

CHAPTER - ONE

INTRODUCTION

1.1 General Background

Language is the most powerful means of communication. It is viewed as the most effective means of communication confined within the human beings. It is thus species specific which differentiates human beings from others living creatures.

Language is studied under the linguistics. "Linguistics is a part of semiotics (Tobin, 1990). So language is part of semiotics that deals with various modalities of communication such as visual aural, olfactory, gustatory, and tactile. Besides these semiotics deals with various signs and signals e.g. zoo-semiotics etc. Among them the most usable means for effective interaction is oral-aural one which comes under language.

According to the Oxford Dictionary of English Etymology, "Language is a body of words or used by people. It is a form of words and style of expression" (1996, p.514). This definition states that language is a proper combination of words used by people.

Thus, Language is unique, complex and the most powerful, convenient and permanent means and form of communication.

English is an international language. It is spoken all over the world. It is recognized as an international language by the United Nations Organization. It is acknowledge as a language for global communication and it is given priority by most of the countries programmed. Not only the language education but also it has played domination role in technology, entertainment, trade etc.

The English language is also one of the six official languages of the United Nations. It is considered the most versatile tool of communication among the great number of heterogeneous people scattered in different corner of the world. The English language learning therefore, has become a global part of learning throughout the world. No doubt, English speaking communities are major sources of attraction and dreamland for anyone in any corner of the world, to survive in such communities and get opportunity English is studied as an academic subject.

According to Crystal (1997) "English is the global language". This sentence clearly points out the fact that English is the most popularly used language of the world. The access in vast treasure of knowledge as well as the possibility of world wide communication becomes a sheer miracle without English. So, the English language learning appears as the most fundamental parts of human behaviours.

We know that language plays the most significant and crucial role in conveying message. There are other means of communication such as visual, tactile, gustatory and olfactory signs as they form the code systems which systematically communicate information or message literally in every field of human behaviour. Two of such appealing and convincing means of conveying message of information is the use of some pictorial representation i.e. para-orthographic.

The use of English language in Nepal started when British Empire began ruling India. The then prime minister of Nepal Junga Bahadur Rana established an English elementary school on the ground floor of Thapathali Darbar in 1854 but it was not opened for public. Establishment of democracy in 1950 brought changes in education. Then, English school was also opened for the public. It increased the access of public to English Education along with the other subjects. But due to different reasons like lack of teacher training, lack of physical facilities, attitudes of

people towards teaching profession, less attention of the government to the teachers, lack of regular supervision etc. deterred the growth of the quality education in ELT along with other subjects.

The school and college level curricula have incorporated a variety of texts to develop competence in English. While talking about secondary level, para-orthographic tests were included as the subject to be studied in 2055 B.S. and effect from 2056 B.S. Secondary level curriculum (2064) states it in the objective no. reading 11 as "Students should be able to understand and interpret information presented in diagrammatic form (pie chart, graph chart, bar/column chart, table etc.)" and in the objective no. writing 5 as "Student should be able to transfer information from tables, charts and diagram to prose and vice-versa". Likely subject matters are included in 9th and 10th grader ELT text book.

In this way, the learners are expected to develop an ability to tackle with the emerging linguistic episodes after having knowledge in these tests. Heaton (1998) states "It is useful to include all types of text for reading comprehension in addition to the usual. More literary prose extracts e.g. newspaper, articles, instruction for using machinery directory extracts, public notes, time-table and maps, advertisement etc. The inclusion of such type of texts will not only provide a more realistic and reliable means of assessment but will also help to motivate students by demonstrating how the target language is used in real life situation. In this way, the most obvious point is that the use of a variety of text is always irrefutable in developing ability of the learners.

This study attempts to find out an effectiveness of para-orthographic texts used in English text book for grade ten.

1.1.1 Orthographic Texts

Generally Speaking, the term orthography is used for spelling. Orthographic is more likely to be used for alphabetic writing. It is the study of science of spelling. Orthographic writing is very similar to alphabetic writing. According to G. Kouroupetroglou et al (1999) "Orthography represents integrated, rule based symbolic systems, where in a fixed set of elements can be recombined to produce an almost unlimited range of novel meanings, words and sentences in normal text are written in an orthography whose graphemic units members of the alphabet of natural languages. ". There may not be one to one relation between letters and the sounds they represent in orthographic writing. For example the letter 's' is pronounced as [s] in books but [iz] in ladies.

Before the development of orthography, the earliest people used pictographs to express their thought, feeling and emotions etc. They carved or printed the stones, metals with pictures to represent their voluntary as well as involuntary desires.

Orthographic texts use graphic symbols with the full fledged form of writing to communicate information to the readers. So the reader should go through the printed symbol to extract the information. Basically proficiency in orthographic texts requires a number of skills to recognize the written characters, analyze syntax and meaning. According to Munby (1979) as cited in Sharma and Phyak, 2006:232) it involves an ability of learner to:

- recognise the script of the language
- decide the meanings and use of unfamiliar lexical items
- understand information explicitly stated

- understand conceptual meaning
- understand the communicative value of the sentences and utterances
- understand the relations within the sentences
- understand relations between parts of a text through lexical cohesion devices
- recognize indicators in discourse
- interpret text by going outside it
- identify the gist for the text
- distinguish the main idea from supporting details
- extract salient points to memorize
- locate specifically required information
- and
- transcode information to diagrammatic display.

Only orthographic text can not fulfill ultimate purpose in teaching and learning field. So that, the use of para-orthographic text is considered as an essential aid.

1.1.2 Para-orthographic Texts

The term 'para-orthography' is made of after adding prefix 'para' with orthography which conveys the meaning beyond the orthographic texts and makes an attractive text. It refers to a writing based on the bountiful use of pictorial representations besides the language. These texts are concerned with non-text or non-linguistic information which are represented in graphics with the scant use of orthographic texts. Commonly, para-orthographic texts include diagrams, charts, graphs, tables, maps, public symbols, traffic signs etc. They don't make use of a full fledged system of orthographic writing.

Communication is not simply bound within the periphery of linguistic symbols alone. The importance of non-linguistic texts like bar-diagrams, charts, graphs, tables etc. can be detached from it. In this regard, Tobin (1990) states "Besides languages, there are other means of communication such as visual, tactile, gustatory and olfactory signs (all signs or signals which are accessible to and can be perceived by all our senses) as they form code systems systematically communicate information or message literally in every field of human behaviour and enterprise". Tobin clearly shows the fact that communication is a broad term that takes place by different ways and one of such appealing and convincing means is the use of para-orthographic texts.

According to G. Kouropetroglou et al. (1999) "Non-orthographic language is graphic sets and systems for argumentative and alternative communication. The majority of the non-orthographic languages are sets of line drawings, each with its own distinct and fixed meaning." Von Tetzcher and Martinsen (1992 in Kouropetroglou, 1999) demonstrate that "A user of well established non orthographic language combines a number of graphic symbols to formulate a sentence. For the effective communication with the other people, this sentence can be translated to common orthography or synthetic speech through a suitable communicator device or an appreciation of personal computer."

Kouropetroglou et al. (2000), "non-orthographic languages in general, belong to graphic representation system (GRS). Since they use standardized graphic symbols (ranging from photographs resembling the depicted object to abstract linear drawings with no apparent relation to the referred object) as their building elements and to convey communication content. While the educational community opts for open, accessible course where there is the number of

students with special needs who want to harness what education has to offer them, but because of their disabilities seem to have less chance. Especially in cases of mild to severe mental disability they cannot use a natural language nor communicate with speech, thus, they need to use an alternative or argumentative communication (AAC) system usually taking the form of non-orthographic language (in contrast with a natural orthographic one)."

It took 2000 years for punctuation and spaces between the words to enter written language, so the continued evolution of how information is packed, filtered and consumed can be doubted? In this exploration of changing economics of our information-based world, Lanham, Professor emeritus of English at UCLA and author of the *Electronic world*, proposes the problems with the information economy as "information doesn't seem in short supply; precisely the opposite. We're drowning in it." Lanham posits that as society moves from a world defined by 'stuff' to one defined by 'fluffs' people are increasingly in need of filters to weed through the information glut. Enter the arts and letters. Citing courses from the art world to Madison Avenue, Lanham develops into the increasing amount of importance placed on products packaging rather than the product itself. Lanham's points are strong and well researched, as shown through his "background conversations" substitutes for endnotes included at the end of every chapter. If style is going to increasingly operate as the decision making arbiter, Lanham should be commended on his clear, jargon-free and forward thinking.

Spaces and punctuations are part of what it is called para-orthography, visual elements that facilitate the orthographic system in written communication. Prof. Lanham is right in that para-orthography helps to guide our attention in reading, but also does more." (Lanham, 2007)

Now-a-days, the use of para-orthographic texts has become an important part of human activity. They are being intensively used in every sector irrespective of any field and subject matter. The use of pictures, charts, graphs, diagrams, tables are especially used in academic sector for rudimentary understanding of the texts and excavating human potential in the development of comprehensive and analytical skills in such texts. Besides these, the para-orthographic texts have been appeared as the most apparent means for media, public awareness, advertisement, giving instruction, traffic signs, and symbols and many more. The main reason behind that is a large body of data can be represented in para-orthographic texts more clearly, effectively and economically without any covert and lengthy descriptions. The use of para-orthographic texts is considered as an asset to explore the interpretative proficiency of the learners. Thoughtfully prepared para-orthographic texts provide the necessary data, source of the data, experience and stimulus to them. While interpreting such texts, the learners should understand the data being presented in pictorial form, activate their schemata in deducing the linguistic information of the texts and their formed ideas, formulate them and finally interpret them at disposal. So the learners require exercising their mind to extract the hidden meaning of the texts.

