# EFFECTIVENESS OF SQ3R TECHNIQUES IN TEACHING READING IN GRADE EIGHT 

A Thesis Submitted toThe Department of English Language Education Sukuna Multiple Campus, Morang<br>In Partial Fulfilment ofMaster's Degree in English Education (Specialization in English Education)

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## RECOMMENDATION FOR ACCEPTANCE

This is to certify that Mr. Purna Bahadur Thapa has prepared the thesis entitled " Effectiveness of SQ3R Techniques in Teaching Reading in Grade Eight" under my guidance and supervision.

I recommend the thesis for approval and acceptance.

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To my parents Prithiman Thapa and Kalawati Thapa who have always been the source of my inspiration behind any efforts and achievements.

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#### Abstract

This research attempts to find out different techniques applied in teaching reading and to identify most commonly used techniques in teaching reading at school level in different public schools. For this purpose the researcher selected Shree Higher Secondary School Parikhaprang, Dhankuta District as his field of study. He sampled the fourty students of the school. Then he used research tools to collect data from the sampled population i.e 40 students of Shree HSS Parikhaprang. The main research tools were questionnaire .

At first, The researcher determine the reading proficiency of the students at the entry point two pre-test was taken. For this purpose he prepared two reading passages were given. Each passage carried ten marks. The mean score was found from the pre-test. The students were divided into two groups on the basis of odd-even ranking of the individual scores. The divided groups were taught side by side for five days in a week. Group-A was taught through SQ3R technique and Group-B was taught through usual classroom technique. The process continued for twenty four days. Same questionnaire was administered both groups to get information.Questionnaires and teaching materials were developed for selected reading texts in each period. At the end of classroom teaching, two post test was taken. The similar types of test used in the pre-test was used for the post-test. Then the results of the two tests were compared to determine the effectiveness of SQ3R technique in teaching reading in lower secondary Level.

The findings of the study have shown that The selected techniques is a bit effective than others common classroom techniques at lower secondary level. This thesis consists of four chapters. The first chapter deals with general background of the study, review of related literature, objectives of the study and significance of the study.


The second chapter deals with the Review of the relative literature and conceptual frame work to carry out the research.

The third chapter deals with the methodology.In other words, it includes the source of data, population of the study, tools for data collection, process of data collection and limitation of the study.

The Fourth chapter deals with analysis and interpretation of data. The data have been analyzed and interpreted on the basis of the responses mentioned by the sampled population and three class observation check lists of each sampled population.

Chapter five consists of the findings and recommendations as well as pedagogical implications.

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## ABBREVIATIONS AND SYMBOLS

| SQ3R | - | survey, Question,Read,Recite,Review |
| :--- | :--- | :--- |
| ELT | - | English Language Teaching |
| S.N. | - | Serial Number |
| H.S.S. | - | Higher Secondary School |
| T.U. | - | Tribhuvan University |
| $\%$ | - | Percentage |
| av. | - | average |

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## CHAPTER - I

## INTRODUCTION

### 1.1 General Background

Language is a gift to human beings to communicate with each other. It is the most effective means of communication to exchange ideas, feelings and information. There are different languages in the world. But all these languages can't be acquired at a time because of their nature of acquiring systems. One acquires a language in which $s / h e$ is brought up or exposed to. It happens automatically to everyone. But only the acquired language is not enough to communicate with people in the world. As a result, many people begin to learn other (second) languages as well.

English is the most important and widely used language. It is a global language which occupies a dominant position in the world. Millions of people have been learning English day by day. So the scope of English has been widening in a great speed. Now, there may arise a question like why has English got so much popularity? But the answer is easy, because many important books, magazines and newspapers are written in English; many scientific inventions and discoveries are also recorded in English. On the other hand, most of the scientists, experts, authors and professors use English to share their ideas.

According to Lewis and Hill, (1992, p9) English is useful because.
a. You can talk to lots of new people.
b. You can use English when you are travelling.
c. You can understand films and TV programmers.
d. You can understand pop songs.
e. It helps you to get a good job.
f. You need it if you want to study at a university.
g. People do business in English all over the world.
h. You can understand more about the world if you can read English and American magazines and newspapers.
i. It is the international language for most people.
j. You can read English literature in the original language.

That is why the importance of English is increasing and it is getting popularity throughout the world.

### 1.1.1 English Language Teaching

English is the international language. So it has been taught, both as a national or international language throughout the world. But teaching language is a challenging job. This is because, language is very complex. It is a system, a code, a set of convention and a means of communication to mention only a few. So, learning a language appropriately is more important than learning about it. The success of teaching language depends upon its suitable use. It means, if the learners can use a language properly then the purpose of teaching it is fulfilled.

English language teaching is a system under which several sub-systems are included like planning, preparation, production and evaluation. The quality of language teaching is based on the best use of language teaching. In other words, the best way of language teaching is based on the best use of approaches, methods and techniques. So the language teacher should apply and create such suitable activities on which the learners involve joyfully and develop their linguistic proficiency effectively. This activity is also regarded as an example of perfect language teaching.

Every language teacher makes his/her teaching and learning plan under a particular approach, method and technique. Approach, method and technique are most frequently used terms in the field of language teaching. These very
terms are defined by different methodologists in different ways but the main theme is somehow related. Anthony (1963), as cited in Richards and Rodgers (1995, p15) defines these three terms as follows:

An approach is a set of correlative assumptions dealing with the nature of language teaching and learning. An approach is axiomatic. It describes the nature of the subject matter to be taught.

Method is an overall plan for the orderly presentation of language material, no part of which contradicts, and all of which is based upon, the selected approach (Anthony, ..., in Richards \& Rodgers, ....). An approach is axiomatic, a method is procedural. Within one approach, there can be many methods.

A technique is implementation - that which actually takes place in a classroom. It is a particular trick, stratagem, or contrivance use to accomplish an immediate objective. Techniques must be consistent with a method, and therefore in harmony with an approach as well.

In the conclusion, an approach refers to the theories about the nature of language and language learning. Method is a practical realization of an approach. It is an overall plan for the orderly presentation of language particular trick, stratagem or contrivance used to accomplish an immediate objective.

### 1.1.2 Language Teaching and Learning

Teaching cannot be defined apart from learning. According to Brown (1994, p.7) "Teaching is guiding and facilitating learning, enabling the learners to learn sitting the conditions for learning." "Learning is relatively permanent change in the behavioral tendency and is the result of reinforcement practice."This definition clarifies that learning is the change in behavior pattern while teaching is to facilitate in the permanent change of behavior.

Regarding language teaching a language means helping learners in learning the language and the objectives of teaching a language is to facilitate and
encourage the learners in learning it. According to Brown (19194, p.2)"The task of language teaching begins with the questions:, who are the learners ? What is that the learners must learn and the teacher teach? How does learning take place? When does second language learning take place? Where is cultural and linguistic milieu of the second language. Why are learners attempting to require the second language?"

Thus, language teaching has five fundamental aspect to consider and they are:-.
a. Who to teach? i.e, identify the learners and characterize their nature.
b. Why to teach?, i.e. identify the purpose the language is being learned for.
c. What to teach? i.e. the content of language teaching.
d. When to teach what? ,i.e. the systematic order to teach the things to be taught.
e. How to teach? ,i.e. the appropriate methodology to teach the things to be taught.

Language is often viewed as a body comprising four basic skills, viz. listening, speaking, reading and writing. language learning as acquiring these skills. A foreign language course, therefore, state it's objectives in terms of the four language skills. Learners may need these four skills in different proportions depending upon whether they need the language for oral communication or written one. In the case of the former they need to focus on listening and speaking. In the case of the latter they need to focus on reading and writing.

An overview of second language Teaching Approach, Method and
TechniquesApproach, method and techniques are the three important procedures of language teaching and learning. Different approaches, methods and techniques came into use and practice in teaching a foreign language. It is only an axiom. So an approach is axiomatic. It describes the nature of subject
matter to be taught. Here approach in teaching refers to theories about the nature of the language and language learning. In other words, approach refers to theories about the nature f language and language learning. These theories serve as the source of practices and principles in language teaching. Edward Anthony (1963, p63-67 as cited in Richards and Rodgers, 2002, p19) defines the terms in following ways

An approach is a correlative assumption dealing with the nature of language teaching and learning. An approach is axiomatic .It describe the nature of subject matter to be taught.

There are some special approaches used in language teaching. Some of them are behaviorist approach, atavist approach, functional approach, communicative approach, developmental approach, natural approach, etc.

Methods on the other hands, ".....is an overall plan for the orderly presentation of language materials, no parts of witch contradicts, and all of which is based upon the selected approach. An approach is axiomatic, a method is procedural. Within one approach, there can be many methods......"(2002). It is concerned with the classroom procedures.

Different methods come into use but they no longer exist. The grammar translation is the oldest methods of foreign or second language teaching. It emphasis on language learning by learning grammatical rules along with some exceptions and vocabulary items and applying them into practice and translation . Reading and writing skills are more emphasized ignoring listening and speaking. It was popular in foreign language teaching in the $18^{\text {th }}$ century. Then direct method come into existence in the $19^{\text {th }}$ century as a reaction to the grammar translation method which gives emphasis on translation and use the mother tongue as the medium of instruction. But, direct method emphasis on the use of foreign language in teaching and learning. It emphasizes that meaning is taught by making a direct connection in the mind of learners through demonstrations and action. Second language utterances are directly
associated with the denoted objects, actions, ideas and expressions. Grammar is taught inductively.

Then ,the audio-lingual methods of language teaching is develop fully at the end of 1950's as an implication of structural linguistics and behavioral psychology in language teaching. The audio-lingual method emphasizes on the teaching of speaking and listening before reading and writing which makes maximum use of dialogues and drills, discourage the use of mother tongue in the classroom and often makes use of contrastive analysis. Then, communication methods came into use in late 1960s and still being popular in language teaching and learning. Communicative method is directly related to communicative approach of foreign language teaching. Communicative method is developed particularly by British applied linguistic association shifting the focus of language teaching from mastery of structures to communicative proficiency. Thus, communicative method of language teaching emphasizes that the goal of language learning is communicative competence.

Technique, on the other hand, is a classroom activities, a pedagogical device, a part of total classroom procedural. In other words, each part of what actually happens in the classroom is called a technique. It is a real classroom procedural or activity that the teacher and students implement to carry out certain teaching tasks effectively."A technique is implementation which actually takes place in classroom. It is a particular trick, strategy or contrivance used to accomplish immediate objectives. Technique must be consistent with method and therefore, in harmony with an approach as well."(2002).

Technique is the level at which classroom procedures are described. This reflects the facts that the procedures we implement in our classroom teaching is a technique.

### 1.1.3 Techniques of Teaching Language

As I have already discussed, a technique is a wide variety of exercises, activities or devices used in the language classroom for realizing lesson
objectives. In other words what actually happens while teaching in the classroom is technique. A teacher can use different techniques to teach same item. These different techniques used in teaching English Language are classified into two types: Teacher-centered and Learner-Centered Techniques.

## a. Teacher-Centered Techniques

Teacher-centered techniques are those techniques on which teachersremain active in the classroom. They speak a lot, read a lot and take too much time in the classroom. On the other hand, students or learners listen to the teacher and observe the teachers' activities. They just remain as a passive worker. Some examples of teacher-centered techniques are given below:
i) Lecture
ii) Explanation
iii) Illustration
iv) Demonstration

## b. Learner-Centred Techniques

Unlike the teacher-centred technique, learner-centred technique is such technique on which the learners are more active than teachers. Learners are given a lot of task to complete or perform. They learn by doing. It emphasizes the student and his/her individual characteristics as central in conducting instruction instead of focusing on subject matter, external authority and educational requirements. It is more psychological than logical. It highlights the process rather than product. The teacher works as a facilitator or a guide. The some examples of learner-centred techniques are as follows:
i) Individual work
ii) Pair work
iii) Group work
iv) Project work
v) Strip story
vi) Drama
vii) Role play
viii) Discovery technique
ix) SQ3R technique

There are four major types of activities included in discovery technique. They are:

1) Preview
2) Matching technique
3) Text study and
4) Problem solving

### 1.2Teaching Language Skills

The main objective of teaching a language is to enable the students to communicate in language. It is essential, therefore, that every second of every language class is directed to equip students with the language skills they really need. The four main skills of language are listening, speaking, reading and writing. To be able to use the language, to convey thoughts, intentions, wishes, information etc a person needs a mastery of above gives language skills.

The four skills mentioned above can be classified as receptive and productive skills. Generally listening and reading fall under the category of receptive skills while speaking and writing are productive skills.

Among these four language skills, only teaching of reading skill is described in detail because this research work has been carried out on the basis of techniques of teaching reading.

### 1.2.1Teaching of Reading Skill

Teaching of reading is an important aspect of teaching/learning language. Reading skill is one of the four language skills. It comes under receptive skill. Reading is a process of communication from the writers to the readers. It involves the reorganization of printed letters, words, phrases, clauses and in some respects, it can be considered a simple process than comprehension. It is a process of understanding a text in its simple sense. Understanding a text means comprehending a text. Thus reading is the total understanding of message or text.

