

# CHAPTER ONE

## INTRODUCTION

### 1.1 General Background

Language is the best and most used medium of instruction, without which life is almost impossible; we face many troubles on the way of our life.

Sapir defines language as (1995, p. 8) ". . . a primarily human and non-instinctive method of communicating ideas, emotions and desires by means of a system of voluntarily produced symbols."

There exist thoughts, emotions, and feelings in human beings which they need to express in their daily life through the medium called language. Without the medium of expression there always remains a gap between the communicator and receiver i.e. information gap. Among many languages English is the most widely used language. It is considered as a link language, trade language and a contact language. It is spoken among the people of two different countries or communities as a lingua-franca. It is considered as the link language because it is used to communicate with the people of different linguistic backgrounds. Hence, it is the necessary to have the knowledge of the English language. Most of the books related to different fields of life such as technology, science, education, commerce, arts etc are written in English. It can be concluded that English is the widely used means of communication.

It is universally accepted that the English language is the most dominant language of the world. It is taught and learnt almost all over the world as second/foreign language so is the case in our country. In the context of Nepal, the importance of teaching the English language has been realized

from the beginning and it has been taught as a compulsory subject from primary to university level. Apart from this many supporting materials have been prepared in English not only for the purpose of English language teaching but also for other business purpose.

Language is the basic means to convey the message, emotions and since it comprises different levels as sounds, morpheme, words, sentences, it must be known by the users about its correct use, which is the domain of grammar.

Hence to know and use the language, grammar is a must. In the absence of grammatical knowledge, the users can not make the correct use of language. As a result, it may create confusion among the hearers and sometimes may lead to break down the communication.

Therefore, correct and appropriate use of language can be done only when there is sufficient knowledge about how the words are arranged so that meaning could be presented appropriately.

Teaching of the English language is not satisfactory in our conditions and many of the students fail to pass English in SLC examination and other levels. However, there are many factors responsible for this. One of them is selecting the method of teaching. If the method of teaching is chosen appropriately it will definitely have positive impact on the result.

There are many methods of teaching a language. The two fundamental methods of language teaching are inductive and deductive. In deductive method, students are taught rules and given specific information about a language. Then, they rote out particular rule and use it while using the language. Grammar Translation method and cognitive code approach make use of this principle. On contrary to this, in inductive method of

teaching, students are not taught the grammatical rules directly but are left to induce the rule from their experience of using the language. The students are shown the context in which the particular structure is used and later they generalize it to their language. Language teaching methods which emphasize the use of language rather than presentation of information about language e.g. direct method, communicative approach, counseling learning; Audio-lingual method make use of principle of inductive learning.

### **1.1.1 Importance of English in Nepal**

English is the language spoken in most part of the world as trade language, contact and foreign language. It can be considered as the global language or an international language. In today's world to get knowledge of advanced technologies and all kinds of branches of science there is an urgent need of such a common language which can be understood by most of us all over the country, the language in which all data and information are available. It is English only which can be rightly selected as the language to be studied by all of us from the very primary level. This language is a store house of social and political knowledge. Hence, the study of the English language is of great importance for a developing country like Nepal. Without the knowledge of this language our technicians, mechanics and engineers cannot progress.

Nepal is a peace-loving country and wants to spread the same message to all countries of the world. The other countries also take interest to understand and know this policy of Nepal. We have to explain and convince the friendly nations our point of view. All this is possible only through a common medium of exchange of ideas and views. English is such a language having an international status and can provide the best

medium to interact with outside world. In all international seminars or summits speeches or course materials are delivered in English. If Nepal is to utilize these opportunities and expand its universal view point, then English is the only language which should be learnt by all of us.

Today, the USA and other countries have made tremendous progress in the field of science and technology. In space technology, we are no match to them. The world is making progress in these fields at a terrific speed. To increase and encourage more research work in science and technology, we have to study all these subjects in detail. And for this the importance of English cannot be denied. Our own regional languages do not have the depth and capacity to understand and correlate all these technological development and as such, cannot serve the purpose to keep pace with the fast growing world outside. Most of the best books on all such subjects are available in the English language only. We cannot translate it all in our own regional languages; therefore, knowledge of English is inevitable.

Apart from that today's world is the world of computers and technologies, internet and websites and to get advantage through them it is evident to have the knowledge of English because most of the materials in websites are found in it. One can create ones own site and can spread his/her findings all over the world through this medium and hence the knowledge of this language is very important.

Every nation must develop and encourage its own language. However, in Nepal we have diversity in language and we must learn and teach English from beginning itself. Some subjects like, science mathematics and technology books are taught in English only. If we keep ourselves away from English we will keep ourselves away from development. It is the

language which can uplift us not only within our own country but throughout the world. We will be no less than anybody in the world with the knowledge of English.

### **1.1.2 Aspects of Language**

Teaching language comprises of different aspects of language. Here, aspects refer the components of language, which are important to make the language complete and meaningful. To make the correct and appropriate use of language one should have the sound knowledge of all these aspects in isolation and in collaboration. The language users must have sufficient knowledge about them otherwise they will miss the correct use of it. Here aspects of language refer to pronunciation and spelling, vocabulary, communicative function and grammar.

#### **1.1.2.1 Pronunciation and Spelling**

Pronunciation refers to the way people produce the utterances. Until and unless a word is pronounced in an accurate way there will not be any fruitful conversation.

Richards et al. (1999, p. 396) describes pronunciation as, "the way a certain sound or sounds are produced ..... pronunciation stresses more the way sounds are perceived by the hearer."

Similarly, OALD (2005, p. 1209) defines, "pronunciation as the way in which a language or a particular word or sound is pronounced."

Pronunciation is not only related to segmental sounds but suprasegmental features like stress, intonation, pitch and length. The teacher should have sound knowledge of pronunciation, so is the case of spelling, there is no one to one correspondence between spelling and pronunciation.

Spelling is the graphic representation of sounds in which a particular word is written. As pronunciation is key factor in speech, spelling is in written language.

There is no one-to-one correspondence between the sound and symbol in English. There are many irregularities found in pronunciation with its spelling as 'ch' in character is pronounced as /k/, but in chin, it is pronounced as /t /. Because of this relationship between sound and symbol students feel difficulty hence teaching spelling is one of the important aspects of language.

### **1.1.2.2 Vocabulary**

Grammar is the skeleton of the language and vocabulary is the flesh . Without vocabulary no language is possible.

Richards et al. (1999, p. 400) define it as "a set of lexemes, including single words, compound words and idioms."

To speak out the language vocabulary is needed. The more the vocabulary the more efficient the language becomes. But every language has got a huge number of vocabularies so virtually it is not possible for all the learners to remember all the words of a particular language. One other problem that the learners face is one word has more than one meaning and it creates problem especially to the foreign language learners. Compound words and idioms of the language also create problem to the learners. So it is one of the aspects which is important to be taught to the students to learn the language.

### **1.1.2.3 Communicative Functions**

Language is a means of communication hence it has to communicate some ideas, feelings, emotions and desires. It has to perform some activities and this performance is known as communicative function of language.

Language functions can be broadly divided as grammatical and communicative function.

Richards et al.( 1999, p. 162) defines grammatical function as, "the relationship that a constituent in sentence has with the other constituents." And communicative function as, "the extent to which a language is used in a community" (ibid).

The main function of the language is the communicative function because we have to share the feelings and emotions using the language.

### **1.1.2.4 Grammar**

Grammar is defined as the connections of words and word groups in an acceptable way. It can be defined as, how words are combined or changed to form acceptable units of meaning within a language. It is the skeleton of the language. Grammar is the set of formal patterns in which words of a language are arranged to convey meanings.

Traditionally, grammar is divided into morphology and syntax.

Morphology refers to the internal structure of the form of words and syntax is the study of sentence structure.

Both morphology and syntax are important from the view point of correct use of language. Hence the learner must have sufficient knowledge of morphology and syntax both to be a good speaker as well as writer.

Richards et al. (1999, p. 161) define grammar as, “a description of the structure of a language and the way in which linguistic units such as words phrases are combined to produce sentences in language.”

Finally, Cross (2003, p.26) defines grammar as "The body of rules which underlie a language is called a grammar".

### **1.1.3 Importance of Grammar**

Grammar is the set of formal patterns, in which words of a language are arranged to convey meaning. It is important both in written as well as spoken form of language. If the speaker does not follow the grammatical patterns the meaning might be distorted and communication may end so is the case of written form of language. If anyone is writing for any job application, scholarship application and literature genre, the knowledge of grammar is needed or else the meaning is lost and the reader may not get intended meaning.