In a nutshell, para-orthographic texts include both mental and physical processes of the learners to obtain implicitly stated linguistic information of the texts.

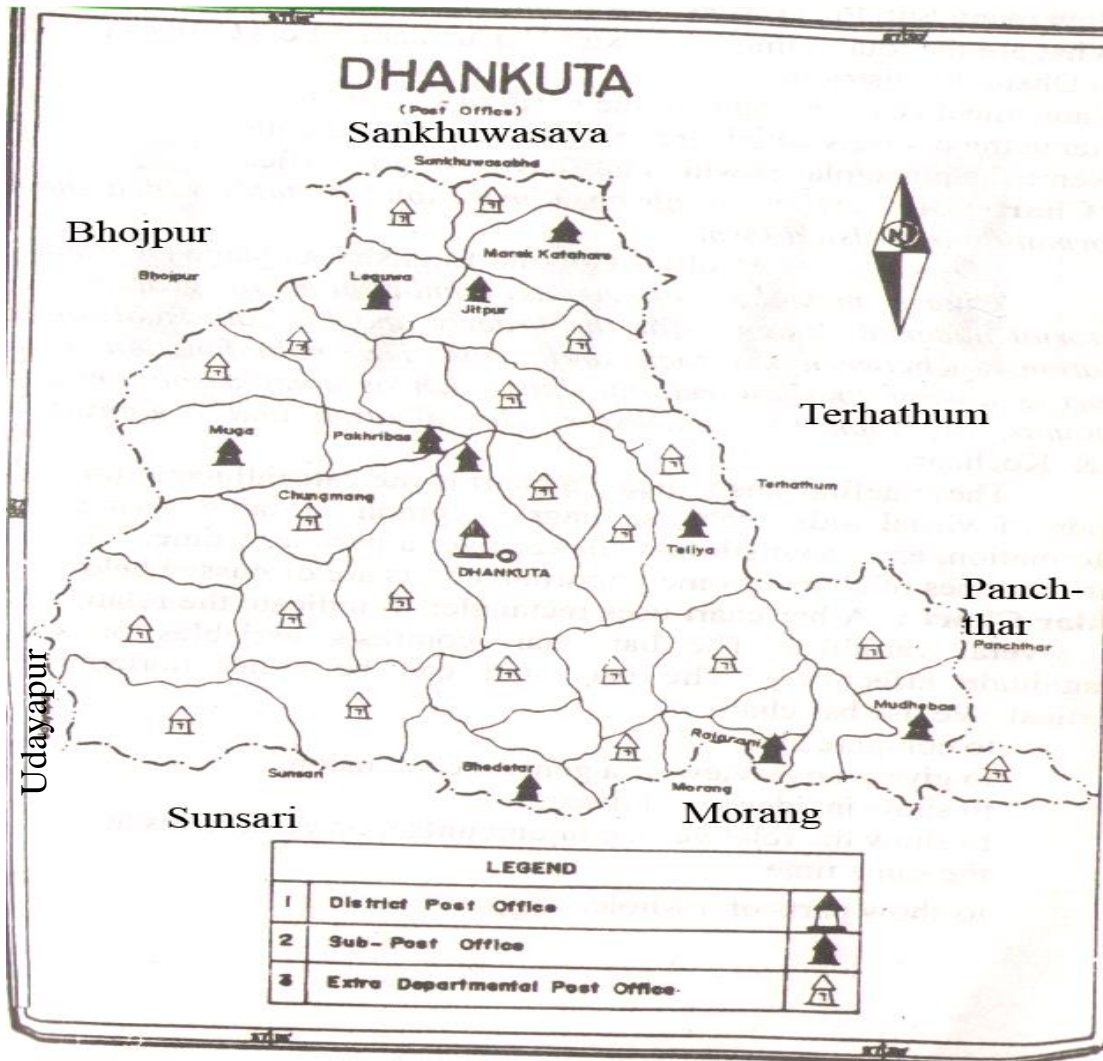
1.1.3 Exemplification

Some exemplification of para-orthographic texts are given below.

1.1.3.1 Maps: A map is a drawing of a particular area, i.e. continent, a country, a city, a district, a village etc.

Figure No. 1.

Map of Dhankuta district



By giving such tools for example questions like these may be asked

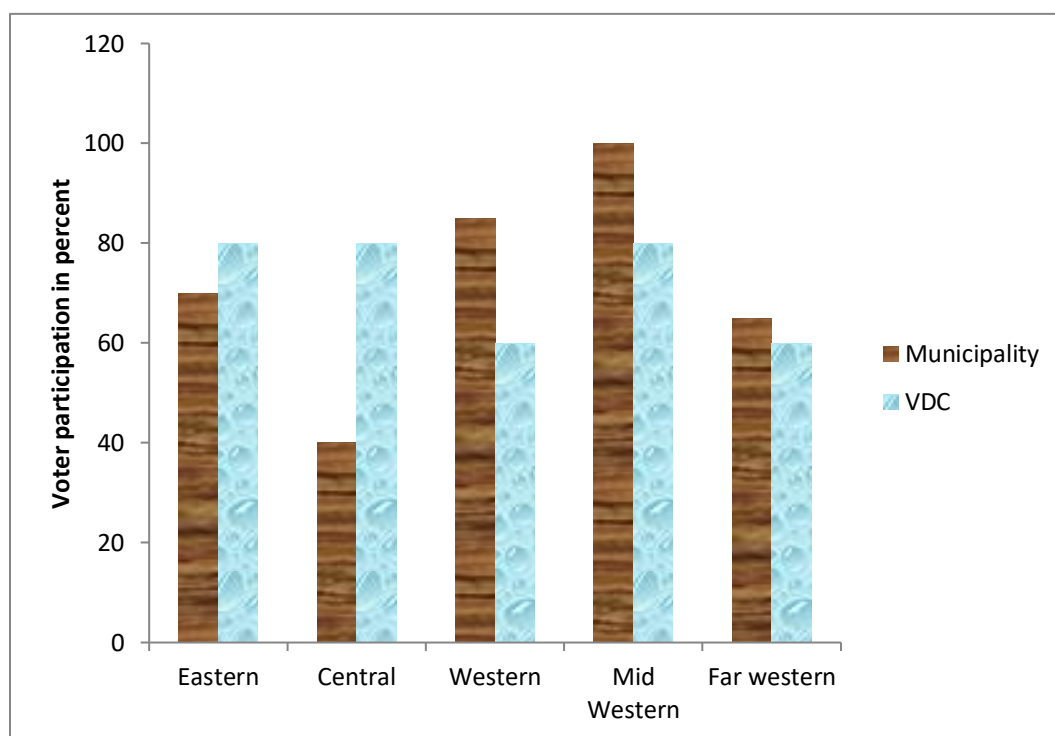
- Which district in these in the north of Dhankuta?
- Name the districts which are in the south of Dhankuta.
- Where is Bhojpur from Dhankuta?
- How many sub-post offices are in Dhankuta district?

1.1.3.2 Bar Chart

Bar chart is the most simple and useful tool for the comparative study of two or more "values of single variable." It consists of equal widths. The heights or lengths of the rectangles are presented by the given values of the variable. The number of rectangles is equal to the number of values of the single variable.

Figure No. 2.

Voter participation in VDC and Municipality elections - 1997



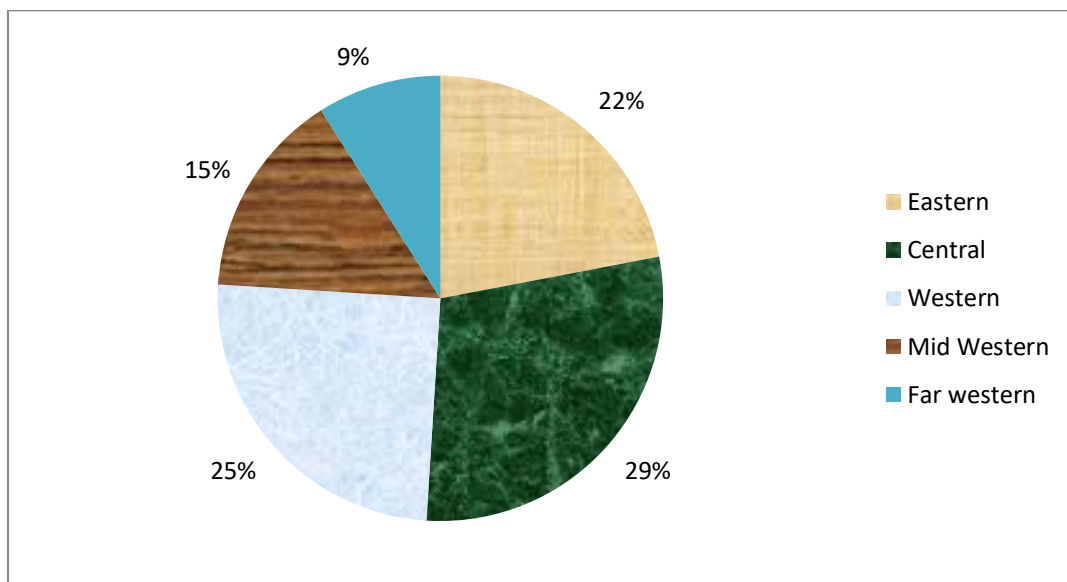
(Source: Unpublished data, Election Commission)

1.1.3.3 Pie Chart

Pie chart is a chart consisting of a circle divided into sections that represent specific proportions of the whole. The pie chart is also called the circle chart or circle graph.