There are several skills in teaching reading. It means, reading includes a variety of skills. The skills in teaching reading are:

- Reorganization of script
- Deduce the meaning/unfamiliar lexis
- Understand conceptual meaning
- Understand implicit things
- Understand the communicative value
- Relation between sentence
- Interpreting the text
- Identifying the main points
- Skimming/scanning
- Trans coding information to diagrammatic display.


### 1.2.2 Types of Reading

There are various types of reading. Reading can be categorized on the basis of different factors like pace/speed, noise, attention
and general purpose. These different types of reading are given below:
a. Rapid reading
b. Silent reading
c. Reading aloud
d. Skimming
e. Scanning
f. Extensive reading
g. Intensive reading

Each type of reading is briefly described as follows:

## a. Rapid Reading

Rapid reading is also known as faster or speed reading. It consists of techniques to teach students to read more quickly and achieve a greater degree of understanding of what they read. It develops students' reading speed and accumulating a lot of information.

## b. Silent Reading

Silent reading is considered to be best kind of reading as the mind is fully engaged in this act. This kind of reading is required at the advanced level where students need a consolidation of all the language skills, vocabulary, structure etc. It facilitates the mastery of language and encourages the students to make use of dictionary.

## c. Reading aloud

In this kind of reading, the reader reads block by block individually. S/he finishes one word, unit etc and then goes to another. Generally those types of reading is conducted to teach pronunciation, stress and intonation.

## d. Skimming

Skimming is a kind of through reading to get gist of the text. While skimming the students go through the reading materials quickly in order to get the gist of it. They do not only get the gist of the text but also know how the text is organized and what the writer has intended to inform the readers.

## e. Scanning

When the reader reads any text to locate specific information, it is known as scanning. The reader doesn't read the entire text but S/he lets his/her eyes wander over the text until they find what they are looking for.

## f. Extensive Reading

This type of reading is independent reading. It is done to train the students to read directly and fluently in the foreign language for own enjoyment without the help of their teacher. It is intended to develop good reading habits to build up confidence in language, to build up knowledge of vocabulary and structure.

## g. Intensive Reading

Unlike the extensive reading, in this reading students are expected to understand everything they read and be able to answer in detail. This type of reading encourages faster reading which in turn develops students reading habits.

### 1.2.3 General Classroom Procedure of Teaching Reading in English

The general classroom procedure of teaching reading consists of the following four types.
a. Introduction
b. The reading
c. Comprehension

### 1.2.4 SQ3R Techniques Of Teaching Reading

Reading is a vital skill. Students with proficient reading skills have the potential to become enhanced self-regulated learners and, thus, demonstrate high academic achievement. However, most students are not proficient in reading. Many students even lack the basic reading skills necessary to perform future job-related tasks (Artis, 2008), which will greatly affect their future study and work.

Several reading-study strategy systems provide clear guidelines to help students learn and practise techniques that imitate the behaviours of highly proficient readers. SQ3R, which consists of five steps (surveying, questioning, reading, reciting, and reviewing), is the most popular reading-study system and was primarily designed for expository text, particularly academic textbooks.

Although SQ3R is a purposeful and meaningful reading method in which students practise different reading strategies, it is cumbersome for novice learners to learn and use (Flippo\&Caverly, 2000; Huber, 2004). The SQ3R process is complex, and the knowledge constructed during this process is comprehensive and varied. Novice learners must expend more cognitive and behavioural effort in operating and managing the process and knowledge before they become experienced. Their effort may impede reading comprehension when learners are unfamiliar with this method.

This impediment may lower their motivation for using and practising this strategy (Artis, 2008). Because the SQ3R process is complex, novice learners must use more cognitive resources to remember the SQ3R steps, when to use these steps, what purpose each step has, and how to perform each step. Although training and practice can facilitate the learning process, it consumes time and effort. Teachers typically address this method for a brief period and ask students to use it by themselves after class.

The learning products that are constructed and acquired during the SQ3R process are comprehensive and varied: section titles, keywords, an overview in
the surveying step, questions in the questioning step, comments and crucial points in the reading step, and summaries in the reciting step. The relationship among the products forms a hierarchical structure. For example, when creating a question for a section title, several pieces of highlighted text and comments are generated to answer the question or explain a keyword, and a summary is written for the section.

The hierarchical structure is useful for remembering and reviewing the learning products. However, they are distributed among different pages, and students have difficulty perceiving and remembering the structure and relationship.This study designed an e-book reader that integrates SQ3R reading strategies with two scaffolding tools, a reading guidance module, and an annotation map, to solve the previously mentioned problems. The reading guidance module reminds readers of the purpose and task of each SQ3R step and provides examples for imitation. The annotation map, which integrates the annotations distributed among different pages into a hierarchical structure, is designed to support reading, reviewing, and navigating. In addition, we conducted an experiment to determine the effect of this e-book reader on the reading behaviour and performance of readers.

### 1.2.6 Reading strategies and SQ3R

Reading strategies, which play a vital role in reading comprehension, have been recognized as effective approaches in increasing reading comprehension (Huang, Chern, \& Lin, 2009). Successful readers apply several reading strategies for reading comprehension, such as recognizing text structure, posing questions, reflecting on behaviour or the process, monitoring comprehension, organizing graphs, taking notes, and rereading (Sung, Chang, \& Huang, 2008; Yang, 2006). Teaching every student to master these strategies in general courses is challenging. Therefore, several methods that bundle a set of reading strategies provide easily applied guidelines for students to practise independently during their reading processes.

SQ3R is the most popular reading method. Robinson (1970) developed this method by incorporating several higher-level study strategies consisting of five steps: surveying, questioning, reading, reciting, and reviewing. The surveying step involves skimming section headings and subheadings to identify chapter content, thus assisting readers in understanding the structure of the chapter. In the questioning step, readers ask questions based on headings and subheadings and transform the headings into questions to guide their reading. The reading step involves reading the text to answer the questions. In the reciting step, readers recall the answers and crucial points in the chapter. In the fifth step, readers reflect on the original questions and answers, organize relevant information, and review the information repeatedly.

Previous studies have investigated the effects of SQ3R on reading comprehension. However, the sparse evidence of the efficiency of SQ3R is inconsistent (Baier, 2011; Cantu, 2006; Carlston, 2011; McCormick \& Cooper, 1991). For example, Baier (2011) observed that SQ3R significantly improved the overall comprehension scores of fifth grade students reading expository texts. However, Cantu (2006) found that the SQ3R learning method demonstrated little or no improvement over traditional learning methods. Such inconsistency may result from the varying material, instruction, task demand, or student variables (Flippo\&Caverly, 2000).

Although insufficient evidence exists to prove that the SQ3R system is an effective reading strategy, it remains the most popular method among teachers SQ3R imitates the reading patterns of proficient readers, provides useful examples for poor readers to improve, and gives meaning and purpose to reading. SQ3R techniques, such as questioning and summarizing, have also been separately proven to enhance reading comprehension and may foster in students a familiarity with the techniques.

### 1.2.7 System design and implementation

To solve the identified problems, we developed an e-book system. The e-book reader interface is divided into three sections: the e-book, annotation map, and guidance section (Fig. 1). The e-book section presents the e-book content. The annotation map section allows students to develop and organize annotations into a hierarchical structure. The guidance section presents the SQ3R steps in sequential buttons.

Three modules were designed for this system: annotation, annotation map, and reading guidance. The annotation module provides basic annotation functions consisting of underlining, highlighting, and commenting. The annotation map module supports students in creating and organizing annotations.

Five types of tree nodes can be created in the annotation map section : heading nodes, which represent the underlined section titles and keywords in the surveying step; questioning nodes, which represent notes associated with the questions created for section titles in the questioning step; highlighting nodes, which represent the highlighted text segments created in the reading step; commenting nodes, which represent the notes made during the reading step; and reciting nodes, which represent the notes associated with summaries created for the sections in the reciting step. The node icons are represented with their respective annotation functions for students to identify the role of each node easily.

Highlighting or underlining a piece of information and organizing it into a hierarchical structure is simple. When marking a within-page text segment, a student can use a PC mouse to right-click a node in the annotation map section to access a context menu. The student can click the Heading or Highlight menu item and immediately underline or highlight this marked text segment.

A heading node or highlighting node with a title assigned by students is generated under this clicked node. The student can also click the Question, Comment, or Recite menu item to generate a questioning, commenting, or
reciting node. shows how to perform this step. When turning to a page that includes a section title or keyword, a student can mark it and click the Heading button presented above the annotation map section or the Heading menu item on the context menu, which is raised when right-clicking an existing heading node. The marked text is then immediately underlined, and a heading node representing the underlined section title or keyword is immediately added to the first level of the hierarchical structure or below the clicked heading node. After completing this step, the student can press the question button to enter the questioning step.

In the questioning step, a student generates questions for the section/subsection titles or keywords. The student can click the Question menu item on a heading node and a question form is presented for the student to enter the title and description of the question. A question node representing the question is created below the heading node, and a question picture associated with the question node is added to the page on which the section title exists.

When pressing the reading button, the student can read the pages in the first section and click the Highlight menu item to highlight a text segment or Comment to take notes. A highlighting node with a title assigned by the student or a commenting node is generated under the node in which the context menu was raised. After completing the reading step, the student can press the recite button. In the reciting step, students create a reciting node. Creating a reciting and commenting node is the same as creating a questioning node, and creating a highlighting node is the same as creating a heading node. Finally, the student can use the annotation map to review the content by double-clicking a node to go to the corresponding page.

What on earth is the SQ3R method of reading? It is a way to read academic material such as textbooks, articles, research studies or manuals that can increase your comprehension of what you are reading and improve your ability to recall it. With the SQ3R method, your active involvement in the reading process is required - in fact, it is demanded! We won't sugar-coat it: reading
textbooks is hard work. But the SQ3R method can make that work less difficult and perhaps, even a little more interesting.

### 1.2.8.Why SQ3R?

Evidence of the success of this method has been obtained from several studies. In one experiment several sections of a how-to-study class measured their reading ability (reading rate and comprehension accuracy) on a test that dealt with the history of Canada. They were then given practice in the use of the SQ3R Method for several days, after which they took another comparable reading test. Before training in SQ3R, the average reading level for the classes was at only the 34th percentile, but after training, it was at the 53rd percentile. In another experiment, two quizzes of equal difficulty were prepared. For the first quiz, the students

Studied their own way, but for the second quiz, they were shown how to predict quiz questions with the SQ3R method. The average number of errors on the first quiz was 15 , but on thesecond quiz the average was only 6 . To the author, one of the most convincing arguments for the method were the comments of students who tried it and found that it worked, such as:

### 1.3 Steps in the SQ3R Method

The title for this new higher-level study skill is abbreviated to make it easier to remember and to make reference to it simpler. The acronym SQ3R stands for the steps that the student follows in using the method: Survey, Question, Read, Recite, Review. A description of each of these steps is given below.

### 1.3.1Survey

The first step, survey or skim, advises that one should resist the temptation to read the book and instead glance through a chapter in order to identify headings, sub-headings and other outstanding features in the text. This is in order to identify ideas and formulate questions about the content of the chapter.

The students survey a text before reading it closely .They look at titles, headings, subheadings, highlighted words pictures, graphs, and The students encouraged to look quickly. through the texts- perhaps reading some parts, such as the introduction and conclusion, more closely.

Skim the following: the title of the chapter, the introduction, the table ofcontents and any illustrations, charts or graphs and the summary paragraph. Note any unknown vocabulary and find a definition. Most importantly, skim the section headings and the first sentences of each paragraph to find the main points that will be developed. This orientation should not take more than a few minutes (make a conscious effort to look only at the headings, etc.) but will help you to organize the ideas as you read them later. For more information on skimming, see the Kwantlenhandout "Tips on Getting the Most from your Reading".

### 1.3.2.Question

Turn the first heading, or the first sentence of the first paragraph, into aquestion. (Think of the game show "Jeopardy!") This will arouse your curiosityand so increase your active involvement and comprehension, and the question will make important points stand out while explanatory detail is recognized as such. Turning a heading into a question can be done instantly upon reading the heading, but it demands a conscious effort on your part to make this a query for which you must read to find the answer.

Formulate questions about the content of the reading. For example, convert headings and sub-headings into questions, and then look for answers in the content of the text. Other more general questions may also be formulated:

- What is this chapter about?
- What question is this chapter trying to answer?
- How does this information help me?

In this stage of teaching reading the students think about what the text will tell them before they read a text. In a way they make up questions they think will be answered by the text. later, while they keep checking to see if their answers are being answered.

