CHAPTER 3

RESEARCH METHODOLOGY

The main purpose of this study, as mentioned in chapter one, is to investigate teachers’ and learners’ perception and classroom practice of CLT in the engineering institutes in Punjab. This chapter describes the research methods that were employed to achieve the main objectives of the study, which are as follows:

1. To investigate the English language teachers’ and learners’ perceptions of CLT in context to the engineering institutes in Punjab.

2. To examine how often the ELT instructors practice the CLT principles in their entire classes.

3. To identify what gaps there might exist between the CLT principles and actual classroom practices.

It, therefore, discusses the participants of the study, the data collection instruments, the development of research instruments, the data collection procedure and the methods of data analysis used in the entire study.

Additionally, I chose to design my research work following a case study model for the following reasons. First, I wanted to focus on a specific case, that is, the ELT scene in the engineering institutes in Punjab. As Stake describes the purpose of a case study as identifying a single case. In addition, it is “a process of inquiry about the case and the product of inquiry” (Stake 2000: 436). Also, I chose a case study design based on Yin’s (1994) explanation of case studies. He states that in a case study, the phenomenon and the context are inseparable. Since, I was interested in the views, insights and experiences of the teachers and the learners in a particular ELT set-up, it justifies my selection of a case study. The three characteristics of case
studies given by Merriam can also explain why a case study was appropriate for my research. These three characteristics that describe case studies are “particularistic”, “descriptive”, and “heuristic” (1998: 29-30). A case study is particularistic because it emphasizes a specific program, group and situation. It is descriptive because it collects data with thick description. Finally, it is heuristic because it describes to the readers and researchers the phenomenon being studied and explains the situation in detail.

In this study, I focused on English language teachers’ and learners’ perceptions and classroom practices with regard to CLT in the engineering institutes in Punjab; thus, making my study particularistic. Also, this study is descriptive as I gathered my data from comprehensive questionnaires responded by language teachers and students, classroom observations and interviews conducted with the participant teachers at various engineering institutes. Lastly, the report of the study showed how this particular group implemented CLT and why their classroom practices were different from or similar to what they perceived CLT to be; thereby implying its heuristic nature.

3.1 Participants and Sampling Design

Since, Punjab Technical University (PTU) is the largest university in the field of technical education in Punjab with 102 engineering institutes affiliated to it; this research work confined its study to the engineering colleges and institutes under PTU only. Out of these 102 engineering institutes running under Punjab Technical University, 34 institutes (one-third of the total sample) were selected from the three regional divisions of Punjab, namely; Majha, Malwa and Doaba. The present study includes two groups of sample- teachers and learners. 2 English language teachers and 20 students were randomly selected from each of the 34 engineering institutes
selected for the study since random sampling, according to Bailey (1994), delivers chances for everyone to be a member of the sample. While conducting the study, it was found that 5 of the selected colleges/institutes have just 1 teaching faculty in the concerned subject. So, in case of these colleges, the study was conducted on only 1 teacher. In all, 63 teachers and 680 students participated in the study. At least, one institute/college was selected from each of the 22 districts in Punjab to make the study more comprehensive. The student participants were selected from B. Tech. first year since the engineering students are exposed to this subject only during the first year of their 4-year degree course. To support and substantiate the study some classroom observations and teacher interviews were also conducted. In all, 11 classes were observed and their respective teachers were interviewed (one-third of the study sample) which were selected on a random basis.

3.2 Development of Research Instruments

The research instruments used in this study include: - Questionnaire (for both teachers and students), Class Observation and Interview (for teachers only).

3.2.1 Questionnaire

A questionnaire for teachers including the major principles of communicative language teaching (i.e. aspects of conceptual perspective, students learning perspective, perspective on group-work and pair-work activities, importance of grammar, error correction and assessments, teachers’ role, students’ role and curriculum design) served as the major instrument of the study. The questionnaire adapted from Karavas-Doukas (1996) and Kim (1999) was composed of Likert-type close-ended items. The questionnaire was divided in to three sections. They are:

1. Personal Information Section- a section designed to obtain accurate description of the respondents.
2. CLT Perceptual Dimension- a section designed to measure the English language teachers’ perceptions of communicative language teaching in line with the principles of CLT; and

3. CLT Practical Dimension- a section which is designed to measure the degree to which English language teachers practice CLT principles.