Figure No. 3.

A pie chart showing regional distribution of public schools in the academic year 1998/1999



1.1.3.4 Table

A table is a collection of information expressed in numbers or words and presented in columns and rows. A fully fledged table records data concise and facilitates rapid comparison and interrelations.

Table No. 1.

Table showing the result of SLC in 1998

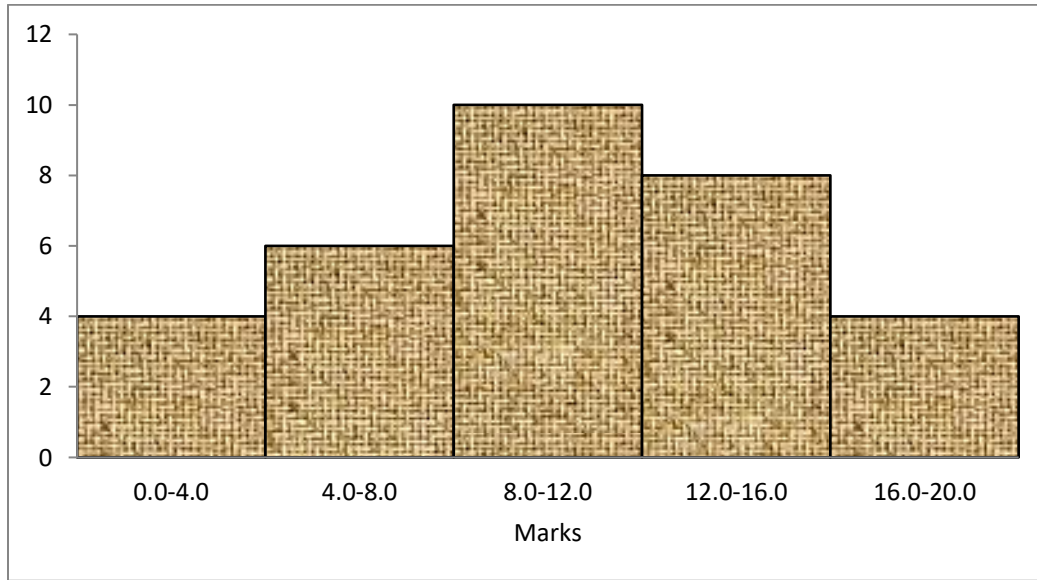
Students	Percentage
First division	50%
Second division	30%
Third division	10%
Failed	10%

1.1.3.5 Histogram

Presentation of frequency distribution in the graphic form is known as 'histogram'. It consists of a set of adjacent vertical rectangles in x-axis with bases equal to the width of the corresponding class intervals and heights proportional to the corresponding frequency of the each class so that the area of the rectangle is proportional to the frequency of the corresponding class. Thus in case of equal class interval, the heights of the rectangles will be proportional to the frequencies while for unequal classes, the heights will be proportional the the relation of the frequencies to the corresponding class size.

Figure No. 4

Histogram showing marks



These signs, diagram, charts, symbols, coloured pictures etc have their multi- dimensional usefulness and effectiveness as they are used from various angles. Bearing the values of para- orthographic texts in mind, the researches have done the present thesis so as to link its importance with teaching learning of the English language.

1.2 Review of Related Literature

A number of studies have been carried out to investigate the effectiveness on different fields and facets of language under department of English Education T.U.

Neupane (2005) carried out a study on "Proficiency of the students in interpreting para- orthographic texts" in different public schools of Kavre district. The purpose of his study was to find proficiency of the grade ten students in interpreting different para-orthographic texts. He used numbers of test items as a research tool to fulfill his purpose. He found that the students

were more proficient in interpreting signs, (93.8%) time table and (89.2%) and line graphs (71.2%) the other para-orthographic texts.

Khakurel (2005) has carried out research on "Effectiveness of Matchstick Figures in Teaching Action Verbs." The aim of his study was to find out the effectiveness of matchstick figures in teaching action verbs at grade five. While teaching, he used matchstick figures. He found that the degree of effectiveness in the use of matchstick figures in teaching action verbs in English was very good.

Humagain (2006) carried out a study on "Effectiveness of Language Games in Learning Reading Comprehension." The purpose of his study was to find out the effectiveness of language games in learning reading comprehension. His research was of experimental type. He divided the students into two groups and used the language games to the experimental group and taught the controlled group without language games. He found that the experimental group which was taught using language game performed better than controlled group in all test items.

Ghimire (2007) carried out research on "The Effectiveness of Visual Aids in Teaching Vocabulary." The aim of this study was to find out the effectiveness of the visual aids (cut out picture or drawing) in teaching vocabulary to compare the vocabulary achievement of the experimental group and control group. The finding shows that the performance of the experimental group was found satisfactory in almost all the test items.

Shau (2007) carried out a study on "Effectiveness of Para-orthographic Texts." He did his research in government aided and private schools' students studying in grade XI from Saptari, Lalitpur and Kathmandu district. The purpose of his study was to find out the effectiveness of

para-orthographic text in learning and to compare and contrast the levels para-orthographic texts with orthographic texts. Out of some unidentified picture mentioned in the the text-book, only one picture and passage were taken for this research. The test was administered three times and the three tests were compared to find out the effectiveness of para-orthographic texts in teaching and learning. His study concluded that students in learning were found better in the para-orthographic text than orthographic texts.

Thapaliya (2007) conducted comparative study in "Proficiency of Bachelor level students in interpreting para-orthographic texts." The aim of his study was to compare the proficiency of the students in interpreting para-orthographic texts on the basis of faculties and institutes. He used numbers of test items as a research tool to fulfill his purpose. He found that the students studying in the institutes had higher proficiency than the students studying in the faculties. The students also illuminated the fact that the proficiency of the boys in interpreting para-orthographic texts (82.82%) was a bit higher than the proficiency of girls (79.49%)

Kafle (2008) carried out a research entitled "Effectiveness of strip story in Teaching Reading comprehension." The aim of his research was to find out the effectiveness of strip story technique in teaching for developing reading comprehension. His research was also of experimental type. While teaching he used strip story technique to experimental group but he used usual technique or way to controlled group. He found the strip story technique is more effective than usual way of teaching for developing reading comprehension.

Acharya (2008) carried out a research on Effectiveness of Teaching Vocabulary through Real Objects." The purpose of his study was to find out the effective objects. While teaching, he used real objects mostly than usual. It was found that using real objects technique in teaching

vocabulary has relatively better impact on the whole. The teaching of vocabulary through real objects appeared 22% more effective than teaching with usual classroom technique. i.e. without using real objects.

Khatri(2008) conducted a research on " Proficiency in Interpreting Orthographic and Para-orthographic Texts." The objective of the study was to find out the proficiency of grade XII students of different stream in interpreting orthographic and para-orthographic text on the basis of streams (Education Vs Management), gender (Boys and Girls), test items (subjective and objective) etc for the comparative study, the sample population consisted of 120 students studying in different disciplines of four different colleges of Kathmandu district. The study was entirely based on the primary sources of data, i.e. the test items administered to the students. His study proved that the students were more proficient in para-orthographic texts (68.92%) than orthographic texts (59.45%).

Though, many studies have been carried out in order to measure the effectiveness of different facets of language. But none of them paid attention on the measurement of effectiveness of para-orthographic texts used in English text book for grade ten. So it is untouched area up-to now.

1.3 Objectives of the Study

The objectives of the study are:

- To find out the effectiveness of para-orthographic text used in grade ten English textbook in the field of learning.

- To compare the effectiveness of para-orthographic texts of grade ten English text book with orthographic text of that text book on the basis of interpreting performance on a given test items.
- To suggest some pedagogical implications with reference to it's findings.

1.4 Significance of the Study

This study entitled "Effectiveness of para-orthographic texts used in English text-book for grade ten" will be highly significant for:

- Finding out the most effective texts that are used in grade ten English text books.
- Finding out the special amenities of both orthographic and para-orthographic texts in teaching.
- Finding out the importance of variety of materials in teaching language.
- Providing more practical information to the students, text designers, curriculum designers, language planners, text book writers to select the most appropriate texts for effective teaching to the students, methodologist and the entire persons who are directly or indirectly involve in teaching and learning English language.