### 1.3.3.Read

Read to answer that question, i.e., to the end of the first headed section.This is not a passive plodding along each line, but an active search for the answer. Underline only key words--never whole paragraphs. Use a dictionary if necessary to look up unfamiliar vocabulary. The reader should definitely have in mind what he wants to learn as he reads each section and not just passively read it line by line. Use the background work done with "S" and "Q" in order to begin reading actively. This is while reading of stage teaching reading stage. In this stage the students read the text as if they are looking for the answers to their questions prepared in the second stage. The students may not find the answer to all their questions because the answers may not be there. Also, they may find out much more than these questions as they read. However, looking for answers is a good strategy to make them read active.

### 1.3.4.Recite

Having read the first section, look away from the book and try briefly to recite in your own words the answer to your question (aloud, if possible). If you can do this you know what is in the section; if you can't, skim the section again and repeat the exercise of reciting. An excellent way to do this reciting from memory is to jot down cue phrases in outline form on a sheet of paper. Make these notes very brief!

Now repeat steps 2, 3 , and 4 on each subsequent headed section. That is, turn the next heading into a question, read to answer that question, recite the answer and check your accuracy. Read in this way until the entire chapter is completed, taking very brief breaks between sections as needed. In this stage the students recite what they have read. In other words the students say aloud
from memory what they have read about. The students can do this while reading, stopping after each paragraph and asking themselves like: what did I just read ? Do I understand the main ideas ? Did the text answer my questions ? And so on.

The second "R" refers to the part known as "Recite/write" or "Recall." Using key phrases, one is meant to identify major points and answers to questions from the "Q" step for each section. This may be done either in an oral or written format. It is important that an adherent to this method use his/her own words in order to evoke the active listening quality of this study method.

### 1.3.5.Review

The final "R" is "Review." In fact, before becoming acquainted with this method a student probably just uses the R \& R method; Read and Review. Provided the student has followed all recommendations, the student should have a study sheet and should test themselves by attempting to recall the key phrases. This method instructs the diligent student to immediately review all sections pertaining to any key words forgotten. When the chapter or selection has thus been completely read, look over your notes to get a bird's-eye view of the points and their relationship to one another.

Check your memory by reciting the major points under each heading and the sub points under each major point. You can do this by covering up the notes and trying to recall the information. Review daily during the period of time before your exam. In reviewing stage, the students go back over the text and think about how much they understand. In this stage, the students can put a $\operatorname{tick}(\nabla$ next to the part they understand and a questions mark $\nabla$ next to the parts that are not still clear.

Textbooks are often read in the same way that other books are read for pleasure - beginning with the first page of the chapter and reading to the end of the chapter, without stopping. While this method is fine for novels, it is not likely to result in the level of understanding and retention needed for most textbooks
and the classes they are assigned to. SQ3R provides a different method of reading textbooks that will most likely enhance understanding and retention of material. It's not a quicker way to read a chapter in a textbook, but it is likely to reduce the amount of time you will need to spend studying the material immediately prior to the test. This result comes from more time being spent actually understanding the chapter while it is initially read. Study time then becomes deepening your understanding of the material.

If you have been trying to improve your reading comprehension but the strategies you're trying just don't seem to be helping as much as you would like, please contact SQ3R is a five-step process.

## When to use SQ3R

No technique is useful 100 percent of the time. Now that you've learned another study strategy, it is important to decide when to use it. Different study strategies work best in different situations.SQ3R may be less useful for two other types of textbooks: beginning foreign language texts or texts for English class. The focus of beginning foreign language texts is often vocabulary, verb tense, and sentence construction. Books for English class may be novels, and the purpose of reading may be focused more on the "big

## Summary

These five steps of the SQ3R Method, if applied and practiced, should result in an increase in reading comprehension, an improved ability to identify important points and better retention of the material. You should also discover one other worthwhile outcome: happily, test questions will seem familiar, because the headings you turned into questions are usually the points the instructor will emphasize on exams!

Sources: University of Illinois website and Fraser, L. (1996). Making your mark (5th ed.)

### 1.4 Objectives

This study had its following objectives:
i)To find out the effectiveness of SQ3R techniques applied by the English teachers in teaching reading in grade eight.
ii) To compare the effectiveness of SQ3R technique with the other techniques in reading in grade eight.
iii)To suggest some pedagogical implication.

### 1.5Significance of the Study

This study will be useful for those who are involved in the field of language teaching especially in ELT. It will be very important for teachers, textbook writers, students and researchers. This work will be remarkable to the area of teaching reading skill by utilizing the findings and recommendations of this study. Furthermore it will be beneficial especially for those teacher and students who improve in learning and teaching of language at lower secondary level. It will be also significant to the other forthcoming work in the field of SQ3R technique. It is also hoped that this study will add some breaks for the further improvement in the field of language teaching and learning.

## CHAPTER - II

## REVIEW OF THE RELATED LITERATURE AND CONCEPTUAL FRAMEWORK

### 2.1 Review of Empirical Literature

Actually no researches have been carried out on this topic. However, very few research work, which have been carried out on effectiveness of different techniques are mentioned below:

Jaiai(2008) conducted a research 'A study on the Technique of Teaching English at Primary Level". The main objective of this study was to find out the techniques used by the teacher of primary level in teaching English. Drill, pair work, group work, explanation etc, are the techniques used at primary level. The researcher conduct the research to find out the effectiveness of SQ3R techniques in grade eight.

Dhungana(2011)conducted a research in title "Effectiveness of Role Play Technique in Teaching Dialogue at Primary Level." The main objectives of this study are to find out the effectiveness of role play in teaching dialogue at primary level and to point out the pedagogical implication of this study. It was conducted in Shree Chanuwa Higher Secondary School in Dhankuta. The research was held in class five. The findings are various comparisoneg. holistic, medium- based comparison, item-wise comparison, Intra -test comparison etc. Among these comparison the conclusion is that the role play technique is more effectiveness than other technique in teaching dialogue at primary level.

Pant (2004), carried out a study on the, 'Effectiveness of Discovery Technique in Teaching Subject Verb Agreement.' The study showed that the Discovery technique was relatively more effective and successful than Explanation and Group Work Technique for subject verb agreement.

Regmi (2004), carried out a practical study to find out the 'Effectiveness of Group Work Technique in Teaching English Tense.' The study showed that the group work technique was relatively more effective and successful than Explanation technique for teaching English tense.

Bhandari (2005), carried a study to find out the effectiveness of Pair work and group work technique in teaching communicative function of English. It was found that the pair work technique was relatively more effective than the group work technique for teaching communicative function of English.

Humagain (2006), conducted a study on "The Effectiveness of Language Games" in learning reading comprehension. The study showed that teaching students using games was relatively more effective than teaching them without using it (usual way) for teaching reading comprehension in general.

Gyawali (2004), carried out a study on teaching poetry at secondary level. The study showed that in spite of many problems in teaching poetry, its teaching was found to be relevant. It was found without any opposition that teaching poetry helped to develop the language skills, cultural enrichment and creativity of the students.

### 2.2 Conceptual Frame Work

In this research the researcher used some text items to find out the effectiveness of SQ3R techniques. Text items are prepared from class eight English book. Students are divided into two groups:controlled and another group. Controlled groups were taught using SQ3R techniques and others groups were taught using general techniques within 24 days. The collected data was analyzed comparatively.

## Conceptual Framework of the Study



## CHAPTER - III

## METHODOLOGY

This chapter will deal with the methodology adopted during the study. The study will be carried out as follows.

### 3.1 Design of the study

The researcher collected the data and presented the information both in qualitative and quantitative ways.

### 3.2 Population of the study

Class eight students of Shree Higher Secondary School Parikhaprang, Marekkatahare-4, Dhankuta were the population of this study to divide the students into two groups and to make the result valid and relevance.

### 3.3 Sampling size

The researcher sampled the forty students of class 8 ,Shree Higher Secondary School Parikhaprang for the study. The sampled students were divided in two groups . Each group had twenty students.

### 3.4Sampling Methods

## Random sampling

Purposive sampling methods was applied to sample the school. Similarly primary and secondary source are also used.

### 3.5 Research Tools

The main tool for the data collection was the test items prepared on the basis of the selected reading texts. The test items required written responses. Written responses were collected from both objective and subjective types of test items.

### 3.6 Method adopted for tools Validation

The validation process should be convincible that the tools were useful for collecting necessary information for the research. In this research, the researcher took the pre-test to find out the reading proficiency of the students using questionnaires. The researcher collected their answer sheets and check them then tabulated their marks.(Appendix)

### 3.7 Data Collection Procedures

The researcher adopted the stepwise methodological procedure to collect the required data. The process of data collection was as follows:-

1. To determine the reading proficiency of the students at the entry point two pre-test was taken. The full mark of the test was twenty $(10+10)$. The test was only written. The two reading passages were given. Each passage carried ten marks.
2. The mean score was found from the pre-test.
3. The students were divided into two groups on the basis of odd-even ranking of the individual scores. The ranking procedure and group division was as follows :

Table 1 Group division of selection students

| Pre-test Rank | Group - A | Group - B |
| :--- | :--- | :--- |
| $1-20$ | Odd | even |
| $21-40$ | Even | odd |

4. The students divided into two groups were taught side by side for five
5. days in a week. Group-A was taught through SQ3R technique and Group-B was taught through usual classroom technique. The process
continued for twenty four days.
6. Same questionnaire was administered both groups to get information.
7. Questionnaires and teaching materials were developed for selected reading texts in each period.

At the end of classroom teaching, two post test was taken. The similar types of test used in the pre-test was used for the post-test. Then the results of the two tests were compared to determine the effectiveness of SQ3R technique in teaching reading in lower secondary Level.

### 3.8 Mode of analysis and interpretation

The researcher collected data and analyzed and interpreted the information both quantitative 11 and qualitative way. The tests of group A and group B were computed and tabulated in the table and the interpretation was presented to make the information clear .

## CHAPTER -IV

## RESULT AND DISCUSSION

This chapter deals with analysis and interpretation of data. The data are analyzed under the following four main headings.
a. Holistic comparison
b. Intra text comparison
c. Item-Based comparison
d. Intra- test comparison

While analyzing the data, the individual scores of both tests (pre-test and posttest) have been taken and tabulated group wise. Then the average score of both groups on the two tests is computed out of the individual scores tabulated.

The average scores of the pre-test were subtracted from the average score of the post test to find out the differences and those differences were converted into percentage. If it is greater than zero, it shows the improvement in learners study during the teaching. The group that got a higher percentage (increment percentage) has been considered to be better than the one which got lower percentage.

As the same method, materials, medium etc. were used for both the groups, only with variation in the technique i.e. experimental group was taught with SQ3R technique whereas control group was taught following usual classroom technique (without following SQ3R technique). It is assumed that one group performed better than other because the technique used for that group was relatively more effective. Thus, the effectiveness of SQ3R technique inteaching reading at class 8 was observed and interpreted.

The analysis and interpretation of the study are given below.
[Note: Throughout the study Group A refers to the experimental group which was taught using the SQ3R technique and Group B refers the control group which was taught usual classroom technique.

### 4.1 Holistic Comparison

In this comparison group ' A ' and group ' B ' in both tests are computed and tabulated in general in the following table.

Table 2: Average Mark of the Students in total

| Group | Av. score in pre-test | Av. score in post-test | D | D\% |
| :--- | :--- | :--- | :--- | :--- |
| A | 11.77 | 14.95 | 3.18 | 27.01 |
| B | 11.80 | 13.65 | 1.85 | 15.67 |

The above table reveals the fact that group ' A ' has the average score of 11.77 and 14.95 in the pre-test and post-test respectively. This group has increased its average scores by 3.18 or $27.01 \%$. Similarly, group 'B' has the average scores of 11.80 and 13.65 in the pre-test and post-test respectively. This group has increased its average scores by 1.85 or $15.67 \%$.

This analysis helps to conclude that in general the performance displayed by group 'A' is relatively greater than that of group ' B '. This showed as a whole or in general that SQ3R technique is relatively more effective than the usual classroom techniques in teaching reading in class 8 . The increase of difference of group 'A' over group 'B' is by 1.33 or $41.82 \%$.

### 4.2Intra Text Comparison

For the process of data collection two text were administered in pre-test and post test. Ten marks were carried for each texts. In this comparison group A and group B in both texts were computed and tabulated. The average scores of obtained by the students in both texts were tabulated in the table. The differences and the percentages of differences in each texts were observed to
see the performance of both groups and on the basis of that performance the effectiveness of SQ3R techniques in teaching reading in class 8.

### 4.2.1 Intra Text comparison of First Text

In this comparison, the average scores obtained by both groups in the first texts were computed and tabulated separately for the analysis and interpretation

Table 3 :Average Marks of the Students in first text

| Group | Av. score in pre-test 1 | Av. score in post-test 1 | D | $\mathrm{D} \%$ |
| :--- | :--- | :--- | :--- | :--- |
| A | 5.75 | 7.45 | 1.70 | 29.57 |
| B | 5.50 | 6.70 | 1.20 | 20.87 |

This table reveals the fact that group A has the average scores of 5.75 in the pre-test and 7.45 in the post-test. It has increased its average score by 1.70 or $29.57 \%$. On the other hand, group B has the average scores of 5.50 in the pretest and 6.70 in the post-test. This group has increased its average score by 1.20 or $20.87 \%$. This also proves that group A which was taught using the SQ3R technique made better improvement than group $B$ in reading texts.