Ur (1996 p. 16) talks about controversial nature of the grammar i.e. whether the grammar of language needs to be taught or they were realized intuitively. In his own words:

The place of grammar in the teaching of foreign language is controversial. Most people agree that knowledge of a language means, among other things, knowing its grammar; but this knowledge may be intuitive (as it is our native language), and it is not necessarily true that grammatical structures need to be taught as such or that formal rules need to be learned or is it?



However, there is controversy between teaching grammar explicitly or not. The rules of grammar are inevitable for developing appropriacy and accuracy of the language.

The importance of grammar can be summarized as.

- a. It is inevitable for systematic analysis of language.
- b. It is used to generate infinite number of sentence with the finite number of grammar rules.
- c. To generate all and only grammatically appropriate sentences.
- d. Grammar rules are essential for the mastery of a language.
- e. To develop communicative competence.

#### **1.1.4 Methods of Teaching Grammar**

Grammar is the set of rules which help to use the correct form of language. It includes the rules which govern the structure of words to form clauses and sentences in an acceptable manner. It makes one to use the connection of words and word groups in an acceptable structure.

So far as the teaching of grammatical rule is concerned there exists two methods viz. Inductive method and Deductive method.

In inductive method the students are given the corpus and are asked to discover the regularities. The teacher presents sufficient examples so that the learners may easily induce the correct rule. Learners are more active and they use their logical reasoning to induce the rule through the various examples.

In deductive method teachers present the rule first and then he/she explains the rule by giving illustration. S/he uses grammatical metalanguage to give the rule. It is also considered as rule driven method.

Though there exist the aforementioned methods, which method is more appropriate for teaching what sorts of grammatical categories is still vague. Different researches proved their effectiveness differently. One method may be effective to teach a particular grammatical category but not effective to teach others. However, our main concern is towards the two methods of teaching Grammar i.e. inductive and deductive.

#### **1.1.4.1 Inductive Method**

In inductive method learners are not taught the grammatical rules directly but are left to induce the correct grammatical rule through the presentation of various examples. The teacher provides various examples regarding a particular rule and students have to generalize the rule out of given examples. It is student centered method and it is believed that the rules will become evident if the learners are given enough appropriate examples.

Scholars have defined inductive method differently in their own words.

Richards et al. (1999, p. 99) define it as "... in inductive learning, learners are not taught grammatical or other types of rules directly but are left to discover or induce rules from their experience of using the language."

Similarly, Cross (2003, p. 28) describes it as, "Teachers following inductive approach induce the learners to realize grammar rules without any form of prior explanation.....the rules will become evident if learners are given enough appropriate examples."

In the same way, Thornburry (1999) "...an inductive approach starts with examples from which a rule is inferred." (as cited in Sharma and Phyak 2007, p. 169).

In inductive method the teacher uses the particular grammatical structure in the context i.e. grammar is taught using the situation giving various examples to the students and the students infer the rules based on the teacher's examples. Since rule is induced in this method by analyzing the examples this method is also considered as rule discovering method. In this method without having known the rules the learner studies examples and from these examples they derive an understanding on the rule.

It is learner centered method to teach the grammatical unit where the students have to use their logical reasoning and hence students having more logical power can analyze it very soon and can easily decipher the rule, however, the students who love to be spoon fed are less benefited by this method, this method demands more participation from students. The teacher works as the helper, facilitator and organizer.

Brown (1994) "In the case of inductive reasoning, one stores a number of specific instances and induces a general law of rule of conclusion that governs or subsumes the specific instances" (as mentioned by Sharma and Phyak 2006, p. 170).

Inductive method follows the following stages:

### **Stages in Inductive Method**

- i. Presentation of examples
- ii. Observation and comprehension of the examples
- iii. Analysis of examples
- iv. Rule formation
- v. Generalization of rules
- vi. Application or verification

It has following advantage and disadvantages:

**a. Advantages of Inductive Method**

- i. Students-centered method
- ii. Increases logical reasoning power
- iii. Develops student's self, reliance and autonomy
- iv. Based on the science of observation
- v. More communicative method
- vi. It includes problem-solving activities.

**b. Disadvantages of Inductive Method**

- i. More time consuming
- ii. The time and energy spent in working out rules may mislead students into believing that rules are the objective of language learning.
- iii. Needs heavy lesson planning from teacher's side
- iv. Students may generate/induce the wrong rules.

**1.1.4.2 Deductive Method**

Deductive method is the method to teach the grammar to the students where they are directly given the rule. They are given specific information about language and then the teacher explains the rule to the students.

According to Cross (2003, p. 27), "The approach is very simple. First the teacher writes examples on the board or draws attention to example in the textbook. The underlying rule is explained nearly always in the mother tongue."

This method makes use of grammar metalanguage. Students have to remember the rule and according to the rule they have to follow and go accordingly.

Different scholars defined deductive method as follows:

Richards et al. (1999, p. 98) define deductive method as

... an approach to language teaching in which learners are taught rules and given specific information about a language. They then apply these rules when they use the language. Language teaching methods which emphasize the study of the grammatical rules of a language .Grammar translation method makes use of the principles of deductive reasoning.

Similarly, Thornburry (1999)"... a deductive approach starts with the presentation of a rule and is followed by examples in which the rule is applied" (as cited by Sharma and Phyak 2006, p.166).

In deductive method the teacher presents the rule and explains those rules with some examples. Students have to memorize the rule and with the help of examples they practice the rules, since students have to follow according to the rule this method is also considered as the rule driven method.

It is a teacher centered method and students remain passive. Students have to act according as the teacher. The teacher is active and spoon fed the students. Students have to memorize the rule and practice.

Brown (1994) views on deductive method as, "Deductive reasoning is a movement from generalization to specific instances: specific subsumed facts are inferred or deduced from general principle" (as mentioned by Sharma and Phyak, 2006, p. 167).

Inductive method follows the following stages:

### **Stages in Deductive Method**

- i. Presentation of rules
- ii. Description and explanation of rules
- iii. Providing some examples
- iv. Explaining underlying rules
- v. Ask students to practice and rote the rule
- vi. Contrasting areas of difference between mother tongue and taught languages.

It has the following advantages and disadvantages:

#### **a. Advantages of Deductive Method**

- i. It is time-saving method.
- ii. It is useful for students having analytical learning style
- iii. It follows cognitive approach
- iv. Special attention is paid to areas of conflict between the grammar of the mother tongue and that of the target language
- v. It allows the teacher to deal with language points as they come up rather than anticipate them and prepare for them in advance.

#### **b. Disadvantages of Deductive Method**

- i. The students may lack sufficient metalanguage.

- ii. It is dry and technical method students feel bored and being lectured and stops paying attention.
- iii. Explanation is seldom as memorable as other forms of presentation such as demonstration.
- iv. Students feel it difficult to memorize the rule.
- v. It encourages the belief that language learning is simply a case of knowing the rules.

### 1.1.4.3 Differences between Deductive and Inductive Method

The differences between inductive and deductive method it summarized in the following table.

S.N.	Deductive Method	Inductive Method
1.	Based on prescriptive approach	Based on descriptive approach
2.	Based on theoretical science	Based on science of observation
3.	Much intellectual practice required	Much logical reason dry required
4.	Learners are more active in applying rules	Learners are active for making rules
5.	Application focused	Understanding focused
6.	In this method teaching moves form abstract rules to concrete examples	In this method teaching moves from concrete examples to abstract rules
7.	Teaching proceeds from general to specific	Teaching proceeds from specific to general
8.	It is teacher centered method	It is students centered method.

### 1.1.5 Articles in English

English language has *article* system. Most languages of western European origin and one or two others have *article* system like English.

However, there are some differences in the way *articles* are used in English and other languages. The Scandinavian and Semiotic languages do have *article* system. Since *articles* are not universal features of language it creates problem to the learner.

*Articles* come under minor word class, they are used before noun phrases. They are also known as demonstrative adjectives or core (central) determiners. They are called demonstrative adjectives because they demonstrate or define nouns as other demonstratives like this, that, these and those. They are also called core (central) determiners as they may be proceeded by one predetermine and may followed by one or two post determiners.

e.g. The beautiful lady (core determiner+ post determiner)

Swan (2006, p. 53) defines *article* as the "small words that are often used at the beginning of noun phrases, "*Articles* can show whether we are talking about things that are known both to the speaker/ writer and to the listener/reader or that are not known to them both."

In the same way, Richards et al. (1995, p. 21) describe *article* as "a word which is used with a noun and which shows whether a noun refers to something definite or something indefinite."

Similarly, Crystal (2003, p.33) opines that it is "a term used in grammatical classifications of words to a sub-class of determiners which displays a primary role in differentiating the uses of nouns. . ."