Briefly, the finding derived from the study will help to remedy problems of teaching such texts.

CHAPTER - TWO

METHODOLOGY

Every researcher's work has stepwise procedure to follow, what is known as methodology. The main aim of the study is to find out the effectiveness of Para-orthographic texts used in text book of English for ten-grader. To accomplish the objectives, the researcher followed the methodology.

2.1 Sources of Data

This study was based on both primary and secondary sources of data.

2.1.1 Primary Sources of Data

The students of grade ten in seven different public schools of Dhankuta District were the primary sources of data.

2.1.2 Secondary Sources of Data

The secondary sources of data for this study were grade ten English text book, teacher's guides, curriculum of secondary level designed by CDC Nepal, different research reports and book on relevant subject to the facilitation of the study.

2.2 Population of the Study

The total population of this study consisted of students from grade ten studying in seven different public schools of Dhankuta District.

2.3 Sample Population and Sampling Procedure

The sample population of the study consisted of 112 students of grade ten studying in seven different schools of Dhankuta district. Sixteen student form each school were sampled through non-probability purposive sampling. The students from each school were selected through random sampling procedure.

2.4 Tools for Data Collection

The main tool for the study was questionnaire. Two sets of tests based on seen orthographic and para-orthographic texts were developed as the tools for data collection. The first (set A) set of test was equipped with 4 different disciplines, i.e. poem, drama, letter and story. Likewise second (set B) set of tests contained four para-orthographic text items, viz., table, bar-chart, pie chart and map. The parallel test items of equal marks were taken into account in both sets of tests which were designed in orthography and para-orthography. Subjective questions and objective questions based on both orthographic and para-orthographic text were the tool for data collection. Objective questions were multiple choices and true/false items of half full marks each.

For the subjective type test, three short answer type wh-questions were developed for each item. The correct answer of each question carried two marks. Hence, the total number of questions of each text was 24 marks. Thus set of each tests i.e. set A and set B were of 32 full marks. Here set A was concerned with orthographic texts and set B was concerned with para-orthographic texts.

2.5 Process of Data Collection

At first, the researcher personally visited the seven randomly selected schools of Dhankuta district. She requested the authentic personnel and explicitly described the related objectives of the study. After getting permission the researcher selected sixteen (8 boys and 8 girls) students from each school and the selected sample population was taken to a separate room to administer the test. Other necessary information was provided orally. The test was administered twice, i.e. once for set A and once for set B. The time allocated for both set of questionnaire was equal. After collecting the answer sheets of first shift (i.e. set A) the researcher thanked them and again administered the next set B question papers for the same students in the same place. The researcher herself had invigilated and she requested other persons for cooperation. After thanking them for their valuable time, participation and kind co-operation, the researcher left the exam room.

2.6 Limitations of the Study

The limitations of the study were:

- The study was only confined within grade ten English text book.
- Only the students of grade ten were taken for the study.
- The study was confined within seven public schools of Dhankuta district.
- The study was limited to the sample population of 112 students of grade X.
- The study was limited in orthographic and para-orthographic text based on grade ten English textbook.

- Para orthographic text were:

- Pie chart
- Bar graph
- Maps
- Tables

- Orthographic text were :

- Poem
- Drama
- Letter
- Story

CHAPTER-THREE

ANALYSIS AND INTERPRETATION OF DATA

This chapter consists of analysis and interpretation of data. The analysis and interpretation of the data was done after checking the responses of the students to the tests administered to them and by assigning marks to the correct responses. The mark of students obtained in both orthographic and para-orthographic texts were tabulated and the average marks and percentage of the average marks in those sets of tests was carefully calculated. Then interpreting performance of the students in both orthographic and para-orthographic texts was analyzed descriptively and statistically using different pictorial representation like pie-chart, table etc.

For analyzing data, focus was laid on interpreting performance of students in both orthographic and para-orthographic texts and finding out the effectiveness of both texts. The analysis and interpretation of the data was carried out under different heading in accordance with the variables such as School-wise, gender-wise, item-wise, text-wise etc. The table, charts etc and the description in the following pages under this unit reports the effectiveness of para-orthographic texts from the seven different schools.

3.1 Item-wise Analysis of the Student's Performance in OT and POT

With regard to find out the performance of the students in interpreting orthographic and para-orthographic texts, the item-wise analysis of the performance of the students was carried out. The item-wise performance has been described in the following paragraphs.

Table No. 2
Item - wise performance of students in OT

	OT									
Type of tests →	Subjective items					Objective items				
School ↓	No. of student	F.M.	Total M. O.	Av.	Per.	No. of student	F.M.	Total M. O.	Av.	Per.
JDHSS	16	24	90	5.62	23.43	16	8	71	4.43	55.64
DHSS	16	24	87.5	5.46	22.78	16	8	59.5	3.68	46.48
SHSS	16	24	90	5.62	23.43	16	8	52	3.25	40.62
NSSHSS	16	24	98	6.12	25.52	16	8	49.5	3.09	38.67
AHSS	16	24	86	5.35	22.39	16	8	50	3.12	39.06
JHSS	16	24	85	5.31	22.13	16	8	62	3.87	48.43
HSS	16	24	105.5	6.59	27.47	16	8	81	5.06	63.28

The above table shows that among 7 schools, students of HSS have achieved highest scores in both subjective and objective tests. On the other hand students of JHSS have lowest score in subjective test and of NSSHSS hve lowest score in objective test items. Regarding the students achievement of on OT, they achieve more marks in objectives test items than in subjective ones.

Table No.3
Item - wise performance of student in POT

Type of text	POT									
School	Subjective items					Objective items				
	No. of student	F.M.	Total M. O.	Av.	Per.	No. of student	F.M.	Total M. O.	Av.	Per.
JDHSS	16	24	120	7.5	31.25	16	8	69	4.31	53.9
DHSS	16	24	196	12.5	51.04	16	8	82.5	5.15	64.45
SHSS	16	24	189	11.81	49.21	16	8	75	4.68	58.59
NSSHSS	16	24	127.5	7.96	33.20	16	8	56	3.5	43.76
AHSS	16	24	179	11.18	46.61	16	8	75	4.68	58.59
JHSS	16	24	185	11.56	48.17	16	8	84	5.25	65.62

HSS	16	24	205	12.8	53.38	16	8	99	6.18	77.34
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It

can be said that HSS students were best in para-orthographic texts in boty types of items.

However, the students of NSSHSS were poorest in objective and of JDHSS had lowest marks in subjective text items. As in OT students achieved better marks in objective text items than in subjective.

The given tables above reveal the performance of students studying in seven different schools of Dhankuta in interpreting orthographic and para-orthographic texts in terms of test items. The students of every school showed the higher performance in para-orthographic texts in both objective and subjective test items. The highest marks (i.e. 77.34%) found to be in para-orthographic text and the highest mark in orthographic text was found to be. 63.28%. Both the scores were in objective test items. Similarly, in the subjective category, the highest mark in para-orthographic text was found to be 53.38% and the highest mark in orthographic text 27.47%.

The analysis of the test item clearly shows that para-orthographic text has scored higher in both the subjective and the objective category. It clearly illuminates that para-orthographic text are more effective than orthographic texts in Learning.

Table No. 4

Holistic analysis of OT and POT

Type of texts	No. of Students	Types of test items							
		Subjective				Objective			
		F.M.	Total M.O.	Av.	Per.	F.M.	Total M.O.	Av.	Per.

Orthographic texts	112	24	642	5.75	23.88	8	424.5	3.79	47.37
Para-orthographic texts	112	24	1201.5	10.72	44.69	8	540	4.82	60.26

The table above shows that the students of seven different schools showed highest performance in para-orthographic texts in both subjective and objective test i.e. 44.69% and 60.26% respectively. Like-wise lowest performance in orthographic texts in both subjective and objective items were 23.88% and 47.37%, respectively.

In conclusion, the holistic comparison shows that the para-orthographic text was found to be more effective than orthographic texts in the field of teaching and learning.

3.2 Text-wise Performance of Students in OT and POT

To find out the performance of seven different schools' students in interpreting orthographic texts and para-orthographic texts, the text-wise analysis of marks was carried out. The text-wise performance of students has been described in the following paragraphs.

Table No. 5

Text-wise performance of students in OT and POT

Types of Score	Performance in OT				Performance in POT			
	Poem	Letter	Drama	Story	Table	Bar-Chart	Pie-Chart	Map
Average	17.14	41.42	34.64	60.57	74.57	69.42	64.57	40.14
Percentage	13.39	32.36	27.06	47.32	58.25	54.24	50.44	31.36

The table above reveals that the students showed the highest performance in para-orthographic texts, i.e. 'Table' securing 58.25 % and lowest performance in orthographic i.e. 'Poem' securing 13.39%. They secured 32.36% in letter, 27.06% in drama, 47.32% in story, 54.24% in bar chart, 50.44 % in pie chart and 31.36% in map.

