**THE EFFECT OF USING STUDENTS TEAM ACHIEVEMENT DIVISION
(STAD) IN COOPERATIVE LEARNING ON THE ELEVENTH
YEAR STUDENTS' VOCABULARY ACHIEVEMENT
AT SMA NEGERI TEMPEH LUMAJANG**

THESIS

By

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2011**

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DEDICATION

This thesis is honorably dedicated to:

1. My beloved father and mother, Mursam and Riami Yuliwati. Thanks for your love and support. This thesis is proudly dedicated to you for your endless love;

2. My lovely sister, Rani Dwi Ayunita Santi. Thank you for your support.

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SUMMARY

The Effect of Using Students Team Achievement Division (STAD) in Cooperative Learning on the Eleventh Year Students' Vocabulary Achievement at SMAN Tempeh Lumajang; Alta Gabrilia Widi Wastiti, 060210491223; 2011:42; English Education Program, Language and Arts Education Department, Faculty of Teacher Training and Education, Jember University

This research design was an experimental research. The purpose of this research was to know whether or not there was a significant effect of using Students Team Achievement Division (STAD) in Cooperative Learning on the eleventh year students' vocabulary achievement. The area of this research was SMA Negeri Tempeh Lumajang. It was chosen purposively because the use of Students Team Achievement Division (STAD) had never been applied in teaching learning process in this school and the researcher got permission from headmaster to conduct the research in this school.

The respondents of this research were all of the eleventh year students of SMA Negeri Tempeh Lumajang in the 2010/ 2011 academic year. The researcher conducted homogeneity test to know the homogeneity of the population to determine the research respondent. The result of the homogeneity test was analyzed statistically using ANOVA formula and the result showed that F-computation (2.8) was higher than that of F-table (2.2). It means that the condition of the whole eleventh year students of SMA Negeri Tempeh Lumajang was heterogeneous or there was a significant difference mean of the six classes. Therefore, two classes from the population that had the closest mean differences class XI IPA 2 and XI IPA 3 were chosen. The lottery was done to determine the experimental group and the control group. The result was class XI IPA 2 as the experimental group and class XI IPA 3 as the control group. The total number of the respondents was 58 students that consisted of 30 students of XI IPA 3 as the experimental group that was taught by using

CHAPTER 1. INTRODUCTION

This research focuses on the effect of using STAD (Students Team Achievement Division) in cooperative learning on vocabulary achievement. The use of STAD technique can make students work in cooperative situation. Besides, it can make students help each other to solve the problem.

This chapter discusses background of the research, problem of the research, operational definition of the research, objective of the research, and significance of the research.

1.1 Background of the Research

English as an international language plays an important role in the world as a means of communication. Considering the importance of English as an international language, people have to master and use it in all aspects such as in science, technology, education, arts, culture, and information.

In Indonesia, English becomes the first foreign language that has been learnt by the students from elementary school as a local content subject and at Junior High School, Senior High School, and University level as a compulsory subject. In English, there are four language skills namely: listening, speaking, reading, and writing; and the language components: grammar, vocabulary, and pronunciation. Those three components are taught integratively with the language skills. As stated in the 2006 English curriculum, the main objective of teaching English at Senior High School is to help students master the four language skills with the three language components. The students have to master the language skills and the language components in order to apply the English well and vocabulary is one of the language components that is very important in learning English because by mastering

This research focused on Students Team Learning (STL) technique developed and researched at Johns Hopkins University (Slavin, 1991:89). There are four types of Student Team Learning Methods; Students Team Achievement Division (STAD), Teams Games-Tournament (TGT), Team Assisted Individualization (TAI), and Cooperative Integrated Reading and Composition (CIRC) (Slavin, 1991:89). However, in this research the researcher focused on the use of STAD model in teaching vocabulary.

Students Team Achievement Division (STAD) is a model developed by Slavin (1986). Students Team Achievement Division (STAD) method is appropriate for teaching well-defined objectives with single right answers, such as mathematical computations and applications, language usage and mechanics, geography and map skills, and science facts and concepts (Slavin, 1991: 90).

The previous research conducted by Astutik (2010) on improving the VIII-C students' structure achievement by using Students Team Achievement Division (STAD) in cooperative learning at SMPN 12 Jember showed that the use Students Team Achievement Division (STAD) in cooperative learning could improve the VIII-C students' structure achievement. The improvement could be seen from the students' means score of the structure test result in the first cycle (68.2) and in the second cycle (72.7). Thus, there was an increase of 4.5 point from the first implementation to the second implementation.

Another previous research was conducted by Sutikno (2010) at SMPN 2 Sukowono Jember in the 2009/2010 academic year. It was found that STAD could improve the eighth grade students' reading comprehension achievement at SMPN 2 Sukowono Jember. The result in the cycle 1 could be reported that 77% students got score at least 71 and the result in cycle 2 could be reported that 79.48 %. Therefore, it proved that STAD model was an effective technique that could be used in teaching learning activity, especially both for reading or structure.

Students Team Achievement division (STAD) was used as an alternative technique in English teaching-learning, including vocabulary. Based on the above

members of the team have mastered the lesson, (4) giving individual test, (5) calculating team improvement scores and recognizing team accomplishment.

1.4.2 Vocabulary Achievement

Vocabulary is collection or list of word that have the meaning. Achievement is the action of achieving after the vocabulary test, covering nouns, verbs, adverbs, and adjectives. Vocabulary achievement is the level or amount of knowledge of vocabulary after learning vocabulary using Students Team Achievement Division (STAD). Vocabulary that was taught and tested to the students was large vocabulary covering nouns, adverbs, verbs, and adjectives. In this research, vocabulary achievement referred to the students' scores of the English vocabulary test after they learn English vocabulary through STAD (Students Team Achievement Division). Vocabulary in this research was an English vocabulary.

1.5 Limitation of the Research

1. The research was conducted in two classes (one class for experimental group and the other one for control group) of eleventh year students at SMA Negeri Tempeh Lumajang in the 2010/ 2011 academic year
2. The Students Team achievement Division (STAD) was used as a technique in teaching vocabulary
3. In this research, the teaching learning vocabulary through the reading text was focused on narrative text because it was one of the types of text that the students of the eleventh year learned as stated in the 2006 Institutional Level Curriculum (*Kurikulum Tingkat Satuan Pendidikan / KTSP*)
4. The instrument of the research was the vocabulary achievement test for both: The experimental and the control groups

The result of this research was only generalized to the population of the research.

CHAPTER 2. REVIEW OF RELATED LITERATURE

This chapter presents the review of aspects related to the research topics. They are definition of vocabulary, classification of vocabulary, vocabulary achievement, Cooperative Learning, the models of Cooperative Learning, Students Team Achievement Division (STAD), the steps of using Students Team Achievement Division (STAD), the advantages and disadvantages using STAD (Students Team Achievement Division), STAD as a technique of teaching vocabulary, the effect of using STAD on vocabulary achievement, hypothesis.

2.1 Definition of Vocabulary

Hatch and Brown (1995:1) state that the term vocabulary refers to a list or a set of words for a particular language or a list or set of words that individual speakers of a language might use. Vocabulary is a list of alphabet that has meaning. Although vocabulary is a component of the English language, vocabulary is a basic of a language to build language skills, namely listening, speaking, reading, and writing. Vocabulary is important to master the skills in learning English as a foreign language.