As the *articles* show the definiteness and indefiniteness of the nouns they are of two types in English viz. definite *article* (the) and indefinite *article* (a/an)



### 1.1.5.1 Definite Article: The

Definite *article* shows the definiteness of the noun that is talked about. Leech, and Svartvik, (1979. p. 52) mention that as “when we use the definite *article* ‘the’ we presume that both we and hearer know what is being talked about.”

Similarly, Swan, (2006, p. 53), “we use ‘the’ before a noun (singular, plural or uncountable) when our listener/reader knows (or can easily see) which particular person (s), thing(s), etc we are talking about”

In the same way, According to Murphy (1994, p. 142) "we use 'the' when it is clear in the situation which thing or person we mean."

'The' is pronounced differently in different situations. It has mainly two types of pronunciations i.e. it is pronounced as / ð / when used before a noun which starts with consonant sound and is pronounced as / ð / when it is used before a noun which starts with vowel sound. Learner of other language find it difficult to pronounce and commit errors. It is more problematic because there are many rules and exceptions.

There are many rules for using *articles* in English. I have tried to summaries them below which are considered mainly during this study

According to Murphy (1994) and Gautam (2063), the definite *article* 'the' is used in the following conditions.

1. When identity has been established by an earlier mention (often with an indefinite *article*).

For example: Once there was a king. The king was generous.

2. When the object or group of objects is the only that exists or has existed.  
For example: The moon, the sun,
3. Before the names of newspapers.  
For example: The Himalayan Times, The Deccan Herald.
4. Before the superlative degrees of adjectives,  
For example: The most beautiful lady ever. The highest peak of the world.
5. Before the name of inventions.  
For example : Who invented the x-ray? Who invented the photocopy machine?
6. Before the internal body parts  
For example: The intestine, the lungs.
7. Before the names of musical instruments  
For example: The guitar, the piano
8. Before the religious books/groups  
For example: The Ramayan, the Jews.
9. Before titles/political parties/rivers/oceans/mountains etc  
For example: The principal, the Maoists, the Mahakali, the Atlantic ocean, the Pacific Ocean
10. Before the name of directions:  
For example: The east, the west.
11. Before the daybreaks  
For example : In the morning, in the dawn.
12. Before the ordinal number  
For example: The first, the last
13. Before parts of the house  
For example: The kitchen, the bedrooms.

14. Before the names of historical building  
For example : The Taj Mahal, the Narayanhiti.
15. Before the names of ship.  
For example: the Titanic, the Mary-Celeste.
16. Before the united geographical names/countries, organization, etc.  
For example: The UK, The USA, The United Nation
17. Before the adjectives as the subject when they represents a class of persons  
For example: The beautiful are selected for the beauty contest. The intelligent were taught separately.
18. Before the name of deserts/canals  
For example: The Sahara, the Suez Canal.
19. Before the names of historic events.  
For example: The Martyrs day, the democratic day.
20. 'The' is used in the measuring expressions beginning with 'by'  
For example. By the kilo, by the dozen, by the hour.

We do not use 'the' in the following cases.

1. 'The' is not used before words like church, temple, court, hospital, prison, school, college, university etc when these place are visited or used for their primary purposes: we go.
2. Before the proper nouns we don't use any *article*.
3. Before plural nouns, we don't use any *article* if they are not definite For example: He likes.....chocolates.  
.....horses are .....animals.
4. To denote things in general for example.  
Pens are cheap, life is hard
5. After possessives and demonstratives  
For example: This is my uncle. Is that his pen?

6. Before 'man' and 'woman' in general sense.  
For example: Man and woman are two wheels of same cart.
7. Before days, months and seasons  
For example: The result will publish on April. Come to meet on Sunday.
8. Before illnesses.  
For example: Have you got headache?
9. Before names of meals. for example  
For example: Come and see you in dinner. Have a nice breakfast.

#### **1.1.5.2 Indefinite Article: A/An**

Swan (2006, p. 53) writes about in definite articles as "We normally put a/an with a singular noun that is used for classifying saying what job somebody has what class, group or type somebody or something belongs to, what we use something for, etc."

Similarly, Murphy, (1991, p. 140) "...we use a/an...to say what kind of thing or person something/somebody is."

Now we can say that a/an is indefinite *article* which is used before a singular countable noun to refer it indefinitely. The indefinite *article* 'a' is used before a singular countable noun beginning with consonant sound or a vowel with a consonant sound. This *article* does not add any more meaning to the noun but works as the determiners 'one'.

According to Murphy (1991) and Gautam (2063), a/an is used in the following cases:

1. A/an is used before a singular countable noun when it is mentioned the first time and represents no particular person or things.  
e.g. I have a pen.

Once there was a king.

2. It is used before a countable noun which is used as an example of a class of things".

e.g. A child needs power care (all children/any children)

I like a pen (all pens/any pen)

3. It is used before a noun complement. Which includes names of profession.

e.g. She is an actress.

It was an earthquake.

He is a journalist.

4. A/an is used to show frequency with time, distance or weight.

e.g. Rs. 50 a kilo. 20 km an hour.

5. A/an is used in exclamations before singular countable nouns.

e.g. What a beautiful girl.

Such an amazing story !

6. A/an can be placed before Mr/Mrs/Miss surname to imply that s/he is stranger to the speaker

e.g. a Mr. Johnson (a man called Johnson)

7. A/an is used in certain expression of quantity and amount.

e.g. A lot of an hour

A pair of a great many of

A/an is omitted in the following cases:

1. Before plural nouns.

Eggs, pens

2. Before uncountable nouns.

A glass of water (but not a water)

A cup of milk (but not a milk)

3. Before meals, proper nouns etc.  
We have breakfast at night.  
They live in India.
4. Before adjectives alone and passives. eg.  
It's nice  
There are his pens.            Language
5. With the names of languages.  
e.g. Nepali, English
6. Before the names of disease we do not use the *article*  
e.g. AIDS, measles, etc.

## **1.2 Review of Related Literature**

A very few theoretical works have been done to make distinction between deductive and inductive methods. Some practical studies have been carried out in the department of English Education to find out the effectiveness of these two methods to teach certain areas of grammar.

Karki (1999) carried out a study to find out the relative effectiveness of inductive methods in teaching subject-verb agreement in English and concluded that inductive method was found to perform better than deductive method.

Similarly, Sitaula (1999) has carried out a study to find out the relative effectiveness of two methods in teaching passivization in English and concluded that inductive method should be applied by the teacher to teach passivization because his study found it as more effective.

In the Same way, Sharma (2000) has carried out a study to measure the relative effectiveness between inductive and deductive method in

teaching reported speech and concluded that deductive method is better in most of the cases.

Similarly, Ghimire (2000) studied comparatively between inductive and deductive method in teaching tag question and found that inductive method is more effective than deductive method.

Neupane (2006) studied on proficiency of 9th graders in using *article* and found that the students of private school were more proficient than that of the students of public school.

Gotame (2007) conducted a study on teaching conditional in English inductively and deductively and concluded that deductive method is more effective than inductive one to teach conditionals.

This study is different from the above studies in the sense that no effectiveness of two methods is identified by any previous researchers in the field of grammatical category *articles*. However, Neupane (2006) conducted his research on proficiency of 9<sup>th</sup> grades in using *articles* but this study focuses on effectiveness of inductive and deductive method to teach *articles*.

### **1.3 Objectives of the Study**

The objectives of the study were as follows:

- i. To find out which method between inductive and deductive method is more effective in teaching *articles* in English.
- ii. To suggest some pedagogical implications.

#### **1.4 Significance of the Study**

This study will be significant for finding out the effectiveness of inductive and deductive methods. Apart from that, this study will be significant for providing feedback to the related teachers, curriculum designers, textbook writers, test designers and other personnel of the related field and it provides guidelines for future researchers in the stated area.



## **CHAPTER TWO**

### **METHODOLOGY**

In this study I adopted the following methodology:

#### **2.1 Sources of Data**

Both primary and secondary sources of data were consulted.

##### **2.1.1 Primary Sources of Data**

The thirty six students of class eight studying at Shree Sunrise Public Higher Secondary School, Mahendranagar were the primary source of data.

##### **2.1.2 Secondary Sources of Data**

Different related researches, related books, journals reports and articles as well were consulted as the secondary sources of this study.

#### **2.2 Population of the Study**

The population of this study was the students studying in grade eight at Shree Sunrise Public Higher Secondary School, Mahendranagar, Kanchanpur.

#### **2.3 Sampling Procedure**

The population was selected through judgmental non-random sampling procedure. Then the total population was divided into two groups on the basis of the pre-test result.