### 4.2.2 Intra Text Comparison of Second Text

Table 4 :Average Marks of the Students in text second

| Group | Av. score in pre-test 2 | Av. score in post-test 2 | D | $\mathrm{D} \%$ |
| :--- | :--- | :--- | :--- | :--- |
| A | 6.02 | 7.50 | 1.48 | 24.58 |
| B | 6.25 | 6.95 | 0.30 | 4.98 |

This table also reveals the fact that group A has the average scores of 6.02 in the pre-test and 7.50 in the post-test. It has increased its average score by 1.48 or $24.58 \%$. On the other hand, group B has the average scores of 6.25 in the pre-test and 6.95 in the post-test. This group has increased its average score by 0.30 or $4.98 \%$. This also proves that group A which was taught using the SQ3R technique made better improvement than group B in reading texts in grade 8 .

### 4.3Item-Based Comparison

For the process of data collection written tests were administered. For the purpose of testing written response two separate question set were prepared. Each of the set 3 different test item s of 10 marks were administered and the average scores obtained by the students in both test (pre-test and post-test) were tabulated in different tables. The average mark in each item of the pre-test was subtracted from the average mark in each item of the post-test in written tests to find out the differences in the two results. The differences and the percentage of differences in each item were observed to see the performance of both groups and on the basis of that performance the effectiveness of SQ3R technique in teaching reading was analyzed and interpreted.

### 4.3.1 Item- Comparison in Item 1 of First Text

Table 5 :Average Marks of the Students in item lof first text

| Group | Av. score in pre-test | Av. score in post-test | D | $\mathrm{D} \%$ |
| :--- | :--- | :--- | :--- | :--- |


| A | 1.40 | 1.85 | 0.45 | 32.14 |
| :--- | :--- | :--- | :--- | :--- |
| B | 1.27 | 1.65 | 0.38 | 24.14 |

This item carried 2 marks. In this item students had to complete four objective question (Fill in the blanks) as given in the example. Each question contained 0.5 marks.

Group A has the average score of 1.40 in the pre-test and 1.85 in the post-test. This group has made the improvement in the marks by 0.45 or $32.14 \%$.

Likewise, group B has the average score of 1.27 in the pre-test and 1.65 in the post-test. This group has made the improvement in marks by 0.38 or $24.14 \%$.

This shows that group A which was taught using the SQ3R technique showed better performance than group B which was taught using the conventional way of teaching or explanation in this item.

### 4.3.2 Item- Based Comparison in Item 2 of First Text

Table 6: Average Marks of the Students in item 2 of first text

| Group | Av. score in pre-test | Av. score in post-test | D | $\mathrm{D} \%$ |
| :--- | :--- | :--- | :--- | :--- |
| A | 1.27 | 1.85 | 0.58 | 45.66 |
| B | 1.30 | 1.65 | 0.35 | 27.55 |

This item carried also 2 marks and consisted of four questions. The above table shows that group A has the average score of 1.27 in the pre-test and 1.85 in the post-test. This group has increased its average marks by 0.58 or $45.66 \%$. On the other hand, group B has the average score of 1.30 in the pre-test and 1.65 in the post-test. This group has increased its average marks by 0.35 or $27.55 \%$.

This shows that group A which was taught using the SQ3R technique showed better performance than group B which was taught using the conventional way of teaching or explanation technique in this item.

### 4.3.3 Item- Based Comparison in Item 3 of First Text

Table 7: Average Marks of the Students in item 3 of first text

| Group | Av. score in pre-test | Av. score in post-test | D | D\% |
| :--- | :--- | :--- | :--- | :--- |
| A | 2.95 | 3.75 | 0.80 | 27.11 |
| B | 3.06 | 3.50 | 0.44 | 14.91 |

This item carried 6 marks. In this item the students had to answer the question based on the given passage. There were 3 questions. Each question had to carry 2 marks. This table shows that the average score of group A is 2.95 in the pre-test and 3.75 in the post-test. This group has increased its average marks by 0.80 or $27.11 \%$. Group B has the score of 3.06 in the pre-test and 3.50 in the post-test. This group has increased its average marks by 0.44 or $14.91 \%$.

This shows that group A has performed relatively better in this item than group B.

### 4.3.4 Item- Based Comparison in Item 1 Of Second Text

Table 8: Average Marks of the Students in item 1 of second text

| Group | Av. score in pre-test | Av. score in post-test | D | $\mathrm{D} \%$ |
| :--- | :--- | :--- | :--- | :--- |
| A | 1.62 | 1.97 | 0.35 | 21.60 |
| B | 1.47 | 1.75 | 0.28 | 17.28 |

This item carried 2 marks. There were 4 objection question related to the given passage. Each carried 0.5 mark. This table shows that the average score of group 'A' is 1.62 in the pre-test and 1.97 in post-test. This group has increased its marks by 0.35 of $21.60 \%$. Group B has the score of 1.47 in the pre-test and 1.75 in the post-test. This group has increased its average marks by 0.28 or 17.28 \%.

It shows that group 'A' has made better improvement than that of group ' B '. Therefore, group 'A' learned more effectively than group 'B' because of the use of SQ3R technique.

### 4.3.5 Item- Based Comparison in Item 2 Of Second Text

Table 9: Average Marks of the Students in item 2 of second text

| Group | Av. score in pre-test | Av. score in post-test | D | $\mathrm{D} \%$ |
| :--- | :--- | :--- | :--- | :--- |
| A | 1.32 | 1.75 | 0.43 | 32.57 |
| B | 1.52 | 1.60 | 0.08 | 6.06 |

This item carried 2 marks. Group 'A' has secured the average score of 1.32 in the pre-test and 1.75 in the post-test. This group has increased its average marks by 0.43 of $32.57 \%$. Group 'B' has secured the average score of 1.52 in the pre-test and 1.60 in the post-test. This group has increased its average marks by 0.80 or $6.06 \%$.

It shows that the average score of group 'A' is greater than that of group 'B'. Therefore, group 'A' learned more effectively than group 'B' because of the use of SQ3R technique.

### 4.3.6 Item- Based Comparison in Item 3 Of Second Text

Table 10: Average Marks of the Students in item 3 of second text

| Group | Av. score in pre-test | Av. score in post-test | D | D\% |
| :--- | :--- | :--- | :--- | :--- |
| A | 2.90 | 3.72 | 0.82 | 28.27 |
| B | 3.17 | 3.60 | 0.43 | 14.82 |

This item carried 6 marks. Group 'A' has secured the average score of 2.90 in the pre-test and 3.72 in the post-test. This group has increased its average marks by 0.82 of $28.27 \%$. Group B has secured the average score of 3.17 in the pre-test and 3.60 in the post-test. This group has increased its average marks by 0.43 or $14.82 \%$. By this, we can conclude that group 'A' learned relatively better than that of group 'B' because of the use of SQ3R technique in teaching reading.

### 4.4 Intra-test comparison

This type of comparison took place within the tests. In this comparison, the average scores obtained by both groups (group 'A' and 'B') were tabulated under the pre-test and post-test separately in separate tables. Then, their achievements were compared within the same test to analyze which group had shown better result in which test items in the pre-test and which group had made better progress in the post-test and in which test items.

### 4.4.1 Pre-test

In this comparison the average scores obtained by both groups in all the test items were computed and tabulated separately for the analysis and interpretation of their achievement in the pre-test.

Table . 11:Intra-test comparison of av. marks obtained in the pre-test

| Type of test | Test item | Group A |  | Group B | $D$ | $D \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Item-1 | 1.40 | $<$ | 1.27 | 0.13 | 9.28 |


| Text-1 | Item-2 | 1.27 | $>$ | 1.30 | 0.03 | 2.14 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Item-3 | 2.95 | $>$ | 3.06 | 0.11 | 7.85 |
|  | Item-1 | 1.62 | $<$ | 1.47 | 0.15 | 10.71 |
|  | Item-2 | 1.32 | $>$ | 1.52 | 0.20 | 14.28 |
|  | Item-3 | 2.90 | $>$ | 3.17 | 0.27 | 19.28 |

The above table shows that group A has obtained more marks in item 2,3, item in text first. The average marks obtained by group A in those respective items were more than the average marks obtained by group B in the pre-test by 0.03 or $2.14 \%$, and 0.11 or $7.85 \%$ respectively. While group B obtained more marks in item 1, in text first. The difference marks obtained by group B than group A in the first text was 0.13 or $9.28 \%$. The average marks obtained by group A are more than the average marks obtained by group group B in the pre-test .Similarly obtained more marks in item 2 and 3 in text second Group B obtained more marks in all aspects of the spoken test. The average marks obtained where as group B obtained more marks only in one item, that is item n.1.

From table, we can conclude that group A showed a relatively better performance than group $B$ as it obtained more average marks in item, 2,3 in text first and 2,3 in text second. Group B obtained more average marks only in item 1 in first text and item n .1 in second text.

### 4.4.2 Post-test

In this comparison the average scores obtained by both groups in all the test items were computed and tabulated separately for the analysis and interpretation of their achievement in the post-test.

Table 12 :Intra-test comparison of av. marks obtained in the post-test

| Type of | Test item | Group A |  | Group B | D | $\mathrm{D} \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| test |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Text-1 | Item-1 | 1.85 | $>$ | 1.65 | 0.20 | 10.81 |
|  | Item-2 | 1.85 | $>$ | 1.65 | 0.20 | 10.81 |
|  | Item-3 | 3.75 | $>$ | 3.50 | 0.25 | 13.57 |
|  | Item-1 | 1.97 | $>$ | 1.75 | 0.22 | 11.89 |
|  | Item-3 | 1.75 | $>$ | 1.60 | 0.15 | 8.10 |
|  | Item | 3.72 | $>$ | 3.60 | 0.12 | 6.48 |

The above table shows that group A obtained $1.85,1.85$ and 3.75 marks in test I. similarly group B obtained $1.65,1.65$ and 3.50 marks in the same test. The different percentage of group a and B are 10.81 in item I, 10.81 in item 2 and 13.57 in item 3.

In text 2 group A obtained 1.75, 160 and 3.60 in item 1,2 and 3. respectively. The different percentages of group A and group B has 11.89, 8.10 and 6.48 in text 2 . The average scores of both groups obtained in the post-test are computed and tabulated in the above table. The table shows that the group ' A ' obtained better marks in each item than group $B$.

It shows that group 'A' progressed more than group 'B' in all items .

## CHAPTER - V

## FINDINGS AND RECOMMENDATIONS

The major focus of this study was to measure the effectiveness of SQ3R technique in teaching reading in class 8 . In this study, two groups were taught the reading passage with same objectives and using the same materials for four weeks but the only difference was in teaching technique. Group ' A ' represents experimental group which comprises twenty students while group 'B' represents control group of same size. As group 'B' was taught in a conventional way using the explanation technique whereas group 'A' was taught using a SQ3R technique.

The pre- and post- tests were administered before and after the real teaching. The results of both groups in the form of scores were computed and tabulated. After the comparative analysis and interpretation of the data obtained from preand post-tests, the researcher found out that the performance of group ' A ' which was taught using SQ3R technique quite better than the performance of group 'B' which was taught using the explanation technique. So, on the basis of the findings, the following conclusions are drawn and some recommendations are put forward.

### 5.1 Findings

The analysis and interpretation of the data obtained from the tests given to the two groups of the students have led the researcher to reach some findings. The main findings of this research work have been summarized in the following points.

## A. Holistic Effectiveness

In general group 'A' has increased its average score by 14.95 or $27.01 \%$ in the post-test whereas group 'B' has increased its average score by 13.65 or $15.67 \%$.

It shows that SQ3R technique is relatively a better impact in teaching reading at class 8 . The students taught using SQ3R technique (group-A) performed better than the students taught using usual classroom technique (group-B) as a whole.

## B. Intra text comparison

In intra text comparison pre-test text one and post test text one was compared. In this comparison in post test Group A has increased 1.70 or $29.57 \%$ marks in average where as group B increased only 1.20 or $20.87 \%$. So we can say that the technique applied to teach in group a was effective that applied in group B.

## C. Item-Based Comparison

i) In item no 1 , of first test in the average mark of group ' A ' in the pre-test is 1.40 and it is 1.85 in the post-test. The group has increased its average marks by 0.45 or $32.14 \%$. Group 'B', on the other hand, has the average score of 1.27 in the pre-test and 1.65 in the post-test. This group has increased its average marks by 0.38 or $24.14 \%$.