Based on the explanation above, it can be concluded that vocabulary is a set of words which has meaning that has an important aspect to make up a language that is used to express the feeling and thought of human beings.

2.2 Classification of Vocabulary

Hatch and Brown (1995:218) state that vocabulary can be classified based on their functional categories which are called parts of speech, including nouns, verbs, adjectives, and adverbs. In addition, to these major classes, there are pronouns, prepositions, conjunctions, and interjections.

This research focused on parts of speech that covered nouns, verbs, adjectives, and adverbs. The following parts will review the aspects of vocabulary used in this research.

Hatch and Brown (1995:222) state that verb is used to denote action. Thomson and martinet (1995:106) explain that verbs in English are classified into two classes, namely the auxiliary verbs and ordinary verbs.

a. Auxiliary verbs.

Based on the size of available vocabulary, auxiliary verbs are not the member of large vocabulary. Auxiliaries help to form a tense or an expression, hence the name. The examples of auxiliary verbs are: to be, to do, modals, and used to.

b. Ordinary Verbs.

There are two types of ordinary verbs.

1. The regular verbs: the simple past and past participle which are formed by adding -d or -ed to the infinitive.

Infinitive	Simple Past	Past Participle
talk	talked	talked
close	closed	closed
work	worked	worked

2. The irregular verbs: the simple past and past participle are not added by -d or –ed, However, it has no fixed rule, for examples:

Infinitive	Simple Past	Past Participle
come	came	come
eat	ate	eaten
go	went	gone

In this research, the researcher used ordinary verbs which covered regular verbs and irregular verbs as they are stated on the 2006 Institutional Level Curriculum for Senior High School.

2.4 Teaching Vocabulary Integrated with Reading

English as a compulsory subject is learnt by Senior High School students. It is stated in the 2006 English Curriculum that there are four language skills that should be mastered by the students' who study the language namely: listening, speaking, reading, and writing, and the language components: grammar, vocabulary, and pronunciation (BSNP, 2006:2). Vocabulary is one of language components which is taught in Senior High Schools. It is usually taught integrated with listening, speaking, reading, and writing.

In this research, vocabulary was taught integrated with reading. The reading text that used based on the 2006 Institutional Based Curriculum (*Kurikulum Tingkat Satuan Pendidikan / KTSP)* for the eleventh year students of Senior High School was narrative text. Isdaryanto (2011) states that a narrative text is a text amuse, entertain, and deal with actual or vicarious experience in different ways.

The narrative text that used in this research entitled "Androcles and the Lion" and "Beware of Mean Friend".

2.5 Cooperative Learning

Cooperative Learning is an instructional task design that engages students actively in achieving a lesson objective through their own efforts and the efforts of the member of their small learning team (Cooper, 1999:273). In this study, the students were divided into a number of small groups, learn the materials, and discuss with their groups to solve problems together. The purpose of Cooperative Learning is to give an opportunity to the students' activity during the teaching learning process.

2.6 The Models of Cooperative Learning

In teaching leaning process, Cooperative Learning has some models that can be applied in the teaching and learning process. Slavin (1991:89) states that the best evaluations in cooperative models are Student Team Learning variations, Jigsaw,

characteristics that may affect group participation are race, gender, or language minority status. A teacher will use this information to form group of four or five by choosing one or two students from each ability group. Each group consists of one student who has high ability, one student or three students have average ability, and one student has low ability.

b. Present Content

After dividing students into groups, teacher will use any format that ensures adequate quantity and quality, the teacher then presents the content of the lesson. The presentation includes three parts: 1) the introduction, including a simple statement of the lesson goal, set induction, and a brief review of prerequisite skills, 2) lesson development which emphasizes the meaning and focuses on demonstration, explanation, and informal, ongoing assessment, and 3) guiding practice, requiring all students to attempt responses and calling on a random election of students to sustain attention.

c. Team Discussion and Practice

In this step, there are two factors contributing to the productivity of learning teams. The first factor is the academic task structure. Team member is engaged in group practice, discussion material, individual practice, and peer coaching. Students share and practice the problem together, explain their solution, give comment on each other problem solving. The second factor is responsible for productivity of learning teams.

d. Assess Individual Mastery

In this step, students have to master the lesson well. The teacher will use individual test (quiz) to assess the individual's mastery. The aim of the test is to measure the student's achievement and improvement related to what they have learned.

2.8 The Steps of Using Students Team Achievement Division (STAD)

Killen (2006: 196) states that the use STAD techniques follow these steps:
1. Dividing the learners into groups of four or five (Refer to earlier discussion of how to form groups)
2. Giving the learners an outline of what they will be learning and why (Get them focused on the outcomes you want them to achieve)
3. Presenting new academic outline information to learners either verbally, in writing, or through other means such as video tape
4. Giving the learners worksheet or other study devices to help them master the academic materials. These worksheets should guide them through the materials and show them how they can help one another learn through tutoring, quizzing one another, or team discussion
5. Giving the learners sufficient time or work together to understand the ideas you have presented- several periods if necessary
6. Testing the learner (as individual, not as a group) to see whether they have learned what you wanted them to learn. These test are sometimes called' quizzes' to emphasizes that they are not major assessment tasks that will count towards learners' grade; they are simply part to the learning process. It is important that these quizzes test important outcomes(such as understanding and the ability to apply knowledge) as well as recall of facts
7. Scoring the quizzes and give each learner an improvement score. This improvement score is based on the degree to which the quiz score exceeds the learner's past average on similar quizzes
8. Adding the individual improvement score to give a team score. Emphasizes to the learners that the more they learn, they more their individual improvement score will increase their team scores

Based on the explanation of the above components, the researcher adopted the procedures of above STAD as procedures in teaching vocabulary.

1. Grouping the students into some groups. Each group consisted of four students (1 high achiever, 2 middle achievers, 1 lower achiever) based on the result of their homogeneity test and the members of the group were classified as a leader, a manager, a monitor, and a writer.

   The Student who has high achiever was chosen as leader because a high achiever student has capability and influences towards the achievement of a goal of the group. The students who has middle achiever was chosen as manager because middle achiever can help the leader in charge and control the group in

teach mathematics to students grades three to six (or older students ready for full algebra course). It means that STAD available in all subjects and all grade level.

Beside the advantages, teaching using STAD has disadvantages. According to Slavin (1991:64) STAD has some problems as follows.

Almost all problem in STAD are problem with teams, discussed earlier because of the use of the individual improvement score system, high performing students complain that it is not fair that they have to do so much better to get the same point as low performing students. To answer this concern, emphasize the following:

1. The individual improvement score system is fair because in order to earn maximum points, everyone has to show improvement each week, not just perform at the same level as before. Improving by 30 points is just as hard for a low performing student as it for a high –performing student.

2. Although team point is based on improvement, grades are still determined in the usual way. Thus, high performing students who continue to perform at a high level will still receive high grades.

Another problem that arises with STAD is that, because a particular quiz is very difficult, almost everyone will get zero points. When it happens, give each item 1.5 or 2 points because it is unfair to penalize the entire class if the test is too difficult. If the large numbers of students keep performing below their base score, the material being taught is probably above the level of the class, and either the pace should be slower or more appropriate material chosen

2.10 Students Team Achievement Division (STAD) as a Technique of Teaching Vocabulary

Vocabulary is one of the language components has important rule to improve language skills. Thonbury (2002:13) states that you can say very little with grammar, but you can say anything with words. However, in learning vocabulary there are many students who always forget the word and have difficulties in finding the meaning of the word. As the result, the get bad score in English test. Therefore,

students' attention and motivation so that the students will be interested in learning English especially learning vocabulary.

