CHAPTER-III

Methodology
Methods should...be chosen according to the information required by different evaluation purposes, and also according to the realities of logistics. It should be stressed that while evaluators must attempt to obtain information for the best possible integrity, and have to anticipate challenges to their methods and findings, evaluations are rarely perfect.

CHAPTER III

METHODOLOGY

3.0 Introduction

The kingdom of Nepal is divided into 14 zones and 75 districts from administrative point of view. It is further divided into 5 development regions so as to facilitate balanced development of the country in various fields (see Appendix I). After the restoration of multi-party parliamentary system in 1989, a great enthusiasm was witnessed in the field of education in the country. Educational reconstruction and restructuring became the prime focus in the early nineties. 10+2 system was introduced, curriculum for the same was framed and implemented in 1993. Later, the HSEB redesigned a uniform curriculum in 1996 and implemented it throughout the country. (For more details see Chapter I, 1.4.)

3.1 Recapitulating the Problem

The sincere efforts put in by the HSEB in designing curricula of 1993 and 1996 have not received encouraging or
rewarding results. The examination results of the various streams at the +2 level in the past have been excessively fluctuating and frustrating. The results have been bewildering everyone, sometimes drastically falling down to 4% on the one hand and shooting up to 60% on the other (see Appendix-X). While the poor results have generated serious doubts about the efficiency of the teachers and teacher training, present curriculum and its designers, the seriously fluctuating percentage of the results leads one to doubt the validity and reliability of the examination system itself.

The researcher was prompted to take up the present research work with a view to appraise and evaluate the curriculum and its various constituents such as objectives of the curriculum, textbook materials used to achieve these objectives, teachers’ efficiency and teacher training and the evaluation system. The evaluation work was taken up with a view to discern problems and gaps in the curriculum and provide measures for modification to ensure its smoother and better functioning. The concept of 'evaluation as a developmental tool for the betterment of the system' has been central to the research undertaken. Long-term planning for improvement of education depends on proper capitalisation on the curriculum research. As the chief purpose
of the present research work is developmental in nature, data collection for the same can fulfil diverse functions. Weir and Roberts (1994) view that the process of data collection may have varieties of functions such as:

... to document its actual development; to provide course records; to record unintended outcomes; to map the evaluation of objectives; to identify the contextual factors affecting implementation; to record the perceptions and reactions of teachers and students to the programme; to monitor progress in language learning; to support and inform materials development; to monitor classroom procedures, and to show how far criteria of quality and worthwhileness relevant to the programme are being met. (Weir and Roberts 1994:131).

The present research is based on eclectic approach with a firm belief in the statement that the purpose of the evaluation should override quasi-ideological preferences in favour of principles of utility and relevance (Patton 1986), which is now a more widespread and far more sensible view, providing preference for a broader and more inclusive approach to evaluation. Patton (1986) concludes:

All in all these trends and factors suggest that the paradigms debate has significantly withered. The focus is now on methodological appropriateness rather than orthodoxy;
methodological creativity rather than rigid adherence to a paradigm and methodological flexibility rather than following a narrow set of rules. (Patton 1986:213)

As such, the methodological aspects for the present research work were, therefore, chosen according to the information required for different evaluation purposes as mentioned above and also according to the realities of logistics, i.e., access and available resources for the same. What follows now is the details of data collection (planning, validity, reliability, sampling, piloting and reporting).

3.3 Need for Fieldwork

The present research is essentially teacher-oriented in the sense that it is primarily through them that the different aspects of curriculum-as-reality as opposed to curriculum-as-intention has been studied and scrutinised. A teacher-oriented approach to the evaluation of the curriculum was adopted with prime focus on studying the feasibility and sustainability of the curriculum in the Nepalese higher secondary school contexts. English teachers of +2 level schools were used as chief means in the evaluation of the curriculum. It was done so with the conviction that curricular activities become meaningful and
validated only when the insiders (teachers) are involved as chief agents in the process of curriculum evaluation.

As it is clear from the foregoing paragraph, the nature of the present study called for extensive surveys. This necessitated an elaborate field-work comprising of visiting schools, meeting the Headmasters and English teachers, establishing rapport with them, administering the questionnaire and finally conducting informal interviews with English teachers and students.

