CHAPTER-4
CHAPTER 4

RESEARCH METHODOLOGY

4.1 Introduction

This chapter describes the research methodology, explains the selection of sample, and describes the procedure of designing the tools. It also discusses the procedures of data collection used to analyze the data.

4.2 Location of Field Work

The study was conducted in secondary schools of Aligarh district. It is situated in the northern part of Uttar Pradesh in India. Aligarh District includes twelve blocks. The schools investigated were from these twelve blocks (see table 1).

Table-1: Name of the blocks in Aligarh District

<table>
<thead>
<tr>
<th>Aligarh District, Uttar Pradesh, India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lodha</td>
</tr>
<tr>
<td>Tappal</td>
</tr>
</tbody>
</table>

The fieldwork took place between July 2010 and September 2011. Data presented in this study had been taken from each block. The purpose behind the selection of few schools from each block was to make the data representative.
The schools visited during the survey can be classified in the following categories:

**Table – 2: Categorization of Schools**

<table>
<thead>
<tr>
<th>Areas-wise</th>
<th>Board-wise</th>
<th>Category-wise</th>
<th>Medium-wise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Area Schools</td>
<td>U.P. Board Schools (52%)</td>
<td>Missionary Schools (3%)</td>
<td>Only English Medium (33%)</td>
</tr>
<tr>
<td>(50%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban Area Schools</td>
<td>CBSE Board Schools (31%)</td>
<td>Private-aided Schools (43%)</td>
<td>English-Hindi Medium (55%)</td>
</tr>
<tr>
<td>(50%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.M.U. Schools</td>
<td>Private-unaided Schools (33%)</td>
<td>English-Urdu Medium (12%)</td>
<td></td>
</tr>
<tr>
<td>(17%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Government Schools (21%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3 Pilot Study

4.3.1 Participants of the Pilot Study

15 English teachers of well-reputed schools had been randomly selected for the pilot study. Only those schools which were situated in the civil line area of Aligarh district had been chosen for conducting the pilot study.

4.3.2 Try-out of Schedule-I: Teacher Questionnaire

A teacher questionnaire had been used for the initial trial during the pilot study. It was divided into nine different sections:

1. School information
2. Respondents’ detail
3. Educational background
4. Teacher’s workload
5. Domain-specific language use
6. Language proficiency
7. Attitude towards teaching profession
8. Teacher training needs
9. Teacher support needs

4.3.3 Purpose of the Pilot Study

The pilot study was part of the planning of research study to ensure the effectiveness of the research. The aim to conduct the pilot study was to improve the quality and efficiency of the teacher questionnaire. The try-out of the questionnaire was done to ensure that the language used was appropriate and participants could clearly understand the contents of the questionnaires. The purpose was to ensure the internal validity of the questionnaire. This try-out was effective in developing and testing the adequacy, feasibility and effectiveness of the questions.

4.3.4 Procedure followed in the Pilot Study

Many documents had been analyzed to frame the research questions. On the basis of research questions short and simple questions had been framed. The questionnaire was framed with 44 items which had been categorized into nine different sections. All the questions had been kept in time with the objectives of the study.

Before distributing the questionnaires, the teachers were also briefed to pay attention to the clarity of language and ambiguities in the questionnaire. While discussion with the principals, many of them showed their interest in reading the questionnaire.

4.3.5 Outcome of Pilot Study

The teacher respondents were asked to give their feedback in identifying the ambiguities and difficulties in questions. The items teachers found difficult to understand were simplified. Difficult terms and ambiguities were removed. A separate questionnaire for the principals was designed.

4.4 The Present Study

4.4.1 Research Methodology

4.4.1.1 Research methods

Qualitative research design is being adopted and supported by the quantitative research methods. Qualitative research methods had been used in the study aiming to identify the perspectives and views of the participants and the researcher/observer to
study the current situation in a particular setting and situation. The researcher used an open-ended survey, observation and telephonic interview to realize the objectives of the study which aimed to obtain information by observing the actual settings and situations of English classrooms.

The study adopted four methods for data collection: survey, focus group discussion, classroom observation and telephonic interview. These methods have been selected keeping in mind the problem to be investigated, nature of the sampling, reliability of the methods, and effectiveness of the tools. The methods are:

1. Survey

Survey was selected for the study to elicit information from the respondents. It was used to analyze the teachers’ background information, academic qualification, skills, attitude towards their profession, and teachers’ needs for training, materials, resources, and support. It was also useful to collect information from a large group of population (see annexure 1 and 2).

2. Focus Group Discussion (FGD)

A focus group discussion (FGD) was conducted as part of the workshop\(^1\) held in Academic Staff College, Aligarh Muslim University, Aligarh. The discussion helped the researcher to find more opportunities to get a shared and dominant view that could capture a wide range of perspectives related to the research problem. Resource persons\(^2\) conducted the sessions while it indirectly became part of the eliciting process required in the survey questions. A structured interview questionnaire was used while discussion (see annexure 3). The discussion was audio-taped.