Slavin (1991:90) states that STAD has been used in a wide variety subjects, from mathematics to language, art, and social study. STAD is the most appropriate well defined objectives with single right answer, such as mathematical computations and application, language usage and mechanic. Furthermore, Newman and Thompson (1987) in Armstrong Scott, Palmer, and Jesse (1998) reported that STAD is the most successful Cooperative Learning technique at increasing students' academic achievement.

Based on the explanation above, teaching vocabulary using STAD can make the students practice to think, to share with their friends and to help each other to learn vocabulary. They also have motivation in learning vocabulary to make their group win the competition.

2.12 The Alternative Hypothesis

Based on the explanations above, the alternative hypothesis of this research was formulated as: There is an effect of using STAD (Students Team Achievement Division) in Cooperative Learning on the eleventh year students' vocabulary achievement at SMA Negeri Tempeh Lumajang in 2010/2011 academic year.

1. Administering homogeneity test to all of the eleventh classes to know the homogeneity of the population.

2. Analyzing the scores of the test using ANOVA Formula. The result of homogeneity test showed that F-computation (2.8) was higher than F-table (2.21). It means that there was a significant difference mean of the six classes (the population was heterogeneous). Two classes from the population that had the closest mean differences were chosen.

3. Determining the experimental group and the control group randomly by lottery, XI IPA 3 was chosen as the experimental group and XI IPA 2 as the control group.

4. Giving treatment to the experimental group that was taught vocabulary with Students Team Achievement Division (STAD) method in cooperative learning and the control group was taught using conventional technique, that is, question-answer and lecturing technique, the student who belong to the control group did the exercises in pairs and they got the same material, and the same teacher (the researcher).

5. Teaching learning process was conducted in two meetings, every meeting took 90 minutes.

6. Administering the try out to establish validity, reliability, and difficulty index of the teacher-made test and analyzing the result. The result of try out showed that the test items were reliable ($0.77 \geq 0.7$) so that the test could be tested to both groups and the researcher did not need to revise some test items because the test items had the range of difficulty index from 0.38 up to 0.72.

7. Giving vocabulary post –test (O) to the respondents (both classes) to measure the students vocabulary achievements after the treatments.

8. Analyzing the result of the post test by using t-test formula of 5% significant Level to know the mean score of the two groups, whether the mean difference was significant or not.

9. Finding the Degree of Relative Effectiveness if the result was significant.

3.3 Data Collection Methods

In this research, there were two kinds of data used in this research: primary data and secondary data. The primary data were collected by using test (vocabulary test); the secondary data were collected by using interview and documentation.

3.4.1 Test Method

Test is an instrument that presents to each subject a standard set of questions that requires the completion of a cognitive task (McMillan, 1992:114). Arikunto (2006:150) divided test into seven categories. Based on objectives test can be divided into personality test, aptitude test, intelligence test, attitude test, projective test, interest test, and achievement test. Achievement test is designed to determine how successful individual, group of students, or a course in achieving objectives (Hughes, 1996:10). The achievement test was given to the students when the treatment was over. Regarding the person who constructed the test, test can be divided into two kinds. Those are teacher made test and standardized test (Arikunto, 2006:223). In this research, the test that was used to measure the students' vocabulary achievement was teacher made test in the form of objective test. The objective test in this research was constructed in the form of multiple choices, with the reason that the test could be scored easily and quickly to measure the students' vocabulary achievement.

In this research, there were two main tests, namely homogeneity test and post test. The homogeneity test that was used was a teacher made-test. The homogeneity test that was given was an objective test in the form of multiple choice. The total number of the test was 20 items and the time allocation for doing the test was 30 minutes. The post test that was used was also a teacher made-test. The post test that was given was an objective test in the form of multiple choice. The total number of the test item was 40 items that consisted of nouns (10 items), verbs (10 items), adjectives (10 items), and adverbs (10 items). The value of 2.5 was given to each correct item of the test, so that the total number of score was 100. Time allocation for doing the test was 45 minutes. The material of the test was related to the 2006

Note:

$r_{\frac{11}{22}}$: Reliability coefficient for half of the test items

$\sum XY$: The total number of odd and even items

$\sum X$: The total number of odd items

$\sum Y$: The total number of even items

N   : The number of the respondents

f. Estimated the reliability index of the whole test using Spearman-Brown's formula :

$$r_{11} = \frac{2\,r_{\frac{11}{22}}}{1 + r_{\frac{11}{22}}}$$

Note:

r_{11} = reliability coefficient for the whole items

$r_{\frac{11}{22}}$ = reliability coefficient for half of the test items

(Adapted from Sudijono, 1996:219)

Concerning of reability of the test, Sudijono (1996:230) confirms that reliability coefficient of the teacher made test is believed to be reliable if the reliability coefficient is ≥ 0.70. In addition, according to Djiwandono, (1996:154) the result of reliability coefficient of the whole test items by using Spearman brown formula was classified into 5 correlation degrees which had difference limitation in each correlation degree, those are:

0.90 – 1.00   = Very High

0.70 – 0.89   = High

0.50 – 0.69   = Fair

0.30 – 0.49   = Low

< 0.30   = Very Low

(Djiwandono, 1996:154)

3.4.2 Documentation

According to Arikunto (2006:206) documentation is also an important method in collecting data. In this research, documentation was used to get the data for example the total number and the names of the respondents of the eleventh year students of SMA Negeri 1 Tempeh Lumajang of the 2010/2011 academic year. The supporting data were used to complete the main data.

3.4.3 Interview

McMillan (1992:132) states that Interview is a form of data collection in which questions are asked orally and subjects' responses are recorded. Arikunto (2006:227) classified interview into two categories namely structured interview and unstructured interviews. The type of interview used in this research was structured interview. It means that the lists of questions were prepared to get the information. In the interview, a list of questions was prepared and used as the guide of interview. In this research interview was conducted with the English teacher to lead further questions relevant to the data needed.

3.5   Data Analysis Method

Data analysis method is a way to analyze the obtained data. After administering the vocabulary test to collect the primary data, the test results were analyzed by using t-test formula. The result was used to know whether or not there was an effect of using Students Team Achievement Division (STAD) in Cooperative Learning on the eleventh year students' vocabulary achievement at SMA Negeri Tempeh Lumajang.

The formula of t-test was as follows;

$$t - test = \frac{M_x - M_y}{\sqrt{\left(\frac{\sum X^2 + \sum Y^2}{N_x + N_y - 2}\right)\left(\frac{1}{N_x} + \frac{1}{N_y}\right)}}$$

(Arikunto, 2006: 311-312)

CHAPTER 4. RESEARCH RESULT AND DISCUSSION

This chapter presents the results of supporting data, the result of homogeneity test, the analysis of the try out, the description of the treatment, the result of main data, and the discussion. The main activity of the research was to know whether or not there was a significant effect of using Students Team Achievement Division (STAD) in Cooperative Learning on the eleventh year students' vocabulary achievement at SMA Negeri Tempeh Lumajang in the 2010/2011 academic year. The schedule of administering the research can be seen in appendix D.

4.1 The Result of Supporting Data

The results of supporting data were obtained through interview and documentation. These data were used to support the primary data.