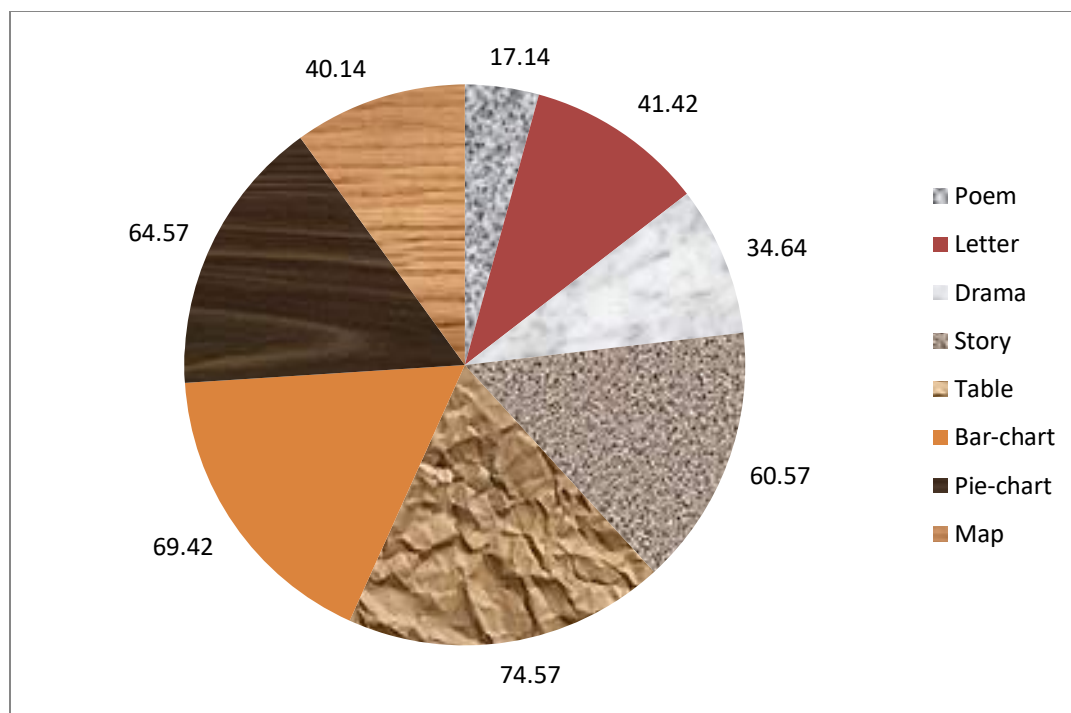
In orthographic texts, the students showed the highest performance in story (i.e. 47.32%) and lowest performance in poem (i.e. 13.39%)

In para-orthographic texts, the students showed highest performance in 'Table' (i.e. 58.25%) and the lowest in the 'Map' (i.e. 31.36%). Comparatively, the percentage of every text of para-orthographic texts seemed higher than every text of orthographic texts.

Text-wise average performance of students in OT and POT can be shown below in pie chart as:

Figure No.5

Text-wise average performance of students in OT and POT



The pie chart above shows that the highest average score of 74.57 in table is in POT and the lowest average score of 17.14 is in poem which is in OT. Comparatively the average scores in para-orthographic texts are found to be higher than that of orthographic texts.

In conclusion, the above comparison shows that the effectiveness of para-orthographic text was found better than that of orthographic texts.

3.3 School-wise Average and Percentage Scores of Students in OT and POT

Comparing scores of different schools, table given below clearly shows the performance of the students in orthographic and para-orthographic texts in seven different schools.

Table No - 6

School-wise average and percentage scores of students in OT and POT

S.N.	School	No of St.	OT			POT			Total(OT+POT)		
			AV.	Per.	F.M.	AV	Per	FM	AV	Per	FM
1	JDHSS	16	7.09	22.15	32	14.84	46.37	32	21.93	34.26	64
2	DHSS	16	8.43	26.34	32	18.78	58.68	32	27.21	42.51	64
3	SHSS	16	9.25	28.90	32	16.15	50.46	32	25.40	39.68	64
4	NSSHSS	16	9	28.12	32	17.93	56.03	32	26.93	42.07	64
5	AHSS	16	7.50	23.43	32	16.87	52.71	32	24.34	38.07	64
6	JHSS	16	9.75	30.46	32	16.21	50.65	32	25.90	40.55	64
7	HSS	16	11.71	36.59	32	18.93	59.15	32	30.64	47.87	64

This table shows that the students of Himalaya Secondary School have shown good performance securing 47.87 % in both the texts. The students in Saraswati Higher Secondary School have secured 28.90 % in OT and 50.46% in POT. Similarly performance in Jalapa Devi Higher Secondary School has proved to be the least one. They have secured 34.26 % in both texts. They have secured 22.15% in OT and 46.37 % in POT. The students of Janata Higher Secondary School have shown moderate performance securing 40.55% in both the texts. They have secured 30.46% in OT and 50.65% in POT. Similarly the students in Dharmodaya Higher Secondary School have secured 26.34 % in OT and 58.68% in POT. The students in Nabin Shiksha Sandan Higher Secondary School have secured 28.12% in OT and 56.03% in POT. Likewise the students in Arunodaya Higher Secondary School have secured 23.43% in OT and 52.71 % in POT.

The school-wise analysis of the scores clearly shows better performance of the students in para-orthographic texts than orthographic texts. It proves that para-orthographic texts are more effective than orthographic texts.

3.4 Gender-wise Average and Percentage Scores of Students in OT and POT

Table below shows the comparative performance of the boys and girls. The overall comparison of marks obtained by the boys and the girls from seven different schools showed that the boys were a bit ahead than the girls. The performance of girls was found to be 51.75% in para-orthographic texts and 26.93% in orthographic texts. The performance of boys was found to be 55.15% in para-orthographic texts and 29.03 % in orthographic texts. Here too, the performance was higher in para-orthographic texts than orthographic texts.

Table No.- 7

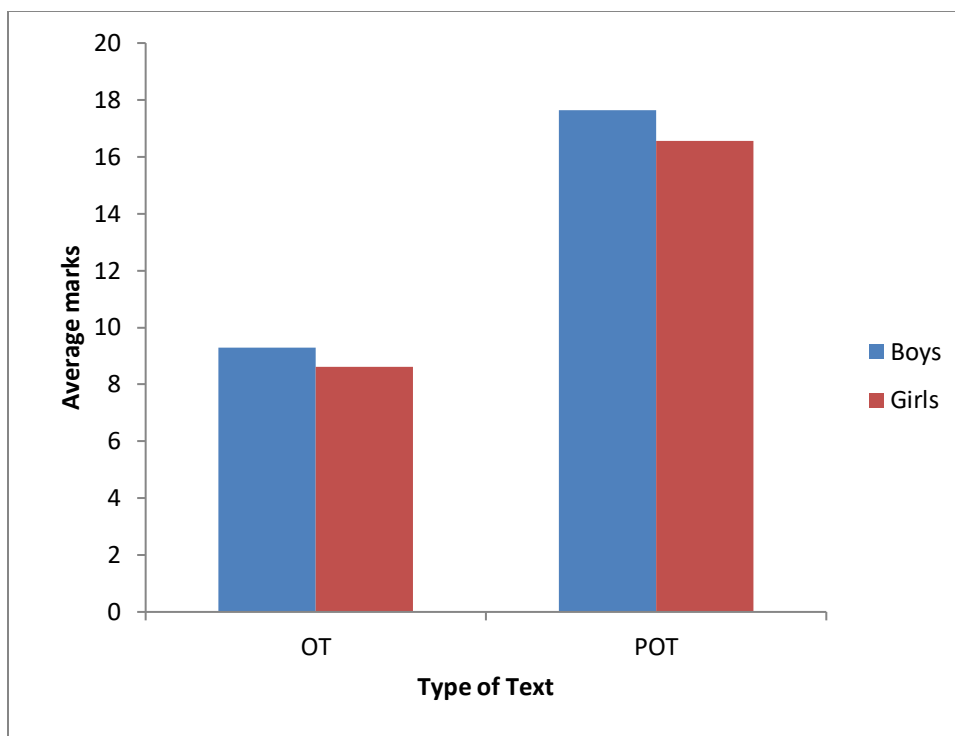
Gender-wise average and percentage scores of students in OT and POT

S.N	Variable of students	No. of students	Type of score	Type of Text(OT)	Type of Text(POT)
1.	Boys	56	Average	9.29	17.65
			Percent	29.03	55.15
2.	Girls	56	Average	8.62	16.56
			Percent	26.93	51.75

Gender wise average scores of students in OT and POT can be presented in bar diagram as:

Figure No. 6

Average scores of boys and girls in OT and POT



The diagram above shows that average score of boys and girls are higher in para-orthographic text.

Tables below clearly describe the gender-wise performance of boys and girls of seven different schools.

Table No-8

Performance of the boys in OT and POT

S.N	Schools	No. of the boys	Type of text/ FM				Total (64) F.M	
			OT (32)		POT (32)			
			AV.	per.	AV.	per.	AV.	per.
1.	JDHSS	8	7.75	24.21	15.75	49.21	23.50	36.71
2.	DHSS	8	8.12	35.37	17.87	55.84	25.99	40.60
3.	SHSS	8	9.75	30.46	16.18	50.56	25.93	40.5

4.	NSSHSS	8	8.50	26.56	17.93	56.03	26.43	41.29
5.	AHSS	8	7.81	24.40	17.18	53.68	24.99	39.04
6.	JHSS	8	10.18	31.81	18.00	56.25	28.18	44.03
7.	HSS	8	13.00	40.62	20.62	64.43	33.62	52.53

The table above reflects the performance of the boys studying in the seven - different schools in interpreting orthographic and para- orthographic texts.