3.4 Construction of Tools

In order to study the various aspects of the curriculum as stated earlier in 3.1, a detailed plan was designed for the same as stated below:

1. Questionnaire for the practising teachers of Nepal and V.S.O. volunteers from U.K. serving as teachers and teacher-trainers at the +2 level schools in the Kingdom.

2. Informal interviews and discussions with teachers, students, curriculum designers and educational administrators.

3. Observations of the classroom teaching.

Informal interviews with teachers and students and others concerned, besides observation of the classroom teaching, were
adopted as tools for triangulation purposes, with a view to getting doubts and contradictions clarified, elicit extra information and counter-check the responses received from the questionnaire. The details of triangulation have been described in the following section (3.5.3).

3.4.1 Questionnaire Construction

For the present research work, questionnaire was used as the main tool for data collection. It was used for the study because of its multiple utility-criteria, such as its cheaper and cost-effective form of enquiry, scope of wider sampling, uniformity of enquiry asking the same question to everyone, providing of anonymity, provision of more time to think about answers and facility to analyse the data received from the sample population.

Development of good items in a questionnaire is 'a mixture of art, science, common sense and practice' (Bell 1987). It is usually dependent on adequate piloting, while constructing the questionnaire for the present study, the researcher put in the best efforts to observe strictly the criteria of validity, reliability and practicality. Detailed attempts were made to ensure that the questions were answerable by providing clear rubrics, unambiguous statements, and piloting the questions.
was done with an aim to minimise the potential for erroneous responses.

3.4.2 Details of the Questionnaire

The questionnaire as the chief tool for the present research work was developed and finalised in three phases. In the third phase, the questionnaire was administered for data collection.

In the first phase of the questionnaire development, the researcher framed a set of 72 questions (including subjective and objective types). This questionnaire for the purpose of standardisation was given to 24 ELT experts (17 at CIEFL, 1 at Osmania University, 4 at Tribhuvan University and 2 at Kathmandu University), with a request letter asking them to provide their expert comments for the refinement of the questionnaire. (See Appendix IV). The comments and suggestions related to redundancy features, consistency of the questionnaire, division of the questionnaire under various headings, links between the sections, comprehensiveness of the total questionnaire, intelligibility and appropriateness of the questionnaire provided the researcher with immense feedback. The questionnaire was re-drafted and refined based on the comments and suggestions of these ELT experts.
3.4.2.1 Piloting of the Questionnaire

In the second phase, the questionnaire (redrafted based on the comments received from the experts) was used for pilot study (see Appendix V). Piloting is a very crucial stage. It was conducted to iron-out faults in data collection instrument. The efficiency of the instructions, the adequacies of the response categories and the analysis of the data were all evaluated. Patton (1986) cautions that insufficient attention paid to the design and piloting of the evaluation tools results in serious threats to the validity and reliability of the study. Sufficient time and attention was given to the refinement of the instrument. This helped in further identifying ambiguities, problems in wording and inappropriate items.

3.4.2.2 The Details of the Pilot Study

- 5 English teachers at the +2 schools in the Kathmandu valley (two from private and 3 from Government schools) were randomly selected and given the questionnaire.

- The two teachers from private schools took 1 hour and 15 minutes to respond to the questionnaire, while the three teachers from government schools took 1 hour and 40 minutes for the same.
The problems faced by these teachers while responding to the questionnaire were noted down. (For instance, if any item of question was not clear, or the structuring of the question posed problems).

On completion of the questionnaire, each of the 5 teachers was asked to tell the researcher his/her difficulties while responding to the questionnaire. Their reactions and comments were noted down for further refinement of the questionnaire.

After the pilot study was over, an analysis of the efficiency of the rubrics and adequacies of the response categories was made for further refinement of the questionnaire to be used for the main study.

3.4.2.3 Questionnaire for the Main Study

The questionnaire for the main study all together consisted of 50 questions divided into 4 sections, viz., objectives of the compulsory English course at the +2 level, Textbook materials, Methodology and need for Training and Evaluation (See Appendix VI).
Section 'A' consists of 9 questions. From item No.1 to item No.6, it contains multiple choice questions (one answer out of three). Item Nos. 7 and 8 are open-ended questions. The last question (Question No.9) under Section 'A' provides a grid for the teachers to mark their responses, and show their preferences. The entire section focuses on eliciting respondents' views on the objectives of English curriculum.

