CHAPTER- ONE

INTRODUCTION

1.1 General Background

We do many different kinds of works in our daily life. We face many problems and think of some new ways of solving them. Reviewing ones own work and finding solving them is called as action research. Action research is done in different fields of work.

In the course of teaching, the teachers face many problems too. The problems may be related to any of the four skills: listening, speaking, reading or writing. The teachers also try to find out the reasons why their teaching has not been very effective or may try to find the reasons why the students are unable to understand some topics or some of the skills. The teachers then investigate and try to solve those problems. It may be either by finding new techniques or changing the teaching style of their teaching or may be by discussing the problem with other co-teachers or by using some new teaching materials. Hence the teachers start the investigation on their own work so that the problem can be solved. This type of investigation is known as action research. As mentioned earlier action research can be done in any field as it helps to improve ones own work. It has a great role to play in the field of education. Action research in education is concerned with trying to improve ones specific point in a teaching technique in a particular classroom using empirical measurement. In it the researcher needs to plan his /her work, act according to the planned work and then reflect on his her own work.. The researcher also needs to re-plan his/ her work. For the betterment of his /her work. We can also call it a form of self –reflective practice.

1.2 Definitions Related to Action Research

There are various definitions related to action research.

Carr & Kemmis (1986) defines :

> The Action Research is a form of self- reflective enquiry undertaken by participants, teachers, students or principals , for example in social (including education) situations in order to improve the rationality and justice of (a) their own social or educational practices (b) their understanding of these practices and the situations in which these practices are carried out.(as cited in McNiff, 1991, p. 2).

The above definition explains that AR can be carried out by people of different sectors. AR can be carried out in order to improve their work.

According to Best and Khan (2009),

> The purpose of action research is to improve school practices and at the same time to improve those who try to improve the practices to combine the research processes , habit of thinking, ability to work harmoniously with others , and professional spirit (p. 2).

Best and Khan have mainly related AR with education. They have said that AR is conducted by people who want to improve their practices. They mean to say teaching practices.

Calhoun (2008) says, "Action Research is a fancy way of saying let's study what's happening at our school and decide how to make it a better place". (as cited in National Centre for Educational Development [NCED], (p. 216).

Here Calhoun also says that AR mainly aims to find out what shortcomings are found out in the school and what measures can be taken to make it a better place.

Glickman (2008), defines AR in this way, "Action Research in education is a study conducted by colleagues in a school to improve instruction". (as cited in National Centre for Educational Development [NCED], (p. 216).

He has specially given emphasis that AR is a study where teacher conduct it to improve their teaching.

Cohen and Mansion (1985) conclude: "Action Research is conducted aiming at the improvement of the current affairs through the process of identifying and solving problem in a specific context" (as cited in Bhattarai, 2005, p. 15).

They mean to say the main aim of conduction AR is to bring change in the current affairs so that the problems can be solved.

Wallace (1990) opines: "Action Research is strategy for professional development which is accomplished by reflecting on the practitioners' regular activities" (as cited in Bhattarai, 2005, p. 15).

From all the definitions we can come to the conclusion that AR is mainly done for one's own improvement. AR in education mainly helps the teachers or instructors to make improvement in their instruction bye reflecting their past activities.

1.3 Importance of Action Research

Action Research aims mainly at improving ones work. It begins with the question 'How do I improve my work?' Hence it is important for all the professionals devoted to ones work. It helps the professionals to improve their work .It helps teachers to evaluate their work which makes the teachers accountable. A person doing the Action Research not only finds his or her faults and weaknesses but also finds new way and techniques to make teaching learning better. The Action Research in not only confined to improving oneself

but the practitioner also shares the findings by which other teachers benefit from them. The target group that is the students is benefitted as well.

1.3.1. Use of Action Research (AR)

l. AR helps the teachers notice what they and their students do in reality and not what they think they have to do.

ii. AR helps to get feedback and it gives a report of their success and failure of what the teachers are doing.

iii. AR helps to increase the knowledge of teaching and learning and become experts in teaching.

iv. AR helps to become less dependent on decisions made by the people whose teaching conditions are different from theirs.

v. AR helps teachers to enjoy teaching

vi. AR helps the teachers to become investigators and find out their own new techniques.

1.4 Steps of Action Research

There is no particular rule regarding how to carry an action research. Action research is said to be a never ending process. It goes on and on.

According to Lewin, (1946) AR is a spiral of steps , which contains the following stages : planning, acting, observing and reflecting. (as cited in McNiff,(1991, p. 22).

Figure No. 1

Planning: In the planning stage the practitioner plans what he/she needs to do. For example, I need to make communication in the class more effective. I shall conduct some speaking classes.

Acting: In the acting stage the practitioner acts what he/she has planned in the planning stage. For example, He/she conducts the speaking class.

Observing: In this stage the practitioners observe what's going on .For example, Are the students are communicating in English or not?

Reflecting: In this stage the practitioner tries to find out what he/she has done. E.g. what are the outcomes of his/ her practice?

Kemmis,(1982) includes the following spiral of planning while carrying out action research ; Identification of the problem, planning , acting, observing, reflecting, and re -planning. The actions move step by step. (As cited in McNiff,(1991, p. 22).

Figure No. 2

Action Research is to improve and not to prove

Identification of the problem: The practitioner at first identifies the problem related to his/her teaching. It might either be by taking tests or observing the homework.

Planning: In this stage the practitioner plans the things to be done during the period of action research. All the things related to planning will be included in this step. What type of data will be included, primary data, secondary data; what will be the sources of data? How many students will be included in the research? What will be the duration of the research? How will the data be analyzed; all such types of activities will be well planned.

Action: In this step the teacher will act out the things which he/she has mentioned in the planning section. He/she will implement the plan in this step.

Observe: In this step the researcher observes what is going on, if some change is required. The researcher also asks the help of his/her colleagues. He/she asks them to give them suggestions.

Reflection: The researcher reflects what he/she has done. The researcher analyses the evidence gathered. He/she tries to find out if the problem has been solved or not.

Re-planning: The researcher re-plans in this step. Whatever shortcomings will be found out will be re-planned and the cycle moves on. The researcher thinks new ways of solving those problems.

1.5 Importance of English Language

Modern English is so widely spoken that often been referred to as a "world language" the lingua franca of the modern world. It has obtained the place of

the dominant international language. Although English is not the official language in most of the countries yet it is studied, taught and spoken as the second language. Most of the books, magazines and newspapers written in English are available all over the world. English is also most commonly used language in science, business, aviation, entertainment, radio broadcastings and diplomacy. A working knowledge of English has become a compulsion in a number of fields, occupation and professions such as medicine and computing. When combined we can say that it is probably the most commonly used language spoken in the world.

In Nepal English is given a lot importance. It is taught as a compulsory subject in the schools of Nepal. In Nepal too the requirement of English is great in various fields such as tourism, business, in maintaining international relation etc.

1.6 Language Skills

Language is a unique gift of nature to the human beings. Language is purely a complex human phenomenon, which distinguishes human beings from other animals. Sapir (1921, p. 8) says , "Language is purely human and non-instinctive method of communicating ideas, emotions and desires by means of voluntarily produced symbols"(as cited in Regmi, 2010, p. 2).