## **2.4 Tools for Data Collection**

The main tools for data collection were the test-items. They were developed prior to classroom teaching which were developed from the specific area of grammar i.e. *article*. The five different types of test items constructed included the following:

### **i. Multiple Choice Test Items**

In this type of questions, the students were given the choices where they had to tick the best answer. This test item consisted of ten questions which carried twenty marks (See Appendix I).

### **ii. Fill in the Blank Test Items**

In this question, the participants were required to fill in the blanks with appropriate *articles*. This test item consisted of ten questions which carried twenty marks (See Appendix I).

### **iii. Cross out Test Items**

This type of item also consisted of 10 questions comprising 20 marks. In this item, the students had to cross out the wrong *article* and make correction, if necessary. They had to write at one side of the paper the correct one after crossing out the wrong *article* (See Appendix I)

### **iv. Insert Type of Test Items**

In this item, students were required to insert the *article* wherever necessary. They had to point the place and write the *article* straight at the side of the paper itself. This item also consisted of ten questions which carried out twenty marks (See Appendix I).

## v. Completion the Paragraph

In this item, the students were required to fill in the gap as shown in the paragraph using the correct *article*. The paragraph consisted of 10 blanks where each blank was allotted two marks, thus carrying twenty marks in total (See Appendix I).

### 2.5 Process of Data Collection

To collect data, the researcher prepared the test items which were administered to determine the entry behavior of the students before actual classroom teaching. The students were then divided into two groups on the basis of odd-even ranking of the pre-test scores as follows:

<b>Pre test rank</b>	<b>Group A</b>	<b>Group B</b>
1-18	odd	even
19-36	even	odd

After dividing the class into two groups, Group A was taught using inductive method and Group B was taught using deductive method. The students were taught through English medium for twenty classes, each class lasted forty minutes. All other variables like period length, exposure, motivation, noise, etc except teaching method were controlled. After real teaching for twenty classes, the post-test with the same set of test items was given to the students. Then, the result obtained from the post test was compared with the result obtained from the pre-test.

### 2.6 Limitations of the study

The research had the following limitations:

- a. The research was limited to find out the effectiveness of deductive and inductive method.
- b. The research was limited to grammatical category *article*.

- c. The students were all from grade eight.
- d. The chosen school was Shree Sunrise Public Higher Secondary School.
- e. The number of sample was only thirty six.
- f. The study based on deductive and inductive method.

## **CHAPTER THREE**

### **ANALYSIS AND INTERPRETATION**

After collecting data from the informants, the responses were tabulated systematically which were analyzed using the statistical tools of average and percentage. The analysis reflected the interpretation of the performance and effectiveness of methods. Percentage and average scores of the inductive and deductive methods were analyzed through different angles.

The analysis has been carried out under the following headings:

1. Comparison of total performance
2. Gender-wise comparison
3. Item wise comparison

The analysis has been done in this way: the individual score of the pre-test and post-tests one of each heading was taken and tabulated group wise. Then the difference of individual score is obtained by subtracting pre-test result from the post-test result. The difference is then converted into percentage. Later the increased percentage of each group was determined by converting the average increased score in percentage. Both the groups were compared on the basis of the increased percentage. And hence the relative effectiveness of two methods was determined.

### 3.1 Comparison of Total Performance

The test showed the following result:

**Table No.1**  
**Comparison in General**

<b>Group</b>	<b>Av. score in P<sub>1</sub></b>	<b>Av. Score in P<sub>2</sub></b>	<b>D</b>	<b>D%</b>
A	41.44	52.22	10.78	26.01
B	41.47	61.88	20.41	49.21

The table shows that the average score obtained in pre-test by Group A was 41.44 and 52.22 in pre-test and post test respectively. The increased score is 10.78 or it was 26.01%.

Likewise, the average score obtained in pre-test by Group B was 41.47 and in post-test it was 61.88. The marks were increased by 20.41 and the increased percentage was 49.21%.

The difference between the average scores and percentages clearly showed that Group B students' scores were greater than the Group A students. Hence, the performance showed by the students taught through deductive method was found to have secured more marks than the students who were taught through inductive method in teaching English *articles*.

### 3.2 Item-wise Analysis

The researcher has used five different types of questions viz. *multiple choice test items, fill in the blanks test items, cross out test items, insertion type of test items and completing paragraph*. Each question has been analyzed below:

### 3.2.1 Multiple Choice Test Items

The following results have been derived from *multiple choice test items*:

**Table No. 2**

#### **Item wise: Multiple Choice Item**

<b>Group</b>	<b>Av. score in P<sub>1</sub></b>	<b>Av. score in P<sub>2</sub></b>	<b>D</b>	<b>D%</b>
A	10.88	13.88	3	27.55
B	11	14.77	3.77	34.34

The above table clearly shows that the average score obtained by Group A is 10.88 in the pre-test and 13.88 in the post-test. The performance is increased by 3 and the increased percentage is 30, whereas the average score obtained by Group B increased by 3.77 in the post-test with difference 34.34%.

The analysis showed that the performance displayed by Group B is greater than Group A. This proves that deductive method seems more effective than inductive method.

### 3.2.2 Fill in the Blanks Test Items

The following have been derived from *fill in the blanks test items*:

**Table No. 3**

#### **Item wise: Fill in the Blanks Items**

<b>Group</b>	<b>Av. score in P<sub>1</sub></b>	<b>Av. score in P<sub>2</sub></b>	<b>D</b>	<b>D%</b>
A	10.77	12.55	1.77	16.49
B	9.44	14.22	4.77	50.58

The above table shows that the average score obtained by Group A is 10.77 in pre-test and 12.55 in the post-test which increased by 1.77. The

increased percentage is 16.49. whereas the average score obtained by Group B is 9.44 marks in pre-test and 14.22 in post-test with the difference of 4.77 . The difference percentage is of 50.58.

The analysis reflected that in the item the performance displayed by Group B is markedly greater than Group A. This also proved that deductive method was more effective than inductive method.

### 3.2.3 Cross out Test Items

The following have been derived from *cross out test items*:

**Table No. 4**  
**Item wise: Cross out Test Items**

<b>Group</b>	<b>Av. score in P<sub>1</sub></b>	<b>Av. score in P<sub>2</sub></b>	<b>D</b>	<b>D%</b>
A	5.88	9	3.12	52.83
B	6.77	10.55	3.75	55.73

The above table shows that the average score obtained by group 'A' is 5.88 in the pre-test and 9 in the post test in their performance. Their marks have been increased by 3.12. The increased percentage is 52.83. Whereas the average score obtained by Group 'B' is 6.77 in the pre-test and 10.55 marks in the post test in their performance. The difference between them is 3.78 and the difference percentage is 55.73.

This analysis shows that Group 'B' is comparatively better than the Group 'A' in their performance in the post-test. Therefore, this item also proves that deductive method is more effective than deductive method.

### 3.2.4 Insert Type Test Items

The following result has been derived from *insert type test items*:



**Table No. 5**

**Item wise: Insert Type Item**

<b>Group</b>	<b>Av. score in P<sub>1</sub></b>	<b>Av. score in P<sub>2</sub></b>	<b>D</b>	<b>D%</b>
A	5.66	9	3.34	58.82
B	5.88	9.66	3.78	64.15

On analyzing data and reading out the table we come to know that the average score of Group 'A' is 5.66 in pre-test and 9 marks in post-test. Their marks have been increased by 3.34. The increased percentage is 58.82, whereas, the average score of Group 'B' in pre-test is 5.88 and that is of post test 9.66. The difference is of 3.78 marks. The increased percentage is 64.15%.

The difference between the percentages of two groups shows that group 'B' is comparatively better than Group 'A' in their performance in the post-test. Therefore, it can be concluded that deductive method is more effective than inductive method to make students able to answer the insert type of item.

**3.2.5 Complete the Paragraph**

The following results have been derived from *complete the paragraph test item*:

**Table No. 6**

**Item wise: Complete the Paragraph**

<b>Group</b>	<b>Av. score in P<sub>1</sub></b>	<b>Av. score in P<sub>2</sub></b>	<b>D</b>	<b>D%</b>
A	8.33	10.77	2.44	29.33
B	8.44	12.66	4.22	50

The average score obtained by Group 'A' is 8.33 marks in the pre-test and 10.77 marks in the post-test. Their marks increased by 2.44. The increased percentage is 29.33.

On the other hand, the average score of group 'B' is 8.44 marks in the pre-test and 12.66 marks in the post-test in their performance. Their marks increased by 4.22. The increased percentage is 50.

Thus, from the above table it is evident that the score obtained by the group B is greater than Group A. Therefore, the deductive method is more effective than inductive one to teach this item.

### 3.3 Gender-Wise Comparison

The participants in the present study were both boys and girls.