4.1.1 The Results of Interview

The interview to the English teacher was conducted on March 23th, 2011. According to the English teacher, SMA Negeri Tempeh has used the 2006 Institutional Based Curriculum since 2006. The English teacher taught vocabulary integratedly with the other skills, especially in reading comprehension. He asked the students to find the difficult words from the text. Then, he asked the students to memorize the words. However, vocabulary was still considered difficult, the students still got difficulties in mastering English vocabulary. They still faced some problems in finding the meaning of the words, memorizing the words and writing sentences using the correct words. The teacher then realized that a new technique in learning vocabulary was needed for better improvement.

The books used by English teacher were, first, Progress a Contextual Approach to Learning English an English textbook for Senior High School published

Tempeh Lumajang. The names of the respondents can be seen in appendices H and I.

4.2 The Result of Homogeneity Test

The homogeneity test was conducted on May 07, 2011. The researcher consulted the schedule with the English teacher first. The researcher also asked permission to some teachers to use their teaching session for conducting the homogeneity test. Therefore, the homogeneity test could be conducted in a day for all of the eleventh year classes of SMA Negeri Tempeh in the 2010/2011 academic year. This test was administered to know the homogeneity of eleventh year students' ability in English especially on Vocabulary. The total number of the eleventh year students were 213 but the students who joined the test were 205, 8 students were absent at the time of the test. The description of the students who joined the homogeneity test can be seen in Table 4.2

Table 4.2 The description of the students who joined the homogeneity test

No	Classes	The total number of the students	The students who absent	The students who joined the test
1	XI IPA 1	29	3	26
2	XI IPA 2	28	2	26
3	XI1PA 3	30	0	30
4.	XI IPS 1	43	2	43
5.	XI IPS 2	42	1	42
6.	XI IPS 3	41	0	41
	Total	213	8	205

The results of homogeneity test were analyzed statistically by using ANOVA formula (see Appendices O and P). The result of F-computation was 2.8 while the value of F-table in the 5% significant level was 2.21. From the calculation above, it was known that the value F-computation was higher than the value of F-table (2.8 <

$$r\frac{11}{22} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{\{N\sum X^2 - (\sum X)^2\}\{N\sum Y^2 - (\sum Y)^2\}}}$$

$$r\frac{11}{22} = \frac{29 \times 4707 - (345)(389)}{\sqrt{\{29 \times 4209 - (345)^2\}\{29 \times 5369 - (389)^2\}}}$$

$$r\frac{11}{22} = \frac{136503 - 134205}{\sqrt{\{112061 - 119025\}\{15571 - 151321\}}}$$

$$r\frac{11}{22} = \frac{136503 - 134205}{\sqrt{3036 \times 4380}}$$

$$r\frac{11}{22} = \frac{2298}{\sqrt{13297680}}$$

$$r\frac{11}{22} = \frac{2298}{3646.6} = 0.63018$$

Notes:

$r\frac{11}{22}$ = the reliability coefficient of a half test

N = the total number of respondents (the students)

$\sum XY$ = the total number of odd items and even items

$\sum X$ = the total number of odd items

$\sum Y$ = the total number of even items

From the calculation, it was found that the reliability coefficient of a half test was 0.63. In order to find the reliability of the whole test it was continued to be calculated by using Sperman Brown formula:

$$r_{11} = \frac{2\, r\frac{11}{22}}{1 + r\frac{11}{22}}$$

$$r_{11} = \frac{2 \times 0.63}{1 + 0.63}$$

$$r_{11} = \frac{1.26}{1.63}$$

$$r_{11} = 0.77$$

4.4   The Description of the Treatment

As has been explained in Chapter 3 (page 19), the experimental group (XI IPA 3) was taught vocabulary by using Students Team achievement division (STAD) in Cooperative Learning, while the control group (XI IPA 2) was taught vocabulary by using Question-Answer and lecturing technique. The treatments were conducted on May 9th up to May 14th, 2011. The schedule of administering the treatments can be seen in the following table.

Table 4.3 The Schedule of Administering the Treatment

No.	Treatments	Experimental Group	Control Group
1	Treatment 1	May 9th, 2011 11.45 – 01.05	May 11th, 2011 10.15-11.45
2	Treatment 2	May 12th, 2011 11.45 – 01.05	May 14th, 2011 07.00-08.30

During the application of Students Team achievement Division (STAD) technique in the experimental group of the first meeting, the students had difficulty in applying the technique because it was new for them. Then, the researcher helped them by explaining the steps of STAD clearly to the students. Moreover, after the students understood all the explanation given, the researcher asked them to do the exercises with their group (see appendix K). After doing the exercises, the researcher discussed the answers with the students. Then, the researcher asked them to do individual quiz and collect the result to the teacher. The researcher announced the result of team achievement in the second meeting (see appendices L and N). They still did the same activity with the different material in the second meeting and the result of the team achievement in second meeting was announced after they did the post test (see appendices M and N). Almost of the students did not experience difficulties in doing the exercises because the students practiced to think, to share with their friends and to help each other to learn vocabulary.

4.5.2 Data Analysis of Post test

To answer the problem, t-test formula was applied to know the significant difference of the scores between the experimental group and the control group. From the data in Appendix V, the computations of t-test on students' Vocabulary achievement score are as follows:

$\sum X$	= 2410	$\sum Y$	= 1990
$\sum X^2$	= 201937.5	$\sum Y^2$	= 154625
Nx	= 29	Ny	= 26

1. Calculation of the mean score of the experimental group:

$$M_x = \frac{\sum X}{Nx} = \frac{2410}{29} = 83.\,10345$$

2. Calculation of the main score of the control group:

$$M_y = \frac{\sum Y}{N_y} = \frac{1990}{26} = 76.\,53846$$

3. Calculation of individual score deviation square of Ma:

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

$$= 201937.\,5 - \frac{(2410)^2}{29}$$

$$= 201937.5 - 200279.3$$

$$= 1658.19$$

4. Calculation of the individual score deviation square of Mb:

$$\sum Y^2 = \sum Y^2 - \frac{(\sum Y)^2}{Ny}$$

$$= 154625 - \frac{(1990)^2}{26}$$

$$= 154625 - 152311.5$$

$$= 2313.46$$

4.6 Discussion

In this research, the vocabulary post-test was conducted to get data about the students' vocabulary achievement. The total number of the test item was 40 items covering nouns (10 items), verbs (10 items), adjectives (10 items), and adverbs (10 items). The value of 2.5 was given to each item in the test. So, the total number of scores was 100. The time allocation for doing the test was 45 minutes.

Teaching English using Students Team Achievement Division in Cooperative Learning was one of the effective ways in increasing the students' vocabulary achievement. In addition, the result of the research showed that the students of the experimental group who were taught vocabulary by using Students Team Achievement Division (STAD) in Cooperative Learning got better result than the control group who were taught using Question-Answer and lecturing technique. This evidence could be seen through the results of vocabulary test that showed the mean score of vocabulary post-test of experimental group was higher than that of the mean score of the control group (83.1>76.5). Moreover, the result of data analysis of vocabulary test showed that the statistical computation value of the t-test was higher than that of the critical value of t- table with significant level of 5% (2.8>2.00). It means that there was a significant effect of using Students Team Achievement Division (STAD) in Cooperative Learning on the eleventh year students' vocabulary achievement of SMA Negeri Tempeh Lumajang.