Every language has four skills i.e. listening, speaking, reading, and writing. Further we can divide them into receptive and productive skill. Listening and speaking are receptive skills as information is received in both of the skills while in speaking and writing language production is done. Writing skill which is to be obtained at last is also felt as a difficult skill among others. Although all the skills are equally important.

1.6.1 Writing Skill

Writing skill is the last of all the skills. Writing skill is regarded as a powerful medium of expressing thoughts ideas emotions and feelings. Writing is an action of putting down graphic symbols on paper that represents a language. Writing skill is long lasting as well as the written documents remain for a longer time than as that of speech.

1.6.2 The Writing Process

Writing is the most difficult skill to be mastered by the learners. Writing doesn't only mean producing graphic symbol but also to arrange them in larger units. It includes generating and organizing of ideas as well as translating the ideas to readable text. Writing process mainly involves manipulation, structuring and communicating.

Manipulation is the basic stage in writing. It is also called recognition stage. It consists of the ability to form the letter from the alphabets.
Structuring is the process in which letters are recognized into words, words into phrases and phrases into appropriate structure.
Communication is the ultimate goal of writing process. At this stage, the writer selects appropriate structure and vocabulary to write complete and meaningful sentences.

1.6.3 Stages of Writing

There are mainly three stages of teaching writing, controlled writing, guided writing and free writing.

1.6.4   Controlled Writing

According to Pincas A (1982) , " Controlled writing refers to the writing in which students follow the exact instruction so as to produce correct written work." (p.125). In controlled types of writing the students have to carry writing

activities under the supervision of the teachers and are not allowed to commit errors.

1.6.5 Guided Writing

Guided Writing is considered as a bridge between controlled and free writing. It includes any type of writing for which the students are given assistance. In guided writing the students are given a model to follow a plan or outline to expand. In guided writing the students are given some freedom to choose lexical items and structural patterns. At this stage the learners are given different types of exercises such as expansion, elaborating on some topics, Parallel writing, developing skeleton to a full text can be used for guided writing. The skeleton of a story or dialogue may be supplied for the development of writing. But the students are not totally free as they have to follow the guide frame.

1.6.6 Free Writing

Free Writing is also known as creative writing. It allows the students to develop their own ideas freely. The students are given a topic and then they are free to choose their desired vocabulary and the sentence structure etc.
 A free writing is one in which there are no restriction on pupil for use of vocabulary and structures. There are usually no restrictions on length of compositions. Pincas (1982), says "In free writing students are presented with a topic and are then free to write as they please" (p. 110). It means that the students are free to think and supply their own ideas

1.7 Different Techniques used in Teaching Writing

As mentioned earlier writing is really a tough job. Most of the students find writing uninteresting, so it in necessary that to use different techniques to teach writing skill.

1.7.1 Teacher Centered Techniques

"Teacher centered methods, activities and techniques are such activities where the teacher decides what is to be learned, what is to be tested and how the class is to be run. Often the teacher is the center of the classroom giving instruction. The teacher decides the goals of the classroom based in his/her own criteria". Source: bogglesworldesl.com/glossary/teachercentered.html.

The techniques which focuses on the activities of the teacher while teaching the classroom are called teacher centered techniques. In teacher centered technique the dominant role is that of the teacher. The teacher is the whole sole personality and uses lecture, explanation, illustrating and demonstration to teach writing. Shuell, (1996) says, "Teacher centered techniques include instruction where the teacher's role is to present the information that s to be learned and to direct the learning process of the students". Source: itc.utk.edu~bobannon/in_strategies.html.

The students are passive as they have nothing to do on their own until their teacher has finished giving the notes. The students then take down the notes and start rote learning the essays. These types of techniques encourage the students to memorize the lessons. Students are not allowed to use their creativity.

1.7.2 Learner Centered Techniques

Learner centered technique gives the emphasis on the learners. "Learners centered techniques involve instruction where the teacher is a facilitator and the learners construct their own understandings".
Source: itc.utk.edu~bobannon/in_strategies.html.

In a learner centered technique the learners needs, abilities, interests are focused hence they becomes more active. The students are given some tasks and the students have to do the tasks on their own. For example, If the teacher gives the students a task saying, "Write five things you can see in this class". The students are busy looking around the class and noting down the points. The teacher functions as a facilitator and helps the students wherever the students feel confused. The students are free to express their views and use the vocabulary and structures. Students centered techniques requires students to be more active, responsible in their own learning.

1.8 Mind Maps

A mind map is a graphical way to represent ideas and concepts. It is a visual thinking tool that helps structuring information, helping the students to better analyze, comprehend, synthesize, recall and generate new ideas. Just as in every great idea, its power lies in its simplicity. In a mind map, as opposed to traditional note taking or linear text, information is structured in a way that resembles much more closely how your brain actually works. Since it is an activity that is both analytical and artistic, it engages your brain in a much, much richer way helping in all its cognitive functions. And best of all it is fun. Basically, mind mapping avoids dull, linear thinking, jogging your creativity and making note taking fun again.

Buzan and Buzan (1993) says "A mind map is a form of outline with ideas and pictures radiating out from a central concept"(as cited in Budd, 2003, p. 4).

From this we can say that in a mind map ideas come from the central point.

Budd (2003) says, "Mind map is based on organizing information via hierarchies and categories. The hierarchies and associations flow out from the central image in a free flowing, organized and coherent manner"(p. 4).

We can infer that mind mapping has a central point from which the branches grow in an organized way.

A mind map is a strategy for making notes on a topic, prior to writing. It is a structured strategy which shows the relationship of ideas.

Source: http://www.teachingenglish.org.uk/articles/using.mind-maps-develop-writing

Mind map is referred as an aid to making notes which will help in writing.

A mind map is a diagram used to represent words, ideas, tasks or other items linked to and arranged around a central key word or idea.

Source: http://en.wikipedia.org.wiki/Mind_map

Mind Map, developed are an effective method of note-taking and useful for the generation of ideas by associations. To make a mind map, one starts in the center of the page with the main idea, and works outward in all directions, producing a growing and organized structure composed of key words and key images.

1.8.1Advantages of Mind Map

Making a mind map is a spontaneous pre- writing activity. When the students start drawing the mind map they generate a web of ideas. From the ideas generated they go on developing and relating these ideas as their mind makes associations. Mind maps help the students to see the relationship between ideas and encourage them to group similar ideas together as they proceed. Mind maps become effective when allowed to work in groups, since the discussion aids in the production of ideas and make the task livelier and more enjoyable.

Students are engaged in active learning as they wrestle with ideas, associations, and categories in creating a Mind map. They create their own Mind Map, not only copy the t one created by the instructor.

1.8.2 Drawing a Mind Map

One needs to follow certain steps while making mind maps. One has to include the following points. Choosing a topic, Note making, Feedback, Organizing mind maps, Writing, and continuation

Choosing a topic: The students are given a topic to write by the teacher. Sometimes the students may also be allowed to choose the topic of their choice. The students can choose the topic of their interest as they may have greater knowledge regarding it. The mind map strategy can almost be used for every kind of topic.