Section 'B' contains 20 questions, out of which 17 are of close-ended and the remaining 3 are open-ended in nature. Item Nos. 17 and 23 are partly objective and partly open-ended. Item Nos. 28 and 29 provide grids for the teachers to show their preferences to specific statements provided. The focus of this section is on textual materials.

Section 'C' of the questionnaire contains 10 questions out of which 6 are of objective-type and the remaining four are open-ended in nature. Item No.39 has a grid form for teachers to mark their responses and show their preference. The focus of this section is on teachers' efficiency and teacher-training.

Section 'D' of the questionnaire has 11 questions, consisting of 8 objective and 3 open-ended questions. Item No.50
is framed in a grid form. The focus of the section is on assessment and the final evaluation system under HSEB.

In brief, the questionnaire contains a total of 50 items, out of which there are 38 objective questions including five grids interspersed in the questionnaire and the remaining 12 are open-ended questions eliciting free response from the teachers. (For further details see Appendix VI.)

3.4.3 Sampling Procedure

Sample of a reasonable size is essential to generate data which can in turn produce credible results in any given research. Therefore the sample chosen for this research was fairly large forming a good chunk of the population. However, care was taken to offset some of the problems i.e., practicability of handling inherent with large size samples.

There are 332 higher secondary schools functioning at present in the country. There are 4 different streams of curriculum developed by the HSEB, viz., Education, Humanities, Science and Management. A total of 137 schools offer multiple streams of courses while there are only 29 schools offering science courses. Schools offering Humanities and Education
courses are 38 and 95 in number respectively. The remaining 33 schools offer courses in Management.

As it was not possible to incorporate the whole population for a research of this kind, the stratified random sampling, i.e., "... a sample in which the population is grouped into different strata, and a selection drawn from each level" (Richards et al. 1985:249) technique was adopted in the selection of the population.

A stratified random sampling was made in selecting schools. The schools were divided into 5 stratified groups offering (1) Education, (2) Humanities, (3) Science, (4) Management, and (5) Composite (Multiple) courses. Care was taken to see that teachers from all the five stratified school groups participated in responding to the questionnaire and informal interviews. A total sample of 81 schools representing 5 development regions were taken into sampling for the present research study.

3.4.3.1 Selection of the Schools

50 higher secondary schools located in the accessible regions and 31 higher secondary schools lying in the remote areas of the 5 developmental regions of the country were selected for
administering the questionnaire. As logistically it was not feasible to reach the 31 schools in the outlying parts of the country in stipulated time, the researcher contacted the English teachers in those schools through letters. The covering letter of the questionnaire was written in Nepali language, giving clear instructions. They were also requested to post back the duly filled questionnaire to the researcher in the self-addressed and stamped envelopes enclosed for the purpose. As for the 50 schools linked to roads and other communications, the researcher visited them in person.

The selection of these 81 schools was made on the stratified random sampling basis. Schools offering different streams of courses were grouped into different strata and selected in order to have representative sample for the present study.

A summary of the distribution and types of schools contacted is given below:

<table>
<thead>
<tr>
<th>Dev. Region</th>
<th>No. of schools in Accessible Areas</th>
<th>No. of schools in Remote Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Dev. Region</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Central Dev. Region</td>
<td>24*</td>
<td>4</td>
</tr>
<tr>
<td>Western Dev. Region</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Mid-Western Dev. Rgn.</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Far-West Dev. Rgn.</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>50</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

* Because of high concentration of higher secondary schools in the Kathmandu valley (in the Central Dev. Rgn.) it was imperative to take up higher number of schools for the study. (For details see Appendix XI).
3.5 The Main Study

The researcher started his data collection work from the schools of the Kathmandu valley. 13 schools were selected from the valley. Because of the communicational amenities, each school was informed in advance about the data collection work. Before the questionnaire was administered, teachers were briefed about the purpose of the data collection so that their interest and cooperation could be solicited so as to elicit responses as close to truth as possible. From practical point of view, teachers were asked to furnish minimum adequate information demanded by the items in the questionnaire. It was made as simple as possible for respondents to complete and return the questionnaire to the researcher. However, a few of them took the questionnaire home to fill at their leisure. The next day, the questionnaires were collected back by the researcher.

