CHAPTER IV

RESEARCH METHODOLOGY

This chapter presents a detailed design of the study and includes the methods of data collection and the variables to be studied and tested. It describes how the research was conducted, including statistical analysis for the quantitative ones. It also discusses the qualitative methods of data collection that allow respondents give their opinions and reflections depending on the required information.

4.1. Design of the Study

This research was conducted using quantitative and qualitative methods. The quantitative method was used to analyze statistical data for the research while qualitative method was employed to describe processes and pertinent issues of inclusive practice. In order to collect a reliable data, triangulation methods were applied. Two triangulation methods were particularly chosen based on the nature of the research and their relevance to the study. These were:

1. **Data triangulation**: In this method, different sources of data such as teachers, visually impaired students, school directors, and SNE implementer in the REB contributed to the investigation.

2. **Methods triangulation**: This was intended to use multiple methods such as interviews, questionnaires, observation, and document analysis to collect data for the study.
4.2. Data Sources

The main sources of data for this study were English language teachers who were teaching visually impaired students in inclusive context, and visually impaired students who were enrolled to learn in the regular program in 2011/2012 academic year. School directors were also taken as a source of data for this study since they were leaders and facilitators of inclusive program. To supplement or exhaust data SNE implementer in the REB was also included as a resource person.

4.3. Sampling

The main participants (English language teachers and visually impaired students) of this study were purposefully selected on the basis of their availability. Since inclusive practices were confined to urban schools a special focus was given to:

1. Schools which were practicing inclusive teaching by enrolling visually impaired students (Grade 5-8) in the second cycle of primary education.

2. Schools accessible for data collection considering the number of VISs from three Metropolitan cities. This was taken for the fact that VISs were concentrated in cities in search of economic support and provision for education.

According to ‘The Amhara National Regional State list of City Administration Level Cities’ (Zikre Hig Gazette No. 25, 2004: 17), these cities are Bahir Dar, Gondar and Dessie. In these cities among the total number of visually impaired students (i.e., 115) enrolled in 2011/12 academic year, 75 (65.22%) VIS and 25 ELT teachers taken from six second cycle primary schools, namely Sertse Dingil, Dil Chibo (Bahir Dar); Tigil
Fire (Dessie); Atse Fasil, Kebele 19, and Tsadiku Yohannes (Gondar) were included in the study.

4.4. Data Collection Instruments

The following instruments were employed to collect data from various sources.

4.4.1. Questionnaires

Two types of questionnaires were used to collect data from teachers and visually impaired students. These questionnaires were designed based on review of literature and preliminary assessment of the existing conditions of the target schools.

To check the validity and appropriateness of teachers’ and students’ questionnaires, comments were collected from three university instructors (one from Andhra University, India, and two from Bahir Dar University, Ethiopia). In addition to this an attempt was made to check the face validity of teachers’ and students’ questionnaire items. Accordingly 18 visually impaired students and 5 English teachers were involved to do this work. The purpose of conducting this face validity was to check every item to see if it is appropriate to the target groups; to check whether the questions/items are not ambiguous, and instructions are clear; to identify questions/items which do not yield usable data, so that they will be discarded; and to be aware of expected problems which may occur in the process of collecting data.

The results of this activity were found to be highly important in the process of designing the final version of both questionnaires and making preparation for the main study.
Teachers’ Questionnaire

Items included in the teachers’ questionnaire were set to involve factual (demographic) information/characteristics, teachers’ beliefs, attitudes and practices in teaching English in inclusive settings. Questions related to teachers’ beliefs with 22 items and questions related to teachers’ attitudes with 20 items, were organized using five Likert Scales continuum, that is, from ‘strongly disagree’ to ‘strongly agree’. Questions related to teachers’ practice (behavioral patterns) with 22 items were searched using five frequency measuring scales, that is, using from ‘always’ to ‘never’. In all cases some items were reverse coded where appropriate so that higher values represent more agreement.

The internal consistency of the teachers’ responses to the items in each variable were also checked and found quite reliable as the observed coefficient alphas .730 (beliefs), .922 (attitudes), and .822 (practice) were very close to and greater than 0.75, as Shaw and Right (1967) suggested.

Generally, the following table highlights the parts, sub parts and the number of items included in the teachers’ questionnaire.