The boys studying in the Himalaya Secondary School were found to score the highest marks.

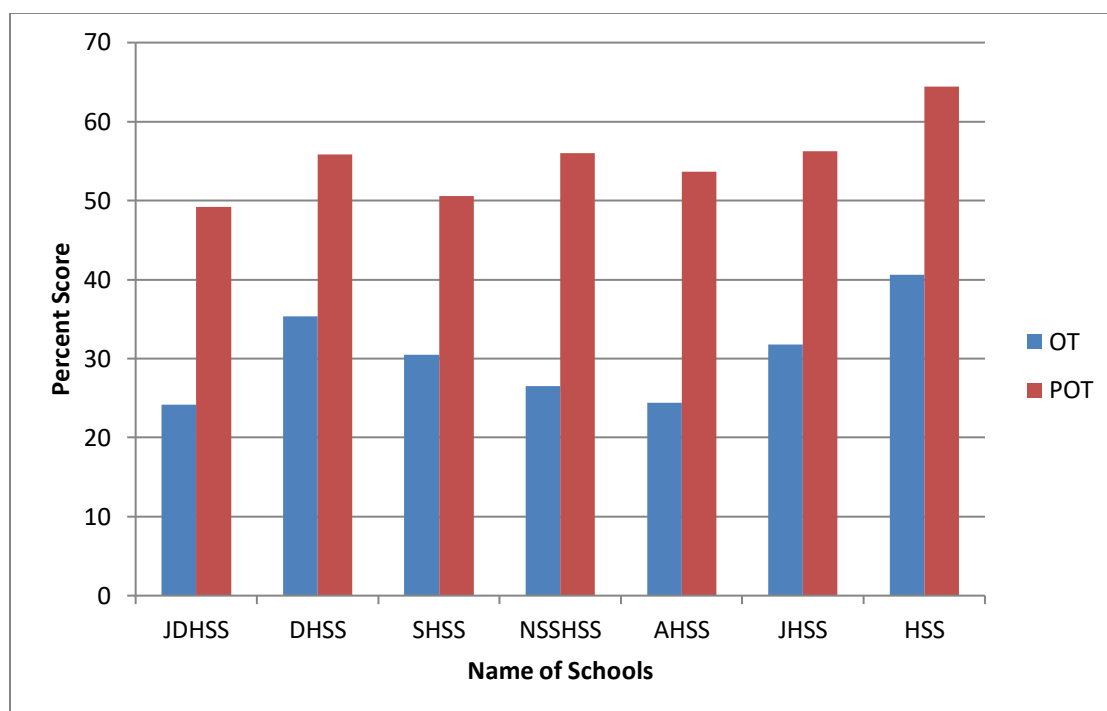
They scored 52.53% and the boys studying in Jalapa Devi Higher Secondary School were found to score the least marks i.e. 36.71%. Similarly, the boys studying in Dharmodaya Higher Secondary School obtained 40.60%. Likewise Saraswati Higher Secondary School, Nabin Shiksha Sadan Higher Secondary School, Arunodaya Higher Secondary School obtained 40.5%, 41.29%, 39.04% and 44.03% respectively.

The table also shows the fact that the boys of each school performed their better performance in para-orthographic with the highest percent (ie. 64.43%) in para-orthographic text but the highest percentage of orthographic text was found to be 40.62%. It concludes that para-orthographic texts of grade ten English text book are more effective than orthographic of that book.

The percentage performance of boys of the seven schools in OT and POT can be presented in diagram as below:

Figure No. 7

Percentage performance of boys of seven schools in OT and POT



The bar diagram presented above shows that the percent scores of the boys in POT of all the schools is higher than that in OT.

Table No. 9

Performance of the girls in OT and POT

S.N	Schools	No. of the girls	Type of text/ FM				Total (64) F.M	
			OT (32)		POT (32)			
			AV.	per.	AV.	per.	AV.	per.

1.	JDHSS	8	6.43	20.09	13.93	43.53	20.36	31.81
2.	DHSS	8	8.75	27.34	29.68	61.50	28.43	44.42
3.	SHSS	8	8.75	27.34	16.12	50.37	24.87	38.85
4.	NSSHSS	8	9.50	39.68	17.93	56.03	27.43	42.85
5.	AHSS	8	7.18	22.43	16.56	51.75	24.74	38.65
6.	JHSS	8	9.31	29.09	14.43	45.09	23.74	37.09
7.	HSS	8	10.43	32.59	17.25	53.90	27.68	43.25

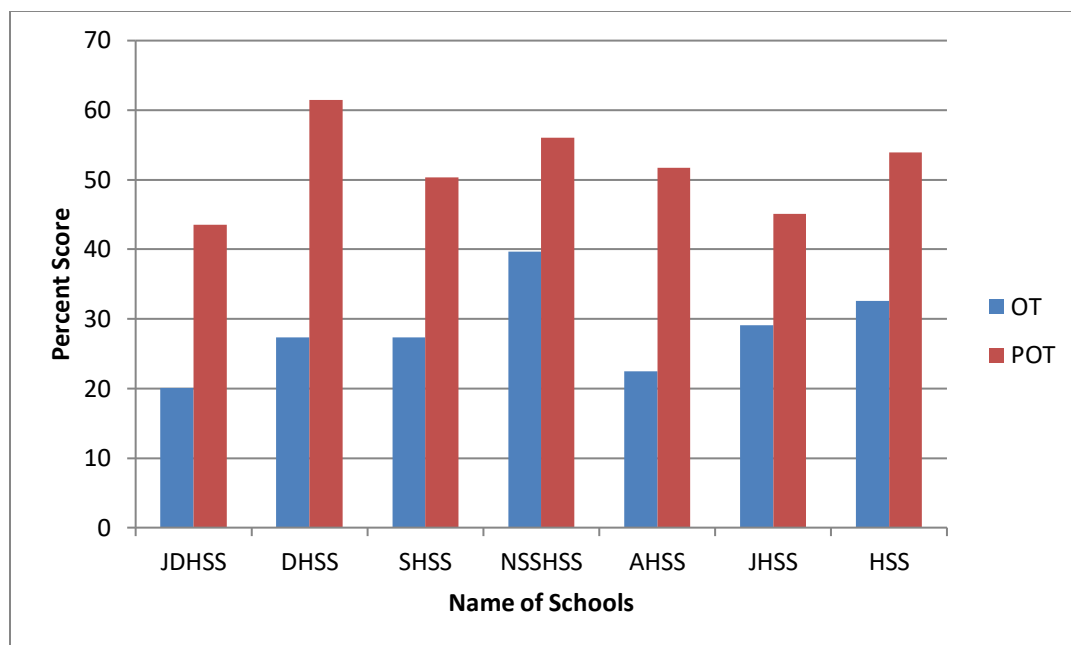
The table above shows the performance of the girls studying in seven different schools in orthographic and para-orthographic texts.

The girls studying in Dharmodaya Higher Secondary School were found to score the highest i.e. 44.42% and the girls studying in Jalapa Devi Higher Secondary School were found to score the lowest i.e. 31.81%. The girls studying in Saraswati Higher Secondary School, Nabin Shiksha Sadan Higher Secondary School and Himalaya Secondary scored 38.85%, 42.85%, 38.65%, 37.09% and 43.25% respectively.

The percentage performance of girls of the seven schools in OT and POT can be presented in bar diagram as:

Figure No. 8

The percent scores of girls of seven schools in OT and POT



The bar diagram presented above clearly shows the higher percentage score of girls in POT of seven schools of Dhankuta district.

The analysis above shows that the scores of girls too were high in para-orthographic texts than orthographic texts.

3.5 Analysis of Overall Performance of the Students in OT and POT

The study was carried out to find out the overall performance of the students on orthographic and para-orthographic texts. The following table presents the comparative performance of the students in orthographic and para-orthographic texts.