#### 3.3.1 Performance of Boys

The number of boys in Group A is 11 whereas in Group B it is 10. The following result has been obtained:

**Table No. 7**

**Gender-wise: Boys**

<b>Group</b>	<b>Av. score in P<sub>1</sub></b>	<b>Av. score in P<sub>2</sub></b>	<b>D</b>	<b>D%</b>
A	41.09	56	14.91	36.28
B	38.8	56.4	16.8	43.29

On analyzing the above data, the average scores of Group A in pre-test and post-tests are 41.09 and 56 respectively. Their marks increased by 14.91. The increased percentage is 36.28. On contrary to this, the average scores of Group B showed that the difference in pre-test and post-test is 16.8 and the increased percentage is 43.29.

Hence, it can be concluded that Group B is comparatively better than Group A in their performance in the post-test and that deductive method is more effective than inductive method.

### 3.3.2 Performance of Girls

The population of girls in Group A is 7 and it is 8 in Group B. The following result has been obtained:

**Table No. 8**  
**Gender wise: Girls**

<b>Group</b>	<b>Av. score in P<sub>1</sub></b>	<b>Av. score in P<sub>2</sub></b>	<b>D</b>	<b>D%</b>
A	42	54	12	28.57
B	45.5	68.75	23.25	51.09

The average score of Group 'A' was 42 in pre-test and 54 marks in post-test. The difference showed that their marks were increased by 12 marks and the increased percentage was 28.57 whereas, the average score of Group 'B' in pre-test was 45.5 and the average score in the post test was 68.75. The marks were increased by 23.25 marks in the performance after teaching. The increased percentage was 51.09.

The difference between the percentage and average scores of two groups indicated that Group B is comparatively better than Group A and hence we can conclude that deductive method is more effective than inductive method for girls to teach English *articles*.

## **CHAPTER FOUR**

### **FINDINGS AND RECOMMENDATIONS**

#### **4.1 Findings of the Study**

After analysis and interpretation of data, the findings derived have been summarized as follows:

##### **i) The Comparison of Total Performance**

The Group A students increased their marks by 10.78 i.e. by 26.01% and the Group B students by 20.41 i.e. by 41.21 in their performance in the post-test. This difference between the average scores and difference percentage showed that deductive method is more effective than inductive one to teach *articles* in English.

##### **ii) Item-wise Analysis in Comparison**

Group A has increased its average marks by 27.55%, 16.49%, 52.83%, 58.82% and 29.33% in *multiple choice test items, fill in the blanks test items, cross out test items, insertion type of test items and completing paragraph* respectively whereas Group B increased its marks by 34.34%, 50.58% 55.73%, 64.15%, and 50% in *multiple choice test items, fill in the blanks test items, cross out test items, insertion type of test items and completing paragraph* respectively.

It proved that the students taught through deductive method have achieved better marks in all types of test items. And hence it can be concluded that deductive method is more effective to teach *articles*.

### **iii) Gender-wise Analysis of Boys**

Group A boys increased their performance by 36.28% and Group B boys increased their marks by 43.29%. The difference between the increased percentages verified that deductive method is more effective than inductive one to teach *articles* in English.

### **iv) Gender-wise Analysis of Girls**

Group A girls increased their performance by 28.5% whereas Group B girls increased their marks by 51.09%. The difference between the increased percentages proved that deductive method is more effective than inductive one to teach *articles* to the girls in English.

## **4.2 Recommendations**

On the basis of the findings of the research, the following recommendations have been made:

- a) More emphasis should be given to the deductive method to teach English *articles*.
- b) Teachers are suggested to apply deductive method to teach English *articles* in the classroom especially to the lower secondary level students.
- c) The textbook writers should provide sufficient rules with sufficient examples. But the rules must be unambiguous, explicit, short and easily comprehensible.
- d) The syllabus designers and methodologists are suggested to give more emphasis to deductive method while devising the syllabus.

- e) In our context, deductive method seems to be better than inductive one because of lack of exposure and the ability of the students to have insufficiency in language, classroom size and teaching time.
- f) While applying deductive method, the teacher should teach the rules clearly without any ambiguous sentences and sufficient illustrations should be given which prove the rules.
- g) Since, our foreign language learning strategies mainly focused on the rules the students taught through the deductive method showed greater comprehensibility. The teacher should motivate the students to involve them more on practice to make learning more effective, permanent and meaningful.
- h) The study was conducted in one of the schools of Kanchanpur district and was limited to thirty six students only. So it cannot be claimed that the findings of this study are applicable in all schools and all the students of Nepal in teaching *articles*. There might be other variables affecting the result as age, exposure, motivation, teachers' competence etc, so it is suggested that further research in these variables should be carryout out.

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## **APPENDIX - I**

## **APPENDIX - II**

## APPENDIX - III

### Lesson plan: One

**School:** Shree Sunrise Higher Secondary School Mahendranagar,  
Kanchanpur

**Class:** Eight

**Date:** 2065/05/08

**Subject:** English

**Time:** 40mins

**Method:** Inductive

**No. of students:** 18

**Topic:** Articles

#### 1. Specific Objective

At the end of this lesson the students will be able to: Use the definite article 'the' before the object group of objects that exists only one in the universe.

#### 2. Teaching Materials

- ) Daily used materials
- ) Chart with the list of different objects that are only one.
- ) Flannel board

#### 3. Teaching Learning Activities

- ) The teacher at first displays the following sentences on the board:

The moon looks beautiful at night.

The sun rises in the east.

The earth is round in shape.

The world is small.

- ) Then the teacher asks students to read aloud and asks to focus on underlined part of the sentences.

- ) The teacher asks them about the object that follows ‘the’ article. And help them to devise the rule.
- ) Then he asks them to write the rule and few examples with that rule, in case they are unable to derive the rule the teacher finally gives the rule that: We use definite article ‘the’ before the objects that exists only one in the universe.
- ) The teacher shows the chart in the flannel board consisting the name of the unique objects.

#### **4. Evaluation**

The teacher writes the following sentences on the board and asks them to fill in appropriately;

- ) Would you like to travel in ..... space?
- ) Bring me ..... oranges.
- ) I would love to go in ..... moon.
- ) We spent all our money in ..... hotel.

#### **5. Homework**

The teacher asks the students to use the definite article the before the objects shown in the flannel board.

## Lesson plan: one

**School:** Shree Sunrise Higher Secondary School Mahendranagar,  
Kanchanpur

**Class:** Eight

**Date:** 2065/05/08

**Subject:** English

**Time:** 40mins

**Method:** Deductive

**No. of students:** 18

**Topic:** Articles

### 1. Specific Objective

At the end of this lesson the students will be able to : Use the definite article 'the' before the object group of objects that exists only one in the universe.

### 2. Teaching Materials

- a. Daily used materials
- b. Chart with the list of different objects that are only one.
- c. Flannel board

### 3. Teaching Learning Activities

) The teacher shows the chart and writes the following rule on the board: When the object or group of objects is the only that exists or has existed we use definite article 'the' before it.

) The teacher shows the chart on flannel board and asks them to write on the note book and tells them that this is the list of objects which are only one in the universe the list can be increased.

) The teacher then writes the following examples on the board and explain the rule:

The moon looks beautiful at night.

The sun rises in the east.

The earth is round in shape.

The world is small.

- ) He then explains that the underlined objects are only in the world and hence we have to use the definite article 'the' before them.
- ) Then the teacher asks them to memorize the rule and make the use of article definite appropriately.

#### **4. Evaluation**

The teacher writes the following sentences on the board and asks them to fill in appropriately;

- ) Would you like to travel in ..... space?
- ) Bring me ..... oranges.
- ) I would love to go in ..... moon.
- ) We spent all our money in ..... hotel.

#### **5. Homework**

The teacher asks the students to use the definite article the before the objects shown in the flannel board.

## APPENDIX IV

### Marks Obtained by the Students in Both Pre-Test and Post Test

- a) List of the students involved in this study and marks obtained in pre-test.