The questionnaire was developed primarily to meet the objectives of the study; and the items were designed in line with the literature review- which deals with CLT principles. To develop an appropriate instrument for the study, in August 2011, a pilot study was administered to 10 randomly selected English language teachers at the engineering institutes in Punjab. Furthermore, after receiving comments and suggestions from the language teaching fraternity and the advisor’s rigorous comments on the items, the researcher reshaped the instrument. Eventually, some items were modified and some were replaced or removed.

The learners’ questionnaire was developed by adapting the teachers’ questionnaire and modifying it so that it would fit the learners’ level of understanding. Similarly, the learners’ questionnaire was developed to meet the objectives of the study and was designed in line with the literature. Almost all of the statements were borrowed from the teachers’ questionnaire but adapted to fit the learners’ level of cognition.

### 3.2.2 Class Observation

The class observation was conducted in order to verify and authenticate the data received from the teachers’ and students’ questionnaires by allowing me to see how teachers conducted their teaching in detail (Preissle 2006). The class observation gave an opportunity to check whether teachers and students practiced the principles of CLT (in reference to what they professed in the responses to the questionnaires) in
their ELT classrooms while the actual class lesson was going on. An important aspect of observation is that it gives the researcher in-depth information about what is happening in the environment, and provides a way to capture behaviours and emotions of the participants (Lincoln & Guba 1985). The class observation was split into two categories—classroom observation and laboratory observation—which has been modified based on the curriculum design of Communicative English, a subject prescribed to B.Tech. first year students in the engineering institutes under PTU. The observation was made based on a checklist which focused on ‘classroom instructional activities employed by teachers’, ‘the role teachers played’, ‘the role learners played’, ‘instructional materials used in the teaching-learning process’ and ‘emphasis on error correction’. The observation checklist was adapted from Gebru (2008), Yemane (2007) and Razmjoo and Riazi (2000).

3.2.3. Teachers’ Interview

Seidman (1998) states that conducting interviews is a fundamental way to obtain information about one’s experiences and the meaning he or she makes out of these experiences. The purpose of teachers’ interview in this study was to substantiate the results obtained from the questionnaire and class observation and to obtain a greater depth of information, free and flexible responses and to get information concerning feeling, attitude or emotion to certain questions which is not possible through questionnaire and class observation. The interview questions for the teachers were prepared based on the perceptual as well as the practical aspects of CLT. The interview questions comprised of both structured and unstructured types. Structured interview was prepared so that the same types of questions can be presented in the same order and manner to every interviewee while unstructured type of interview was
prepared to get chances of flexibility to rephrase and modify the questions (Koul 1984).

3.3 Data Collection Procedure

The data collection session were arranged at times suggested by the college administration’s permission and the willingness of the participants. It took a period of over ten months to carry out the entire procedure of data collection which included the questionnaire, the class observation and the teachers’ interview. All participants were encouraged to ask questions so that they did not have any problems with respect to the content, the language, and the ways to deal with the questionnaire. Still, to avoid any discrepancies, the students’ questionnaire (see Appendix-B) was distributed purposely to 680 students (20 from each class) in 34 different institutes in the presence of the researcher at the normal class time. During the administration of the questionnaire, students who needed explanations about the questions or the way they should make their answers were given clarifications. Another questionnaire (see Appendix-A), which was meant for the teachers, was distributed to 77 English Language teachers and 63 were returned.

The classroom observation was conducted in 20 different ELT (Communicative English course) classes that were randomly chosen from the 34 engineering institutes selected for the study. Out of these, 11 were deemed fit to be incorporated in the study. Concerning classroom observation, the researcher prepared a checklist (see Appendix-C). Then, the frequencies of the observed list of behaviour were tabulated and prepared for the analysis.

Finally, teachers from the 11 observed classes, which were selected for the study, were interviewed. An open-ended interview questionnaire was structured for
this purpose (see Appendix-D). Then the responses were analyzed to have a broader understanding of the situation.

3.4 Methods of Data Analysis

To see the extent to which English language teachers and learners understand CLT principles and the frequency with which they practice it in the ELT classrooms in context of the engineering institutes in Punjab; the data gathered through questionnaire, classroom observation and interview were analyzed using the following procedures.