Note Making: Once the topic has been introduced the teacher encourages the students to think as many things they know about the topic. The students can be allowed to work in groups, compare and discuss their ideas. The students can go on adding down the ideas.

Feed back: The teacher then can make a collective mind map on the board as the students might be making mind maps for the first time or there may be students who are new to the term mind map. The teacher corrects students mistakes. The maps can be extended or changed. The students also can make more connections or sub groups.

Organizing mind maps: In the next stage the students organize their mind maps. The students have to think about the overall structure i.e. the order in which the information has to be relayed. The students will divide their mind maps into groups to form paragraphs.

Writing: The students finally begin writing with the help of the points they have in their mind maps. The students also exchange their copies so that they can get feedback from their friends. The teacher finally helps the students.

Continuation: The students are now familiar with the idea of making mind maps they can be encouraged to use this skill for further writing activities.

Drawing a mind map is simple.

One has to start in the middle of a blank page, writing or drawing the idea one intends to develop. It is better to use the page in landscape orientation. Then one has to develop the related subtopics around this central topic, connecting each of them to the center with a line. Finally same the same process is repeated for the subtopics, generating lower-level subtopics it seems to fit, connecting each of those to the corresponding subtopic.

 Mind maps: Curriculum vitae

This is an example of mind map for planning a CV (curriculum vitae). The main topic is put in the middle. The branches, or legs, from the central point are all of the topics that can be included in a CV.

Figure No.3

Mind map of CV

Figure No.4

Mind map of My Best Friend

The mind map to plan what one is writing can be as small or as big as we want to make it.

1.9 Review of the Related Literature

A number of researches have been carried out comparing the different methods regarding writing. Similarly researches have been carried out regarding the proficiency of the students in writing skill. A few attempts have been made to find out the effectiveness of different techniques in language teaching and writing.

Research work has been carried out related to writing using new techniques. However a few attempts have been made to find out the effectiveness of different techniques in language teaching and writing. Action Research on teaching writing has not been done up to now. Some of the research work carried out in this field are as follows:

Various studies have been done regarding writing skills. But most of the studies have been related either to comparative studies or to find how proficient the students are in writing skill . None of them are action researches. Some of the studies done regarding writing are as follows.

Pande (2004) carried out a research in "Effectiveness of Project Work Technique in Developing Writing Skill". The objectives of her study were

To find out the effectiveness of project work technique in developing writing skill ; To suggest some pedagogical implications on the basis of the findings of the study. She came to the conclusion that project work technique had better She carried out her research at Neelkantha Campus, Dhading Besi, Dhadhing. The population of her study consisted of twenty six students of B.Ed 1st Year. She collected data using pre-test and post test. She divided the students into two groups , experimental group and controlled group. She then taught the students of experimental group using the project work technique and the other group was taught in a conventional way. She then conducted a post test and analyzed the results. She came to the conclusion that Project work technique had better impact on the result of the students. The students who were taught using the project work technique performed better than the students who were taught in a conventional way.

Shahi (2006) did a research on " A study on the Use of Verbs in Free Writing by the Eighth Graders." He carried out his research work in five purposefully selected schools of Dolakha district which were as (a) Sankheshwar LSS, Gobardhanthan (b) Siddeshwar LSS, Sahare (c) Janajagriti LSS, Sahare (d) Gulmeshwar HSS Malu(e) Mahendra S.S Malu. His objectives regarding this study were to determine the 8th graders performance in free writing in terms of the use of different kinds of verbs on the basis of 3 variables: Performance as whole; Item wise performance; School wise performance. His next objective was to analyze and describe the errors in using the verbs and to suggest pedagogical implications. He found out that the performance of the students in free writing was 46.20%. the students were better at describing about institution.

Basnet (2008) has done a study on the "Proficiency of the Students in Guided Writing" under the Department of English Education TU. He selected 30 students from Mahendra Ratna Campus and Pashupati Multiple Campus from the Faculty of Humanities and Faculty of Education in the Kathmandu Valley.

His objectives of the study were to: find out guided writing proficiency of the PCL first year students; To compare their writing performance on the basis of two variables: Boys vs. girls; Students of faculty of education vs. students of faculty of humanities and social sciences. To suggest pedagogical implications. He concluded that guided writing proficiency of PCL first year students was satisfactory. The writing proficiency of the students of Humanities and social science was better than those of the students of faculty of education. Writing proficiency of girls was found better than those of boys in both the faculties.

Kafle (2008) carried out his research work in "Proficiency in Guided Writing" He conducted his study in the private and public schools of Kathmandu valley. The populations of his studies were 60 students 30 girls and 30 boys. He collected the data using the test items which included six questions. The main objective of his study were to find out guided writing proficiency of the students, to compare the proficiency in guided writing on the basis of girls vs. boys, public school vs. private schools. He found that the proficiency of the girls was better than those of boys in both types of schools. The written proficiency of the private schools was better than those of the public schools.

Pokhrel (2008) carried out a research on "Writing Proficiency of the Students with Disabilities" She selected different schools of Kathmandu Valley. The populations of her study were blind, deaf and handicapped students who were studying in Grade 8. Her objectives were to find out the writing proficiency of the students with disabilities, to analyze their writing proficiency in different test items. She came to the conclusion that the blind students were better than deaf and physically handicapped students in writing proficiency.

Niraula (2008) conducted a research in "Ungraded Non Stop Writing as a Tool to Improve Writing Skill". He selected 24 students of Grade 11 of Koshi Campus, Biratnagar for his research work. His objectives were to find out if the

un-graded nonstop writing helped the students to improve in writing skill or not. He gave the students a test which contained 5 test items which were worth 100 marks. After the post test he found that both the experimental group and the controlled group made progress in the post test. So he came to the conclusion that ungraded nonstop writing had a good impression on the students as it prevented the students from the fear of making mistakes or errors.

Bhatta(2009) conducted a study on "Proficiency in Mechanic of Writing". He carried out his study in three districts i.e. Banke, Surkhet and Kalikot. Altogether 270 students, 90 from each district were the population of his study. The students were from Lower Secondary, Secondary and Higher secondary level. His data was based on the on test items which carried 100 full marks and the test items were mainly based on the mechanics of writing. He analyzed his study item level wise, gender wise and school wise. He found that the total proficiency of the students in mechanic of writing was 53%. Among the 3 districts the students of Banke were most proficient while the students of Kalikot were the least proficient. The proficiency of boys was found better i.e. 54% than that of girls which was 52%. The students of higher secondary level performed better and the student of lower secondary level was least.

This study is different from the other studies in the sense that it is an action research. The student will be using mind maps to develop their writing proficiency and particularly the free writing skill.

1.10 Objectives of the Study

The objectives of the study were as follows:
1. To improve the free writing skills of the students.
2. To use mind maps to teach free writing skill.

3. To suggest some pedagogical implications.

1.11 Significance of the Study

Writing is an important skill to be taught and also the students feel some difficulty in doing free writing. New techniques are really very essential to make the students do some free writing. The teachers need to improve their old way of making the students cram and rote learn the long essays and other topics related to free writing. The students must be encouraged to do free writing on their own. Hence the teacher should think of a better way of making the students creative. This study will be helpful to the students, teachers, syllabus designers, textbook writers as they can incorporate using mind maps in their learning, teaching and writing as well and also to those people who are interested and involved in English Language learning and teaching.