Similarly in the item n .1 of second text in the average mark of group ' A ' in the pre-test is 1.62 and it is 1.97 in the post-test. The group has increased its average marks by 0.35 or $21.60 \%$. Group ' B ', on the other hand, has the average score of 1.47 in the pre-test and 1.75 in the post-test. This group has increased its average marks by 0.28 or $17.28 \%$.
ii ) In item no 2 of first test, the average mark of group 'A' in the pre-test is 2.27 and 1.85 in the post-test. This group has an increment of 0.58 or $45.66 \%$. Group 'B' on the other hand has the average score of 1.30 in the pre-test and 1.65 in the post-test. This group has increased its marks by 0.35 or $27.55 \%$. Similarly group A obtained 1.32 average marks in pre-test. It increased 1.75 in post test. The increases average marks was 0.43 or $32.57 \%$. Group B on the other hand 1.52 and 1.60 average marks obtained in pre-test and post test respectively. The increases averages marks was 0.08 or $6.06 \%$.
iii) In item no 3, the average mark of group ' A ' in the pre-test of first test is 2.95 and it is 3.75 in the post-test. This group has an increment of 0.80 or $27.11 \% \%$. Group 'B' on the other hand has the average score of 3.06 in the pretest and 3.50 in the post-test. This group has increased of 0.44 or $14.91 \%$.
Similarly in the second test, the average marks of group A is 2.90 and it is 3.72 in the post test. The group has increased 0.82 or $28.27 \%$. Group B on the other hands 3.17 is the average marks in the pre-test and it is 3.60 in the post test. It also increased 0.43 or $14.82 \%$.

## D. Intra-test comparison

## i) Pre-test

In the pre-test, group A is found to be better in item 2 and 3 of the first test whereas group B is found better in item 1 . Similarly Group A is better in all items except item 1 in second test.

## ii) Post-test

In the post-test, group A has performed better than group B in all the items of the test. So, the SQ3R technique is found relatively more effective than the usual classroom technique in teaching reading.

### 5.2Recommendations

On the basis of the findings of the study, the following recommendations have been made.

### 5.2.1 Policy Level Recommendation

This level of recommendation can be used for police maker of the concerning sectors related to the teaching learning activities. Some recommendations under this level are:-

1. The text book writers and curriculum designers can be given priority to the SQ3R technique in teaching reading .
2. Curriculum Development Centre can be useful to develop and provide the teaching materials needed to handle SQ3R activities inside the class.
3. In the course of English textbooks at lower secondary level in all classes, there are included reading passage in almost every lesson. So, the English teachers of lower secondary level can be helpful to teach passage using the SQ3R technique for qualitative result.
4. The beginners are very curious to know a new thing. Therefore, it would be better if the language teachers make them read the text by creating interesting situation instead of making them depend on teachers.

### 5.2.2 Practical Level of Recommendation

1. The teaching through this technique entertains the students. Even the shy students learn the language more easily using this technique in natural like situation. So, all the secondary level English teachers who are involved in teaching reading passage throughout the country can be useful to teach passage using this technique.
2. Reading is the most important skill to gain knowledge. So to make reading purposeful, the readers should read authentic materials.
3. In order to make the students more active in the classroom, SQ3R technique would be better to applied in teaching reading. In the study students of group A who were taught using SQ3R technique found more active in classroom in comparison to the students of group B. SQ3R technique require much time. So, it is suggested that much time should be devoted while using this technique by providing them a lot of activities.

### 5.2.3 Further Research-related Recommendation

1. This research has been limited to only lower secondary level of public school. So other researchers are recommended to be carried out in other level as well.

1 .This research was only limited to 40 students of a government school of Dhankuta district. It is limited to only one experimental group in which the number of students was confined. Therefore, it can't be said that the findings of this study are complete in themselves. Further research can be carried out including more students and more schools of different types and different parts of the country to test the validity of the findings of this research.

2 .This research was limited to Reading passage only. Similar type of research can be carried on the other areas of course also.

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## APPENDIX - A

## TEST ITEMS

Student Name:-<br>Roll, No :-......

School: Shree Higher Secondary School, Parikhaprang, Dhankuta
Subject: Com. English
Date: 2072-04-27
Class: 8
Time: 45 minutes

## Group - APre-test - 1

Read the passage carefully and do the activities below
A Memorable journey from Terai to Hill I had heard that Ghalegaun was a really beautiful place for home stay. I was keen to go there. My luck favored me. My parents made a plan to take me to the place for five days during my vacation. As I was born in Birgung, I had never seen the hilly region before. My first visit to Ghalegaun made a lasting impression on me. I reached their passing many hills through green countryside. The beautiful scenery on the way appealed to me. It still flashes in my memory.

After spending a night at a hotel in Beshisahar, early next morning we start our journey on foot. I felt it difficult to walk the hills. My father immediately realized it. We broke our journey in Baglungpani. He told us to have a rest at chautara. He took out a bottle of cold drink from his bag. we drank it. "Are you enjoying the scenery?" My mother asked me. "Isn’t it an exciting experience to see such a picturesque village?" My father pointed to the village with clustered houses. I looked at the village. I couldn't help saying, "Yes". That picturesque scenery thrilled me. I forgot all the tiredness that I had felt before. "Mummy, I am ready to move ahead. I am not exhausted. Let's go!" I got up and walked to wards the village.
A.Fill in the gaps with the correct words from the passage above- 2
i.GhaleGaun was a really $\qquad$ .place for home stay.
ii. During the school vacation many city people like to visit the $\qquad$
iii. My father pointed to the village with .houses.
iv. He told us to have a rest at $\qquad$
B. Match the words in column a with the meaning in column B. -2
i. Impress village area
ii. realize a feeling that one gets about something or somebody.
iii. thrilled come to know.
iv. country side overjoyed
C. Answer the following questions $\quad(3 \times 2=6)$
i. Where did the writer go on holiday?
ii. How many member were there on the journey? who were they?
iii. Where was the writer from?

## TEST ITEMS

Student Name:- ............................................. Roll, No :-.......
School: Shree Higher Secondary School, Parikhaprang, Dhankuta
Subject: Com. English
Date: 2072-04-28
Class: 8
Time: 45 minutes
Group - BPre-test -2
Read the passage carefully and do the activities below.

## A Memorable journey from Terai to Hill

"Thank you" ,my mother replied. the man said;"The village with clustered houses is GhaleGaun. It is situated at the northwest of Besishahar in Lamjung. It takes about a five hour walk to rich there on foot from Besishahar. We can get there by bus too. People who cannot walk can take a bus to go there. Almost all the inhabitants of GhaleGaun are GhyabraGurungs. "

We enjoyed the journey with that man very much. After about a five hour walk we reached our destination. "Why are they taking marigold garland with tika? " I asked my mother. This is how they welcomed their guest, my mother replied. we were treated with proper hospitality. We were served with fresh and delicious organic food. we ate dal, Bhat, tarkari, achar with a Gurung family. we were the paying guests there. They performed their cultural danced. Mainly, we observed the Ghantu Dance, Krishna Charara, Jhakri dance and Lama dance. In the end, we observed some typical round houses there. We also looked at the Annapurna Himalayans range from the village. Thus we spent five days in a homely environment in lamjung and returned home.
A. Fill in the gaps with the correct words from the passage above- 2
i. We canlike with a Gurung family in a..........and learn their
culture.
ii. .............. food are produced without using chemical.
iii. I was $\qquad$ from the days continuous walk.
iv. Gurung family provided proper
B. Match the words in column a with the meaning in column B. 2
i. Destination come back
ii. hospitality a place where somebody is going.
iii. inhabitation friendly and generously behaviors towards guests .
iv. returned a person that lives in a particular place.
C. Answer the following questions. $3 \times 2=6$
i. Name the three types of dance that performs in GhaleGaun?
ii. How long it takes to reach GhaleGaun from Besishahar?
iii. How long did they spend at GhaleGaun?

## TEST ITEMS

Student Name:- ............................................. Roll, No :-.......
School: Shree Higher Secondary School, Parikhaprang, Dhankuta
Subject: Com. English
Date: 2072-05-18
Class: 8
Time: 45 minutes
Group - APost-test -1
Read the dialogue carefully and do the activities below.

## A visit toGodawari

Grade Eight students of KhadgaLaxmi School Went for a visit to Godawari in Lalitpur district. They studied about many plants there and enjoyed its scenic beauty. When they returned to school, Srijana, the leader of the visiting team answered the question asked by the students who were unable to attend the trip.

Binod: Tell us something interesting about Godawari.
Sirjana: Godwari is a beautiful place situated at the base of the hill full of exotic and local plants varities. The fern and orchid houses are very popular. The Japanese garden which is in the northwest part of the area is also a sight to see. This lush region is the home of many plants. There are four types of oak trees with their leaves remaining green all the years round. In addition, rhododendrons, wide walnuts, dark chestnuts and Himalayan Maples are other species of butterflies and plants are found in Godawari.

Mamata :Did you have to write about what you observed in Godawari?
Sirjana: Yes of course. We were asked to write a short report on godawari's butterflies and animals. In April and May butterflies-many of them with gleaming swallow tails-flock around beautiful flowers. Godawari is a shelter for over a hundred species of butterflies.
A. Fill in the gaps with the correct words from the conversation above- 2
i. Sirjana is the leader of the $\qquad$ teams.
ii. Godawari is situated at the $\qquad$ of the forested hills.
iii. As its climate is subtropical more than $\qquad$ pieces of butterfly and plants are found.
iv. There are $\qquad$ types of oaks trees.
B. Match the words with their meaning. 2
i. Exotic covered in healthy grass and plants.
ii. orchid stranger and unusual.
iii. subtropical a type of flowers with unusual shape.
iv. lush
warm temperature
C. Answer the following questions. $3 \times 2=6$
i. What makes Godawari beautiful?
ii. What is Godwari famous for?
iii. How many species of plants are found there?

## TEST ITEMS

Student Name:- ............................................. Roll, No :-.......
School: Shree Higher Secondary School, Parikhaprang, Dhankuta
Subject: Com. English
Date: 2072-05-18
Class: 8
Time: 45 minutes
Group - BPost-test -2
Read the dialogue carefully and do the activities below.
Anuj: I have heard Godawari is a famous picnic spot as well as, is it true?
Sirjana: That's right. Godawari's beauty and plants attract many people who go there to enjoy a picnic. Especially one Saturday's, large groups of people gather there for cook outs. Varieties of food items are prepare and served in paper or leaf plates because they are biodegradable.

Picnics are often associated with festivals and are long standing traditions in Nepal. Picnics have been part of the social harmony for centuries . People enjoy eating, participate in dancing singing and other fun events at picnic.

Asha :How can we reached there from Kathmandu ?
Sirjana: Godawari is within easy rich of Kathmandu's ring road. You can take a public vehicles, mini bus, micro bus, or private car or taxi to go there.

Anil: How would you appeal people to visit Godawari?
Sirjana: well, visiting places like Godawari provides us with recreation and inspiration to study nature. We are nature lovers and it is a part of our lives. In this sense, Godawari is worth visiting.
A. Fill in the gaps with the correct words from the conversation above- 2
i. Picnics are often $\qquad$ with festivals.
ii. Butterflies $\qquad$ around beautiful flower
iii. We are $\qquad$ lovers.
iv. People $\qquad$ eating ,participate in dancing.
B. Correct the spelling of the following words. 2
i. reogion.
ii. clmati
iii. picnic
iv. hamonyr
C. Answer the following questions. $3 \times 2=6$
i. In which month do we find butterflies moving around flowers ?
ii.How can you go there from in Kathmandu ?
iii. Why do people use paper of leaf plate?

