III. RESEARCH METHOD

3.1 Classroom Action Research Setting

This research is a classroom action research. In this research, students' problem was found base on the interview is vocabulary mastery. It was found that the problem in understanding both receptive and productive language use was resulted from inadequate vocabulary mastery. And base on the interview to the teacher, the main problem of the students was that the students were not active and unenthusiastic when they were following English class. They found it difficult to communicate because they lack of vocabulary. They felt frustrated when they cannot find appropriate word to express their thoughts and to grasp the meaning of someone's utterance.

The problem mostly appeared when they were doing written test; it was hard for them to recall the vocabulary they have got as they lack impression and eagerness in learning English. So, a classroom action research was done to increase the students' vocabulary achievement, the teacher's performance and the teaching learning process. The researcher taught vocabulary through STAD and saw the improvement from the process and product of teaching and learning. This research was done at first grade of SMA N 1 Terbanggi Besar.

There was one class only of first grade in SMA N 1 Terbanggi Besar. The subject of this classroom action research was the students of X.H that consist of 30 students. From the pre observation and the teacher' explanation this class was chosen because most of students in that class have the lower ability in vocabulary achievement among the other classes. It was showed from the mid test, not all of the students pass the target of KKM (Kriteria Ketuntasan Minimal). The target is 60 and no one of the students can reach it, their score is below of the KKM, and the range of their score 32-55. Besides that, he found that most of the students cannot answer the teacher' question, they kept asking the teacher to translate the question into Bahasa, and they also cannot answer it in English. It was known by the pre-observation that researcher does and also from the English teacher's information. The researcher observed the problem and tried to find the solution for that problem. In this research, students' problem related to vocabulary achievement.

The problem solution applied was teaching vocabulary through STAD. Then lesson plan is design and use. After that, all the students are asked to answer some teacher's questions related to their understanding of the task, and then they are also asked to choose the correct answer related to their vocabulary mastery. This research is done in collaboration with the other English teachers. There are two others English teacher. One English teacher observes the teacher's performance and the other one English teacher observes the students' activity during the teaching learning process. Learning process analysis is done base on the students' observation and teacher's observation. Base on this analysis and reflection, it is decided the next cycle and it focuses on the weaknesses in previous cycle.

3.2 Research Procedures

In this classroom action research, there are two cycles. The first cycle is based on the problem which is faced by the students and teacher. The main steps of the cycle are as follows:

1. Planning

Base on the research problem, the researcher prepares lesson plan, selects the material from the textbook or another book that is relevant to the curriculum of senior high school. The researcher prepares the vocabulary test for the students and also observation sheets that will be filled out when the observer is observing the students' activities and the teacher's performance.

2. Action

Action is part of the cycle where a teacher does the treatment; it is teaching English through STAD. In this stage, lesson plan is used in the teaching learning process. The researcher teaches in the classroom as a teacher base on the lesson plan throughout the teaching learning process.

During the teaching learning process, the students' activities will be observed. Observation is done by the observer during the teaching and learning process. The observer observes the students' activities and also the teacher's performance, then the result of the observation is will be filled out in the observation sheets. The researcher and the observer also will interpret the result of the observation. This step will be started during the teaching learning process occurs.

3. Observation and Interpretation

During the teaching learning process, the students' activities are observed by the rater. The teacher performance is observed and noted by the teacher of the class by using observation sheet and interpret the result of teaching learning process. This step is done while the teaching learning process occurred.

4. Analysis and Reflection

Reflection means that the researcher analyzes and reflects the teaching learning process based on the observation result, students' performance and the vocabulary task to find out the improvement of students' achievement. The researcher analyzes the weakness and the strength of the activity, material, media and students' achievement.