3. Classroom Observation

This method was used to obtain the general information about teacher and student behavior, objectives of teaching language, communication skills of teachers, effectiveness of classroom interaction, methodology, use of types of teaching materials, and feedback as a tool of teaching-learning process (see annexure 4).
4. Telephonic Interview

A telephonic interview was also conducted with the respondents. The conversation on telephone took place with some selected participants from each block. The respondents were contacted on telephone. The interview was geared to collect respondents' point of view. The questions asked from the respondents were roughly framed as this will regard to the teaching of English based on the idea of their needs.

The interview aimed to investigate the responses of the teachers about their choices of teaching models. The purpose was to further identify the teachers' perception regarding their needs for training on new methods of teaching, focusing on the changing context of educational goals and settings.

4.4.1.2 Population and Sampling

Selection of population

The populations chosen for the study were the principals and English teachers of secondary schools of Aligarh. The survey had been conducted in all twelve blocks of Aligarh district – Lodha, Akrabad, Dhanipur, Jawan, Chandaus, Khair, Iglas, Gonda, Atrauli, Bijauli, Tappal, and Gangiri. The study was based on the data taken from 100 teacher questionnaires and 100 principal questionnaires. The data generated through different schedules being reported separately as follows:

Teacher questionnaire

The convenience random sampling was used in the selection of data. 150 teacher questionnaires were distributed among the teachers. Only 100 teacher questionnaires were found valid which were found to be representative of rural/urban schools, UP board, CBSE board, and AMU board schools, categories of schools (government aided, government unaided, private, and missionaries), and language of instruction (see Table-2).

Principal questionnaire

120 questionnaires were distributed only 100 valid questionnaires had been taken for the analysis of the data.
Criterion of sampling

Mixed criterion of sampling was followed in the selection of population. Convenience sampling was followed in the selection of population for the survey, focus group discussion and classroom observation. During telephonic interview, the researcher followed the purposive sampling criteria. The selection of the participants was done by choosing one participant from each block. The selection of the participants was done considering their willingness to share information on relevant pedagogical aspects.

4.4.1.3 Tools

The Design of the tools

The tools and techniques selected for the study were effectively used in retrieving relevant information from the participants. The tools used to collect data include both subjective and objective type items. The parameters taken up for the design of quantitative questionnaires were tasks related to instructional practices, job related conditions, context of teaching, work culture, resources, infrastructure, other challenges, and training needs.

The selection of tools was done on the basis of the requirement of the kind of information. A number of tools had been used at different stages of data collection. The tools used are:

1. Schedule-I: Teacher Questionnaire

The aim of the teacher questionnaire was to realize the facts, opinions and attitudes based on the responses obtained from the respondents. Information was obtained regarding the current status of English teaching. Teacher questionnaire itself gathered the information regarding present status of teachers and teaching of English. The questionnaire included 41 items which are a mix of open-ended and close-ended questions. Close-ended questions were designed using likert scales of agreement, quality, frequency and likelihood. These items have been divided into nine different sections as follows:
Section-1- School information

This section aimed to obtain information of schools. The items of these sections were related to the name of the school, name of the block, contact number of school, and category, board and medium of the schools surveyed.

Section-2- Respondents' detail

In this section, the items were supposed to ask the name and ID no. (optional) of teachers, mother tongue, gender, age, teaching status, distance of school from home, strata, domicile, residential address, time of residing in the same address and contact number. This section aimed to collect information regarding the gender and age of teachers, their teaching position (TGT/PGT/Part-time/Full-Time/Permanent/Temporary) and location of their workplace from their place of residence.

Section-3- Educational background

This section was based on teachers' qualification, total teaching experience and teaching experience in current school.

Section-4- Teacher's workload

The items in this section were related to the examination workload, evaluation and assessment, and nature of problems teachers faced. Six point scales had been used to obtain the information on quantum of teaching and classroom performance of the students.

Section-5- Domain-specific language use

This section includes information based on teachers' proficiency level in using English media, computer and internet in classrooms. The items of this section were based on teachers' concern for training on use of English in different situations. Five point scales were used to obtain information related to the use of English as a medium of instruction.

Section-6- Language proficiency

This section obtained information on teachers' proficiency in different language skills, ability to use different materials, and language evaluation skills. Five point scales have been used to obtain information related to proficiency in language skills. Three point
scales have been used in getting information about language evaluation skills and ability to use different teaching materials.

Section-7- Attitude towards teaching profession

This section includes items based on attitude of teachers towards different aspects of teaching profession. The aspects were based on the level of satisfaction required in administrative work, likelihood of teaching as profession, job recognition, and other challenges. Five and three point scales have been used.

Section-8- Teacher training needs

This section tried to get information related to teachers’ opinion on required changes in syllabus of English taught in secondary schools and the curriculum for teacher education. Five point scale have been used to rate the different abilities required for English teachers of secondary schools.

Section-9- Teachers’ support needs

This section aimed to receive information regarding teachers’ opinion on receiving recognition as a resourceful teacher by their principals. The respondents were also asked to mention the topic of their interest on professional development activity. They were also asked to mention problems teachers faced in pre-service and in-service teacher training.