## APPENDIX 2

## Pre-test and Post-test Results

## 1. The result of the pre-test

Full Mark: 20

| S.N. | Name of the students | Test -1 | Test -2 | Total |
| :---: | :---: | :---: | :---: | :---: |
| 1. | BheshKumariShrestha | 7 | 7.5 | 14.5 |
| 2. | Elisha Shrestha | 8 | 8 | 16 |
| 3. | PrabinGurung | 5 | 6 | 11 |
| 4. | SakshamKarki | 3 | 5 | 8 |
| 5. | Lila Shrestha | 7 | 6.5 | 13.5 |
| 6. | PrativaKhadka | 7 | 6.5 | 13.5 |
| 7 | Tek Mani Karki | 9 | 9.5 | 18.5 |
| 8 | YogeshParajuli | 7.5 | 8 | 15.5 |
| 9 | LokendraAdhikari | 6 | 8 | 14 |
| 10 | Narayan Parajuli | 4 | 4 | 8 |
| 11 | SaritaAdhikari | 5.5 | 5.5 | 11 |
| 12 | Yuba Raj Darji | 3.5 | 4 | 7.5 |
| 13 | Santos Bista | 6.5 | 6 | 12.5 |
| 14 | NabinAdhikari | 7 | 8 | 15 |
| 15 | SumanParajuli | 7 | 7 | 14 |
| 16 | KhemBahadurParajuli | 4 | 4.5 | 8.5 |
| 17 | SirjanaAdhikari | 2 | 2.5 | 4.5 |
| 18 | SarinaGurung | 3 | 4 | 7 |
| 19 | BhupalParajuli | 5 | 3 | 8 |
| 20 | Milan Ale Magar | 6 | 6 | 12 |
| 21 | KesharaDahal | 8.5 | 8 | 16.5 |
| 22 | Puja Adhikari | 7 | 7 | 14 |
| 23 | NabinPoudel | 7.5 | 8 | 15.5 |
| 24 | SagarAdhikari | 6 | 7 | 13 |
| 25 | NirmalGurung | 9 | 9 | 18 |
| 26 | PrativaDarji | 4 | 5 | 9 |


| 27 | Kamala Khadka | 2 | 3 | 5 |
| :--- | :--- | :--- | :--- | :--- |
| 28 | Gita Shrestha | 7 | 7 | 14 |
| 29 | Tanka BahadurKhadka | 6 | 8 | 14 |
| 30 | HariThapa | 7 | 7 | 14 |
| 31 | SagarParajuli | 7 | 6 | 13 |
| 32 | AsmitaAdhikari | 6 | 7 | 13 |
| 33 | Rama Adhikari | 6 | 5 | 11 |
| 34 | MunaKatuwal | 5 | 6 | 11 |
| 35 | BobinaThapa | 3 | 8 | 11 |
| 36 | PuspaBahadurKatuwal | 5 | 4 | 9 |
| 37 | JagatBahadurBista | 4 | 6 | 10 |
| 38 | KarismaThapa | 4 | 4 | 8 |
| 39 | GomaAdhikari | 5 | 6 | 11 |
| 40 | ManjuMagar | 4 | 5 | 9 |
|  | Total | 226 | 245.5 | 471.5 |


| R.N | Name of students | Test -1 | Test -2 | Total |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BheshaKumariShrestha | 7 | 7.5 | 14.5 |
| 3 | PrabinGurung | 5 | 6 | 11 |
| 5 | Lila Shrestha | 7 | 6.5 | 13.5 |
| 7 | Tek Mani Karki | 9 | 9.5 | 18.5 |
| 9 | LokendraAdhikari | 6 | 8 | 14 |
| 11 | SaritaAdhikari | 5.5 | 5.5 | 11 |
| 13 | Santos Bista | 6.5 | 6 | 12.5 |
| 15 | SumanParajuli | 7 | 7 | 14 |
| 17 | SirjanaAdhikari | 2 | 2.5 | 4.5 |
| 19 | BhupalParajuli | 5 | 3 | 8 |
| 22 | Puja Adhikari | 7 | 7 | 14 |
| 24 | SagarAdhikari | 6 | 7 | 13 |
| 26 | PrativaDarji | 4 | 5 | 9 |
| 28 | Gita Shrestha | 7 | 7 | 14 |
| 30 | HariThapa | 7 | 7 | 14 |
| 32 | AsmitaAdhikari | 6 | 7 | 13 |
| 34 | MunaKatuwal | 5 | 6 | 11 |
| 36 | PuspaBahadurKatuwal | 5 | 4 | 9 |
| 38 | KarishmaThapa | 4 | 4 | 8 |
| 40 | ManjuMagar | 4 | 5 | 9 |
|  | Total marks | 115 | 120.5 | 235.5 |
|  | Average Marks | 5.75 | 6.02 | 11.77 |


| R.. | Name of students | Test -1 | Test -2 | Total |
| :---: | :---: | :---: | :---: | :---: |
| 2 | Elisha Shrestha | 8 | 8 | 16 |
| 4 | SakshamKarki | 3 | 5 | 8 |
| 6 | PrativaKhadka | 7 | 6.5 | 13.5 |
| 8 | YogeshParajuli | 7.5 | 8 | 15.5 |
| 10 | Narayan Parajuli | 4 | 4 | 8 |
| 12 | Yuba Raj Darji | 3.5 | 4 | 7.5 |
| 14 | NabinAdhikari | 7 | 8 | 15 |
| 16 | KhemBahadurParajuli | 4 | 4.5 | 8.5 |
| 18 | SarinaGurung | 3 | 4 | 7 |
| 20 | BhupalParajuli | 6 | 6 | 12 |
| 21 | KhesharaDahal | 8.5 | 8 | 16.5 |
| 23 | NabinPoudel | 7.5 | 8 | 15.5 |
| 25 | NirmalGurung | 9 | 9 | 18 |
| 27 | Kamala Khadka | 2 | 3 | 5 |
| 29 | Tanka BahadurKhadka | 6 | 8 | 14 |
| 31 | SagarParajuli | 7 | 6 | 13 |
| 33 | Rama Adhikari | 6 | 5 | 11 |
| 35 | MunaKatuwal | 3 | 8 | 11 |
| 37 | JaaagatBahadurBista | 4 | 6 | 10 |
| 39 | GomaAdhikari | 5 | 6 | 11 |
|  | Total | 111 | 125 | 236 |
|  | Average Marks | 5.5 | 6.25 | 11.80 |

## Post-test Results

2.1 The result of the post-test

Full Mark: 20

| S.N. | Name of the students | Test -1 | Test -2 | Total |
| :---: | :---: | :---: | :---: | :---: |
| 1. | BheshKumariShrestha | 8 | 9 | 17 |
| 2. | Elisha Shrestha | 7 | 8 | 15 |
| 3. | PrabinGurung | 8.5 | 9 | 17.5 |
| 4. | SakshamKarki | 8 | 7 | 15 |
| 5. | Lila Shrestha | 8 | 7 | 13 |
| 6. | PrativaKhadka | 7 | 5 | 12 |
| 7 | Tek Mani Karki | 9.5 | 9 | 18.5 |
| 8 | YogeshParajuli | 8 | 8 | 16 |
| 9 | LokendraAdhikari | 8 | 8 | 16 |
| 10 | Narayan Parajuli | 7 | 6 | 13 |
| 11 | SaritaAdhikari | 7 | 6 | 13 |
| 12 | Yuba Raj Darji | 7 | 6 | 13 |
| 13 | Santos Bista | 8 | 7 | 15 |
| 14 | NabinAdhikari | 7 | 8 | 15 |
| 15 | SumanParajuli | 8 | 7 | 15 |
| 16 | KhemBahadurParajuli | 5 | 6 | 11 |
| 17 | SirjanaAdhikari | 6 | 7 | 13 |
| 18 | SarinaGurung | 7 | 8 | 15 |
| 19 | BhupalParajuli | 8 | 7 | 15 |
| 20 | Milan Ale Magar | 6 | 7 | 13 |
| 21 | KesharaDahal | 8 | 7 | 15 |
| 22 | Puja Adhikari | 8 | 7 | 15 |
| 23 | NabinPoudel | 9 | 8 | 17 |
| 24 | SagarAdhikari | 7 | 8 | 15 |
| 25 | NirmalGurung | 8 | 7 | 15 |
| 26 | PrativaDarji | 7 | 6 | 13 |
| 27 | Kamala Khadka | 5 | 7 | 12 |


| 28 | Gita Shrestha | 7 | 7 | 14 |
| :--- | :--- | :--- | :--- | :--- |
| 29 | Tanka BahadurKhadka | 7 | 8 | 14 |
| 30 | HariThapa | 8 | 7 | 15 |
| 31 | SagarParajuli | 6 | 7 | 13 |
| 32 | AsmitaAdhikari | 7 | 8 | 15 |
| 33 | Rama Adhikari | 7 | 6 | 13 |
| 34 | MunaKatuwal | 6 | 8 | 14 |
| 35 | BobinaThapa | 5 | 7 | 12 |
| 36 | PuspaBahadurKatuwal | 8 | 7 | 15 |
| 37 | JagatBahadurBista | 6 | 6 | 12 |
| 38 | KarismaThapa | 7 | 8 | 15 |
| 39 | GomaAdhikari | 5 | 6 | 11 |
| 40 | ManjuMagar | 6 | 7 | 13 |
|  | Total | 285 | 287 | 569 |


| R.N | Name of students | Test -1 | Test -2 | Total |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BheshaKumariShrestha | 8 | 9 | 17 |
| 3 | PrabinGurung | 8.5 | 9 | 17.5 |
| 5 | Lila Shrestha | 8 | 7 | 15 |
| 7 | Tek Mani Karki | 9.5 | 9 | 18.5 |
| 9 | LokendraAdhikari | 8 | 8 | 16 |
| 11 | SaritaAdhikari | 7 | 6 | 13 |
| 13 | Santos Bista | 8 | 7 | 15 |
| 15 | SumanParajuli | 8 | 7 | 15 |
| 17 | SirjanaAdhikari | 6 | 7 | 13 |
| 19 | BhupalParajuli | 8 | 7 | 15 |
| 22 | Puja Adhikari | 7 | 8 | 15 |
| 24 | SagarAdhikari | 7 | 8 | 15 |
| 26 | PrativaDarji | 7 | 6 | 13 |
| 28 | Gita Shrestha | 7 | 7 | 14 |
| 30 | HariThapa | 8 | 7 | 15 |
| 32 | AsmitaAdhikari | 7 | 8 | 15 |
| 34 | MunaKatuwal | 6 | 8 | 14 |
| 36 | PuspaBahadurKatuwal | 8 | 7 | 15 |
| 38 | KarishmaThapa | 7 | 8 | 15 |
| 40 | ManjuMagar | 6 | 7 | 13 |
|  |  | 149 | 150 | 299 |
|  | Average marks | 7.45 | 7.50 | 14.95 |

2.2. Post-test result of Group -B

Full Mark: 20

| R.n. | Name of students | Test -1 | Test -2 | Total |
| :---: | :---: | :---: | :---: | :---: |
| 2 | Elisha Shrestha | 7 | 8 | 15 |
| 4 | SakshamKarki | 8 | 7 | 15 |
| 6 | PrativaKhadka | 7 | 5 | 12 |
| 8 | YogeshParajuli | 8 | 8 | 16 |
| 10 | Narayan Parajuli | 7 | 6 | 13 |
| 12 | Yuba Raj Darji | 7 | 6 | 13 |
| 14 | NabinAdhikari | 7 | 8 | 15 |
| 16 | KhemBahadurParajuli | 5 | 6 | 11 |
| 18 | SarinaGurung | 7 | 8 | 15 |
| 20 | BhupalParajuli | 6 | 7 | 13 |
| 21 | KhesharaDahal | 8 | 7 | 15 |
| 23 | NabinPoudel | 9 | 8 | 17 |
| 25 | NirmalGurung | 8 | 7 | 15 |
| 27 | Kamala Khadka | 5 | 7 | 12 |
| 29 | Tanka BahadurKhadka | 7 | 8 | 15 |
| 31 | SagarParajuli | 6 | 7 | 13 |
| 33 | Rama Adhikari | 7 | 6 | 13 |
| 35 | MunaKatuwal | 5 | 7 | 12 |
| 37 | JaaagatBahadurBista | 6 | 6 | 12 |
| 39 | GomaAdhikari | 5 | 7 | 12 |
|  | Total | 134 | 139 | 273 |
|  | Average marks | 6.70 | 6.95 | 13.65 |

### 3.1 Item Based pre-test result of group- A

| Roll no | Name of the student | Test 1 |  |  | Test 2 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Item 1 | Item <br> 2 | Item <br> 3 | Item 1 | Item 2 | Item 3 |  |
| 1 | BheshaKumariSh restha | 2 | 2 | 3 | 1.5 | 2 | 4 | 14.5 |
| 3 | PrabinGurung | 1 | 1 | 3 | 2 | 1 | 3 | 11 |
| 5 | Lila Shrestha | 2 | 2 | 3 | 2 | 1.5 | 3 | 13.5 |
| 7 | Tek Mani Karki | 2 | 2 | 5 | 2 | 2 | 5.5 | 18.5 |
| 9 | LokendraAdhikar i | 2 | 1 | 3 | 2 | 2 | 4 | 14 |
| 11 | SaritaAdhikari | 1.5 | 1.5 | 2.5 | 2 | 0.5 | 3 | 11 |
| 13 | Santos Bista | 2 | 0.5 | 1.5 | 0.5 | 0 | 2 | 12.5 |
| 15 | SumanParajuli | 2 | 2 | 3 | 2 | 2 | 3 | 14 |
| 17 | SirjanaAdhikari | 0 | 0.5 | 1.5 | 0.5 | 0 | 2 | 4.5 |
| 19 | BhupalParajuli | 1 | 1 | 3 | 1 | 1 | 1 | 8 |
| 22 | Puja Adhikari | 1.5 | 2 | 3.5 | 2 | 1.5 | 3.5 | 14 |
| 24 | SagarAdhikari | 1 | 1 | 4 | 2 | 2 | 3 | 13 |
| 26 | PrativaDarji | 1 | 1 | 2 | 2 | 1 | 2 | 9 |
| 28 | Gita Shrestha | 2 | 1 | 4 | 2 | 2 | 3 | 14 |
| 30 | HariThapa | 2 | 1 | 4 | 2 | 2 | 3 | 14 |
| 32 | AsmitaAdhikari | 1 | 1 | 4 | 2 | 1 | 4 | 13 |
| 34 | MunaKatuwal | 1 | 1 | 3 | 2 | 1 | 3 | 11 |
| 36 | PuspaBahadurKat uwal | 1 | 2 | 2 | 1 | 1 | 2 | 9 |
| 38 | KarishmaThapa | 1 | 1 | 2 | 1 | 1 | 2 | 8 |
| 40 | ManjuMagar | 1 | 1 | 2 | 1 | 2 | 2 | 9 |
|  | Total | 28 | 25.5 | 59 | 32.5 | 26.5 | 58 | 235.5 |
|  | Average marks | 1.40 | 1.27 | 2.95 | 1.62 | 1.32 | 2.90 | 11.77 |