The same procedure of administering the questionnaire was adopted at other schools of the Kingdom. Most of the teachers responded to the questionnaire in approximately 1.30 minutes.

3.5.1 Interviewing

After the questionnaire for the main study was furnished and returned, the English teachers at the different schools in the Kathmandu valley were informally interviewed followed by group
discussion-cum-interviews with the students. Although it was more time consuming, the teachers provided face-to-face descriptions and discussions of the programme experiences. While questionnaire responses have to be taken at face-value, an interview response can be clarified and developed through follow-up questioning. "The interviewer can probe, follow up on clues and comments, and can develop unanticipated lines of inquiry" (King et al. 1987:72).

An evaluator cannot provide a comprehensive account of a programme on his own. One needs the accounts of insiders such as learners, teachers and administrators etc., in order to elicit their experiences of events to verify their descriptions. The perceptions of teachers and learners, though subjective, proved a crucial means to understand the programme implementation and its effects.

As some of the questions in the questionnaire demanded high inference information such as their levels of expectation, reactions to the new coursebooks and students perceptions of what and how they have been taught, conducting interviews with teacher and students in an informal way proved more suitable in gathering information as it afforded greater scope for questions of complexity and depth. These interviews proved particularly more useful where explanations of behaviours or affective responses were needed.
The informal interviews were discovery oriented, without any prior limiting assumptions on the topics to be provided by the teachers and learners. The researcher helped them to talk freely about the area under study. Quite often, the researcher conducted group discussions (mostly with students) to elicit a wider range of concerns, views and priorities. Utmost care was taken to establish rapport with them before engaging them in discussions for interviews. This effort of the researcher proved amply rewarding in terms of eliciting information from the students.

The same procedure for informal interviews with teachers and students was adopted at other selected schools of the Kingdom.

3.5.1.1 Interviews with Policy Makers Curriculum Experts and Educational Administrators

After the field work was over, the researcher conducted unstructured interviews with the policy makers, curriculum experts, and educational administrators in the capital. Although a list of questions for this purpose was framed in advance (see Appendix IV), they were used only as points of reference during the interviews. As the intention of this unstructured interview with these people was to discuss the problem so as to reach a wider canvas, the interviews moved ahead dealing with the items related to the present and past curriculum. Some of the
important items discussed during the interviews are mentioned here.

Most of the questions were concerned with their perceptions of a syllabus, its needs, structures and functions, academic and philosophical underpinnings of the curriculum; how the present curriculum was arrived at; the scope and pragmatic values of the present curriculum; reasons for success/failure of achieving objectives; similarities and differences between assumed needs of learners and objectives set in the curriculum; possible strategies to bridge the gap by policy makers, classroom teachers and Board of examination; Coursebooks and their faithfulness to curriculum and evaluation system under the present curriculum.

3.5.2 Classroom Teaching Observation

As a supplement to the information received through the questionnaire, the researcher used interviews (as discussed in 3.5.1) and classroom observation as additional tools. Patton (1986) opines that observation is the only way to get direct information on the classroom behaviour of teachers and learners. It is hard to justify an evaluation of the implementation of curriculum materials without observational data. In the case of the present evaluation study, the purpose of classroom teaching observation was only to revalidate the information received from interviews with teachers and students and questionnaire for the
teachers. As such no rigorous device was considered needed to make any systematic observation of classroom teaching. A total of 12 classroom teachings were observed in the course of the fieldwork. The observational remarks made by the researcher were later tallied with the information received from the concerned teachers during the interviews and the questionnaire received from them.

3.5.3 Triangulation

A combination of data sources is likely to be necessary in an evaluation as no any single source can adequately describe the diversity of features of an educational setting (Patton 1986). Developing this theme, Lynch (1992) views that there is need for triangulation for corroboration of findings by using data from different sources, collected by different methods and by different people. He further suggests that multiple methods should be used in all investigation. Triangulation from different data sources helps us in establishing validity and reliability of the outcomes. It is generally recognised that both quantitative and qualitative dimensions of data are relevant to the description and evaluation of programmes. This is because of the need to 'triangulate' data, i.e., confirm data from one source by cross-referring it to another. It is also because the forms of data can be complementary. Quantitative findings can
identify objective trends and patterns; qualitative, self-support data can help us to understand them.