The data obtained from the questionnaires (of both teachers and learners) were first tallied and tabulated and were registered as frequency that could show the number of respondents for each item. The data analysis procedure consisted of Likert–type item analysis. The Likert-type items, which were designed to identify teachers’ and learners’ understandings of CLT concepts and their views on CLT classroom implementation, were given numerical scores. As stated by Taylor, cited in Gebru (2008), Likert assigned numerical values to responses and the numerical representation (the coding) of the items went through the following two procedures:-

The unfavourable items or statements which directly address or are consonant with the communicative language teaching principles were coded as:

‘Strongly Agree’ (SA) =5;
‘Agree’ (A) = 4;
‘Undecided’ (U) =3;
‘Disagree’ (D) =2 and
‘Strongly Disagree’ (SD) =1.
The unfavourable items or statements which are designed to cross check the teachers’ view and address non-communicative aspects were coded in the reverse manner as:

‘Strongly Agree’ (SA) = 1;
‘Agree’ (A) = 2;
‘Undecided’ (U) = 3;
‘Disagree’ (D) = 4 and
‘Strongly Disagree’ (SD) = 5.

Similarly, the items representing or unfavouring the communicative activities in the questionnaire for ‘classroom practice’ were coded as:

‘Nearly Always’ (NA) = 5;
‘Often’ (O) = 4
‘Sometimes’ (ST) = 3;
‘Rarely’ (R) = 2; and
‘Never’ (N) = 1.

And the reverse in case of unfavourable or non-communicative activities:

‘Nearly Always’ (NA) = 1;
‘Often’ (O) = 2;
‘Sometimes’ (ST) = 3;
‘Rarely’ (R) = 4; and
‘Never’ (N) = 5.

The mean score of each item was computed in line with the coding numerals.

For instance, if the frequencies of 25 respondents for unfavourable item no. I and unfavourable item no. II were as:
Table 3.1- Coding of Responses and Calculation of Weighted Mean

<table>
<thead>
<tr>
<th>Scale Value</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Weighted Total (X)</th>
<th>Weighted Mean (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>6</td>
<td>5</td>
<td>8</td>
<td>4</td>
<td>2</td>
<td>84</td>
<td>3.36</td>
</tr>
<tr>
<td>II</td>
<td>5</td>
<td>3</td>
<td>7</td>
<td>4</td>
<td>6</td>
<td>78</td>
<td>3.12</td>
</tr>
</tbody>
</table>

The mean for Unfavourable Items (I) was computed as:–

\[
\text{Weighted Mean} = \frac{\text{Weighted Total of Unfavourable Responses (X)}}{\text{No. of Total Items}}
\]

\[
= \frac{(6 \times 5) + (5 \times 4) + (8 \times 3) + (4 \times 2) + (2 \times 1)}{25}
\]

\[
= \frac{84}{20}
\]

\[
= 3.36
\]

Similarly, the mean for Unfavourable Items (II) was computed as:–

\[
\text{Weighted Mean} = \frac{\text{Weighted Total of Unfavourable Responses (X)}}{\text{No. of Total Items}}
\]

\[
= \frac{(5 \times 1) + (3 \times 2) + (7 \times 3) + (4 \times 4) + (6 \times 5)}{25}
\]

\[
= \frac{78}{25}
\]

\[
= 3.12
\]

Hence, a higher mean score indicates the respondents’ high perception or frequent classroom practices (Karavas-Doukas 1996) and vice-versa. Therefore, the analysis was done relating the computed percentage and mean values and the results ranged between mean scores 5 to 1.

To make the discussion easier, the items of the questionnaire were categorized in to eight (8) thematic units as follow:-

1. Conceptual Perspective (4 items)
2. Students’ Learning Perspective (7 items)
3. Perspective on Pair-work and Group-work Activities (6 items)
4. Perspective on the Importance of Grammar (7 items)
5. Perspective on Error corrections and Assessments (8 items)
6. Perspective on the Teachers’ Role (7 items)
7. Perspective on the Learners’ Role (4 items)
8. Perspective on Curriculum Design (5 items)

The data gathered through the observation scheme were analyzed descriptively determining the amount of importance placed on to each principle of the communicative language teaching. Similar to the analysis made for the questionnaire, the results obtained through classroom observation with the help of observation checklist (see Appendix- C) were categorized in to two domains- unfavourable and unfavourable. The coding of the items on the scale was as- Very Much (VM)= 5, Much (M)= 4, Average (A)= 3, Little (L)= 2, and Very Little (VL)= 1 for unfavourable items and the scale was reversed for unfavourable items i.e.- Very Much (VM)= 1, Much (M)= 2, Average (A)= 3, Little (L)= 4, and Very Little (VL)= 5. The descriptive statistics was done in the light of the observation checklist which is fully explained in section 4.5.
References