### 3.2 Item Based pre-test result of group- B

| Roll <br> no | Name of the student | Test 1 |  |  | Test 2 |  |  | Tota 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Item 1 | Item <br> 2 | $\begin{array}{\|l\|} \hline \text { Item } \\ 3 \end{array}$ | Item 1 | Item <br> 2 | Item <br> 3 |  |
| 2 | Elisha Shrestha | 2 | 2 | 4 | 2 | 2 | 4 | 16 |
| 4 | SakshamKarki | 0 | 1 | 2 | 1 | 2 | 2 | 8 |
| 6 | PrativaKhadka | 2 | 2 | 4 | 1.5 | 2 | 4 | 13.5 |
| 8 | YogeshParajuli | 2 | 1.5 | 4 | 1 | 1.5 | 4 | 15.5 |
| 10 | Narayan Parajuli | 1 | 1 | 2 | 1 | 1 | 2 | 8 |
| 12 | Yuba Raj Darji | 0.5 | 0.5 | 2.5 | 1 | 1 | 2 | 7.5 |
| 14 | NabinAdhikari | 1 | 2 | 4 | 2 | 2 | 4 | 15 |
| 16 | KhemBahadurPa rajuli | 1 | 1 | 2 | 1 | 1 | 2.5 | 8.5 |
| 18 | SarinaGurung | 1 | 1 | 1 | 1 | 1 | 2 | 7 |
| 20 | BhupalParajuli | 1 | 2 | 3 | 1 | 2 | 3 | 12 |
| 21 | KhesharaDahal | 2 | 2 | 4.5 | 2 | 2 | 4 | 16.5 |
| 23 | NabinPoudel | 2 | 2 | 3.5 | 2 | 2 | 4 | 15.5 |
| 25 | NirmalGurung | 2 | 2 | 5 | 2 | 2 | 5 | 18 |
| 27 | Kamala Khadka | 0 | 0 | 2 | 1 | 0 | 1 | 5 |
| 29 | Tanka <br> BahadurKhadka | 2 | 1 | 3 | 2 | 2 | 4 | 14 |
| 31 | SagarParajuli | 2 | 1 | 4 | 1 | 2 | 3 | 13 |
| 33 | Rama Adhikari | 1 | 1 | 4 | 1 | 1 | 3 | 11 |
| 35 | MunaKatuwal | 1 | 1 | 1 | 2 | 2 | 4 | 11 |
| 37 | JaaagatBahadurB ista | 1 | 1 | 3 | 2 | 1 | 3 | 10 |
| 39 | GomaAdhikari | 1 | 1 | 3 | 2 | 1 | 3 | 11 |
|  | Total | 25.5 | 26 | 61.5 | 29.5 | 30.5 | 63.5 | 236 |
|  | Average marks | 1.27 | 1.3 | 3.06 | 1.47 | 1.52 | 3.17 | 11.8 |

### 4.1 Item Based post-test result of group- A

| Roll <br> no | Name of the student | Test 1 |  |  | Test 2 |  |  | Tota 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Item <br> 1 | Item <br> 2 | $\begin{array}{\|l\|} \hline \text { Item } \\ 3 \end{array}$ | Item 1 | Item <br> 2 | Item <br> 3 |  |
| 1 | BheshaKumariSh restha | 2 | 2 | 4 | 2 | 2 | 5 | 17 |
| 3 | PrabinGurung | 2 | 2 | 4.5 | 2 | 2 | 5 | 17.5 |
| 5 | Lila Shrestha | 2 | 2 | 4 | 1.5 | 1 | 4.5 | 15 |
| 7 | Tek Mani Karki | 2 | 2 | 5.5 | 2 | 2 | 5 | 18.5 |
| 9 | LokendraAdhikar i | 2 | 2 | 4 | 2 | 2 | 4 | 16 |
| 11 | SaritaAdhikari | 2 | 1 | 4 | 2 | 1 | 3 | 13 |
| 13 | Santos Bista | 2 | 2 | 4 | 2 | 1 | 4 | 15 |
| 15 | SumanParajuli | 2 | 2 | 4 | 2 | 2 | 3 | 15 |
| 17 | SirjanaAdhikari | 1 | 2 | 3 | 2 | 2 | 3 | 13 |
| 19 | BhupalParajuli | 2 | 2 | 4 | 2 | 2 | 3 | 15 |
| 22 | Puja Adhikari | 2 | 2 | 3 | 2 | 2 | 4 | 15 |
| 24 | SagarAdhikari | 2 | 2 | 3 | 2 | 2 | 4 | 15 |
| 26 | PrativaDarji | 2 | 2 | 3 | 2 | 1 | 3 | 13 |
| 28 | Gita Shrestha | 2 | 2 | 3 | 2 | 2 | 3 | 14 |
| 30 | HariThapa | 2 | 2 | 4 | 2 | 2 | 3 | 15 |
| 32 | AsmitaAdhikari | 2 | 2 | 3 | 2 | 2 | 4 | 15 |
| 34 | MunaKatuwal | 1 | 1 | 4 | 2 | 2 | 3 | 13 |
| 36 | PuspaBahadurKa tuwal | 2 | 2 | 4 | 2 | 2 | 3 | 15 |
| 38 | KarishmaThapa | 2 | 2 | 3 | 2 | 2 | 4 | 15 |
| 40 | ManjuMagar | 1 | 1 | 4 | 2 | 1 | 4 | 13 |
|  | Total | 37 | 37 | 75 | 39.5 | 35 | 74.5 | 298 |
|  |  | 1.85 | 1.85 | 3.75 | 1.97 | 1.75 | 3.72 | 14.9 |

### 4.2 Item Based post-test result of group- B

| Roll <br> no | Name of the student | Test 1 |  |  | Test 2 |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Item <br> 1 | Item <br> 2 | Item <br> 3 | Item 1 | Item <br> 2 | Item <br> 3 |  |
| 2 | Elisha Shrestha | 2 | 2 | 3 | 2 | 2 | 4 | 15 |
| 4 | SakshamKarki | 2 | 2 | 4 | 2 | 1 | 4 | 15 |
| 6 | PrativaKhadka | 2 | 1 | 4 | 1 | 1 | 3 | 12 |
| 8 | YogeshParajuli | 2 | 2 | 4 | 2 | 2 | 4 | 16 |
| 10 | Narayan Parajuli | 2 | 1 | 4 | 1 | 1 | 4 | 13 |
| 12 | Yuba Raj Darji | 2 | 2 | 3 | 1 | 1 | 4 | 13 |
| 14 | NabinAdhikari | 2 | 2 | 3 | 2 | 2 | 4 | 15 |
| 16 | KhemBahadurPa rajuli | 1 | 1 | 3 | 1 | 2 | 3 | 11 |
| 18 | SarinaGurung | 1 | 2 | 4 | 2 | 2 | 4 | 15 |
| 20 | BhupalParajuli | 1 | 2 | 3 | 2 | 1 | 4 | 13 |
| 21 | KhesharaDahal | 2 | 2 | 4 | 2 | 1 | 4 | 15 |
| 23 | NabinPoudel | 2 | 2 | 5 | 2 | 2 | 4 | 17 |
| 25 | NirmalGurung | 2 | 2 | 5 | 2 | 1 | 3 | 15 |
| 27 | Kamala Khadka | 1 | 1 | 3 | 2 | 2 | 3 | 12 |
| 29 | Tanka <br> BahadurKhadka | 2 | 2 | 3 | 2 | 2 | 4 | 15 |
| 31 | SagarParajuli | 2 | 1 | 3 | 2 | 2 | 3 | 13 |
| 33 | Rama Adhikari | 2 | 1 | 4 | 1 | 2 | 3 | 13 |
| 35 | MunaKatuwal | 1 | 1 | 3 | 2 | 2 | 3 | 12 |
| 37 | JaaagatBahadurB ista | 1 | 2 | 3 | 2 | 1 | 3 | 12 |
| 39 | GomaAdhikari | 1 | 2 | 2 | 2 | 2 | 3 | 12 |
|  | Total | 33 | 33 | 70 | 35 | 32 | 72 | 274.5 |
|  |  | 1.65 | 1.65 | 3.50 | 1.75 | 1.6 | 3.6 | 13.72 |

## 5. Item Based Test Result

5.1 The Result in Item No. 1 of First text

Total Marks: 2
Group A

| Roll No. | Pre-test | Post-test | Difference | D\% |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 2 | 0 | 0.00 |
| 3 | 1 | 2 | 1 | 50.00 |
| 5 | 2 | 2 | 0 | 0.00 |
| 7 | 2 | 2 | 0 | 0.00 |
| 9 | 2 | 2 | 0 | 0.00 |
| 11 | 1.5 | 2 | 1.5 | 75.00 |
| 13 | 2 | 2 | 0 | 0.00 |
| 15 | 2 | 2 | 0 | 0.00 |
| 17 | 0 | 1 | 1 | 50.00 |
| 19 | 1 | 2 | 1 | 50.00 |
| 22 | 1.5 | 2 | 0.5 | 25.00 |
| 24 | 1 | 2 | 1 | 50.00 |
| 26 | 1 | 2 | 1 | 50.00 |
| 28 | 2 | 2 | 0 | 0.00 |
| 30 | 2 | 2 | 0 | 0.00 |
| 32 | 1 | 2 | 1 | 50.00 |
| 34 | 1 | 1 | 0 | 0.00 |
| 36 | 1 | 2 | 1 | 50.00 |
| 38 | 1 | 2 | 1 | 50.00 |
| 40 | 1 | 1 | 0 | 0.00 |
| Total Mark | 28 | 37 | 9 |  |
| Average <br> Mark | 1.4 | 1.85 | 0.45 | 0.00 |

## Group B

| Roll No. | Pre-test | Post-test | Difference | D\% |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 2 | 2 | 0 | 0.00 |
| 4 | 0 | 2 | 2 | 100.00 |
| 6 | 2 | 2 | 0 | 0.00 |
| 8 | 2 | 2 | 0 | 0.00 |
| 10 | 1 | 2 | 1 | 50.00 |
| 12 | 0.5 | 2 | 1.5 | 75.00 |
| 14 | 1 | 2 | 1 | 50.00 |
| 16 | 1 | 1 | 0 | 0.00 |
| 18 | 1 | 1 | 0 | 0.00 |
| 20 | 1 | 1 | 0 | 0.00 |
| 21 | 2 | 2 | 0 | 0.00 |
| 23 | 2 | 2 | 0 | 0.00 |
| 25 | 2 | 2 | 0 | 0.00 |
| 27 | 0 | 1 | 1 | 50.00 |
| 29 | 2 | 2 | 0 | 0.00 |
| 31 | 2 | 2 | 0 | 0.00 |
| 33 | 1 | 2 | 1 | 50.00 |
| 35 | 1 | 1 | 0 | 0.00 |
| 37 | 1 | 1 | 0 | 0.00 |
| 39 | 1 | 1 | 0 | 0.00 |
| Total Mark | 25.5 | 33 | 7.5 | 375.00 |
| Average <br> Mark | 1.27 | 1.65 | 0.38 | 0.00 |

5.3.The Result in Item No. 2 of First text Total Marks: 2

## Group A

| Roll No. | Pre-test | Post-test | Difference | D\% |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 2 | 0 | 0.00 |
| 3 | 1 | 2 | 1 | 50.00 |
| 5 | 2 | 2 | 0 | 0.00 |
| 7 | 2 | 2 | 0 | 0.00 |
| 9 | 1 | 2 | 1 | 50.00 |
| 11 | 1.5 | 1 | -0.5 | -25.00 |
| 13 | 0.5 | 2 | 1.5 | 75.00 |
| 15 | 2 | 2 | 0 | 0.00 |
| 17 | 0.5 | 2 | 1.5 | 75.00 |
| 19 | 1 | 2 | 1 | 50.00 |
| 22 | 2 | 2 | 0 | 0.00 |
| 24 | 1 | 2 | 1 | 50.00 |
| 26 | 1 | 2 | 1 | 50.00 |
| 28 | 1 | 2 | 1 | 50.00 |
| 30 | 1 | 2 | 1 | 50.00 |
| 32 | 1 | 2 | 1 | 50.00 |
| 34 | 1 | 1 | 0 | 0.00 |
| 36 | 2 | 2 | 0 | 0.00 |
| 38 | 1 | 2 | 1 | 50.00 |
| 40 | 1 | 1 | 0 | 0.00 |
| Total Mark | 25.5 | 37 | 11.5 | 575.00 |
| Average <br> Mark | 1.27 | 1.85 | 0.58 | 0.00 |