2. Schedule-II: Principal questionnaire

Principal questionnaire included items based on administrative and management needs of the teachers. It contained total 16 items. All the items were related to following categories:

i. Number and duration of teacher training sessions attended
ii. Teacher accountability
iii. Teacher Attendance
iv. Number and Types of training programs
v. Resources for teacher development
vi. Availability of infrastructural facilities
vii. Administrative support
The principal questionnaire contained sixteen (16) items which included both open-ended and close-ended items. Different types of items have been used, such as, choose and tick, yes/no, and likert scales. In question no. 4, 5, and 15 five point scales related to frequency have been used.

3. Classroom observation tool

An observation tool was prepared to observe the actual classroom situations and settings to analyze the present status of English language teaching. It contained 31 items. The items were categorized into following sections:

A. General Information
B. Skill/Content-based Objectives
C. Teacher Communication Skills
D. Teaching Methodology Used
E. Use of Teaching Materials
F. Evaluation and Feedback

The questions were a mix of open-ended and close-ended questions. The category of closed-ended questions contained ‘yes/no’, choose and tick, and rating scales. The primary purpose of the tool was to obtain information related to the effectiveness of teacher, teaching procedures, textbooks and methodology.

4. Interview questionnaire

An interview questionnaire was used during focus group discussion (FGD). It contained seven open ended questions with an additional column asking about any other problem teachers facing in their situations. The purpose to use questionnaire during FGD was to ensure the specificity of the discussion in a given context. The idea was to connect the information retrieved with that of the quantitative survey.

4.4.1.4 Procedures of Data Collection

The field work and data collection can be recounted briefly by discussing the steps in different phases.

The first phase of data collection starts from the survey. The questionnaires were distributed among the respondents at their workplace.
In second phase, focus group discussion (FGD) had been conducted. There were four different sessions in the workshop. Before conducting focus group discussion (FGD) the resource persons were briefed about the related features of the teacher questionnaire. The first two sessions were devoted to enter the data as per the schedule. Focus group discussion was generated to confirm the findings based on the information provided in the school. The respondents shared important information during the discussion with the resource persons. Respondents were allowed to enjoy the flexibility of group discussion. Every participant got the equal chance to speak and share their views on different problems they were facing in their schools. Some teachers were very passive. Our attempts to stimulate them to speak did not work. They were echoing the same line of dialogues that was generated by their peers. Some of them were quite cautious not to speak. The resource persons were also briefed about precautions and interventions that could help the conversation focused without disturbing the dynamics of the group voice. The discussion was audio recorded. The purpose of the recording was to recollect the significant points discussed by the respondents. The last session was the feedback session. This session was important as it aimed to invite respondents’ suggestions on their needs and wants related to their profession.

The third phase of data collection was to observe the actual English classroom situations. Classroom observation tool was designed and used to record the relevant information. Before proceeding for observation, the researcher analyzed English textbooks. The contents and the objectives of the textbooks had been read carefully so that the objectives of the lessons and other aspects of language teaching could be observed and realized. Seventeen teachers from different schools were observed. During observations many significant problem areas and areas related to training needs of teachers were identified.

The last and final phase of data collection was conducting telephonic interviews with respondents. The conversation was noted down. The respondents were asked about their requirement to bring changes in teaching methodology, textbooks and materials. Views of the respondents had been transcribed before analysis. They were also questioned about their requirement for the training in these areas during pre-service and in-service teacher training programmes.
4.5 Data Interpretation

After data collection, the information was arranged, organized, and interpreted. To analyze closed-ended items data was entered into excel sheets. Through excel sheets bar-diagrams and pie-charts were designed. Frequency of responses had been calculated for each item. The concepts were quantified obtained in the form of responses of the respondent. The information was transcribed and arranged in various categories, like, the role of the teacher has to play in a given teaching situation and context, what are the different teaching complexities, curriculum adaptation, curriculum development and implementation, unstructured materials development, and others.

Significant information was also obtained from classroom observation. Different sections of the observation tool were analyzed separately and the frequency was calculated. The Microsoft excel sheets were used for data entry and the calculation of frequency of responses. The results were analyzed to generalize the statements which served as the significant bases to suggest the implications.

During the telephonic interview the responses were noted down. The responses were transcribed before analysis. While analyzing the telephonic interview, only new information was selected to enrich the findings of the study. The results had been cross validated with the information obtained through survey questionnaires, focus group discussion, classroom observation, and telephonic interview.

4.6 Limitations

The study is restricted to certain limitations apart from the constraints related to time, conditions, and availability of resources. Some of the limitations are:

1. The first limitation is that the students' and education officers' perspectives have not been considered during interviews. The data had not been taken from education officers to justify the issues raised by the teachers during Focus Group Discussion.

2. The second limitation is that the classes of all hundred teachers could not be observed because of time and other constraints. Only representative schools
from each block have been selected randomly to observe and understand the actual classroom settings.