Table No-10

Interpreting performance of the student on OT and POT

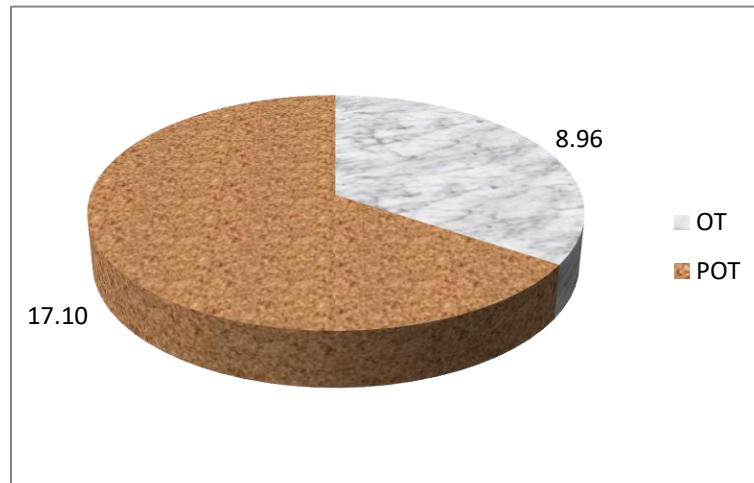
No. of students	OT			POT			Total(OT & POT)		
	Average	per.	F.M	Average	per.	F.M	Average	per.	F.M
112	8.96	28	32	17.10	53.43	32	26.06	40.71	64

The table above shows the holistic comparison of performance of the students on two different texts namely orthographic and para-orthographic texts. The average performance of the students on both orthographic and Para-orthographic text as a whole was found to be good. They secured 40.71% marks out of 64 full marks in total, which can be considered good average. However their performances in both texts were found to be different. The overall performance of the students in orthographic text was found to be poor. They secured 28% with average score of 8.96 out of 32 full marks. Regarding the performance of the students on para-orthographic texts, their performance was found to be better. They secured 53.43% with the average score 17.10 out of 32 full marks. The difference in performance of the students between orthographic and para-orthographic text was found to be 25.43% with the average score of 8.14 marks.

Overall average performance of students in OT and POT can be presented in pie chart as follows:

Figure No. 9

Overall average performance of students in OT and POT



The pie chart above shows that overall average performance in POT is higher than that in OT.

This study showed that the students had better performance in para-orthographic text than orthographic texts. Therefore, the para-orthographic text found to be more effective than orthographic ones that are used in grade ten English text book.

3.6. Analysis of the Marks in Terms of Central Tendency: Mean, Median and Mode

The marks obtained by the students in both sets of tests i.e. orthographic and para-orthographic texts have been analysed with reference to the statistical tools of mean, median and mode. They are described below.

3.6.1 The Mean

The average score of the total marks obtained by the students is called mean. It is the most effective method for measuring of central tendency. Since the study was carried out to find out the performance of the students in para-orthographic and orthographic texts to know which one

is the most effective texts, the mean of the study in the two sets of tests containing orthographic and para-orthographic texts are given below:

3.6.1.1 The Mean Score of Orthographic Texts

Table No-11

The mean score of orthographic texts

Marks (X) arranged in ascending order	Frequency (F)	Product of marks and Frequency (FX)	Cumulative Frequency(CF)
3	5	15	5
3.5	1	3.5	6
4	6	24	12
4.5	2	9	14
5	8	40	22
5.5	1	5.5	23
6	4	24	27
6.5	1	6.5	28
7	14	98	42
7.5	2	15	44
8	12	96	56
9	10	90	66
9.5	1	9.5	67
10	4	40	71

10.5	1	10.5	72
11	11	121	83
11.5	2	23.0	85
12	6	72	91
13	12	156	103
14	1	14	104
14.5	1	14.5	105
15	3	45	106
16.5	1	16.5	109
17	1	17	110
19	1	19	111
19.5	1	19.5	112
	$\Sigma F=112$	$\Sigma FX=1004$	

Using the formula,

$$\bar{X} = \frac{\Sigma fx}{N}$$

$$= \frac{1004}{112}$$

$$= 8.96$$

Therefore mean (\bar{X}) = 8.96

Thus, the mean score or the average score of the students in orthographic texts is 8.96 out of 32 full marks. It shows that students had below average performance in orthographic texts.

3.6.1.2 The Mean Score of Para-orthographic Texts

The mean score of the students' performance in para-orthographic texts is given below.

Table No- 12

The mean score of para-orthographic texts

Marks (X) arranged in ascending order	Frequency (F)	Product of Marks and Frequency(FX)	Cumulative Frequency (CF)
7.5	1	7.5	1
8	1	8	2
9.5	2	19	4
10.5	1	10.5	5
11	8	88	13
12	7	84	20
12.5	1	12.5	21
13	7	91	28
13.5	1	13.5	29
14	8	112	37
14.5	4	58	41
15	6	90	47
16	4	64	51
16.5	2	33	53
17	3	51	56
17.5	4	70	60
18	12	216	72

18.5	2	37	74
19	8	152	82
20	2	40	84
20.5	1	20.5	85
21	6	126	91
21.5	1	21.5	92
22	5	110	97
22.5	1	22.5	98
23	1	23	99
24	3	72	102
24.5	1	24.5	103
25	3	75	106
25.5	1	25.5	107
26	2	52	109
28	1	28	110
28.5	1	28.5	111
30	1	30	112
	$\sum F = 112$	$\sum FX = 1916$	

Using the formula,

$$\text{Mean } (\bar{X}) = \frac{\sum FX}{N}$$

$$= \frac{1916}{112} = 17.10$$

Therefore, Mean = 17.10

Thus the mean or the average score of the students in para-orthographic texts is found to be 17.10 out of 32 full marks. It shows that students had satisfactory performance in para-orthographic texts.

3.6.2 The Median

The median is the exact mid point of a series, below and above which 50% of the cases lie. It is another method for measuring central tendency. Since the study was carried out to find out the performance of the students in para-orthographic and orthographic texts to know which one is the most effective texts, the median of the study in the two sets of tests containing orthographic and para-orthographic texts are given below:

3.6.2.1 The Median Score in Orthographic Texts

The median score of the study in orthographic text is mentioned below.

Using the formula,

$$\text{Median} = \frac{(N+1)}{2} \text{th item}$$

$$= \frac{112+1}{2} \text{ (Putting the values)}$$

$$= \frac{113}{2} = 56.5$$

The median score is 56.5th item. Hence, from the table the median score of the students in orthographic texts was 9. This statistical calculation shows that the performance of the students in orthographic texts among the students was not satisfactory.

3.6.2.2 The Median Score of the Study in Para-orthographic Texts

The median score of the study in para-orthographic texts has been computed as follows:

$$\begin{aligned}\text{Median} &= \frac{(N+1)}{2} \text{th item} \\ &= \frac{112+1}{2} \text{ (Putting the values)} \\ &= \frac{113}{2} = 56.5\end{aligned}$$

Hence, the median score of the students in para-orthographic texts was 17.5. This statistical calculation shows that the performance of the students in Para-orthographic text was satisfactory.

3.6.3 The Mode

The mode is a frequently obtained score in the distribution of data. Therefore, the mode is the score which the most candidates obtain. Since the study was carried out to find out the performance of the students in orthographic and para-orthographic texts to know which one is the most effective texts, the mode of the study in the two sets of the tests containing orthographic and Para-orthographic texts are given below:

Table No- 13

Mode of the study in OT and POT

S.N	Types of text	Total No. of candidates involved in study	Mode	Total No. of candidates obtained the same score
1.	Orthographic texts	112	7	14
2.	Para-orthographic texts	112	18	12

The table above presents the mode of the study in both orthographic and para-orthographic texts.

The mode of the study in orthographic texts has been found to be 7 as 14 out of 112 candidates have scored the same score. In the same way, the mode of the study in para-orthographic texts has been found to be 18 as 12 candidates out of 112 have scored marks. This statistical conclusion shows the students had satisfactory performance in Para-orthographic texts than the orthographic ones. Relatively most of the students in orthographic texts were poor.

3.7 Analysis of the Marks on the Basis of Measures of Variability

In order to know the variability among the scores i.e. how they are spread out from the central point, measures of variability are very significant. Range and Standard Deviation are the measures of variability. The Range and Standard Deviation of the study are computed in the following paragraphs.

3.7.1 The Range

The range is the difference between the largest value and the smallest value in the distribution of the marks. Since the study was carried out to find out the scoring power of the students in orthographic and Para-orthographic texts in the two sets of the tests are given below:

3.7.1.1 Range of the Scores of the Students in Orthographic Texts

Since the highest and the lowest value of the performance of the student in orthographic text were 19.5 and 3 respectively. The range of the study has been calculated as following:

Using the formula,

$$\begin{aligned}\text{Range} &= L - S \\ &= 19.5 - 3 \\ &= 16.5\end{aligned}$$

Therefore, Range=16.5

Thus, the range of performance of the students in orthographic texts has been found to be 16.5. It shows that performance of students in orthographic texts was varied or heterogeneous. This statistical calculation shows that group of students had the mixed ability.

3.7.1.2 Range of the Scores of the Students in Para-orthographic Text

Since, the highest and the lowest performance of the students in para-orthographic texts were 30 and 7.5 respectively. The range of the study has been calculated below:

Using the formula,

$$\text{Range} = L - S$$

$$= 30 - 7.5 \text{ (putting the value)}$$

$$= 22.5$$

Thus, the range of the study in para-orthographic texts has been found to be 22.5. It shows that the students who were sampled for the study had mixed ability in para-orthographic texts or the students had variety of scoring power in para-orthographic texts.