1	Mukesh Dhanuk	70
2	Romantika Gautam	70
3	Sharmila B.C.	68
4	Abhisekh Joshi	66
5	Sulov Bhandari	64
6	Prapti Chand	64
7	Ekta Khrrel	64
8	Himmat Dhami	60
9	Anand Raj Joshi	58
10	Bikram Bist	58
11	Lalit Chand	54
12	Sailesh Aryal	52
13	Dharmendra Pandey	52
14	Suvash Kharel	52
15	Rajan Bhandri	48
16	Shama Thapa	48
17	Tapasi Sijapati	44
18	Laxmi bogati	44
19	Usha Pant	42
20	Laxmi Paneru	36
21	Muna Giri	34
22	Sonu Aryal	34



23	Manisha Ayer	32
24	Pooja Joshi	30
25	Mamta Bhatt	30
26	Jeevan Badu	30
27	Adarsh Pandey	24
28	Govind Bhandari	22
29	Lalit Singh	22
30	Rajeev Pant	20
31	Bishnu Pandey	20
32	Sushrit Swar	18
34	Rekha Pal	18
35	Rajesh Pal	16
36	Umesh Chaudhary	16

**Group Division**

Pre-test Rank	Group A	Group B
1-18	Odd	even
19-36	even	odd

### Group A

S.N.	Names	Marks
1	Mukesh Dhanuk	70
2	Sharmila B.C.	68
3	Sulov Bhandari	64
4	Ekta Kharel	64
5	Anand Raj Joshi	58
6	LalitChand	54
7	Dhamendra Pandey	52
8	Rajan Bhandari	48
9	Tapasi Sijapati	44
10	Laxmi Paneru	36
11	Sonu Aryal	34
12	Pooja Joshi	30
13	Jeevan Badu	30
14	Govand Bhandari	22
15	Rajeev Pant	20
16	Sushrit Swar	18
17	Rekha Pal	18
18	Umesh Chaudhary	16

### Group B

S.N.	Names	Marks
1	Romntika Gautam	70
2	Abhisekh Joshi	66
3	Prapti Chand	64
4	Himmat Dhaimi	60
5	Bikram Bist	58
6	Silesh Aryal	52
7	Suvash Kharel	52
8	Shama Thapa	48
9	Laxmi Bogati	44
10	Usha Pant	42
11	Muna Giri	34
12	Manish Ayer	32
13	Mamta Bhatt	30
14	Adarsh Pandey	24
15	Lalit Singh	22
16	Bishnu Pandey	20
17	Ashish Chand	18
18	Rajesh Pal	16

## APPENDIX - V

### Pre-test and post-test result of Group 'A' (inductive)

S.N.	Group A	P <sub>1</sub>	P <sub>2</sub>	D	D%
1	Mukesh Dhanuk	70	90	20	28.57
2	Sharmila B.C.	68	86	18	26.47
3	Sulov Bhandari	64	74	10	15.62
4	Ekta Kahrel	64	68	4	5.88
5	Anand Raj Joshi	58	72	14	24.13
6	Lalit Chand	54	62	8	14.81
7	Dhamendra Pandey	52	58	6	11.53
8	Rajan Bhandari	48	70	22	45.83
9	Tapasi Sijapati	44	60	16	36.36
10	Laxmi Paneru	36	42	6	16.66
11	Sonu Aryal	34	44	10	29.41
12	Pooja Joshi	30	46	16	53.33
13	Jeevan Badu	30	48	18	60
14	Govand Bhandari	22	40	18	81.81
15	Rajeev Pant	20	32	12	60
16	Sushrit Swar	18	36	18	100.00
17	Rekha Pal	18	32	14	77.77
18	Umesh Chaudhary	16	34	18	112.5
Total		746	994	13.77	33.24
Av. Score		41.44	55.22	248	

**Pre-test and post-test result of Group 'B' (Deductive)**

S.N.	Students Name	P1	P2	D	D%
1	Romntika Gautam	70	88	18	25.71
2	Abhisekh Joshi	66	86	20	30.30
3	Prapti Chand	64	70	6	9.37
4	Himmat Dhaimi	60	82	22	36.66
5	Bikram Bist	58	72	14	24.13
6	Silesh Aryal	52	62	10	19.23
7	Suvash Kharel	52	60	8	15.38
8	Shama Thapa	48	76	28	58.33
9	Laxmi Bogati	44	70	26	59.09
10	Usha Pant	42	70	28	66.66
11	Muna Giri	34	64	30	88.23
12	Manish Ayer	32	50	18	56.25
13	Mamta Bhatt	30	62	32	106.66
14	Adarsh Pandey	24	48	24	100
15	Lalit Singh	22	44	22	100
16	Bishnu Pandey	20	34	6	30
17	Ashish Chand	18	40	22	122.22
18	Rajesh Pal	16	36	20	125
	Total	752	1114	354	47.07
	Av. Score	41.77	61.88	19.66	

## APPENDIX - VI

### Gender-Wise Division

S.N.	Female	Marks	S.N.	Male	Marks
1	Romntika Gautam	70	1	Mukesh Dhanuk	70
2	Sharmila B.C.	68	2	Abhisekh Joshi	66
3	Prapti Chand	64	3	Sulov Bhandari	64
4	Ekta Kharel	64	4	Himmat Dhami	60
5	Shama Thapa	48	5	Anand Raj Joshi	58
6	Tapasi Sijapati	44	6	Bikram Bist	54
7	Laxmi Bogati	44	7	Lalit Chand	54
8	Usha Pant	42	8	Sailesh Aryal	52
9	Laxmi Paneru	36	9	Dharmendra Pandey	52
10	Sonu Aryal	34	10	Suvash Kharel	52
11	Muna Giri	34	11	Rajan Bhandari	52
12	Manisha Ayer	32	12	Jeevan Badu	39
13	Pooja Joshi	30	13	Govind Bhandari	24
14	Mamta Bhatt	30	14	Adarsh Pandey	22
15	Rekha pal	18	15	Lalit singh	22
			16	Rajeev Pant	20
			17	Bishnu Pandey	20
			18	Sushrit Swar	18
			19	Ashish Chand	18
			20	Umesh Chaudhary	16
			21	Rajesh Pal	16

## Gender-Wise Comparison of Both Group

### Sex wise table: Boys

#### Group A

S.N.		P <sub>1</sub>	P <sub>2</sub>	D	D%
1	Mukesh Dhanuk	70	90	20	28.57
2	Sulov Bhandari	64	74	10	15.62
3	Anand Raj Joshi	58	72	14	24.13
4	Lalit Chand	54	62	8	14.81
5	Dhamendra Pandey	52	58	6	11.53
6	Rajan Bhandari	48	70	22	45.83
7	Jeevan Badu	30	48	18	60
8	Govand Bhandari	22	40	18	81.81
9	Rajeev Pant	20	32	12	60
10	Sushrit Swar	18	36	18	100.00
11	Umesh Chaudhary	16	34	18	112.5
	Total	452	616	164	
	Av. Score	41.09	56	14.91	36.28%

#### Group B

S.N.		P <sub>1</sub>	P <sub>2</sub>	D	D%
1	Abhisekh Joshi	66	86	20	30.30
2	Himmat Dhaimi	60	82	22	36.66
3	Bikram Bist	58	72	14	24.13
4	Silesh Aryal	52	62	10	19.23
5	Suvash Kharel	52	60	8	15.38
6	Adarsh Pandey	24	48	24	100
7	Lalit Singh	22	44	22	100
8	Bishnu Pandey	20	34	6	30
9	Ashish Chand	18	40	22	122.22
10	Rajesh Pal	16	36	20	125
	Total	388	564	168	
	Av. Score	38.8	56.4	16.8	43.29

**Girls**  
**Group A**

S.N.		P <sub>1</sub>	P <sub>2</sub>	D	D%
1	Sharmila B.C.	68	86	18	26.47
2	Ekta Kharel	64	68	4	5.88
3	Tapasi Sijapati	44	60	16	36.36
4	Laxmi Paneru	36	42	6	16.66
5	Sonu Aryal	34	44	10	29.41
6	Pooja Joshi	30	46	16	53.33
7	Rekha Pal	18	32	14	77.77
	Total	294	378	84	
	Av. Score	42	54	12	28.57

**Group B**

S.N.		P <sub>1</sub>	P <sub>2</sub>	D	D%
1	Romntika Gautam	70	88	18	25.71
2	Prapti Chand	64	70	6	9.37
3	Shama Thapa	48	76	28	58.33
4	Laxmi Bogati	44	70	26	59.09
5	Usha Pant	42	70	28	66.66
6	Muna Giri	34	64	30	88.23
7	Manish Ayer	32	50	18	56.25
	Mamta Bhatt	30	62	32	106.66
	Total	364	550	186	
	Av. Score	45.5	68.75	23.25	51.09