√ Identification of problem

√ Analysis of problem

Planning

Analysis & Reflection

Observation &
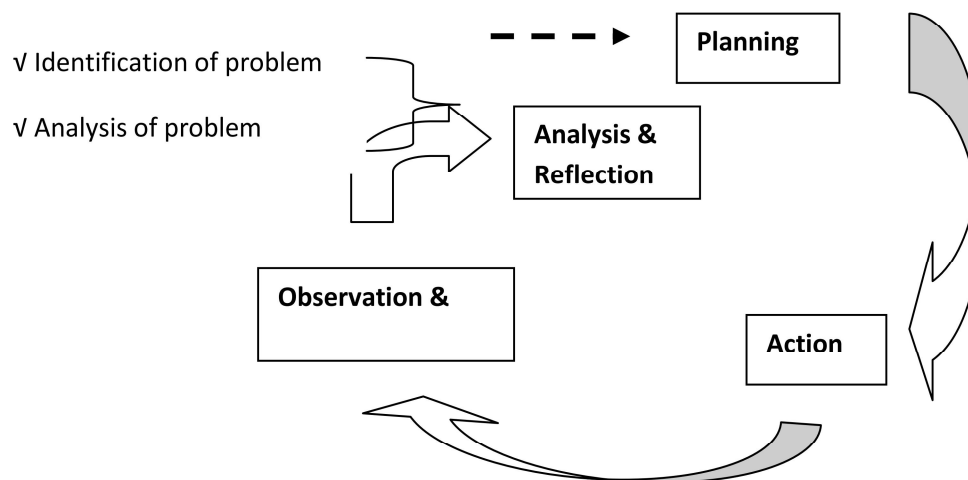
Action

The cycle of Classroom Action Research (Suyanto in Wiliyanti, 2007: 33).

3.3 Indicators of the Research

In order to see whether STAD can be used to increase the students' vocabulary achievement in this Classroom Action Research, the researcher determines the indicator dealing with the learning product and process.

3.3.1 Learning Product

Based on the standard score or KKM (Kriteria Ketuntasan Minimal) stated by the school for English subject, the indicator of learning product is 60. So, the researcher and the teacher determine the target according to that standard, if at least 70% of students' scores can reach 60 or more for the test, it is assumed that STAD is able to foster the learning product.

3.3.2 Learning Process

For this learning process, observation is done to both the teacher and the students by the observer during the teaching learning process by observing the whole activities in the class and by filling the observation form. The observation is done to know the students' activity during learning process, subject is based on the problems faced by the teacher, and it is divided into three activities, they are, pre-activity, while-activity and post-activity. In pre-activity the aspects observed are the students' interest to follow the class and respond to the topic, while, in while-activity, the aspects

observed are students' attention to the teacher's explanation, their focus on the aspects of vocabulary achievement, and their understanding to the materials.

The indicator determined by the researcher concerning the students' activities is 80%. So, if 80% students are actively involved in teaching and learning activities when the use of STAD is implemented, it means that the use of STAD technique is applicable to improve students' vocabulary achievement.

The researcher decides to set up 80% as the target since according to Arikunto (2006: 7), if more than 75% students are actively involved in teaching learning activities, it can be categorized as a good level. The teacher also discusses it to the English teacher.

Besides observing the students' activities, the researcher also observes the teacher's performance during teaching and learning process. It is expected that teacher's score for his teaching performance could reach score 80. So, if the teacher could get score 80 in his teaching performance, it means he can teach the students very well. There are some aspects that are used to score for the teacher's performance that was, doing the appreciation, mastering the learning material, having the learning strategy, using the learning media, involving the students, and having evaluation.

3.4 Instrument of the Research

In getting the data, the researcher employs two kinds of instruments. The first instrument is the main source of instrument of information and the second one

supported the analysis itself. The instrument used here were (1) vocabulary task and (2) observation sheet.