Table 2. Summary Information about Teachers’ Questionnaire

<table>
<thead>
<tr>
<th>Parts</th>
<th>Sub- parts</th>
<th>No. of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belief</td>
<td>a) Disabilities/visual impairments</td>
<td>1,2,3,4,5,6, and 7</td>
</tr>
<tr>
<td></td>
<td>b) Inclusive education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Benefits of IE</td>
<td>8,9,10,11, and 12</td>
</tr>
<tr>
<td></td>
<td>- Requirements of IE</td>
<td>13,14,15,16,17,18,19,20,21, and 22</td>
</tr>
</tbody>
</table>
Attitude  Inclusive education in addressing the needs of disabled / visually impaired students  1-20
Practice  a)Concern  1, and 2
b)Motivation and support  3,4,5, 6, and 7
c)Follow up and assessment  8, and 9
d)Material preparation and adaptation  10, 11, and 12
e)Teacher- parent relationship  13
f)teaching strategy/ approach  14,15,16,17,18,19,20,21, and 22

Students’ Questionnaire

Students’ questionnaire was designed to investigate the opinion of VISs on various issues which are pertinent to the practice of inclusive education. In the questionnaire 23 items were included to enable VISs reflect their attitudes, self-perception, reflection on teachers’ practice, strategies they follow while attending schools in inclusive settings, and the support they get. The following table summarizes the categories and number of items of the questionnaire.

Table 3. Summary Information about Students’ Questionnaire

<table>
<thead>
<tr>
<th>Category of Items</th>
<th>No. Of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Attitude towards IE</td>
<td>1,2,3,4, and 5</td>
</tr>
<tr>
<td>b) Self-perception/image</td>
<td>6,7,8,9, and 10</td>
</tr>
<tr>
<td>c) Opinion on teacher’s practice</td>
<td>11,12,13,14,15,16,17, and 18</td>
</tr>
<tr>
<td>d) Learning strategies</td>
<td>19,20, and 21</td>
</tr>
<tr>
<td>e) Support</td>
<td>22, and 23</td>
</tr>
</tbody>
</table>
For the sake of convenience (intelligibility), that is, to avoid linguistic barriers that students may encounter, students’ questionnaire was translated into Amharic. The translated questionnaire was given to two university instructors who had expertise in translation for their comments to make the questionnaire appropriate to the purpose of the study and level of students.

Another questionnaire, which was similar in items, was also designed for both teachers and VISs to investigate the difficulty level of English language skills (reading, listening, speaking and writing) in the process of teaching and learning in inclusive classes. These four language skills were given to respondents to rate their difficulty level using four rating scale continuum, that is, from the ‘most serious problem’ to ‘not a problem at all’. This questionnaire was also supported by open-ended questions to make respondents verify their responses and reasons for their assessment of seriousness of a problem.

4.4.2. Observation

Classroom observations were conducted, using a checklist, to assess the natural setting where inclusive teaching was practiced. The school environment was also observed to assess whether it was supportive to inclusive teaching addressing the needs of visually impaired students.

4.4.3. Interviews

Interviews with selected teachers, students, school administrators, and SNE implementer were undertaken person-to-person on various issues associated with the practice of inclusive teaching, visual impairments and the situation where English language was
taught. Though there was a plan in the proposal of this research to employ focus-group discussion to complement information, this was not used due to inconvenience of the school program to meet teachers and visually impaired students in a group as they were engaged in the teaching and learning process throughout class hours.

4.4.4. Document Analysis

Document analysis was also used as a tool to make the research reliable and comprehensive. Hence, the following documents were taken as sources of information for the study. These were:

1. Special Needs Education (SNE) Course Catalog for Cluster and Linear Diploma Program (2007): This was used to collect data related to the inputs for training SNE teachers and other subject teachers who take SNE course as common course.
2. English Syllabus –Grade 5-8(2001): To make curriculum / syllabus assessment whether it fits to the needs of VISs.
3. Education Statistics Annual Abstract (2009/10);
4. Postgraduate Diploma in Teaching (PGDT) -2010: to elicit the content of inclusive education course offered in the degree program.
5. Statistics on disabled students enrolled in primary schools – Unpublished Amhara Regional State: To get the current enrollment of VIS in the second cycle of the Amhara National Regional State.
4.5. Methods of Data Analysis

On the bases of the categorized and coded quantitative data, respondents’ responses were computed using SPSS (Statistical Package for Social Sciences) 16.0. The following statistical techniques were also employed for analysis.

1. Descriptive statistics like percentile, mean, and standard deviation were used for general comparisons and discussions of selected variables and associated factors.
2. Pearson product moment correlation was also employed to examine whether there is a relationship/difference among variables with more than two factors.
3. A t-test was used to compare whether there exists mean score difference between / among factors with limited sample, i.e., n< 30, and a z-test with large samples, i.e., n > or = 30.

For the sake of making presentation and analysis of statistical data the mean scores were taken rounding off two decimal places in Chapter five.

The qualitative data which were collected from interview, observation and document analysis were presented and analyzed based on thematic descriptions. For convenience, all citations were used following American Psychological Association (APA) referencing style.

In this chapter an attempt was made to clarify the methods of data collection, the subjects of the study, instruments used to collect data, and methods of data analysis including the whole procedure followed in collecting and analyzing data. In the next chapter a detail report on the presentation and analysis of all collected data are presented substantiating with theoretical issues and empirical evidences.
REFERENCES


Ministry of Education (2009). English Syllabus Grade 5-8 MOE, Addis Ababa,