## APPENDIX - VII

### Item Wise Marks Pre-test

S.N.	Name	G.A.	G.B.	G.C.	G.D.	G. E.	Total
1	Mukesh Dhanuk	16	16	16	12	14	70
2	Romantika Gautam	18	14	14	10	14	70
3	Sharmila B.C.	14	16	12	12	14	68
4	Abhisekh Joshi	16	14	10	12	14	66
5	Sulov Bhandari	18	16	8	10	12	64
6	Prapti Chand	16	14	10	8	16	64
7	Ekta Kharel	14	16	8	10	16	64
8	Himmat Dhami	14	14	10	10	12	60
9	Anand Raj Joshi	14	14	8	10	12	58
10	Bikram Bist	16	12	8	8	10	58
11	Lalit Chand	14	14	10	6	10	54
12	Sailesh Aryal	14	12	8	6	12	52
13	Dharmendra Pandey	14	12	8	6	12	52
14	Suvash Kharel	14	14	6	8	10	52
15	Rajan Bhandari	16	12	4	6	10	48
16	Shama Thapa	12	10	6	8	12	48
17	Tapasi Sijapati	12	12	8	6	6	44
18	Laxmi Bogati	12	10	16	6	8	44
19	Usha Pant	12	8	8	6	8	42
20	Laxmi Paneru	10	8	6	4	8	36
21	Muna Giri	10	8	6	4	6	34
22	Sonu Aryal	8	10	4	6	6	34
23	Manish Ayer	10	8	4	6	4	32
24	Pooja Joshi	8	8	4	4	6	30
25	Mamta Bhatt	8	8	4	4	6	30
26	Jeevan Badu	6	6	4	4	6	30
27	Adarsh Pandey	8	4	6	2	4	24
28	Govind Bhandari	8	6	2	2	4	22
29	Lalit Singh	6	6	4	2	4	22
30	Rajeev Pant	6	6	2	2	4	20
31	Bishnu Pandey	4	6	4	2	4	20
32	Sushrit Swar	6	6	2	2	2	18
33	Ashish Chand	4	4	4	2	4	18
34	Rekha Pal	6	6	2	-	4	18
35	Rajesh Pal	4	4	2	2	4	16
36	Umesh Chaudhary	6	4	4	-	4	16

### Item-Wise Marks-Post Test

S.N.	Name	G.A.	G.B.	G.C.	G.D.	G. E.	Total
1	Mukesh Dhanuk	20	20	16	16	18	90
2	Romantika Gautam	20	18	18	16	16	88
3	Sharmila B.C.	20	18	16	14	18	86
4	Abhisekh Joshi	18	20	14	16	18	86
5	Sulov Bhandari	16	18	14	16	10	74
6	Prapti Chand	14	14	14	12	16	70
7	Ekta Kharel	16	12	10	12	16	68
8	Himmat Dhama	18	16	14	16	18	82
9	Anand Raj Joshi	18	18	14	12	10	72
10	Bikram Bist	20	16	12	14	10	72
11	Lalit Chand	16	14	10	8	14	62
12	Sailesh Aryal	14	16	10	10	12	62
13	Dharmendra Pandey	16	16	8	10	12	58
14	Suvash Kharel	16	14	10	8	12	60
15	Rajan Bhandari	18	16	10	14	12	70
16	Shama Thapa	16	18	14	10	12	76
17	Tapasi Sijapati	14	16	8	10	12	60
18	Laxmi Bogati	18	16	12	10	14	70
19	Usha Pant	18	18	10	10	16	70
20	Laxmi Paneru	12	10	6	8	6	42
21	Muna Giri	16	16	12	8	12	64
22	Sonu Aryal	12	12	8	6	6	44
23	Manish Ayer	12	8	8	8	14	50
24	Pooja Joshi	12	10	8	6	10	46
25	Mamta Bhatt	16	14	10	10	12	62
26	Jeevan Badu	14	12	6	6	10	48
27	Adarsh Pandey	12	12	8	6	10	48
28	Govind Bhandari	14	8	6	4	8	40
29	Lalit Singh	12	12	8	6	6	44
30	Rajeev Pant	8	6	6	4	8	32
31	Bishnu Pandey	8	8	6	4	8	34
32	Sushrit Swar	10	8	4	6	8	36
33	Ashish Chand	12	10	4	4	10	40
34	Rekha Pal	6	8	4	6	8	32
35	Rajesh Pal	8	8	6	4	8	36
36	Umesh Chaudhary	8	8	6	4	8	34

### Item Wise: Multiple Choice Item

Inductive					Deductive			
S.N.	P <sub>1</sub>	P <sub>2</sub>	D	D%	P <sub>1</sub>	P <sub>2</sub>	D	D%
1	16	20	4	25	18	20	2	11.11
2	14	20	6	10.71	16	18	2	12.5
3	18	16	-2	11	16	14	-2	
4	14	16	2	14.28	14	18	4	28.57
5	14	18	4	28.57	16	20	4	25
6	14	16	2	14.28	14	14	-	-
7	14	16	2	14.28	14	16	2	14.28
8	16	18	2	12.8	12	16	4	33.33
9	12	14	2	16.66	12	18	6	50
10	10	12	2	20	12	16	4	33.33
11	8	12	4	50	10	16	6	60
12	8	12	4	50	10	12	2	20
13	6	14	8	133.33	8	16	8	100
14	8	14	6	75	8	12	4	50
15	6	8	2	33.33	6	12	6	100
16	6	10	4	66.60	4	8	4	100
17	6	6	-	-	4	12	8	200
18	6	8	2	33.33	4	8	4	100
	1296	250	54		198	266	68	
	10.88	13.88	3	27.55	11	14.77	3.77	34.34

### Item Wise- Paragraph

Inductive					Deductive			
S.N.	P <sub>1</sub>	P <sub>2</sub>	D	D%	P <sub>1</sub>	P <sub>2</sub>	D	D%
1	14	18	4	28.57	14	16	2	14.28
2	14	18	4	28.57	14	18	4	28.57
3	12	10	-2	-	16	16	-	-
4	16	16	-	-	12	18	6	50
5	12	10	-2	-	10	10	-	
6	10	14	4	40	12	12	-	
7	12	12	-	-	10	12	2	20
8	10	12	2	20	12	16	4	33.33
9	6	12	6	100	8	14	6	75
10	8	6	-2	-	8	16	8	100
11	6	6	-	-	6	12	6	100
12	6	10	4	66.66	4	14	10	250
13	6	10	4	66.66	6	12	6	100
14	4	8	4	100	4	10	6	150
15	4	8	4	100	4	6	2	50
16	2	8	6	300	4	8	4	100
17	4	8	4	100	4	10	6	150
18	4	8	4	100	4	8	4	100
Total	150	194	44		152	228	76	
Av. Score	8.33	10.77	2.44	29.33	8.44	12.66	4.12	50

### Item Wise-Fill in the Blanks

Inductive					Deductive			
	P <sub>1</sub>	P <sub>2</sub>	D	D%	P <sub>1</sub>	P <sub>2</sub>	D	D%
1	16	20	4	25	14	18	4	28.57
2	14	18	4	28.57	14	20	6	42.85
3	18	18	-		14	14	-	
4	14	12	-2	-14.28	14	16	2	14.28
5	14	18	4	28.57	12	16	4	33.33
6	14	14	-	-	12	16	4	33.33
7	14	12	-2	-14.28	14	14	-	
8	16	16	-		10	18	8	80
9	12	16	4	33.33	10	16	6	60
10	10	10	-		8	18	10	125
11	8	12	4	50	8	16	8	100
12	8	10	2	25	8	8	-	
13	6	12	6	100	8	14	6	75
14	8	8	-		4	12	8	200
15	6	6	-		6	12	6	100
16	6	8	2	33.33	6	8	2	33.33
17	6	8	2	33.33	4	10	6	150
18	4	8	4	100	4	10	6	150
Total	194	226	32		170	256	86	
Av. Score	10.77	12.55	1.77	16.49	9.44	14.22	4.77	50.58