The instrument could be specifically as follows:

3.4.1 Vocabulary Test

The first instrument use in getting the data is vocabulary test. Vocabulary test is chosen as the instrument because it requires students to measure their vocabulary mastery. Vocabulary test could also motivate the students to improve their English. The researcher uses vocabulary test proposed by Heaton (1991). The test assesses the students' understanding and the students' vocabulary by choosing the correct answer. The vocabulary test consists of 40 items. It is all about vocabulary of sport and the items are vocabulary of noun consist of occupations, places, things, etc. However, in this recent study, the researcher decides to use nouns because it is popular and it still around the students world.

Table 4
The List of Vocabulary

Vocabulary	
Noun	Foot ball, racket, Football player, athlete, diver, hockey player, rider, swimmer, tennis player, circuit, stadium, jockey, cyclist, golfer, ice-skater.
Verb	beat, box, catch, cycle, dive, draw, hit, kick, Drive, lose, practice, throw, surf, swim, shoot, ride.
Adjective	Amateur, danger, professional, safe.
Adverb	Field, swimming pool, additional time, circuit.

3.4.2 Observation

In this research, observation is conducted during the teaching learning process. The teacher and the rater observe the process happening in the classroom. The observation is done to find out the students' interest to follow the class, students' attention to the teacher explanation, their focus on the aspects of vocabulary achievement and the teacher's performance in implementing teaching vocabulary through STAD. All of the important things those happen during teaching learning process are noted by the rater and the teacher.

3.5 Data Analysis

According to Setiyadi (2006:254), data analysis is a process of organizing the data in order to gain regularly of the pattern or form of the research. In this research, the teacher validated the data by using vocabulary test and observation. After getting the data from the test and observation, the teacher analyzes the data based on the limitation of the problems and objectives of the research.

In analyzing and interpreting the data, the first step that the teacher does is making description all data. Then the teacher selects the data related to the research question. The next step, the teacher arranges all collected data by classifying the data. They are the data in the learning process and learning product, they are observation and vocabulary task. The last step is making the report. When the data are taken, she

interprets all the collected data and described them into conclusion. And base on the analysis and reflection, it is decided to conduct two cycles.

3.5.1 Learning Product

To know the learning product, the researcher uses vocabulary task to collect the data. There is the indicator that is used to analyze the data gained from the test:

If at least 70% of students' scores can reach 60 or more for the test, it is assumed that STAD is able to foster the learning product.

To know the percentage of students' who get ≥ 60, the following formula is used:

$$\frac{\text{Number of students who get} \geq 60}{\text{Total number of students}} \times 100$$

3.5.2 Learning Process

In this learning process, observation is done to both the teacher and the students by the observer during the teaching learning process by observing whole activities in the class and by filling the observation form. The observation is done to know the students' activity and the teacher's activity during learning process and it is based on the problems faced by the teacher.

a. Students' Activity and Teacher's Performance

There are some indicators that are used to analyze the learning process of the students and the teachers: If 80% or more of students are actively involved in teaching and learning activities when STAD is being implemented, it means the target is achieved. If more than 80% of students are actively involved in teaching and learning activities, it categorizes as a good level. If the teacher gains 80 in her teaching performance, it means he could teach the students very well by using STAD. To get the data from the learning process, the researcher uses observation sheets. The result of the observation sheets is analyzed after every cycle has been conducted.

b. Observation

Since the observation is done for observing the students' activities and also the teacher's performance, the teacher analyzes the result of the observation separately. In analyzing the data from observing the students' activities, the researcher counts number of students who are actively involved in the teaching learning activities and also calculate the percentage of the students. In addition the researcher make abstraction or description then selects the important data which is related to the activities of the students. Meanwhile, in analyzing the data from observing the teacher's performance, the researcher does the following steps:

1. Counting the total score

In this step, the researcher counts the sum of scores from all aspects. The aspects scored covered the teacher' activities in pre-activity, while-activity and post-activity.

2. Making a description from the data to be analyzed

It is similar to analyze the students' activities, in analyzing the teacher' performance the researcher also makes some description from the collected data which enriches and supports the result of the analysis.