## Group B

| Roll No. | Pre-test | Post-test | Difference | D\% |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 2 | 2 | 0 | 0.00 |
| 4 | 1 | 2 | 1 | 50.00 |
| 6 | 2 | 1 | -1 | -50.00 |
| 8 | 1.5 | 2 | 0.5 | 25.00 |
| 10 | 1 | 1 | 0 | 0.00 |
| 12 | 0.5 | 2 | 1.5 | 75.00 |
| 14 | 2 | 2 | 0 | 0.00 |
| 16 | 1 | 1 | 0 | 0.00 |
| 18 | 1 | 2 | 1 | 50.00 |
| 20 | 2 | 2 | 0 | 0.00 |
| 21 | 2 | 2 | 0 | 0.00 |
| 23 | 2 | 2 | 0 | 0.00 |
| 25 | 2 | 2 | 0 | 0.00 |
| 27 | 0 | 1 | 1 | 50.00 |
| 29 | 1 | 2 | 1 | 50.00 |
| 31 | 1 | 1 | 0 | 0.00 |
| 33 | 1 | 1 | 0 | 0.00 |
| 35 | 1 | 1 | 0 | 0.00 |
| 37 | 1 | 2 | 1 | 50.00 |
| 39 | 1 | 2 | 1 | 50.00 |
| Total Mark | 26 | 33 | 7 | 350.00 |
| Average <br> Mark | 1.30 | 1.65 | 0.35 | 0.00 |

## Group A

| Roll No. | Pre-test | Post-test | Difference | D\% |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 3 | 4 | 1 | 33.33 |
| 3 | 3 | 4.5 | 1.5 | 50.00 |
| 5 | 3 | 4 | 1 | 33.33 |
| 7 | 5 | 5.5 | 0.5 | 16.67 |
| 9 | 3 | 4 | 1 | 33.33 |
| 11 | 2.5 | 4 | 1.5 | 50.00 |
| 13 | 1.5 | 4 | 2.5 | 83.33 |
| 15 | 3 | 4 | 1 | 33.33 |
| 17 | 1.5 | 3 | 1.5 | 50.00 |
| 19 | 3 | 4 | 1 | 33.33 |
| 22 | 3.5 | 3 | -0.5 | -16.67 |
| 24 | 4 | 3 | -1 | -33.33 |
| 26 | 2 | 3 | 1 | 33.33 |
| 28 | 4 | 3 | -1 | -33.33 |
| 30 | 4 | 4 | 0 | 0.00 |
| 32 | 4 | 3 | -1 | -33.33 |
| 34 | 3 | 4 | -1 | -33.33 |
| 36 | 2 | 4 | 2 | 66.67 |
| 38 | 2 | 3 | 1 | 33.33 |
| 40 | 2 | 4 | 2 | 66.67 |
| Total Mark | 59 | 75 | 16 | 533.33 |
| Average <br> Mark | 2.95 | 3.75 | 0.8 | 26.67 |

## Group B

| Roll No. | Pre-test | Post-test | Difference | D\% |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 4 | 3 | -1 | -25.00 |
| 4 | 2 | 4 | 0 | 0.00 |
| 6 | 4 | 4 | 0 | 0.00 |
| 8 | 4 | 4 | 0 | 0.00 |
| 10 | 2 | 4 | 2 | 50.00 |
| 12 | 2.5 | 3 | 0.5 | 12.50 |
| 14 | 4 | 3 | -1 | -25.00 |
| 16 | 2 | 3 | 1 | 25.00 |
| 18 | 1 | 4 | 3 | 75.00 |
| 20 | 3 | 3 | 0 | 0.00 |
| 21 | 4.5 | 4 | -0.5 | -12.50 |
| 23 | 3.5 | 5 | 1.5 | 37.50 |
| 25 | 5 | 5 | 0 | 0.00 |
| 27 | 2 | 3 | 1 | 25.00 |
| 29 | 3 | 3 | 0 | 0.00 |
| 31 | 4 | 3 | -1 | -25.00 |
| 33 | 4 | 4 | 0 | 0.00 |
| 35 | 1 | 3 | 2 | 50.00 |
| 37 | 3 | 3 | 0 | 0.00 |
| 39 | 3 | 2 | -1 | -25.00 |
| Total Mark | 61.5 | 70 | 8.5 | 212.50 |
| Average <br> Mark | 3.07 | 3.50 | 0.43 | 10.75 |

Group A

| Roll No. | Pre-test | Post-test | Difference | D\% |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 1.5 | 2 | 0.5 | 33.33 |
| 3 | 2 | 2 | 0 | 0.00 |
| 5 | 2 | 1.5 | -0.5 | -33.33 |
| 7 | 2 | 2 | 0 | 0.00 |
| 9 | 2 | 2 | 0 | 0.00 |
| 11 | 2 | 2 | 0 | 0.00 |
| 13 | 0.5 | 2 | 1.5 | 100.00 |
| 15 | 2 | 2 | 0 | 0.00 |
| 17 | 0.5 | 2 | 1.5 | 100.00 |
| 19 | 1 | 2 | 1 | 66.67 |
| 22 | 2 | 2 | 0 | 0.00 |
| 24 | 2 | 2 | 0 | 0.00 |
| 26 | 2 | 2 | 0 | 0.00 |
| 28 | 2 | 2 | 0 | 0.00 |
| 30 | 2 | 2 | 0 | 0.00 |
| 32 | 2 | 2 | 0 | 0.00 |
| 34 | 2 | 2 | 0 | 0.00 |
| 36 | 1 | 2 | 1 | 66.67 |
| 38 | 1 | 2 | 1 | 66.67 |
| 40 | 1 | 2 | 1 | 66.67 |
| Total Mark | 32.5 | 39.5 | 7 | 466.67 |
| Average <br> Mark | 1.62 | 1.97 | 0.35 | 23.33 |

## Group B

| Roll No. | Pre-test | Post-test | Difference | D\% |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 2 | 2 | 0 | 0.00 |
| 4 | 1 | 2 | 1 | 50.00 |
| 6 | 1.5 | 1 | -0.5 | -25.00 |
| 8 | 1 | 2 | 1 | 50.00 |
| 10 | 1 | 1 | 0 | 0.00 |
| 12 | 1 | 1 | 0 | 0.00 |
| 14 | 2 | 2 | 0 | 0.00 |
| 16 | 1 | 1 | 0 | 0.00 |
| 18 | 1 | 2 | 1 | 50.00 |
| 20 | 1 | 2 | 1 | 50.00 |
| 21 | 2 | 2 | 0 | 0.00 |
| 23 | 2 | 2 | 0 | 0.00 |
| 25 | 2 | 2 | 0 | 0.00 |
| 27 | 1 | 2 | 1 | 50.00 |
| 29 | 2 | 2 | 0 | 0.00 |
| 31 | 1 | 2 | 1 | 50.00 |
| 33 | 1 | 1 | 0 | 0.00 |
| 35 | 2 | 2 | 0 | 0.00 |
| 37 | 2 | 2 | 0 | 0.00 |
| 39 | 2 | 2 | 0 | 0.00 |
| Total Mark | 29.5 | 35 | 5.5 | 275.00 |
| Average <br> Mark | 1.47 | 1.75 | 0.28 | 14.00 |

## Group A

| Roll No. | Pre-test | Post-test | Difference | D\% |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 2 | 0 | 0.00 |
| 3 | 1 | 2 | 1 | 50.00 |
| 5 | 2 | 2 | 0 | 0.00 |
| 7 | 2 | 2 | 0 | 0.00 |
| 9 | 1 | 2 | 1 | 50.00 |
| 11 | 1.5 | 1 | -0.5 | -25.00 |
| 13 | 0.5 | 2 | 1.5 | 75.00 |
| 15 | 2 | 2 | 0 | 0.00 |
| 17 | 0.5 | 2 | 1.5 | 75.00 |
| 19 | 1 | 2 | 1 | 50.00 |
| 22 | 2 | 2 | 0 | 0.00 |
| 24 | 1 | 2 | 1 | 50.00 |
| 26 | 1 | 2 | 1 | 50.00 |
| 28 | 1 | 2 | 1 | 50.00 |
| 30 | 1 | 2 | 1 | 50.00 |
| 32 | 1 | 2 | 1 | 50.00 |
| 34 | 1 | 1 | 0 | 0.00 |
| 36 | 2 | 2 | 0 | 0.00 |
| 38 | 1 | 2 | 1 | 50.00 |
| 40 | 1 | 1 | 0 | 0.00 |
| Total Mark | 25.5 | 37 | 11.5 | 575.00 |
| Average <br> Mark | 1.27 | 1.85 | 0.58 | 29.00 |

5.10.The Result in Item No. 2 of second text

Total Marks: 2

## Group B

| Roll No. | Pre-test | Post-test | Difference | D\% |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 2 | 2 | 0 | 0.00 |
| 4 | 2 | 1 | -1 | -50.00 |
| 6 | 2 | 1 | -1 | -50.00 |
| 8 | 1.5 | 2 | 0.5 | 25.00 |
| 10 | 1 | 1 | 0 | 0.00 |
| 12 | 1 | 1 | 0 | 0.00 |
| 14 | 2 | 2 | 0 | 0.00 |
| 16 | 1 | 2 | 1 | 50.00 |
| 18 | 1 | 2 | 1 | 50.00 |
| 20 | 2 | 1 | -1 | -50.00 |
| 21 | 2 | 1 | -1 | -50.00 |
| 23 | 2 | 2 | 0 | 0.00 |
| 25 | 2 | 1 | -1 | -50.00 |
| 27 | 0 | 2 | 2 | 100.00 |
| 29 | 2 | 2 | 0 | 0.00 |
| 31 | 2 | 2 | 0 | 0.00 |
| 33 | 1 | 2 | 1 | 50.00 |
| 35 | 2 | 2 | 0 | 0.00 |
| 37 | 1 | 1 | 0 | 0.00 |
| 39 | 1 | 2 | 1 | 50.00 |
| Total Mark | 30.5 | 32 | 1.5 | 75.00 |
| Average <br> Mark | 1.52 | 1.60 | 0.80 | 40.00 |

## Group A

| Roll No. | Pre-test | Post-test | Difference | D\% |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 4 | 5 | 1 | 25.00 |
| 3 | 3 | 5 | 2 | 50.00 |
| 5 | 3 | 4.5 | 1.5 | 37.50 |
| 7 | 5.5 | 5 | -0.5 | -12.50 |
| 9 | 4 | 4 | 0 | 0.00 |
| 11 | 3 | 3 | 0 | 0.00 |
| 13 | 2 | 4 | 2 | 50.00 |
| 15 | 3 | 3 | 0 | 0.00 |
| 17 | 2 | 3 | 1 | 25.00 |
| 19 | 1 | 3 | 2 | 50.00 |
| 22 | 3.5 | 4 | 0.5 | 12.50 |
| 24 | 3 | 4 | 1 | 25.00 |
| 26 | 2 | 3 | 1 | 25.00 |
| 28 | 3 | 3 | 0 | 0.00 |
| 30 | 3 | 3 | 0 | 0.00 |
| 32 | 4 | 4 | 0 | 0.00 |
| 34 | 3 | 3 | 0 | 0.00 |
| 36 | 2 | 3 | 1 | 25.00 |
| 38 | 2 | 4 | 2 | 50.00 |
| 40 | 2 | 4 | 2 | 50.00 |
| Total Mark | 58 | 74.5 | 6.5 | 162.50 |
| Average <br> Mark | 2.90 | 3.72 | 0.82 | 20.50 |

## Group B

| Roll No. | Pre-test | Post-test | Difference | D\% |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 4 | 4 | 0 | 0.00 |
| 4 | 2 | 4 | 2 | 50.00 |
| 6 | 4 | 3 | -1 | -25.00 |
| 8 | 4 | 4 | 0 | 0.00 |
| 10 | 2 | 4 | 2 | 50.00 |
| 12 | 2 | 4 | 2 | 50.00 |
| 14 | 4 | 4 | 0 | 0.00 |
| 16 | 2.5 | 3 | 0.5 | 12.50 |
| 18 | 2 | 4 | 2 | 50.00 |
| 20 | 3 | 4 | 1 | 25.00 |
| 21 | 4 | 4 | 0 | 0.00 |
| 23 | 4 | 4 | 0 | 0.00 |
| 25 | 5 | 3 | -2 | -50.00 |
| 27 | 1 | 3 | 2 | 50.00 |
| 29 | 4 | 4 | 0 | 0.00 |
| 31 | 3 | 3 | 0 | 0.00 |
| 33 | 3 | 3 | 0 | 0.00 |
| 35 | 4 | 3 | -1 | -25.00 |
| 37 | 3 | 3 | 0 | 0.00 |
| 39 | 3 | 3 | 0 | 0.00 |
| Total Mark | 63.5 | 72 | 8.5 | 212.50 |
| Average <br> Mark | 3.17 | 3.60 | 0.43 | 10.75 |