Theoretically, this result finding was supported by statements of Newman and Thompson (1987) in Armstrong, Scott, Palmer, and Jesse (1998) reported that STAD is the most successful Cooperative Learning technique at increasing students' academic achievement. It was also supported by Slavin (1991:95) who states that some studies using STAD found significantly higher achievement than using traditional instruction. Thus it could be stated that STAD got better result than the students who was taught by using question answer and lecturing technique.

CHAPTER 5. CONCLUSSION AND SUGGESTION

This chapter presents the research conclusion and suggestion. The suggestions are for the English teacher, the students, and the future researchers.

5.1 Conclusion

Based on the results of the data analysis and the hypothesis verification that has been discussed and interpreted in the Chapter IV, it can be concluded that there was a significant effect of using Students Team Achievement Division (STAD) in Cooperative Learning on the eleventh year students' vocabulary achievement of SMA Negeri Tempeh Lumajang in 2010/2011 academic year. It means that the students who were taught vocabulary by using Students Team achievement Division (STAD) in Cooperative Learning gained better vocabulary score than the students who were taught vocabulary by Question-Answer technique and lecturing. The results suggest that teaching vocabulary using STAD in Cooperative Learning has positive effect on the students' vocabulary achievement.

5.2 Suggestions

Considering the result of the research in which there was a significant effect of using Students Team Achievement Division (STAD) in Cooperative Learning on the eleventh year students' vocabulary achievement of SMA Negeri Tempeh Lumajang in 2010/2011 academic year, the researcher proposed some suggestions to the English teacher, the students and the future researcher.

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Appendix B

Supporting Data Instruments

a. Interview guide

No	The Questions	Data Sources
1.	What curriculum do you use in teaching	The eleventh year
2.	English?	English teacher of
3.	How often do you teach English a week?	SMA Negeri Tempeh
4.	What books do you use in teaching English?	
	Do you teach vocabulary integrated with the	
5.	language skills?	
6.	Have you ever taught using STAD to your	
7.	students?	
	What techniques do you use in teaching	
8.	vocabulary?	
	How are the students' abilities in mastering	
9.	vocabulary?	
	What are students' difficulties in learning	
10.	vocabulary?	
	How do you assign the students to enlarge their	
	vocabulary?	
	How do you help the students if they have	
	difficulty in vocabulary?	

b. Documentation Guide

No	The supporting data	Data Resources
1.	The total number of the eleventh year students of SMA Negeri Tempeh Lumajang in the 2010/2011 academic year	Document
2.	The names of respondent	Document

Appendix C

8	What are students' difficulties in learning vocabulary?	They still faced problem in memorizing word, writing correct word, and finding the meaning of word
9	How do you assign the students to enlarge their vocabulary?	I ask them to find the difficult word in the text then ask them to find the meaning in Indonesian
10	How do you help the students if they have difficulty in vocabulary?	I ask them to find the meaning in dictionary but if the still have problem the can ask to me

    b. Documentation Guide

No	The supporting data	Data Resources
1.	The total number of the eleventh year students of SMA Negeri Tempeh Lumajang in the 2010/2011 academic year	Document
2.	The names of respondent	Document

Appendix E

HOMOGENEITY TEST
Subject   : English
Level/Smt   : The XI grade of SMA /II
Time   : 30 minutes

Choose the correct answer by crossing the letter a, b, c, d, or e on the answer sheet provided!

1. I didn't get the ………. I was searching for.I needed it to take a picture
   a. jewelry   d. calculator
   b. camera   e. telephone
   c. walkman

2. I ……..the "Harry Potter" movie with my sister at home yesterday.
    a. lived   d. came
    b. stayed   e. went
    c. watched

3. I want a slice of …………….with pineapple jam on it.
    a. coffee   d. bread
    b. cookie   e. candy
    c. peanut

4. My father is a………………he works in laboratory
    a. scientist   d. teacher
    b. dentist   e. director
    c. doctor

5. Edo   : Do you know the famous player of Timnas Indonesia?
    Ronny   : Of course. He is Irfan Bachdim. He…………..well in Football Match
    a. plays   d. catches
    b. watches   e. kicks
    c. coaches

6. My mother was…………when she knew I broke her vase
    a. shy   d. happy
    b. pretty   e. angry
    c. patient

7. Dino is very arrogant so his friends do not like him. The similar meaning of the word "arrogant "is…….
    a. kind   d. wicked
    b. poor   e. bad
    c. conceited

Appendix E

15. In a lunar eclipse, the moon covers the centre of the sun, leaving the bright **ring** of light around the moon. The similar meaning of the word "ring "is……..
    a. piece of god   d. circle
    b. rotation   e. bell
    c. jewel

> **The text is for questions 16 to 18**
>
> Finding a job is often difficult for young people today. But it will be easier if you follow these steps. First, you have to (16)………..what kind of job you want. Think about the kind of (17)………. you like to do. You should talk to your friends and family about it. You can also talk to some people with different kinds of job. Next, you need to (18)…….a resume. This tells about your education and your earlier jobs. It should be carefully typed. Then, you start looking for a job.

16. a. know   d. follow
      b. decide   e. study
      c. think

17. a. appointment   d. choice
      b. decision   e. work
      c. expectation

18. a. read   d. send
      b. look   e. write
      c. find

19. Endang   : How was your visit to the museum?
      Ayu   : It was closed when I got there. .... about it.
      Endang   : I'm sorry to hear that.
      a. I'm satisfied   d. I'm disappointed
      b. I'm amazed   e. I'm delighted
      c. I'm appointed

20. My uncle always goes to hospital, all of his patients have problems in dental. My uncle is a……
      a. dentist   d. gynecologist
      b. doctor   e. nurse
      c. surgeon

Appendix

LESON PLAN (MEETING 1)

Subject   : English

Level/semester   : The XI grade of SMA /2

Language skill   : Reading

Language Focus : Vocabulary (Verbs, Nouns, Adjectives, Adverbs)

Theme/ Sub theme   : Narrative / Androcles and the Lion

Time   : 2 X 45 minutes

I. Standard competence

Comprehending meaning in short functional text and simple essay in the form of narrative, spoof, and hortatory exposition text in daily life context.

II. Basic competence

Expressing meaning of simple short essay by using various written language accurately, fluently and acceptably in the form of narrative text entitled "Androcles and the Lion" in daily life context.

III. Indicators of teaching to experimental group and control group

a. Finding difficult words and giving the meanings to the difficult words in Indonesian, and classify them into verbs, nouns, adjectives, a adverbs.

b. Giving the synonym and antonym of the words correctly.

c. Completing 5 sentences with the words provided in the box correctly.

d. Identifying verbs, nouns, adjectives, and adverbs in the form of multiple choice.

Appendix F

II.	Main Activities		Main Activities	
	1. Grouping the students into some groups. Each group consists of four students (1 high achiever, 2 middle achievers, 1 lower achiever) based on the result of their homogeneity test and the members of the group are classified as a leader, a manager, a monitor, and a writer	5'	1. Pairing the students based on the students' seatmate	5'
	2. Distributing the reading text to the students	3'	2. Distributing the reading text to the students	3'
	3. Explaining the materials (nouns, verbs, adjectives, and adverbs) and their meaning based on the text explaining the role of STAD to the students.	10'	3. Explaining the materials (nouns, verbs, adjectives, and adverbs) and their meaning based on the text	10'
	4. Giving worksheets to the students	2'	4. Giving the worksheets to the students	2'
	5. Asking the students to do exercises 1,2, and 3 with their group	30'	5. Asking the students to do exercises 1,2 and 3 in pairs	30'
	5. Discussing the answers of the exercises with the students.	12'	6. Discussing the answers of the exercises with the students.	12'
	7. Asking the students to do quiz individually	10'	7. Asking the students to do exercise 4 individually	10'
	8. Assigning team scores based on individual score gains,	8'	8. Discussing the answers of the exercise 4 with the	8'

Appendix F

Set Induction
Look at the picture below!