The theoretical underpinnings of Lynch (1992), Patton (1986) stated about the triangulation of data were utilised wherever and whenever there was need felt for it during data analysis and interpretation in chapter four of the present research work.

3.6 Qualitative and Quantitative Data Analysis

Out of 81 school teachers (50 in the accessible area and 31 in the outlying parts of the country), a total of 62 questionnaire from direct and indirect (postal correspondence) contacts were received back. Before processing of the data for tabulation work, they were scrutinised in terms of complete furnishing of the responses. On scrutiny, 12 of them were found to be incomplete, leaving quite a few of the objectives and subjective items unticked/unanswered. As they did not furnish complete information required for the data collection work, they were deemed not useful for the present study and therefore not considered as part of the data. The remaining 50 questionnaires were taken up for tabulation purpose (see Appendix VII).

As mentioned earlier in 3.4.2.3, out of 50 items, there were 38 objectives and 12 open-ended questions. The objective items called for quantitative data analysis (in figures and percentage
forms), while the open-ended items were treated qualitatively, describing the perceptions and critiques of the teachers. In Appendix VII, the objective figure and percentage have been shown along with summary of the responses to open-ended questions. A separate appendix has been provided recording the actual version of the teachers' responses to the open-ended questions (see Appendix VIII).

Some of the merits of qualitative and quantitative data analysis used in the analytical part of the present study posited by ELT experts, are given in the succeeding paragraphs.

Qualitative methods of data analysis are normally exploratory, descriptive and discovery oriented in purpose. They can provide information on how teaching and learning process actually takes place and what they mean to participants. Thus, they allow for depth and flexibility. Quantitative methods normally rely on constraining people to respond in terms of fixed response categories. These quantified data tell us the frequency with which certain responses are ascribed to the sample (Weir and Roberts 1994). Pointing out some of the salient features and advantage of qualitative method, Patton (1986) remarks, "The advantage of the quantitative approach is that it measures the reactions of great many people to a limited set of questions, thus facilitating comparison and statistical aggregation of the data. This gives a broad generalizable set of findings."
The foregoing remarks made by Weir and Roberts (1994) and Patton (1986) serve as rationale for using quantitative and qualitative analysis of the data received and used in Chapter IV.

3.7 A Glimpse of Main Facts and Figures

- A total of 81 school teachers were contacted (50 face-to-face and 31 through letters).

- A total number of 62 questionnaires were received back from the teachers of sample population.

- Out of 62 questionnaires received from the teachers, 45 were collected from the accessible parts of the country and 17 were received back from the remote areas. 14 questionnaires from the remote area schools were not sent back at all.

- A total of 50 teachers, 92 students, 4 curriculum experts and 3 concerned educational administrators were interviewed.

- A total of 12 classroom teaching sessions were observed.

3.8 Recapitulation of the Chapter

This chapter deals with methodological aspects of the present study. It begins with why the need for the present research work was felt. It was established that the evaluation
work undertaken was necessitated by a number of factors, such as extremely frustrating and fluctuating results of the HSEB, recently implemented curriculum and the coursebooks, the objectives of the curriculum and the evaluation system. It further necessitated undertaking field work, for which tools in forms of questionnaire were framed and modified on the lines of suggestions and comments from the ELT experts. In the second phase, the questionnaire was tried out on 5 teachers to further refine and modify it. In the third phase the questionnaire for the main study was administered in the field. From the 62 questionnaires collected only 50 were tabulated for the purpose of the present research, since the responses offered were partial and their inclusion would lead to arriving at non-authentic conclusions.

The methodological instruments used for the study show that the present research is sensitive to the differing perceptions of the teachers and students. The views expressed by the policy makers, curriculum experts and educational authorities were used for getting feedback from multi-perception description and triangulation of different data sources. The next chapter is devoted to the analysis and interpretation of data received from teachers in response to the questionnaire provided to them.