CHAPTER- TWO
METHODOLOGY

The researcher adapted the following methodology to fulfill the above mentioned objectives.

2.1 Source of Data Collection

Both primary and secondary sources of data were used in this research. The primary sources were used for data collection while the secondary sources were used to facilitate the researcher herself to carry out the research.

2.1.1 Primary source of Data

The primary source of data of this research were 40 students of class 12 studying at Shree Guru Jajur Higher Secondary School in Dang district of Nepal.

2.1.2 Secondary Sources of Data

The secondary sources of the data were books, NELTA journals volume 5, 2005 , books on AR by McNiff, articles related to the topic, and textbook of class 12(Meaning into words) , different websites (www.wikipedia.com) related to writing proficiency.

2.2 Population of the Study

The populations of the study were 40 students from class 12 of Shree Guru Jajur Higher Secondary School, Tulsipur , Dang.

2.3 Sampling Procedure

 To carry out this research work all the 40 students of class 12 of Shree Guru Jajur Higher Sec. School were purposefully selected as the sample population as the study was related to action research which mainly aims at improving one's own work. The researcher conducted pre test and later she conducted a post test and used the data in her research.

2.4 Tools for the Data Collection

The researcher used the test papers for the data collection. The researcher prepared a set of test items beforehand. The same set of test items were used for both pre-test and post- test.

2.5 Process of Data Collection

The researcher first prepared the test items to test writing proficiency of the students. The test paper included eight items related to free writing. The pre-test was administered and scored .Free writing was taught to the students using mind maps. The class was taught one period per day for the time duration of 45 minutes. The students were taught for 28 days. On the 29th day the post test was conducted. The scores of pre test and post test were computed, tabulated and compared. The data was then analyzed.

2.6 Limitations of the Study

The study had the following limitations.

a. The population of the study was confined to the 40 students of class 12 studying in class 12 studying in Shree Guru Jajur Higher Secondary School in Dang district.

b. The primary data for the study were collected from the pre-test and post-test.

c. The study focused on the development of free writing using mind maps only.

d. Only the subjective test items were administered.

CHAPTER- THREE
ANALYSIS AND INTERPRETATION

The researcher identified the problem that her students were very weak at writing skill especially in the free writing skill. They always left out the essay type questions. So the researcher developed her research question. "How can I improve the free writing skill of my students?" The researcher then planned her work. She planned that she was going to use mind maps to help the students to improve their writing skill. The researcher made a questionnaire. She took pre test so as to find out the situation of her students. Then she taught the students using mind maps. She used 28 lesson plans in her teaching. She included different items in such as descriptions, news story, giving instructions, different kinds of letters such as personnel letter, job-application. She then conducted the post test. Then she analyzed the results. She collected data using the test items. The test items in pre-test contained eight questions related to free writing. The full marks of the test items were 50. The first test item was to

describe about village which carried 7 marks. The second item was to write six rules and regulations to be followed at the college which carried 6 marks. The third item was to write a short description about the best friend which carried 5 marks. The fourth item was to write a message of congratulation to a friend which was for 5 marks. The fifth item was to write about the advantages and disadvantages of telephone which was worth 7 marks. The sixth item was to write an application for a job which carried 10 marks. The seventh item was to write instruction how to prepare an omelet which was worth 5 marks. The last item was writing a news article on a road accident which carried 5 marks. Then the researcher taught the students to make and use the mind maps for free writing. The researcher taught the students for 28 days and then gave the students post test. The data obtained was analyzed item wise and as a whole for both pre and post tests.

The Descriptive Data

The basic data obtained from the Pre and Post Test of the individual students.

<p align="center">Table No.1</p>

S.N	Names of the students	Pre Test	Post Test	D	D%
1	Babita Parajuli	9.5	35.5	26	52
2	Balika Reule	7.5	21	13.5	27
3	Bhupendra Oli	7	14	7	14
4	Bimala K.C.	7.5	29	21.5	43
5	Bishnu Gharti	6	14	8	16
6	Deepak Ghimire	4.5	15	10.5	21
7	Devi Rana	6.5	22	15.5	31
8	Dibya Pun Magar	6.5	27	20.5	41

9	Dibya Pun Magar	6.5	21	14.5	29
10	Dipa Thapa	5.5	24	18.5	37
11	Ganesh Kumar Kandel	4.5	14	9.5	19
12	Gita Bhattarai	3.5	18	14.5	29
13	Gita Chhantyal	6	20.5	14.5	29
14	Gita Kandel	7	19	12	24
15	Indra Bahadur K.C.	8.5	27	18.5	37
16	Jamuna Pandey	6.5	20	13.5	27
17	Kailash Basnet	10	23	13	26
18	Laxmi Khatri	10	26	16	32
19	Madhu K.C.	3.5	16	12.5	25
20	Nabraj Bhandari	5.5	20	14.5	29
21	Nirmala Gharti	10	33	23	46
22	Prabha Oli	6	23	17	34
23	Prerana Chand	5	17	12	24
24	Punam Gupta	7.5	20	12.5	25
25	Radha Sharma	4	20.5	16.5	33
26	Ranjita Lamichhane	4.5	18	13.5	27
27	Sabita Nepali	4	15	11	22
28	Sarita Khadka	10.5	37	26.5	53
29	Sima Gurung	5	10	5	10

30	Sita Chaudhary	3	15	12	24
31	Sita Malla	6.5	18	11.5	23
32	Sujata K.C.	20	38	18	36
33	Sunita Bhandari	8.5	30	21.5	43
34	Sunita Chaudhary	13.5	31	17.5	35
35	Sunita Panthi	9.5	24	14.5	29
36	Sushila K.C.	5.5	14	8.5	17
37	Usha Kawar	6	21	15	30
38	Yadav Bhandari	7.5	20	12.5	25
39	Yamuna Bista	4	21	17	34
40	Yubraj Khanal	5.5	16	10.5	21
	Total	278	867.5		
	Mean	6.95	21.69		

Marks of Pre and Post Test of the individual students.

Diagram-1

Item wise Analysis and Interpretation
Table No. 2   Item- 1

Item No.1	pre test	post test	D	D%
Total	92	157	65	928.57
Mean	2.30	3.93	1.63	23.21

In Item No. 1 the question carrying 7 marks was asked which is as follows:
Describe your village in about 60 words. The average score of the students in the pre-test in item 1 was 2.3 while the score of the same item in post test was 3.93. The increment of the marks was by 1.63 or 23.21%

Table No. 3 Item- 2

Item No.1	pre test	post test	D	D%
Total	28	93	65	1083.33
Mean	0.7	2.33	1.63	27.08

In Item No.2 the question asked was **"Write six rules and regulations followed in your college."** The average score of the students in pre-test was0.7 and the score in post test was 2.33. The increment of the average score was by 1.63 or 27.08%

Table No. 4 Item- 3

Item No.3	pre test	post test	D	D%
Total	76	135.5	59.5	1190.00
Mean	1.9	3.39	1.49	29.75

The average score of the students in Item no. 3 "**Write a short description of your friend.**" Carrying 5 marks was as follows. Pre-test 1.9 and post –test 3.39. Hence the increment of marks was by 1.49 or 29.75%

Table No. 5 Item- 4

Item No.4	pre test	post test	D	D%
Total	4	43.5	39.5	790.00
Mean	0.1	1.09	0.99	19.75

The Item No.4 consisted of the question **"Write a message of congratulation to your friend who has won first place in the District Level Essay**

Competition" worth 5 marks. The average score of the students in pre-test was 0.1 and in post test was 1.09. Hence the increment occurred by 0.99 or 19.75%

Table No. 6 Item- 5

Item No.5	pre test	post test	D	D%
Total	16	94.5	78.5	1121.43
Mean	0.4	2.36	1.96	28.04

In Item No 5 there was the **question "Write a paragraph of 60 words about the advantages and disadvantages of Telephone"**. The average score of the students in pre-test was 0.4 and that of post test was 2.36. The increment of the score was by 1.96 or 28.04%

Table No. 7 Item- 6

Item No.6	pre test	post test	D	D%
Total	45	163	118	1180
Mean	1.13	4.08	2.95	29.50

The question asked in Item No. 6 was "**Write an application to the manager of NABIL Bank, Kathmandu for the post of an accountant"** for 10 marks. The average score of the students in pre-test was 1.13 while in post test was 4.08. The increment of marks was by 2.95 or 29.50%

Table No. 8 Item-7

Item No.7	pre test	post test	D	D%
Total	2	70.5	68.5	1370.00
Mean	0.05	1.76	1.71	34.25

The question asked in Item No. 7 was **"Give instruction on how to make an omelet"** The question carried 5 marks. The average marks in pre –test was 0.05 and post test was 1.76. The increment of scores took place by 1.71 or 34.25%.

Table No. 9 Item- 8

Item No.8	pre test	post test	D	D%
Total	0.46	102	83.5	1670
Mean	0.46	2.55	2.09	41.75

The question in Item No. 8 was **"Write a news article on the road accident you have seen recently".** The question carried 5 marks. The average score of

the students in pre-test was 0.46 and post test was 2.55. The increment of marks took by 2.09 or 41.75%.

All the descriptions above exhibit that the students scored better marks in post-test than in post –test. This shows that the students have improved in their free writing skill than before. The impact of using mind maps had a positive effect on the students.

CHAPTER- FOUR

FINDINGS AND RECOMMENDATIONS

The researcher carried out this practical study to improve the students writing proficiency by using mind maps. In this study the researcher taught a group of 40 students of class 12 of Shree Guru Jajur Higher Secondary School in Dang. The researcher conducted a pre test before real teaching. Then she taught the students for 28 days. Later post test was given to the students. The questions in pre test and post test were the same. The marks of pre test and post test were used as data. The data were computed and tabulated. The data was analyzed and interpreted. The following conclusions are drawn and the recommendations are given.

4.1 Findings

The following findings have been found out on the basis of the research study:

    i)   The students scored more marks in the post test than the pre test. This shows that using mind maps has better impact on the result.

    ii)   All the students made mind maps. This shows that they found it easy and interesting to make mind maps.

    iii)   The students found it easy to group similar points to make good paragraphs.

iv)   The students were able to make better sentences than before although they made slight mistakes.

v)   Students still need to improve their spellings and punctuation.

vi)   The students were able to do free writing using mind maps.

4.2 Recommendation and Pedagogical Implications

i)   The teachers must use mind maps to teach free writing skill as it is more effective.

ii)   Using mind maps helps the students to be creative and hence it should be used in teaching writing skill.

iii)   Using mind maps in the classroom makes the classroom interesting and full of fun.

iv)   Free writing is one of the most difficult tasks so teachers should be trained in this matter.

v)   The students should be allowed to work in groups so that they can share each other's ideas.

vi)   Mind maps can be used at all levels .It can specially be used with the advanced students, but it also can be used with the primary level students in a simplified form using pictures.

vii)   Mechanics of writings should be given importance while teaching writing skill.

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Appendix- I

Questions Paper of Pre and Post Test

Q.N. 1) Describe your village in about 60 words.   7

Q.N.2) Write six rules and regulations which you follow at your school.   6

Q.N.3) Write a short description of your friend.   5

Q.N.4) Write a message of congratulation to your friend who has won first
     Place   in the District Level Essay Competition.   5

Q.N.5) Write a paragraph of 60 words about the advantages and
     disadvantages of   Telephone.   7

Q.N.6) Write an application to the manager of NABIL Bank, Kathmandu for
     the post of an accountant.   10

Q.N.7) Give instruction on how to make an omelet.   5

Q.N.8) Write a news article on the road accident you have seen recently   5

Appendix- II

Lesson Plan No -1

School : Shree Guru Jajur Higher Secondary School, Tulsipur ,Dang.

Class : 12

Topic : Making mind maps

Objective: to make mind maps on given topics

Materials: Large card sheet with a mind map on it

Presentation:

The teacher motivates the students by asking if they have seen map of Nepal. She asks if they have seen the maps of different countries on the globe.

The teacher then introduces the new topic mind map. She asks if any students have idea about mind maps. She then explains that mind maps help us to generate new ideas for developing writing skill.

Practice:

The teacher then gives a topic 'write a short description about you'. The teacher then asks the students to collect the information what they can write about themselves.

As the students go on saying the points the teacher makes the mind map on the board. The teacher then displays the chart of mind map on the board. Then she asks the students to make a mind map about themselves.

Evaluation:

What is a mind map?

What is its use?

Read aloud what you have included in your mind map.

Mind Map

Appendix- III

Lesson Plan Two

Objectives: Make mind map about their class.

Write about their class using mind maps.

Presentation: The teacher revises the previous lesson about mind maps. Then she introduces the day's topic that is My Class.

She asks the students, what information can be included about their class. She elicits the points from the students.

Practice:

 The teacher writes My Class in the middle of the board and then she asks the students to come and extend what points can be included about the class. She asks the students to make mind maps regarding their class. She goes around helping the students. Then she asks the students to write about their class with the help of the mind maps they have made.

Evaluation:

The teacher asks the students to read their description about the class.

What other things can be included in the topic?

Appendix- IV

Lesson Plan 3

Objectives: Make mind maps about their school
                 Describe about their school using the mind map.

Presentation:
     The teacher revises the previous lesson in brief. The teacher write - - - - - - on the board. She asks the students to guess what the word might be. Then she asks the students to say some alphabets. If the alphabets match in the gaps she goes on filling them until the word school is formed. The teacher then explains that they are going to make mind maps about the school and write about their school   S   C H   O   O L

Practice: The teacher hangs the picture of the school in front of the class and asks the students to make mind map about the school. She asks the students what aspects of the school can be included. The students reply, facilities, location, introduction, etc. When the students have finished making the mind maps she asks them to write about their school.

Evaluation: The teacher asks the students to exchange the copies in pairs and ask to read their friend's work. The teacher asks to find what things are common in and what things are different. The teacher makes corrections wherever necessary.

Appendix- V

Lesson Plan 4

Objectives: To make mind map about their village

Describe their village using the mind maps

Presentation:

The teacher asks students where they live, she asks the students to tell the names of their villages. She then asks what facilities are found in their village. She then asks about the population of the village.

She then gives the students chart paper and asks them to make mind maps about their village.

Practice: The students make mind maps about their villages. The teacher asks the students to use those points to write a description about their village.

She asks the students to display their mind maps on the wall.

Evaluation:

The teacher asks the students to read aloud about their village.

The teacher asks the students to go around the class and tell about one of the villages displayed on the wall.

Appendix- VI

Lesson Plan 5

Objectives: To make mind maps about the domestic animal cow

Write a short essay about the cow

Presentation: The teacher asks the students to tell the names of few domestic animals. Then she asks which animals do they like? Then she asks which our national animal is? She introduces the topic that they are going to make mind maps about the cow.

Practice:

She divides the class into four groups. She gives a card sheet to each group. She asks the leader of the group to write 'The cow' in the middle of the card sheet. Then each and every person in the group has to write some points about the cow to complete the mind map. Then she asks the students to write about the cow. Later she asks the students to combine their written work and make a single essay about the cow.

Evaluation:

The teacher asks the leader from each group to present the essay written by their group. The teacher helps the students

Appendix –VIII (Item 1)

S.N	Names of the students	pre test	post test	D	D%
1	Babita Parajuli	3	4.5	1.5	21.43
2	Balika Reule	2.5	3.5	1	14.29
3	Bhupendra Oli	3	4	1	14.29
4	Bimala K.C.	2	4.5	2.5	35.71
5	Bishnu Gharti	1.5	3	1.5	21.43
6	Deepak Ghimire	1.5	3	1.5	21.43
7	Devi Rana	2.5	4	1.5	21.43
8	Dibya Pun Magar	1.5	3.5	2	28.57
9	Dipa Thapa	2	4	2	28.57
10	Ganesh Kumar Kandel	1.5	3	1.5	21.43
11	Gita Bhattarai	1.5	3.5	2	28.57
12	Gita Chhantyal	2	3	1	14.29
13	Gita Kandel	2	4	2	28.57
14	Indra Bahadur K.C.	2	4.5	2.5	35.71
15	Jamuna Pandey	2.5	4	1.5	21.43
16	Kailash Basnet	3	4.5	1.5	21.43
17	Laxmi Khatri	3	4.5	1.5	21.43
18	Madhu K.C.	1.5	3	1.5	21.43
19	Nabraj Bhandari	2	3	1	14.29
20	Nirmala Gharti	3	5	2	28.57
21	Prabha Oli	2	3.5	1.5	21.43
22	Prerana Chand	2	3.5	1.5	21.43
23	Punam Gupta	3	4	1	14.29
24	Radha Sharma	2	3	1	14.29

25	Ranjita Lamichhane	1.5	3.5	2	28.57
26	Sabita Nepali	2	4	2	28.57
27	Sabitra Pokhrel	2.5	4	1.5	21.43
28	Sarita Khadka	3	6	3	42.86
29	Sima Gurung	2	3	1	14.29
30	Sita Chaudhary	1.5	2.5	1	14.29
31	Sita Malla	2	3.5	1.5	21.43
32	Sujata K.C.	4	5.5	1.5	21.43
33	Sunita Bhandari	2.5	4	1.5	21.43
34	Sunita Chaudhary	3	5.5	2.5	35.71
35	Sunita Panthi	3	4.5	1.5	21.43
36	Sushila K.C.	2.5	4.5	2	28.57
37	Usha Kawar	3	5	2	28.57
38	Yadav Bhandari	3	4	1	14.29
39	Yamuna Bista	2	4	2	28.57
40	Yubraj Khanal	2	3.5	1.5	21.43
	Total	92	157	65	928.57
	Mean	2.30	3.93	1.63	23.21

Appendix –IX(Item 2)

S.N	Names of the students	pre test	post test	D	D%
1	Babita Parajuli	2	4	2	33.33
2	Balika Reule	0	2	2	33.33
3	Bhupendra Oli	1.5	3.5	2	33.33
4	Bimala K.C.	1	3.5	2.5	41.67
5	Bishnu Gharti	0	1.5	1.5	25.00
6	Deepak Ghimire	0	1.5	1.5	25.00
7	Devi Rana	0	1.5	1.5	25.00
8	Dibya Pun Magar	1	4	3	50.00
9	Dipa Thapa	0	2	2	33.33
10	Ganesh Kumar Kandel	0	0.5	0.5	8.33
11	Gita Bhattarai	0	0.5	0.5	8.33
12	Gita Chhantyal	1	1	0	0.00
13	Gita Kandel	0.5	1	0.5	8.33
14	Indra Bahadur K.C.	1	3	2	33.33
15	Jamuna Pandey	0	1.5	1.5	25.00
16	Kailash Basnet	1	3	2	33.33
17	Laxmi Khatri	1	3	2	33.33
18	Madhu K.C.	0	1	1	16.67
19	Nabraj Bhandari	0	2	2	33.33
20	Nirmala Gharti	2.5	5.5	3	50.00
21	Prabha Oli	1	1.5	0.5	8.33
22	Prerana Chand	0	1.5	1.5	25.00
23	Punam Gupta	0.5	1.5	1	16.67

24	Radha Sharma	1	3.5	2.5	41.67
25	Ranjita Lamichhane	0	2	2	33.33
26	Sabita Nepali	0	1	1	16.67
27	Sabitra Pokhrel	1.5	4	2.5	41.67
28	Sarita Khadka	3	5	2	33.33
29	Sima Gurung	0	0	0	0.00
30	Sita Chaudhary	0	0	0	0.00
31	Sita Malla	0	2	2	33.33
32	Sujata K.C.	3	5	2	33.33
33	Sunita Bhandari	1	4	3	50.00
34	Sunita Chaudhary	3	4.5	1.5	25.00
35	Sunita Panthi	1	3	2	33.33
36	Sushila K.C.	0	0	0	0.00
37	Usha Kawar	0.5	5	4.5	75.00
38	Yadav Bhandari	0	2	2	33.33
39	Yamuna Bista	0	1	1	16.67
40	Yubraj Khanal	0	1	1	16.67
	Total	28	93	65	1083.33
	Mean	0.7	2.33	1.63	27.08

Appendix –X (Item 3)

S.N	Names of the students	pre test	post test	D	D%
1	Babita Parajuli	2	4	2	40.00
2	Balika Reule	2.5	4	1.5	30.00
3	Bhupendra Oli	1	0	-1	-20.00
4	Bimala K.C.	2.5	4	1.5	30.00
5	Bishnu Gharti	1.5	2.5	1	20.00
6	Deepak Ghimire	1.5	2	0.5	10.00
7	Devi Rana	1.5	3.5	2	40.00
8	Dibya Pun Magar	3.5	3.5	0	0.00
9	Dipa Thapa	1.5	4	2.5	50.00
10	Ganesh Kumar Kandel	1.5	3	1.5	30.00
11	Gita Bhattarai	1	3	2	40.00
12	Gita Chhantyal	2.5	3	0.5	10.00
13	Gita Kandel	2	3.5	1.5	30.00
14	Indra Bahadur K.C.	2	4	2	40.00
15	Jamuna Pandey	1.5	3	1.5	30.00
16	Kailash Basnet	2	4	2	40.00
17	Laxmi Khatri	2	4.5	2.5	50.00
18	Madhu K.C.	1	3.5	2.5	50.00
19	Nabraj Bhandari	1.5	3	1.5	30.00
20	Nirmala Gharti	3	4	1	20.00
21	Prabha Oli	2.5	3	0.5	10.00
22	Prerana Chand	2	3.5	1.5	30.00
23	Punam Gupta	2	4	2	40.00
24	Radha Sharma	1	3	2	40.00
25	Ranjita Lamichhane	1.5	3.5	2	40.00

26	Sabita Nepali	1.5	3.5	2	40.00
27	Sabitra Pokhrel	2.5	4	1.5	30.00
28	Sarita Khadka	0	4	4	80.00
29	Sima Gurung	2	3	1	20.00
30	Sita Chaudhary	1.5	3	1.5	30.00
31	Sita Malla	1.5	3.5	2	40.00
32	Sujata K.C.	3.5	4	0.5	10.00
33	Sunita Bhandari	3	4	1	20.00
34	Sunita Chaudhary	3	4	1	20.00
35	Sunita Panthi	2	4	2	40.00
36	Sushila K.C.	2	3.5	1.5	30.00
37	Usha Kawar	2.5	3	0.5	10.00
38	Yadav Bhandari	1.5	3	1.5	30.00
39	Yamuna Bista	1.5	3	1.5	30.00
40	Yubraj Khanal	1.5	3	1.5	30.00
	Total	76	135.5	59.5	1190.00
	Mean	1.9	3.39	1.49	29.75

Appendix –XI (Item 4)

S.N	Names of the students	pre test	post test	D	D%
1	Babita Parajuli	0	4	4	80.00
2	Balika Reule	0	1.5	1.5	30.00
3	Bhupendra Oli	0	0	0	0.00
4	Bimala K.C.	0	2.5	2.5	50.00
5	Bishnu Gharti	0	0	0	0.00
6	Deepak Ghimire	0	1	1	20.00
7	Devi Rana	0	2.5	2.5	50.00
8	Dibya Pun Magar	0	0	0	0.00
9	Dipa Thapa	0	1.5	1.5	30.00
10	Ganesh Kumar Kandel	0	1	1	20.00
11	Gita Bhattarai	0	1.5	1.5	30.00
12	Gita Chhantyal	0	1	1	20.00
13	Gita Kandel	0	1.5	1.5	30.00
14	Indra Bahadur K.C.	0	2.5	2.5	50.00
15	Jamuna Pandey	0	2	2	40.00
16	Kailash Basnet	0	1.5	1.5	30.00
17	Laxmi Khatri	0	2	2	40.00
18	Madhu K.C.	0	0	0	0.00
19	Nabraj Bhandari	0	1.5	1.5	30.00
20	Nirmala Gharti	0	0	0	0.00
21	Prabha Oli	0	1	1	20.00
22	Prerana Chand	0	0	0	0.00
23	Punam Gupta	0	0.5	0.5	10.00

24	Radha Sharma	0	0	0	0.00
25	Ranjita Lamichhane	0	0	0	0.00
26	Sabita Nepali	0	0	0	0.00
27	Sabitra Pokhrel	0	1	1	20.00
28	Sarita Khadka	3	0	-3	-60.00
29	Sima Gurung	0	0	0	0.00
30	Sita Chaudhary	0	0	0	0.00
31	Sita Malla	0	0	0	0.00
32	Sujata K.C.	1	4	3	60.00
33	Sunita Bhandari	0	2	2	40.00
34	Sunita Chaudhary	0	3	3	60.00
35	Sunita Panthi	0	2.5	2.5	50.00
36	Sushila K.C.	0	0	0	0.00
37	Usha Kawar	0	0	0	0.00
38	Yadav Bhandari	0	1	1	20.00
39	Yamuna Bista	0	0	0	0.00
40	Yubraj Khanal	0	1	1	20.00
	Total	4	43.5	39.5	790.00
	Mean	0.1	1.09	0.99	19.75

Appendix –XII (Item 5)

S.N	Names of the students	pre test	post test	D	D%
1	Babita Parajuli	0.5	4	3.5	50.00
2	Balika Reule	0	2.5	2.5	35.71
3	Bhupendra Oli	1	0	-1	-14.29
4	Bimala K.C.	0.5	2.5	2	28.57
5	Bishnu Gharti	0	1.5	1.5	21.43
6	Deepak Ghimire	0	1	1	14.29
7	Devi Rana	1	2.5	1.5	21.43
8	Dibya Pun Magar	0.5	4	3.5	50.00
9	Dipa Thapa	0	3.5	3.5	50.00
10	Ganesh Kumar Kandel	0	1	1	14.29
11	Gita Bhattarai	0	3	3	42.86
12	Gita Chhantyal	0	3.5	3.5	50.00
13	Gita Kandel	1	2.5	1.5	21.43
14	Indra Bahadur K.C.	1	4	3	42.86
15	Jamuna Pandey	1	2.5	1.5	21.43
16	Kailash Basnet	1	3	2	28.57
17	Laxmi Khatri	1	3	2	28.57
18	Madhu K.C.	0	2	2	28.57
19	Nabraj Bhandari	0	3.5	3.5	50.00
20	Nirmala Gharti	0	4	4	57.14
21	Prabha Oli	0	3.5	3.5	50.00
22	Prerana Chand	0	2	2	28.57

23	Punam Gupta	0	2	2	28.57
24	Radha Sharma	0	3	3	42.86
25	Ranjita Lamichhane	0	1	1	14.29
26	Sabita Nepali	0	0	0	0.00
27	Sabitra Pokhrel	0	4	4	57.14
28	Sarita Khadka	1.5	5	3.5	50.00
29	Sima Gurung	0	0	0	0.00
30	Sita Chaudhary	0		0	0.00
31	Sita Malla	0	1	1	14.29
32	Sujata K.C.	3.5	5	1.5	21.43
33	Sunita Bhandari	0	3	3	42.86
34	Sunita Chaudhary	1	4.5	3.5	50.00
35	Sunita Panthi	1	3	2	28.57
36	Sushila K.C.	0	0	0	0.00
37	Usha Kawar	0	4	4	57.14
38	Yadav Bhandari	0.5	0	-0.5	-7.14
39	Yamuna Bista	0	0	0	0.00
40	Yubraj Khanal	0	0	0	0.00
	Total	16	94.5	78.5	1121.43
	Mean	0.4	2.36	1.96	28.04

Appendix –XIII (Item 6)

S.N	Names of the students	pre test	post test	D	D%
1	Babita Parajuli	2	7	5	50.00
2	Balika Reule	1	3	2	20.00
3	Bhupendra Oli	0	3	3	30.00
4	Bimala K.C.	1.5	6	4.5	45.00
5	Bishnu Gharti	1.5	3	1.5	15.00
6	Deepak Ghimire	1	3	2	20.00
7	Devi Rana	1.5	4	2.5	25.00
8	Dibya Pun Magar	0	5	5	50.00
9	Dipa Thapa	1.5	4.5	3	30.00
10	Ganesh Kumar Kandel	1.5	3	1.5	15.00
11	Gita Bhattarai	1	3.5	2.5	25.00
12	Gita Chhantyal	0.5	4	3.5	35.00
13	Gita Kandel	1	3.5	2.5	25.00
14	Indra Bahadur K.C.	2	5	3	30.00
15	Jamuna Pandey	1.5	3	1.5	15.00
16	Kailash Basnet	2	4	2	20.00
17	Laxmi Khatri	2	5	3	30.00
18	Madhu K.C.	1	3.5	2.5	25.00
19	Nabraj Bhandari	1.5	3.5	2	20.00
20	Nirmala Gharti	2	7	5	50.00
21	Prabha Oli	0.5	4.5	4	40.00
22	Prerana Chand	1	4	3	30.00
23	Punam Gupta	2	5	3	30.00

24	Radha Sharma	0	4	4	40.00
25	Ranjita Lamichhane	1	4	3	30.00
26	Sabita Nepali	0.5	3	2.5	25.00
27	Sabitra Pokhrel	0	0	0	0.00
28	Sarita Khadka	0	8	8	80.00
29	Sima Gurung	1	3	2	20.00
30	Sita Chaudhary	0	2	2	20.00
31	Sita Malla	1.5	4	2.5	25.00
32	Sujata K.C.	5	8.5	3.5	35.00
33	Sunita Bhandari	0	7	7	70.00
34	Sunita Chaudhary	0	3.5	3.5	35.00
35	Sunita Panthi	2	4	2	20.00
36	Sushila K.C.	1	4	3	30.00
37	Usha Kawar	0	0	0	0.00
38	Yadav Bhandari	2	5	3	30.00
39	Yamuna Bista	0.5	2.5	2	20.00
40	Yubraj Khanal	1	3.5	2.5	25.00
	Total	45	163	118	1180.00
	Mean	1.13	4.08	2.95	29.50

Appendix –XIV (Item 7)

S.N	Names of the students	pre test	post test	D	D%
1	Babita Parajuli	0	3.5	3.5	70.00
2	Balika Reule	0	2	2	40.00
3	Bhupendra Oli	0	2	2	40.00
4	Bimala K.C.	0	3	3	60.00
5	Bishnu Gharti	0	0	0	0.00
6	Deepak Ghimire	0	1.5	1.5	30.00
7	Devi Rana	0	1.5	1.5	30.00
8	Dibya Pun Magar	0	3	3	60.00
9	Dipa Thapa	0	2	2	40.00
10	Ganesh Kumar Kandel	0	1	1	20.00
11	Gita Bhattarai	0	1	1	20.00
12	Gita Chhantyal	0	2	2	40.00
13	Gita Kandel	0	1	1	20.00
14	Indra Bahadur K.C.	0	1	1	20.00
15	Jamuna Pandey	0	1.5	1.5	30.00
16	Kailash Basnet	0	1	1	20.00
17	Laxmi Khatri	0	1	1	20.00
18	Madhu K.C.	0	1	1	20.00
19	Nabraj Bhandari	0	1.5	1.5	30.00
20	Nirmala Gharti	0	3.5	3.5	70.00
21	Prabha Oli	0	2.5	2.5	50.00
22	Prerana Chand	0	1	1	20.00
23	Punam Gupta	0	1.5	1.5	30.00

24	Radha Sharma	0	3	3	60.00
25	Ranjita Lamichhane	0	1.5	1.5	30.00
26	Sabita Nepali	0	1	1	20.00
27	Sabitra Pokhrel	0	4	4	80.00
28	Sarita Khadka	0	4	4	80.00
29	Sima Gurung	0	0	0	0.00
30	Sita Chaudhary	0	0	0	0.00
31	Sita Malla	0	1.5	1.5	30.00
32	Sujata K.C.	0	3.5	3.5	70.00
33	Sunita Bhandari	0.5	3	2.5	50.00
34	Sunita Chaudhary	1	2.5	1.5	30.00
35	Sunita Panthi	0	1	1	20.00
36	Sushila K.C.	0	0	0	0.00
37	Usha Kawar	0	1	1	20.00
38	Yadav Bhandari	0.5	3	2.5	50.00
39	Yamuna Bista	0	1	1	20.00
40	Yubraj Khanal	0	1.5	1.5	30.00
	Total	2	70.5	68.5	1370.00
	Mean	0.05	1.76	1.71	34.25

Appendix –XV (Item 8)

S.N	Names of the students	pre test	post test	D	D%
1	Babita Parajuli	0	4	4	80.00
2	Balika Reule	1.5	2.5	1	20.00
3	Bhupendra Oli	0.5	1.5	1	20.00
4	Bimala K.C.	0	3	3	60.00
5	Bishnu Gharti	1.5	2.5	1	20.00
6	Deepak Ghimire	0.5	2	1.5	30.00
7	Devi Rana	0	2.5	2.5	50.00
8	Dibya Pun Magar	0	4	4	80.00
9	Dipa Thapa	0.5	2.5	2	40.00
10	Ganesh Kumar Kandel	0	2	2	40.00
11	Gita Bhattarai	0	2	2	40.00
12	Gita Chhantyal	0	3	3	60.00
13	Gita Kandel	0.5	2	1.5	30.00
14	Indra Bahadur K.C.	0.5	3	2.5	50.00
15	Jamuna Pandey	0	2.5	2.5	50.00
16	Kailash Basnet	1	2	1	20.00
17	Laxmi Khatri	1	3	2	40.00
18	Madhu K.C.	0	2	2	40.00
19	Nabraj Bhandari	0.5	2	1.5	30.00
20	Nirmala Gharti	0	4	4	80.00
21	Prabha Oli	0	3.5	3.5	70.00
22	Prerana Chand	0	1.5	1.5	30.00
23	Punam Gupta	0	1.5	1.5	30.00
24	Radha Sharma	0	1	1	20.00
25	Ranjita Lamichhane	0.5	2.5	2	40.00

26	Sabita Nepali	0	2.5	2.5	50.00
27	Sabitra Pokhrel	0	0	0	0.00
28	Sarita Khadka	1.5	4	2.5	50.00
29	Sima Gurung	0	1	1	20.00
30	Sita Chaudhary	0	1.5	1.5	30.00
31	Sita Malla	1	2.5	1.5	30.00
32	Sujata K.C.	0	4	4	80.00
33	Sunita Bhandari	1.5	3	1.5	30.00
34	Sunita Chaudhary	2.5	3.5	1	20.00
35	Sunita Panthi	0.5	2	1.5	30.00
36	Sushila K.C.	0	2	2	40.00
37	Usha Kawar	0	3	3	60.00
38	Yadav Bhandari	0	2	2	40.00
39	Yamuna Bista	0	1.5	1.5	30.00
40	Yubraj Khanal	1	2.5	1.5	30.00
41	Yubraj Khanal	1	2.5	1.5	30.00
42	Yubraj Khanal	1	2.5	1.5	30.00
	Total	18.5	102	83.5	1670
	Mean	0.46	2.55	2.09	41.75