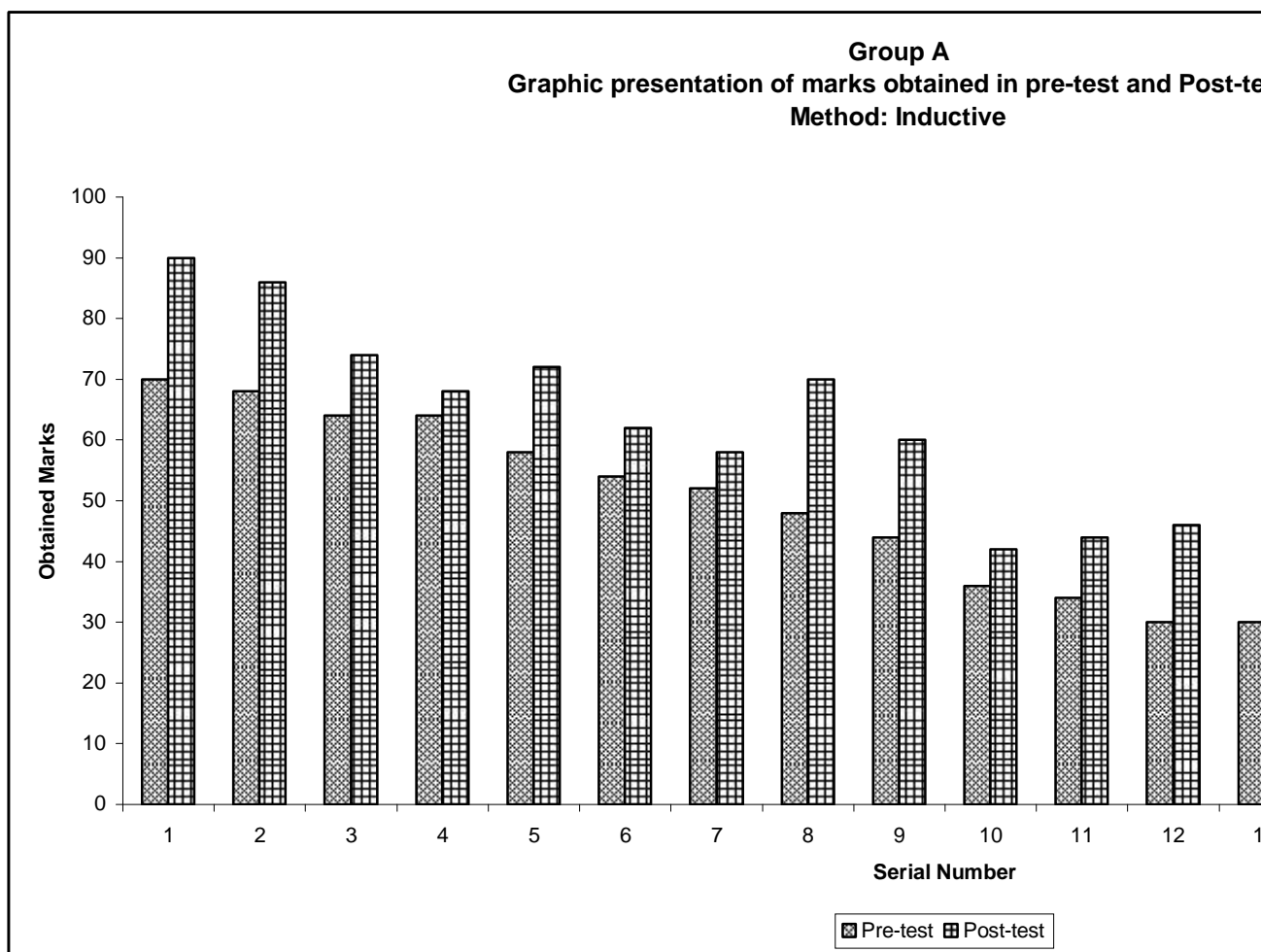
### Cross Out Items

Inductive					Deductive			
	P <sub>1</sub>	P <sub>2</sub>	D	D%	P <sub>1</sub>	P <sub>2</sub>	D	D%
1	12	16	4	33.33	14	18	4	28.57
2	12	16	4	33.33	10	14	4	40
3	8	14	6	75	10	14	4	40
4	8	12	4	50	10	14	4	40
5	8	14	6	75	8	12	4	50
6	10	10	-	-	8	10	2	25
7	8	8	-	-	6	10	4	66.66
8	4	10	6	150	6	14	8	133.33
9	8	8	-	-	8	12	4	50
10	6	6	-	-	8	10	2	33.33
11	4	8	4	100	6	12	6	100
12	4	8	4	100	4	8	4	100
13	4	6	2	50	4	10	6	150
14	2	6	4	200	6	8	2	33.33
15	2	6	4	200	4	8	4	100
16	2	4	2	100	4	6	2	50
17	2	4	2	100	4	4	-	-
18	2	6	4	200	2	6	4	200
	106	162	56		122	190	68	
	5.88	9	3.12	52.83	6.77	10.55	3.78	55.73

### Insert Items

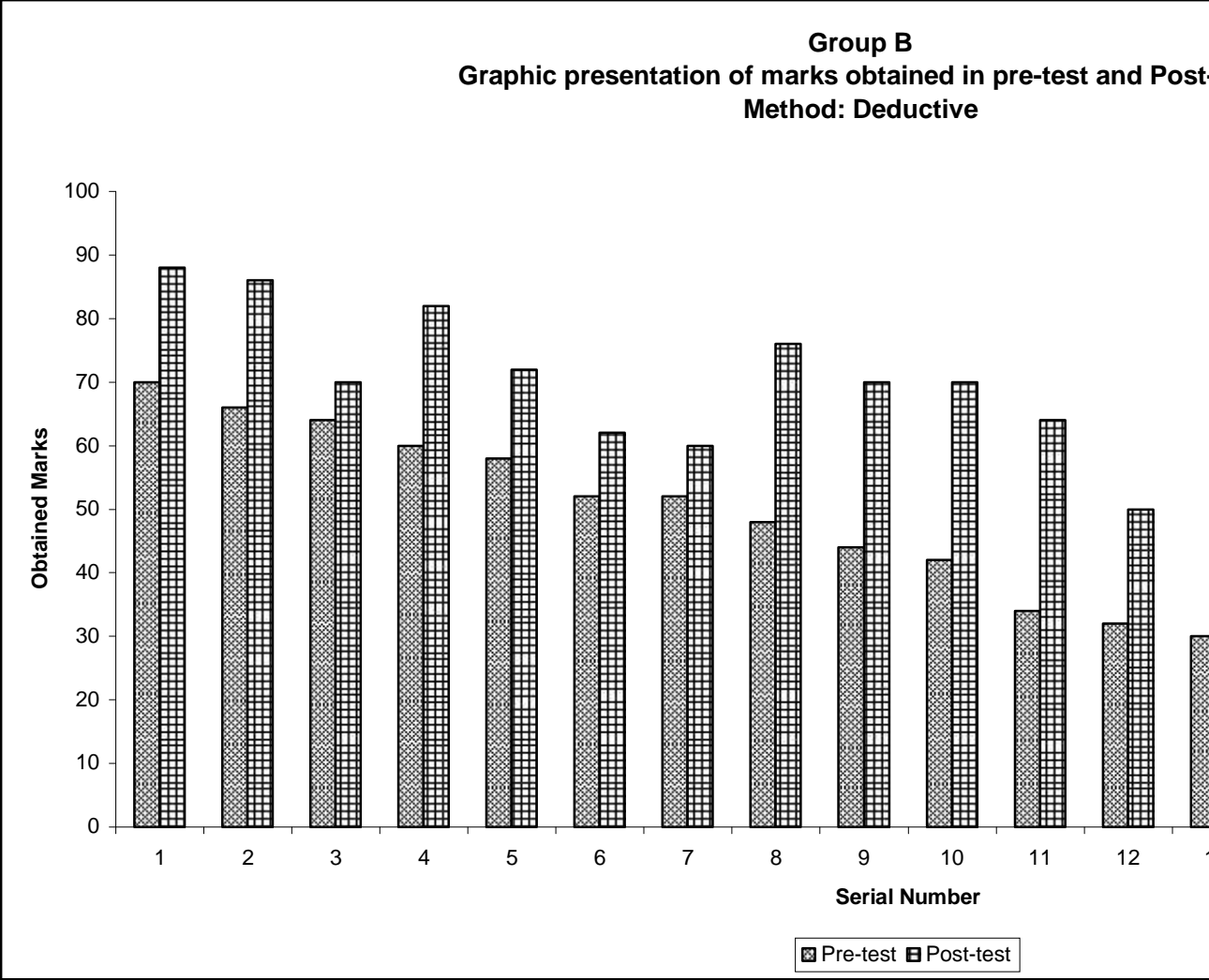
Inductive					Deductive		
S.N.	P <sub>1</sub>	P <sub>2</sub>	D	D%	P <sub>1</sub>	P <sub>2</sub>	D
1	12	16	4	33.33	10	16	6
2	12	14	2	16.66	12	16	4
3	10	16	6	60	8	12	4
4	10	12	2	20	10	16	6
5	10	12	2	20	8	14	6
6	6	8	2	33.33	6	10	4
7	6	10	4	66.66	8	8	--
8	6	14	8	133.33	8	12	4
9	6	10	4	66.66	6	10	4
10	4	8	4	100	6	10	6
11	6	6	-	-	4	8	4
12	4	6	2	50	6	8	2
13	4	6	5	50	4	10	6
14	2	4	2	100	2	6	4
15	2	4	2	100	2	6	4
16	2	6	4	200	2	4	2
17	-	6	6		2	4	2
18	-	4	4		2	4	2
	102	162	60		106	174	68
	5.66	9	3.34	58.82	5.88	9.66	64.15

## APPENDIX-VIII



Source: See Appendix





Source: See Appendix