3.7.2 The Standard Deviation

Standard deviation is the root mean square deviation of scores in the distribution. Since the study was carried out to find out the performance of the students in para-orthographic and orthographic texts to know which one is the most effective texts, the standard deviation of the study in the two sets of tests containing orthographic and para-orthographic texts are given below:

3.7.2.1 The Standard Deviation of the Study in OT

The Standard Deviation of the performance of the students in OT has been computed as follows:

Table No. 14

The Standard deviation of the study in OT

S.N	Marks (X)	Frequency (F)	Individual Deviation ($X - \bar{X}$)	Square of the deviation (X^2)	Product of frequency and square of Deviation ($\sum FX^2$)
1	3	5	-5.96	35.52	177.60
2	3.5	1	-5.46	29.81	29.81
3	4	6	-4.96	24.64	147.60

4	4.5	2	-4.46	19.89	39.78
5	5	8	-3.96	15.68	125.44
6	5.5	1	-3.46	11.97	11.97
7	6	4	-2.96	8.76	35.04
8	6.5	1	-2.46	6.05	6.05
9	7	14	-1.96	3.84	53.76
10	7.5	2	-1.46	2.13	4.26
11	8	12	-0.96	0.92	11.04
12	9	10	0.04	1.60	16.0
13	9.5	1	0.54	0.29	0.29
14	10	4	1.04	1.08	4.32
15	10.5	1	1.54	2.37	2.37
16	11	11	2.04	4.16	45.76
17	11.5	2	2.54	6.45	12.90
18	12	6	3.04	9.24	55.44
19	13	12	4.04	16.32	195.84
20	14	1	5.04	25.40	25.40
21	14.5	1	5.54	30.69	30.69
22	15	3	6.04	36.48	109.44
23	16.5	1	7.54	56.85	56.85
24	17	1	8.04	64.64	64.64
25	19	1	10.04	100.80	100.80
26	19.5	1	10.54	111.09	11.09
		N = 112			$\sum FX^2 = 1474.18$

Mean $\bar{X} = 8.96$ (From Table No.10)

Using the formula,

$$SD (\sigma) = \sqrt{\frac{\sum F X^2}{N}}$$

$$\begin{aligned}
&= \sqrt{\frac{1474.18}{112}} \\
&= \sqrt{13.162} \\
&= 3.62799
\end{aligned}$$

Therefore, the Standard Deviation= 3.62799

Thus, the standard deviation of the performance of the students in orthographic text has been found to be 3.62799. This statistical calculation shows that the students were of varied ability in interpreting orthographic texts.

3.7.2.2 The Standard Deviation of the Scores of the Students in POT

The standard deviation of the performance of the students in para-orthographic text has been computed in the following ways:

Table No-15

The standard deviation of the study in POT

S.N	Marks (X)	Frequency (F)	Individual Deviation ($X - \bar{X}$)	Square of the deviation (X^2)	Product of Frequency and square of Deviation ($\sum FX^2$)
1	7.5	1	-9.60	92.16	92.16
2	8	1	-9.10	82.81	82.81
3	9.5	2	-7.60	57.76	115.52
4	10.5	1	-6.60	43.56	43.56
5	11	8	-6.1	37.21	297.68
6	12	7	-5.1	26.01	158.07

7	12.5	1	-4.6	21.16	21.16
8	13	7	-4.1	16.81	117.67
9	13.5	1	-3.6	12.96	12.96
10	14	8	-3.1	9.61	76.88
11	14.5	4	-2.6	6.76	27.04
12	15	6	-2.1	4.41	26.46
13	16	4	-1.1	1.21	4.84
14	16.5	2	-0.6	0.36	0.72
15	17	3	-0.1	0.01	0.03
16	17.5	4	0.4	0.16	0.64
17	18	12	0.9	0.81	3.72
18	18.5	2	1.4	1.96	3.92
19	19	8	1.9	3.61	28.88
20	20	2	2.9	8.41	16.82
21	20.5	1	3.4	11.56	11.56
22	21	6	3.9	15.21	91.26
23	21.5	1	4.4	19.36	19.36
24	22	5	4.9	24.01	120.05
25	22.5	1	5.4	29.16	29.16
26	23	1	5.9	34.81	34.81
27	24	3	6.9	47.61	142.83
28	24.5	1	7.4	54.76	54.76
29	25	3	7.9	62.41	187.23
30	25.5	1	8.4	70.56	70.56
31	26	2	8.9	79.21	158.42
32	28	1	10.9	118.81	118.81
33	28.5	1	11.4	129.96	129.96
34	30	1	12.9	166.41	166.41
		N=112			$\sum FX^2=2496.72$

Mean $\bar{X} = 17.10$ (From Table No.11)

Using formula,

$$\begin{aligned}SD(\sigma) &= \sqrt{\frac{\sum F X^2}{N}} \\&= \sqrt{\frac{2496.72}{112}} \\&= \sqrt{22.29214} \\&= 4.72145\end{aligned}$$

Therefore, the standard deviation = 4.72145

Thus, the standard deviation of the performance of the students in interpreting Para-orthographic text has been found to be 4.72145. This statistical result shows that the samples students were found to have diverse ability. Heterogeneous ability of the students were found in para-orthographic texts.

Comparing the standard deviations of orthographic texts and para-orthographic texts the variability was found to be more in para-orthographic texts. This shows that heterogeneity of the students was more in para-orthographic texts.

CHAPTER- FOUR

FINDINGS AND RECOMMENDATIONS

This chapter deals with the major findings which are derived from the analysis and the interpretation of data. This finding reflects the spirit of objectives of the study. On the basis of these finding some recommendations and pedagogical implications has been made. So this chapter basically deals with finding, recommendations and pedagogical implications of the study.

4.1 Findings

The findings-derived from analysis and interpretation of the data are stated as follows:

1. With respect to the objective No.1 that is "to find out the effectiveness of para-orthographic text used in grade ten English text book in the field of learning", the study found that students understand the text better if the textbook is accompanied by para-orthographic texts. So the para-orthographic texts that are used in grade ten English text books are very effective and useful in the field of learning and teaching.
2. With regards to the objective No.2 that is "to compare the effectiveness of para-orthographic text of grade ten English text-book with orthographic text of that text book".

The findings based on this objectives are given in different text points:

- a) The average performance of grade ten students studying in seven different school of Dhankuta district in both orthographic and para-orthographic text as a whole was found to be good. They secured 40.71% marks out of 64 full marks. However their

performance in both text was found to be weak (i.e. 28%). There performance in para-orthographic text on the other hand, was found to be better (i.e. 53.43%). The difference in the performance of the students between para-orthographic and orthographic texts was found to be 25.43%. Thus, this evidence of the study shows that the para-orthographic texts are more effective than orthographic texts.

- b) On the basis of item-wise analysis of the performance of the students, the students' highest performance was found on para-orthographic text in both subjective and objective test items i.e. 44.69% and 60.26% respectively. On the other hand, 23.88% on subjective and 47.37% on objective test items in orthographic texts. It shows that the para-orthographic texts are more useful and effective in grade ten English textbook.
- c) Regarding the text-wise performance of the students, the students showed the highest performance on Table (i.e. Para-orthographic text) securing 58.25% and the lowest performance on 'poem' (i.e. orthographic text) securing 13.39%. Comparatively, the percentage score of every text of para-orthographic texts was found to be higher than the percentage score of every text of orthographic texts.

This evidence of the study concludes that the orthographic texts of grade ten English textbook could not be as much effective as para-orthographic texts.

- d) Regarding the gender-wise performance of students, the boys showed the highest performance than girls. But both boys and girls secured highest marks in para-orthographic texts than orthographic texts i.e. 55.56% and 51.71% respectively. In orthographic texts they have secured 29.03% and 26.93% respectively. The boys studying in Himalaya Secondary School have secured 64.43% in para-orthographic

- texts whereas the girls studying in Dharmodaya Higher Secondary School have secured 61.50% in para-orthographic texts. Here gender wise performance found to be higher in para-orthographic than orthographic.
- e) Regarding the school-wise performance of the students, the students of Himalaya Secondary School have shown the highest performance (i.e. 59.15%) in Para-orthographic text and 36.59% in orthographic texts. Similarly, the performance of Jalapa Devi Higher Secondary School has proved to be least one i.e. 46.37% and 22.15% respectively. It also showed that all the students studying in seven different school of Dhankuta district has got higher marks on para-orthographic texts. It concludes that the Para-orthographic texts are more effective than orthographic ones.
- f) Regarding to the orthographic and para-orthographic texts the performance of the students of seven different schools was found varied. This shows that the grade ten students studying in Dhankuta district don't have uniform capacity in both orthographic and para-orthographic text that are used in grade ten English text book.

4.2 Recommendations and Pedagogical Implications

On the basis of the above findings of the study following recommendations and pedagogical implication have been made to improve the performance of the student in grade ten English course.

- It would be better to introduce a sufficient numbers of para-orthographic text in grade ten English.
- It would be better to use different types of para-orthographies to make teaching effective.

- It will be better to include para-orthographic texts in all units and there should be integrative teaching techniques using orthographic as well as para-orthographic texts.
- The para-orthographic text are strongly recommended to be focused in text-books, language course, books, curriculum etc. for better readability of the text and for testing performance of the students.
- It would be better to organise workshops, seminar, short-term meetings and gatherings of language teachers for the discussion of para-orthographic texts.
- The teacher should be well trained and skilled in presenting para-orthographic texts.

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