1. What picture is it?

2. Who are they?

3. What is the man doing with the lion?

4. What is the relationship between them?

Appendix F

C. Verbs (Kata Kerja)

Verb is used to denote action. Verbs in English are classified into two classes, namely the auxiliary verbs and ordinary verbs.

1. Auxiliary verbs.

Based on the size of available vocabulary, auxiliary verbs are not the member of large vocabulary. Auxiliaries help to form a tense or an expression, hence the name. The examples of auxiliary verbs are: to be, to have, to do, modal, to dare and used to.

2. Ordinary Verbs.

There are two types of ordinary verbs.

a. The regular verbs: the simple past and past participle which are formed by adding -d or -ed to the infinitive.

Infinitive	Simple Past	Past Participle
talk	talked	talked
close	closed	closed

b. The irregular verbs: the simple past and past participle are not added by -d or –ed, However, it has no fixed rule, for examples:

Infinitive	Simple Past	Past Participle
come	came	come
eat	ate	eaten

D. Adverbs   (kata keterangan)

An adverb is a word that adds more information about place, time, circumstance, manner, cause, degree. Six kinds of adverbs, as follows.

f. Adverbs of manner, for examples   : happily, hard, slowly;

g. Adverbs of place, for examples   : down, here, near;

h. Adverbs of time, for examples   : now, soon, yet, then;

i. Adverbs of frequency, for examples   : always, never, often;

j. Adverbs of degree, for examples   : certainly, luckily, definitely

Appendix F

brought him back to the town from which he had fled. Here his master soon found him and brought him before the authorities. Soon Androcles was sentenced to death for fleeing from his master. Now it used to be the custom to throw murderers and other criminals to the lions in a huge circus, so that while the criminals were punished the public could enjoy the scene of a fight between them and the wild beasts.

So Androcles was sentenced to be thrown to the lions, and on the appointed day he was led forth into the Arena and left there alone with only a spear to protect him from the lion. The Emperor was in the royal box that day and gave the signal for the lion to come out and attack Androcles. But when it came out of its cage and got near Androcles, what do you think it did? Instead of jumping into him it fawned him and stroked him with its paw, it made no attempt to do him any harm.

It was of course the lion which Androcles had met in the forest. The Emperor, surprised at seeing such a strange behavior in so cruel a beast, called Androcles to him and asked him how the lion lost all its cruelty. So Androcles told the Emperor all that had happened to him and how the lion was showing its gratitude for his having relieved it of the thorn. The Emperor pardoned Androcles and ordered his master to set him free, while the lion was taken back into the forest and let loose to enjoy liberty once more. *(Taken from: Interlanguage: English for Senior High School Students XI (Science and social study program), 2008:85)*

Exercises 1
Classify the verbs, nouns, adjectives, and adverbs from the text above and give the meaning in Indonesian and please do it in groups of STAD!

a)

No	Nouns	Meaning
1.		
2.		
3.		
4.		
5.		

Appendix F

Exercises 2

Find the synonym of the words below from the text and please do it in groups of STAD!

1. Escape   =

2. Near`   =

3. Tired   =

4. Moan   =

5. Great   =

Find the antonym of the word below from the text and please do it in groups of STAD!

6. Beauty   ><
7. Life   ><
8. Hope   ><
9. Usual   ><
10. Master   ><

Exercises 3

Complete the sentences with the words that provided in the box and please do it in groups of STAD!

1. Rose's stems are full of....

2. The king ... him for his mistakes.

3. The lion ... loudly.

4. The old woman looks very....

5. I can't walk properly with my ... ankle.

fawn	stumble	swollen
loose	roar	pardon
limp	weary	
fond	thorn	

Appendix F

Read the text carefully!
Androcles and The Lion (Control Group)

The place of this story was in Rome, where a Greek slave named Androcles escaped from his master and fled into the forest. There he wandered for a long time until he was weary, hungry, and hopeless. Just then he heard a lion near him moaning and groaning and at times roaring terribly. Tired as he was, Androcles rose up and rushed away, as he thought, from the lion; but as he made his way through the bushes he stumbled over the root of a tree and fell down. When he tried to get up, there he saw the lion coming towards him, limping on three feet and holding his forepaw in front of him.

Poor Androcles was hopeless; he had no strength to rise and run away, and there was the lion coming upon him. But when the great beast came up to him instead of attacking him it kept on moaning and groaning and looking at Androcles, who saw that the lion was holding out his right paw, which was covered with blood and much swollen. Looking more closely at it Androcles saw a big thorn pressed into the paw, which was the cause of all the lion's trouble. *Plucking up courage* he held the thorn and drew it out of the lion's paw, who roared with pain when the thorn came out, but soon after finding such relief from it that he fawned upon Androcles and showed, in every way that he knew, to whom he owed the relief. Instead of eating him up he brought him a young deer (fawn) that he had killed, and Androcles managed to make a meal from it. For some time the lion continued to bring the game he had killed to Androcles, who became quite fond of the huge beast.

But one day a number of soldiers came marching through the forest and found Androcles. As he could not explain what he was doing, they took him prisoner and

Appendix F

b)

No	Verbs	Meaning
1.		
2.		
3.		
4.		
5.		

c)

No	Verbs	Meaning
1.		
2.		
3.		
4.		
5.		

d)

No	Verbs	Meaning
1.		
2.		
3.		
4.		
5.		

Appendix F

Exercises for the Control Group
Choose the correct answer by crossing the letter a, b, c, d or e on the answer sheet provided and please do it individually!

1. The lion brought Androcles a young deer he had killed. The similar meaning of "a young deer" is…………

   a. lamb   b. calf   c. cub   d. puppy   e. fawn

2. The prisoner fled from the jail. The similar meaning of the word "fled" is…

   a. escaped   b. ran   c. went   d. kept   e. protected

3. The dog …………..his master from the dangerous situation.

   a. escaped   b. ran   c. went   d. protected   e. fled

4. Doni ……the lion behind the bushes, the lion was roaring terribly. It made him felt very scared.

   a. spoke   b. walked   c. heard   d. smelt   e. told

5. The slave did some mistakes. He was……….by the master.

   a. kept   b. let   c. punished   d. killed   e. caught

6. The police found the victim covered with blood. The police assumed that the criminal killed the victim……….

   a. cruelly   b. badly   c. closely   d. kindly   e. strictly

7. The adventurer walked in the forest but he didn't see the bushes so he…on the root of a tree.

   a. fell down   b. stumbled   c. slipped   d. ran away   e. limped

8. Doni walked in the garden. Suddenly, he trod the thorn. It made him ……..

   a. fall down   b. stumble   c. slip   d. run away   e. limp

9. The young man plucks up *courage* he held the thorn and drew it out of the lion's paw. The similar meaning of the word "courage" is……

   a. bravery   b. anxiety   c. frightened   d. strength   e. loyalty

10. The man was hopeless, he **did not have *strength*** to rise and run away while there was the lion coming upon him. The bold word means………

   a. strong   b. sickness   c. powerful   d. weak   e. weary

Appendix G

LESON PLAN (MEETING 2)

Subject   : English

Level/semester : The XI grade of SMA /II

Language skill   : Reading

Language Focus : Vocabulary (Verbs, Nouns,

            Adjectives and Adverbs)

Theme/ Sub theme : Fable / Beware of Mean Friends

Time   : 2 X 45 minutes

XI. Standard competence

Comprehending meaning in short functional text and simple essay in the form of narrative, spoof, and hortatory exposition text in daily life context

XII. Basic competence

Expressing meaning of simple short essay by using various written language accurately, fluently and acceptably in the form of narrative text entitled "Beware of Mean Friends" in daily life context

XIII. Indicators

1. Finding some verbs, nouns, adjectives, and adverbs and give the meaning in Indonesian.
2. Matching ten words in column A with their meaning in column B correctly.
3. Completing five sentences correctly.
4. Identifying verbs, nouns, adjectives, and adverbs in the form of multiple choice.

