 Limitations of the study:

The present study ‘An Evaluation of Yuvakbharati-a coursebook in English introduced for higher secondary level in Maharashtra’ is handicapped on the basis of the following points:

i) The study was confined only to the five blocks of Nanded district in Maharashtra.

ii) The study is limited to 25 teachers of English and 200 students of the 12th class.

iii) The study is limited to semi-urban and rural areas; urban areas, though not completely ignored, were not adequately represented.

iv) The sample investigation is solely based on the preferences and responses given by the teachers, and the performance shown by the students at higher secondary level.

v) The period of data collection for the investigation has been for only one academic year, that is, 2011-2012.
References: