

CHAPTER I

INTRODUCTION

A. Background of the Study

Since human beings have been interacting, communicating, or conveying ideas among themselves, a language becomes a primary tool of human communication. It is supported by Wardhaugh (1972:3) who defined language as “a system of arbitrary local vocal symbol used for human communication”.

Language is the most vital instrument in human life. By using language, people can communicate each other and can obtain some information. According to Alwasilah (1993:19), “Language is a method of conveying our idea to the mind of other persons”.

Learning a foreign language is mostly learning vocabulary. According to Wallace (1982:5) "there is a sense in which learning a foreign language is basically a matter of learning vocabulary of the learned language. If learners have vocabulary that they need it is usually to communicate".

Words or vocabulary are the labels assigned to represent ideas and concepts. Understanding the meaning of words within the context of a passage facilitates reading comprehension. A teacher has traditionally recognized this fact by introducing new or unknown vocabulary words prior to making a reading assignment.

In addition to this, vocabulary is to emphasize over grammar. Although work on all four English skills (reading, writing, speaking, and listening) occurs

from the start, oral communication is a basic. Thus, reading and writing exercises are based upon what students do in their practice at first orally. Pronunciation also receives attention right away from the beginning of an English course, (Larsen and Freeman, 1986:24-25).

As a matter of facts many students of primary schools face difficulties in learning English such as: translating a simple sentence, getting the meaning of simple paragraph. It is because of their lack of vocabulary. Zhitong cited on Nurjanah (2004:10) "... without a sufficient vocabulary, one cannot communicate his ideas with others. Meanwhile, having high vocabulary is an important skill in learning English".

The richness of a person's vocabulary is considered to be a reflection of intelligence or level of education. In increasing number of one's vocabulary, it is also called vocabulary building. It is generally known as an important part of both learning a language and improving one's skills in a language.

Vocabulary teaching, as it has often been conducted, is rather ineffective. Recent research findings indicate that typical activities of looking up dictionary definition, writing each word in a sentence, and memorizing words meaning, for a test usually accomplish very little long term vocabulary growth. While this research doesn't answer all of the questions or address all of concerns about teaching word meanings, it does provide general guidelines and suggest specific technique for maximizing the learning effects of the time spent on vocabulary instruction.

In teaching learning process, a teacher plays an important role. She has to be creative. As students obtain the language through exposure to language, such as through viewing, hearing, as well as through formal instruction, it is English teacher's job to explore this natural ability by presenting materials which are interesting, educating, and appropriate for them. In creating a pleasant activity a teacher can push students to have positive attitudes towards English by applying activities, for example using cooperative learning method.

According to Johnson, Johnson and Holubc, (1994:3) "Cooperative learning is the instructional use of small groups through which students work together to maximize their own and each others learning." Cooperative learning method consists of many kinds such as jigsaw, think pair share, Three-Step Interview, Numbered Heads Together, snow ball, etc.

But here the writer chooses Number Head Together (NHT) technique to teach the vocabulary to students. The reason why the writer chooses this technique because NHT have some advantages, one of them is NHT is useful for quickly reviewing objective material in a fun way and also can stretch students' thinking. A teacher can use NHT to students in teaching vocabulary for beginning learners. He/she teaches materials by using NHT in variety ways. It depends on what materials that can be delivered by him/her.

Numbered Heads Together (NHT) is a method of learning where each student is given a number and then made a random group of teachers and then calls the number of students (Adityawan, 2010:4).

As a cooperative learning, NHT holds each student accountable for learning the materials. Students are placed in groups and each of them is given a number (from one to a maximum number for each group). A teacher poses a question and students "put their heads together" to figure out the answer. The teacher calls a specific number to respond as spokesperson for a group. By having students work together in a group, this strategy ensures that each member knows the answer to problems or questions asked by a teacher. Because no one knows which number will be called, all team members must be prepared, (Adityawan, 2010:7).

Specific to teaching vocabulary in SDN II Mekarwangi, it is to increase the new vocabulary by giving texts to student who get the new vocabulary and its meaning. It is not only an English teacher who is targeted to read the text, but students should find new vocabulary and look at the meaning. In this case, students are also targeted to find new vocabulary and look for the meaning by themselves.

However, in fact, most of students are still lack in their vocabulary. It could happen whether the teacher uses an inappropriate method in the way he teaches or students still face the difficulties in the way of understanding the language.

After observing classroom activities at the school, it is found that a teacher used lecturing method and focused on a source book without using any teaching aid. The students were seen to be confused, get bored and forgetful. It happens

because several factors, such as: there's a trouble between items information and material on student' memory system, pressure toward items that has been existed, the changes of social environment, the changes of student' enthusiasm and attitude, law of disuse, the changes of nerve blood-vessel (Syah, 2006:25). Therefore the writer wants to analyze the result of students' achievement when they are taught English vocabulary by using Number Head Together (NHT).

Based on the explanation above, the title of this study would be **THE EFFECT OF COOPERATIVE LEARNING THROUGH THE APPLICATION OF NUMBER HEAD TOGETHER ON STUDENTS' VOCABULARY ACHIEVEMENT** (An experimental study at the sixth grade of SDN II Mekarwangi Ciamis).

B. Statement of Problems

Based on the background of the study previously mentioned, the writer formulates the statement of research problem in the following questions:

1. What is the students' achievement in English vocabulary taught with NHT technique?
2. What is the students' achievement in English vocabulary taught with conventional technique in language teaching learning process?
3. How significant is the students' achievement in English vocabulary taught with NHT technique and taught conventional technique?

C. Aim And Significance Of Research

Considering the statement of problem above, this investigation is directed to present a simple and useful description based on the result of collecting the empirical and clarifying the main points of:

1. To identify students' achievement English vocabulary taught with Number Head Together (NHT) technique
2. To identify students' achievement English vocabulary taught with conventional technique in language teaching learning process
3. To identify the difference between the students' achievement English vocabulary taught with NHT technique and a conventional technique

Significances of the research are:

This study is expected to contribute to teaching learning process, especially for teaching vocabulary in elementary school. It can be as a teaching aid for teacher and it is one of the alternatives for students in teaching vocabulary in order to help students improving their vocabulary.

D. Hypothesis

According to Arikunto (1997:62) "Hypothesis is a temporary answer toward a research problem by collecting data in research". This research involves two variable, the first variable is the effect of cooperative learning trough the application of Number Head Together, symbolize by X, and the second variable is student's vocabulary achievement, symbolize by Y.

This research based on null hypothesis (H₀), namely, there is no correlation between using Number Head Together technique and students' vocabulary achievement, and alternative hypothesis (H_a), namely, and there is a correlation between using Number Head Together and students' vocabulary achievement.

E. Rationale

Balkcom (1992:9) said that "cooperative learning is developed to achieve the academic goal as well as effective to developed students' social skill".

Cooperative learning is the teaching strategy in which small team, each with student of defferent levels of ability, use variety of learning activities to improve their understanding of a subject, (Balkcom,1992:29). In this case, it refers to the teaching strategy in which small team, each with student of different levels of ability, use a Number Head Together (NHT) technique to improve their vocabulary achievement.

Number head Together is cooperative learning strategy promotes discussion both individuals and groups. According to Teacher Vision's website (2010) this strategy is beneficial for reviewing and integrating a subject matter. Students with special needs often get benefits when this strategy is used. After direct instruction of the materials, the group supports each member and provides opportunities for practice, rehearsal, and discussion of content material. Group learning methods encourage students to take greater responsibility for their own learning and to learn from one another, as well as from the instructor (Terenzini

and Pascarella, 1994:34). "Cooperative learning has been shown to increase student achievement, race relations, acceptance of special needs students, and self-esteem (Slavin, 1995:11)".

The Number Head Together (NHT) technique when it is used, it should increase the number of vocabulary quality of all students. If teachers have to use various techniques for development of words they have to do teaching learning vocabulary.

In understanding the words meaning, and trying to make it easier, it would create more understanding on other related words of English. This would raise the student's interest on it. Another main reason why it is important to learn the English words, because vocabulary would develop English language skills, as it is said in Tarigan's view (1984:96) as follows:

1. Studying words' origin can help developing the word's consciousness.
2. Studying the words' origin can help students to develop their interest in word study.
3. Studying the roots of a word can be function as a memory which means in providing additional contexts.

Recognizing word roots is an important process in vocabulary learning. Freyd and Baron (1982:70) found that "superior sixth graders were better able to use roots to drive meaning than those who are at average eight graders". Likewise, Levin, Carney, and Pressley (1988:60) said that "teaching word roots to student

enhances their ability to infer meaning of certain vocabulary". Further, they found that the students who learned roots through the keyword method were just as able, if not more so, infer meaning from roots as were students in free study and semantic conditions.

In learning vocabulary, it is to make the students understand and use the words in exact situation. The application of using of NHT technique as a new alternative technique of teaching learning will help teacher to teach vocabulary to the student elementary level easier than using the text book for reading comprehension.

In teaching learning process, teaching aid is very important. According to Brown (1994:35):

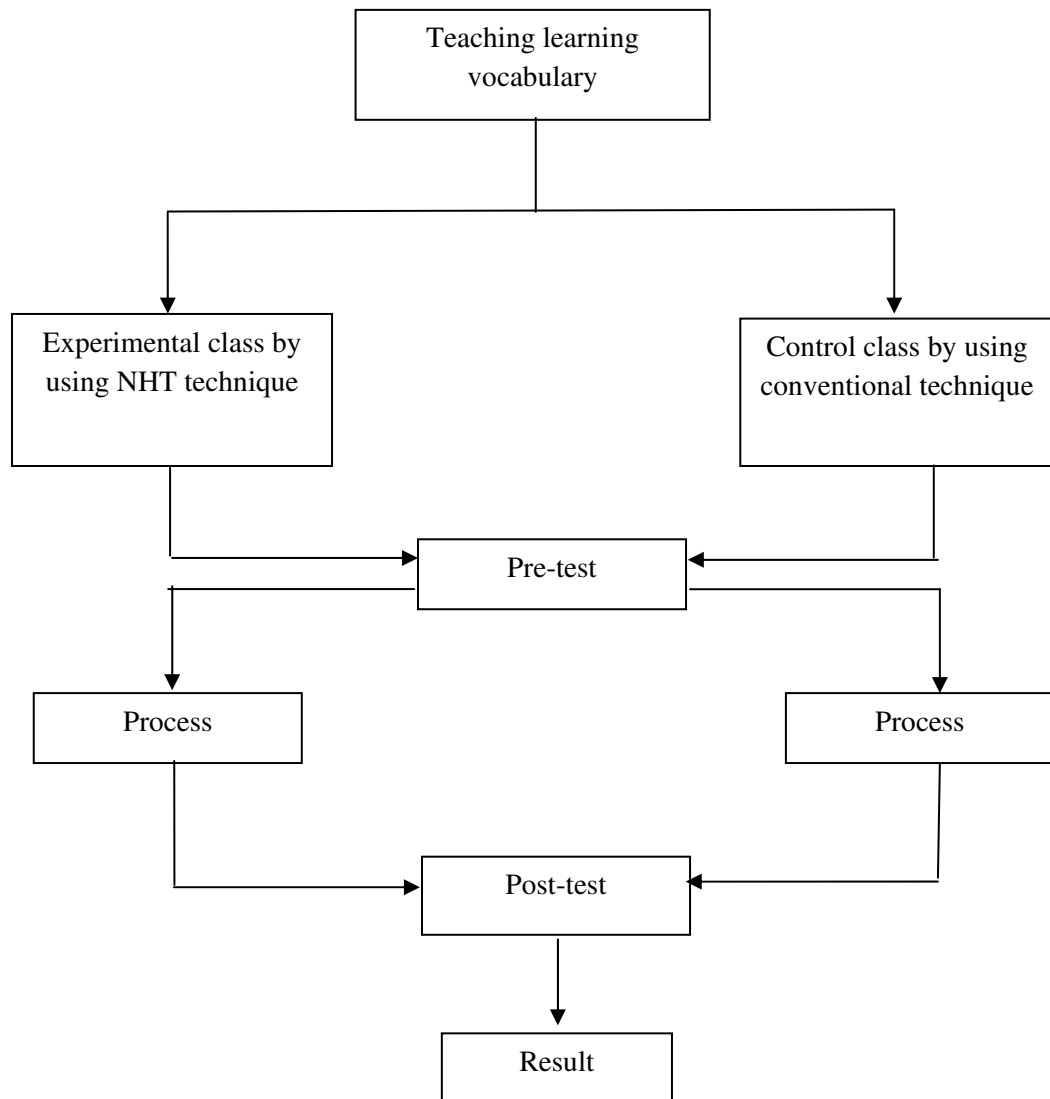
“Children need to have all five senses stimulated. Your activities should strive to go well beyond the visual and auditory modes that we usually feel are sufficient for classroom. One of the five senses is sensory aid and there will help children to internalize concept. The smell of flowers, the touch of plants and fruits, the taste of food, a liberal does of audio-visual aids like videos, picture, tape music all these are important elements in children’s language teaching”.

It means that language can be taught to children through a fun way using teaching aids such as videos, picture, tape, etc. learning English through NHT. Vocabulary is a teaching topic which lends itself very easily to the NHT approach, and there are literally hundreds of vocabularies ranging from elementary to advance levels.

As the study uses experimental research, it will be divided into experimental and control classes. Firstly, the pre-test will be conducted in both of classes. Secondly, teaching learning process will be conducted in both of classes. The treatment was conducted in experimental class and ordinary teaching will be in control class. After that, post test is given to students in both of classes in order to know whether there is an improvement or not. The chart below will make it clear.

Figure 1.1

Rationale



F. Methodology

1. Method of research

This study will use an experimental research with a quantitative method. Experimental research is analytic and deductive. All experimental approaches involve the control or manipulation of three basic components: population treatment and measurement of treatment, as Selinger and Shohamy (1989:136) said that "groups of population are usually formed with studying the effects of specified and controlled treatment which will be evaluated or observed by measurement component".

The design of this research will be divided into two groups, the experiment group and the control group. Pre-test and post-test will be conducted for each group before and after teaching-learning process, then the data will be analyzed to know the result whether the teaching using NHT technique has influence on vocabulary achievement or not.

2. Population and sample

Population is the whole of subject research (Arikunto, 1993:80). The population in this research is the students of SDN II Mekarwangi Sukamantri Ciamis. After interviewing the teacher, the data shows that the student of sixth grade SDN II Mekarwangi are 42 students. So, in this research, it will be divided into two groups 21 students for experiment group and 21 students for control group.

Table 1.1

The condition of population and sample of student at sixth grade of SDN II
Mekarwangi

No	Class	Number of students		
		Male	Female	total
1.	Experimental group	10	11	21
2.	Control group	8	13	21

3. Technique of research

The techniques that are used by the writer in this research for collecting the data are through.

a. Observation

The data that is needed in the technique of observation has been stated in a guideline. It is collected by observing the process of study as long as the treatment of research is given. It is participant observation, when the researcher stands in the research groups and plays the role as a teacher to observe the process of investigation clearly and specifically. The researcher also, observes the condition of the school completely to make the real report of the local circumstance. Then, it has been taken from the headmaster's data. Hopefully, the specific situation and condition at SDN II Mekarwangi Ciamis should be clarified clearly in order to the complete research data.

b. Interview

The technique is needed to get the real condition of investigation to complete the data. It is collected through observation. In this case, the researcher takes a free interview by making any important questions globally about whole things that are related to the condition of the elementary school, and referred to the scope of school. The interview is also aimed to those who play important roles in the school, such as teacher, the headmaster, and the school guards.

c. Pre-test

The implementation of pre-test is conducted in a classroom. It is a standardized test that has requirement of having validity and reliability tests. Beside, the questionnaire as the instrument between both of groups must be homogeneous in order to get balancing quality of the two groups researched. It is objective test use multiple choice. The pre-test used to measure the intelligent of students on their vocabulary acquisition before they are given the treatment or experiment.

d. Post-test

This technique is used to know the final result of students' achievement after they are given the treatment of experiment. The purpose this post test is to explain the influence of NHT technique and to measure the ability of the students on vocabulary achievement. (Variable X that uses NHT technique, variable Y that is not uses NHT technique).

e. Library research

According to Surakhman cited on Nurjanah (2004) "*perlengkapan seorang penyidik dalam setiap lapangan ilmu tidak akan sempurna apabila tidak dilengkapi dengan fasilitas kepastakaan*". This means that if the researcher didn't have instrument in their research such as library research this research will be not perfect.

4. Data analysis

- a. Testing the normality for pre-test in experiment group (variable X) and control group (variable Y) conducting the procedure as follows:

- 1) Determining the class interval (K) with formula:

$$K = 1 + 3,3 \log n$$

(Sudjana, 1988:46)

- 2) Determining the range of data (R) by using formula:

$$R = \text{the highest score} - \text{the smallest score} + 1$$

(Sudjana, 1988:46)

- 3) Determining the length of class (P) by using formula:

$$P = R/K$$

(Sudjana, 1988:46)

- 4) Making the table of frequency distribution:

Score	F_i	X_i	$f_i X_i$	$(X_i - \bar{X})^2$	$f_i (X_i - \bar{X})^2$
1	2	3	4	5	6

- 5) Determining the mean (\bar{X}) by using formula:

$$\bar{X} = \frac{\sum f_i X_i}{f_i}$$

(Sudjana, 1988:66)

- 6) Looking for standard of deviation by using formula:

$$S^2 = \frac{\sum f_i (\bar{f}_i X_i - \bar{X})^2}{n - 1}$$

(Sudjana, 1988:93)

- 7) Arranging the distribution of observation and expectation frequency by using the table as follows:

<i>Class limit</i>	Z_{count}	Z_{table}	L_1	O_1	E_1	X^2_{count}
1	2	3	4	5	6	7

- 8) To determine X^2 (chi square) by using formula:

$$X^2 = \sum \frac{(O_1 - E_1)^2}{E_1}$$

(Sudjana, 1988:270)

- 9) To determine the degree of freedom by using formula:

$$Df = K - 3$$

(Sudjana, 1988:290)

- b. Determining the homogeneity of two variance by conducting the following step:

- 1) Determining score F by using the formula:

$$F = \frac{S^2_1}{S^2_2}$$

(Sudjana, 1988:242)

- 2) Determining the degree of freedom (df) of the data:

$$df_1 = n_1 - 1$$

$$df = n_2 - 1$$