Appendix G

II	Main Activities		Main Activities	
	9. Grouping the students into some groups. Each group consists of four students (1 high achiever, 2 middle achievers, 1 lower achiever) based on the result of their homogeneity test and the member of the group are classified as a leader, a manager, a monitor, and a writer	5' '	9. Pairing the students based on the students' seatmate	5'
	10. Distributing the reading text to the students	3'	10. Distributing the reading text to the students	3'
	11. Explaining the materials (nouns, verbs, adjectives, and adverbs) and their meaning based on the text explaining the role of STAD to the students.	10'	11. Explaining the materials (nouns, verbs, adjectives, and adverbs) and their meaning based on the text	10'
	12. Giving worksheets to the students	2'	12. Giving the worksheets to the students	2'
	13. Asking the students to do exercises 1,2, and 3 with their group	30'	13. Asking the students to do exercises 1,2 and 3 in pairs	30'
	14. Discussing the answers of the exercises with the students.	12'	14. Discussing the answers of the exercises with the students	12'
	15. Asking the students to do quiz individually	10'	15. Asking the students do the exercises 4 individually	10'
	16. Assigning team scores	8'		8'

Appendix G

1. Have you ever read a fable?
2. Mention the kinds of fable that you have known before?
3. What are the animals that are always mentioned in the story?

Now, look at the following pictures. Do you know the names of the animals below?

What are they?

Jackal

Lion

Crow

Camel

Material

Appendix G

Verb is used to denote action. Verbs in English are classified into two classes, namely the auxiliary verbs and ordinary verbs.

3. Auxiliary verbs.

Based on the size of available vocabulary, auxiliary verbs are not the member of large vocabulary. Auxiliaries help to form a tense or an expression, hence the name. The examples of auxiliary verbs are: to be, to have, to do, modal, to dare and used to.

4. Ordinary Verbs.

There are two types of ordinary verbs.

c. The regular verbs: the simple past and past participle which are formed by adding -d or -ed to the infinitive.

Infinitive	Simple Past	Past Participle
talk	talked	talked
close	closed	closed

d. The irregular verbs: the simple past and past participle are not added by -d or –ed, However, it has no fixed rule, for examples:

Infinitive	Simple Past	Past Participle
come	came	come
eat	ate	eaten

H. Adverbs   (kata keterangan)

An adverb is a word that adds more information about place, time, circumstance, manner, cause, degree. Six kinds of adverbs, as follows.

k. Adverbs of manner, for examples   : happily, hard, slowly;

l. Adverbs of place, for examples   : down, here, near;

m. Adverbs of time, for examples   : now, soon, yet, then;

n. Adverbs of frequency, for examples   : always, never, often;

o. Adverbs of degree, for examples   : certainly, luckily, definitely

Appendix G

All the three friends got worried and decided to persuade the Lion. They said, "Your Majesty, you are getting weak day by day. We can't see you in this miserable condition. Why don't you kill the Camel and eat him?" The Lion roared, "No. How can you think of such thing? He is our guest and we should not kill him. Don't give such suggestions to me in the future". As the jackal, the crow and the wolf had set their evil eyes on the camel; they met once again and set up a plan to kill the Camel.

They went to the Camel and said, "Dear Friend, you know our King has not eaten anything from the past many days. He is unable to go for hunting due to his wounds and sickness. Under such circumstances, it becomes our duty to sacrifice ourselves to save the life of our king. Come with us, we will offer our bodies to make his food". The Camel didn't understand their plan, but innocently he nodded in favor of their plan.

First of all, the Crow came forward and said, "Your Majesty, we didn't succeed in getting any food for you. I can't see you like this. Please eat me and make me obliged". The Lion replied, "Dear, I will prefer to die than to perform such a sinful deed". Then, the Jackal also did the same thing to the lion. And the Lion also rejected killing him. After that, the wolf came forward and offered his body to the Lion, but he also rejected his offer.

The Camel, who was watching the whole scene felt reassured of his safety and also decided to go forward and complete the formality. He marched forward and said, "Your Majesty, why don't you kill me. You are my friend. A friend in need is a friend indeed. Please allow me to offer you my body".

The Lion thought that the offer was appropriate, as the Camel himself had offered his body for food, his ethics were maintained. The Lion attacked the Camel at once, ripped open his body and tore him into pieces. The Lion and his friends ate the delicious flesh to their fill. They feasted on the poor Camel for days together.

(Taken from: Interlanguage: English for Senior High School Students XI (Science and social study program), 2008:88)

Appendix G

d)

No	Verbs	Meaning
1.		
2.		
3.		
4.		
5.		

Exercises 2
Match the words in column A with their meanings in column B and please do it in groups of STAD!

No	A	Answer	B
1.	Powerful	…………..	A. Deep loud sound made by a lion
2.	Kingdom	…………..	B. A place for giving protection from danger
3.	Roared	…………..	C. To defeat an enemy
4.	Attacked	…………..	D. Chase (wild animals) for food
5.	Kill	…………..	E. Place ruled by a king or queen
6.	Refuge	…………..	F. Cause death , make a death
7.	Sacrifice	…………..	G. Move violently to get free
8.	Hunting	…………..	H. Soft part between the skin and bones of animal bodies
9.	Struggle	…………..	I. Having or producing great ability to do something
10.	Flesh	……….....	J. Offering of something available for a good purpose

Exercises 3
Complete the following sentences with a suitable word and please do it in groups

of STAD!

1. The tiger got badly……. in the struggle of goat.

2. The rabbit felt ………..when the wolf would kill him.

3. The jackal didn't eat several days so he was getting………..

4. The camel was very afraid when he knew that the jackal was …him for his food.

5. The king was very………..so he helped the camel from danger.

Appendix G

Read the text carefully!
Beware of Mean Friends (Control Group)

Once upon a time, there lived a Lion named Madotkata in a forest. He made friends with three other animals, they were a crow, a jackal, and a wolf. The lion was sincere with their friendship but the three animals made friends only to take advantages from the Lion. They knew that the Lion was the King of the forest and had friendship with such fierce creatures that would always help them. They didn't have to make any efforts to search for their food, as the Lion usually gave his leftover meals to them. Moreover, they became powerful as they were next to the King of the forest.

One day the three animals, the jackal, the crow, and the wolf saw a camel which didn't belong to the forest. The camel seemed to try and to find his way out of the forest. The Jackal suggested to kill the camel. The Wolf suggested to inform the Lion that the camel was too large for them to be killed. The Crow agreed with the idea that was given by the Wolf.

