Chapter-3
Research Design: Planning and Procedure

3.0 Introduction
In any research work planning is necessary. Research needs to be well planned keeping in mind the objectives, methods and tools of data collection, samples, procedure etc. “Planning of the work estimates the resources, manpower and time required to accomplish the task. Review of the literature and other pertinent information give ideas for improving the procedure. These ideas should be incorporated into the revised research plan (Sing: 1992:385). This third chapter deals with research design of the study, especially planning and procedure. Research methods and data collection tools and samples used for the study have been discussed in this chapter. Moreover detailed procedure of how the study was carried out has been given.

3.1 Survey Method
The investigator used the survey method in the present study. It is considered as a method of systematic data collection. “The questionnaire and individual interviews are the most common instruments for data collection in survey upon the willingness and the cooperativeness of the samples selected for the study. In case they are not willing and do not cooperate with the survey researcher, he should drop the plan in favor of some other technique”. (Sing: 1982 P361)

The aim of the survey is to obtain data from selected size of the sample of the population under study. Researcher takes enough care to ensure that the sample
population is truly representative of the universe. The success of survey research depends upon the willingness and the cooperativeness of the sample selected for the study. The data obtained through a questionnaire, interviews or observations have to be reduced to a form suitable for analysis and interpretation.

In order to validate the analytical study of the ESL textbooks carried out by the investigator, it was decided to invite other English teachers’ opinions and views regarding the different aspects of the textbooks under study and for this the survey method was used. Having prepared the questionnaire and opinionnaire the investigator administered the same on 150 teachers of English at the HSC level in Gujarat who had worked as Resource Persons (RPs) during teacher training programmes. Some of them were interviewed and asked about their difficulties and problems while dealing with the new textbooks.

3.2 Content Analysis Technique

Content Analysis consists of analyzing the contents of documentary materials such as books, magazines, newspapers and the contents of all other verbal materials which can be either spoken or printed.

It is a research method for the objective, systematic and quantitative description of the manifest content of communication. Books, journals, newspapers and the like may be analysed to study the changing attention to a particular issue over several years. [Brog: 1983 P512]

Content Analysis, prior to 1940’s, was mostly quantitative analysis of documentary materials concerning certain characteristics that can be identified and counted. But
since 1950’s Content Analysis is mostly qualitative analysis concerning the general import or message. The analysis of content is a central activity whenever one is concerned with the study of the nature of the verbal materials. A review of research in any area, for instance, involves the analysis of the contents of research articles that have been published.

In qualitative type of research the most commonly used methodology for research in education has been content analysis. “The analysis may be at a relatively simple level or may be a subtle one. It is at a simple level when we pursue it on the basis of certain characteristics of the document or verbal materials that can be identified and counted (such as on the basis of major scientific concepts in a book). It is at a subtle level when researcher makes a study of the attitude, say of the press towards education by feature writers” (Kothari C.R.:2010).

The present study being analytical it was necessary to analyse the different aspects of the textbooks such as language component, thematic aspect, values, exercises and tasks. For that the content analysis technique was used. The investigator prepared a Content Analysis Tool for the objective and systematic analysis of the content of the textbooks. Language component, themes, tasks and exercises—all these aspects were analysed for the fulfillment of the objectives of the study.

3.3 Data Collection Tools for the Present Study

A great variety of research tool has been developed to aid in the acquisition of data. These tools are of many kinds and employ distinctive ways of describing and qualifying the data. Each tool is particularly appropriate for certain sources of data,
yielding information of the kind and in the form that would be most effectively used like the tools in the carpenter’s chest, each is appropriate in a given situation. For the present study following tools were used.

1. Content Analysis Instrument
2. Opinionnaire
3. Questionnaire
4. Interview
5. Observation

1) **Content Analysis Instrument (Appendix 1)**

The major tool prepared for this study is compatible with the Content Analysis Method. The investigator constructed three content areas viz. Language Component, Thematic component and Exercises as well as Tasks for the classification under which almost all the information of the textbooks was clustered.

In the area of language component, there were three content units viz. grammatical structures, vocabulary and sentences. Under thematic component the investigator analysed the themes and subject matter of the lessons and poems in terms of types of lessons, variation of the themes of the lessons and poems, interest level of the lessons and relevance of the themes with the age level of the students. Exercises were analysed in terms of number of total exercises, types, areas and purpose of exercises. In the same way tasks and activities were analysed in terms of their types, mode, area and purpose. Different classification tables were prepared on the basis of this instrument.
2) Opinionnaire (Appendix 2)

It was a part of the study to invite other teachers’ views regarding the textbooks. One of the tools used for this purpose was an opinionnaire. The opinionnaire was filled up by 150 teachers teaching English at the HSC level and who had worked as the RPs in the teachers’ training programmes held by the Gujarat State School Textbook Board, Gandhinagar.

Different criteria for textbook assessment and the characteristics of a good textbook were kept in mind while preparing the opinionnaire. The statements were formed regarding different aspects of the textbooks. Respondents were also requested to write their difficulties and problems that arise while dealing with the new textbooks and while teaching grammar, vocabulary, reading comprehension and writing.

3) Questionnaire (Appendix 3)

The most common types of instruments used in a survey research are the questionnaire, opinionnaire, interview and observation. Data collection through questionnaire is quite popular, particularly in case of big enquiries. It is being adopted by private individuals, research workers, private and public organisations and even by governments.

A questionnaire consists of a number of questions printed or typed in a definite order on a form or a set of forms. A questionnaire is sent (usually by post) to the persons concerned with a request to answer the questions and return the questionnaire. The respondents are expected to read and understand the questions and write down the reply in the space meant for the purpose in the questionnaire itself. The respondents had to answer the questions on their own.
Quite often the questionnaire is considered the heart of a survey type of study. Hence it should be very carefully constructed. If it is not properly set up, then the survey is bound to fail. This fact requires the researcher to study the main aspects of a questionnaire viz., the general form, question sequence and question formulation and wording.

The investigator constructed a questionnaire having 24 questions in order to invite other teachers’ responses regarding the potential of the textbooks and to know the difficulties of the teachers while dealing with the new textbooks. It was distributed to 150 teachers teaching English at the HSC level.

4) Interview

Another tool used for data collection was interview. An interview is a conversation between two people where questions are asked by the interviewer to obtain information from the interviewee.

An unstructured interview schedule was prepared with a view to cross validate the information obtained through the questionnaire. With the help of the unstructured interview, the investigator himself interacted with some of the respondents during their free time activities. The interview did not follow any particular format. It also varied from case to case as the interaction patterns of the respondents differed significantly from person to person.

The investigator interviewed some teachers while collecting questionnaires and opinionnaires from them. They were asked some questions about their problems and
difficulties while dealing with the new textbooks. Some students were also interviewed by the investigator to get their views about the textbooks.

5) Observation

Actual classroom observation was carried out by the investigator to find out the problems and difficulties regarding the classroom teaching. The investigator had selected the points to be observed in the classroom while the process of teaching English.

The principal of Higher Secondary Education Complex, Science Stream, Vallabh Vidyanagar, had arranged for the classroom observation. He had allotted me two sessions in a week throughout the year so as to observe the sessions of English engaged by some teachers. The school has 15 classes for Std 11 and 14 classes for Std 12. 6 teachers teach English in the school. The researcher had observed all these teachers’ classes throughout one year. The main things kept in mind during actual classroom observation are:

- Students’ response
- Classroom interaction
- Handling of the class during pair-group activities
- Interest level of the session

Moreover, the researcher had carried out reflective teaching of his own classes keeping in mind the above-stated points. This was very helpful to find out some difficulties faced by the teachers and students in the classroom.
3.4 Samples

The Following samples were used for the present study.

1. Syllabus of English (SL) prescribed by the Gujarat State School Textbook Board, Gandhinagar. (Appendix -04)

3.5 Research Procedure

The study was undertaken through triangulation.

1. Analysis of the textbooks by the researcher following logical content analysis technique
2. Finding out the problems and hindrances faced by the teachers through their interviews and actual classroom observation of some classrooms
3. Collection of teachers’ opinions and views regarding the functional textbooks to validate the study done by the researcher.

- Both prior to as well as after the selection of the topic for the study the investigator reviewed related literature with a view to developing insights and skills to carry out the research. Various reports and books were referred to in order to know the features or requirements of an effective textbook. Different criteria were studied for an objective assessment of the textbook.
- Having developed clarity about the topic for study, a statement of the topic was formed.
- Then the terms used in the statement were defined to understand and explain the exact meaning and intensity of the study to be undertaken.
After this, the objectives were decided followed by the research questions based on the objectives.

The content analysis instrument was constructed by the investigator to analyse the textbooks.

Opinionnaire and questionnaire were prepared to invite the teachers’ opinions regarding the different aspects of the textbooks and their problems in dealing with the functional textbooks.

Research procedure was determined in relation to the objectives of the study using appropriate tool for that.

**Objective 1**

To determine the relevance of the said syllabus with the current thinking of language teaching

In order to justify this objective, the syllabus prescribed for English (SL) at the HSC level was analysed in terms of the current thinking of teaching English in Gujarat. The learning outcomes, instructional materials mentioned in the syllabus and skills to be acquired by the learners at the HSC level were analysed. (Table 4.1) Moreover, the analysis of the language as well as thematic component of the syllabus was carried out. (Table 4.2) The next step of the procedure was to check whether the textbooks were based on the prescribed syllabus.

**Objective 2**

To analyse and describe the language aspect of the textbooks in terms of new grammatical structures, new words and sentence construction
For the justification of this second objective, the investigator read the ESL textbooks in detail keeping in mind the research questions and the objective. Second reading was carried out in order to analyse the language component of both the textbooks. They were analysed particularly in terms of the new grammatical structures and their functional application (Tables 4.3.1 and 4.3.2), useful words and phrases (Appendices 4.6.1 and 4.6.2) and the language functions (Table 4.4) introduced in the textbook units. Language component was analysed as showed in the content analysis instrument. The sentences of the lessons were analysed in terms of simple, complex, compound and compound-complex. (Tables 4.5.1 and 4.5.2) Teachers’ views regarding the language aspect were collected through an opinionnaire and were analysed.

**Objective 3**

**To analyse the thematic component of the materials in terms of the variation and interest level of themes**

So far as the third objective is concerned, the researcher having studied the format of the textbook units (Table 4.6), undertook the reading of the textbooks for the analysis of the thematic component of the textbooks in terms of the content types (Table 4.7), variation of themes (Table 4.8), interest level of the lessons and poems (4.9) and relevance of the themes with the age level of the learners. Different themes of the lessons and poems and the subject matter for the introduction of those themes were found out (Appendices 8.1 and 8.2). The content analysis instrument was the basic tool for this objective. Also the teachers’ opinions about the thematic component were collected through an opinionnaire.
**Objective 4**

*To define and categorize the values reflected in the lessons and poems*

The next reading was carried out to analyse the textbook units in terms of reflection of a variety of values (Table 4.10). The researcher found out the value traits of different values, frequency of those values in a lesson and poem, mode of occurrence and the example of those values. (Appendices 9.1 and 9.2)

**Objective 5**

*To assess the types and purpose of the exercises and tasks*

Keeping in mind the content analysis instrument, the investigator analysed the exercises given after each lesson and poem in terms of types, areas (Table 4.11) and objectives (Table 4.12). He also analysed the tasks and activities in terms of types and situations they involve (Tables 4.13.1 and 4.13.2), the mode of the activity and the purpose of the tasks or activities (Table 4.13.3). Appendix 10.1 and 10.2 contain detailed analysis of different tasks and activities. Views of 150 teachers about exercises and tasks and activities were collected through an opinionnaire.

**Objective 6**

*To evaluate the materials for their potential in developing communicative competence*

On the basis of the analysis of the textual materials, the researcher evaluated the textbooks for their potential in developing communicative competence. Teachers’ views were collected through a questionnaire about the potential of the textbooks.

**Objective 7**

*To develop an understanding of difficulties faced by the teachers in dealing with the new textbooks*
150 teachers were given a questionnaire to know about their difficulties while teaching functional English and in dealing with the functional textbooks. The researcher also took some unstructured interviews of some teachers to know about their problems in English language teaching. Moreover actual classroom observation was carried out to be aware of the difficulties the teachers come across during the teaching in the classroom.

**Objective 8**

**To suggest guidelines for teachers to deal with the current textbooks**

Probable solutions of the problems while teaching English in the functional way and while dealing with the functional textbooks were given with the help of the experts in the fields. A set of guidelines was prepared by the researcher about the teaching of different skills viz. reading comprehension, listening comprehension, writing etc. and about the handling of pair group work in the classroom.

Data thus collected was analysed statistically as well as in a descriptive manner. Insights into the textbooks understudy were arrived at through interpretation of the data.

**3.6 Conclusion**

In this chapter, the researcher has discussed the technical details of the research carried out by him. These details include the research design, methods, tools, and the overall procedure followed to collect data. The next chapter deals with the analysis and interpretation of the data collected.