They told the lion that there was a lost camel and that it would be a great meal for them. The lion roared loudly on hearing this and said, "What are you saying? The Camel has come to refuge in my kingdom. It is unethical to kill him like this. We should provide him the best shelter. Go and bring him to me". All of them got shocked hearing what the king had said. But, they obeyed what the lion had told them to do and brought the camel to him. At first, the camel was scared but then he was assured by the kindness of the king. Then he considered the lion, the crow, the jackal, and the wolf as his friends.

One day, when the Lion was hunting for food, he had a struggle with a mighty Elephant. The Lion got badly injured in the struggle and became incapable of hunting for his food. Stricken by a bad luck, the Lion had to suffer without food for days. Because of this, his friends also got hungry for several days as they totally depended on the Lion's kill for their food. But the Camel was satisfied grazing around in the forest.

Appendix G

Exercises 1
Classify the verbs, nouns, adjectives, and adverbs from the text above and give the meaning in Indonesian and please do it in pairs!

a)

No	Verbs	Meaning
1.		
2.		
3.		
4.		
5.		

b)

No	Verbs	Meaning
1.		
2.		
3.		
4.		
5.		

c)

No	Verbs	Meaning
1.		
2.		
3.		
4.		
5.		

Appendix G

Exercises 4 for the Control Group

Choose the correct answer by crossing the letter a, b, c, d or e on the answer sheet provided and please do it individually!

1. There lived a Lion by the name of Madotkata in a forest. The word "lived' has the similar meaning to…

    a. stay   b. home   c. life   d. house   e. case

2. The lion had **friendships** with a crow, a jackal, and a wolf. The similar meaning of the word "friendship" is....

    a. rival   b. strange   c. opposition   d. enemy   e. amity

3. The lion became **powerful** after he ate delicious flesh. The opposite meaning of the word "powerful "is…..

    a. strong   b. fast   c. weak   d. slow   e. soft

4. The lion roared loudly so all animal in the forest could………his voice

    a. smell   b. hear   c. feel   d. look   e. scream

5. The camel ran very fast because the tiger .. ……him.

    a. held   b. let   c. chased   d. ran   e. protect

6. The lion made friends with three …………they were a crow, a jackal, and a wolf.

    a. rivals   b. groups   c. people   d. animals   e. enemies

7. The wolf knew that the lion was the king in the forest. He ………looked for the lion when he needed help.

    a. always   b. usually   c. seldom   d. everyday   e. rarely

8. The Jackal ……..very fast so he could catch the rabbit

    a. killed   b. ate   c. ran   d. hunted   e. held

17. The camel was very…… when he knew the wolf wanted to kill him.

    a. weak   b. brave   c. powerful   d. afraid   e. calm

10. The Lion, the crow, the jackal, and the wolf lived in the forest. The similar meaning of the word "forest" is……….

    a. land   b. sea   c. refuge   d. lake   e. jungle

Appendix H

VOCABULARY TEST (Post-Test)

Subject   : English

Class/ Semester: The XI grade of SMA / II

Time   : 45 minutes

Choose the correct answer by crossing a, b, c, d, or e on the answer sheet provided!

1. The tiger …… the mouse deer until it died.

   a. protected   d. saw

   b. touched   e. killed

   c. hid

2. A Greek slave did a mistake. A master punished him. The similar meaning of the word "mistake" is…..

   a. fault   d. wickedness

   b. beneficence   e. difficulty

   c. kindness

3. After the tiger ate delicious meat, he became **powerful**. The similar meaning of the word "powerful "is……………

   a. strong   d. slow

   b. fast   e. sturdy

   c. weak

4. The lion wanted to find a new cave for his house. After walking for ………… he found the perfect cave.

   a. yesterday   d. tomorrow

   b. a day after tomorrow   e. several days

   c. last day

Appendix H

12. The camel walked……………so his friends left him behind.

   a. weakly   d. slowly

   b. shortly   e. strongly

   c. quickly

13. The sheep ……. happy when he knew that his children were safe from the lion.

   a. made   d. wished

   b. felt   e. knew

   c. hoped

14. The master gave freedom to his slave. The similar meaning of the word

   "freedom" is………..

   a. happiness   d. loyalty

   b. captive   e. fidelity

   c. liberty

15. The fox was……….because he did not eat food for several days.

   a. full   d. angry

   b. dull   e. thirsty

   c. hungry

16. Doni saw a strange man. He …….met him before.

   a. ever   d. rare

   b. always   e. never

   c. seldom

17. The young man was hopeless, he did not have any strength to run away when

   he..……... the lion came up to him.

   a. spoke   d. smelt

   b. walked   e. told

   c. saw

Appendix H

24. The tiger gets food …………….

    a. in the forest   c. in the beach   e. in the river

    b. in the sea   d. in the lake

25. The goat …………..her child from the lion.

    a. escaped   d. felt

    b. saw   e. fled

    c. protected

26. The lion is the king of the jungle and the tiger is the king of the………

    a. land   d. air

    b. river   e. sea

    c. jungle

27. The tiger lost the game when he fight with the………elephant.

    a. weak   d. beauty

    b. lazy   e. cruel

    c. mighty

28. The jackal got………..injured in the struggle of the victim when he was hunting the food.

    a. badly   d. innocently

    b clearly   e. closely

    c. smoothly

29. The lion ……… loudly, so that all the animals in the jungle could hear his voice.

    a. roared   d. sang

    b. spoke   e. twittered

    c. barked

30. The………..escaped from the jail.

    a. killer   d. prisoner

    b. pickpocket   e. burglar

    c. robber

Appendix H

37. The boy was very disappointed because the girl …………his gift.

   a. accepted   d. received

   b. offered   e. used

   c. rejected

38. The lion lives in the cave but the cat lives in the ………….

   a. crib   d. nest

   b. mews   e. cage

   c. hutch

39. The sheep was very……when the tiger would kill him.

   a. brave   d. stupid

   b. strong   e. scared

   c. weak

40. The man killed the woman brutally in the warehouse. The similar meaning of the word "brutally" is…………

   a. roughly   d. badly

   b. cruelly   e. wickedly

   c. innocently

Appendix I

The Respondents' Name of Experimental Class (XI IPA 3)

No	Name	M/F
1	Andri Hermawan	M
2	Anis Fadhilah	F
3	Anita Maydiah	F
4	Ayatul Lailiyah	F
5	Desy Ari Puspita	F
6	Dhika Elvira M	F
7	Dimas Dwi Marta	M
8	Dwi Ratnawati	F
9	Dwi Riky Cahyanto	M
10	Febriana Tri Ermadhani	F
11	Itok Dwi Guro Permadani	M
12	Jamilatus Sholihah	F
13	Khusnul Khotimah	F
14	Maulana Nauval Fariz	M
15	Maya Novita Sari	F
16	Merisa Evi Irmawati	F
17	Miranti Widhasari	F
18	Mohamad Jajang Irawan	M
19	Muhamad Eko Siswanto	M
20	Muhammad Abdul Fatah	M
21	Muhammad Nur Asror M	M
22	Nedia Putri Damayanti	F
23	Nikmatul Khoiroh	F
24	Noviana Sri Wedari	F
25	Rani Floridha	F
26	Ria Rohma Oktaviani	F
27	Rofika Inayati	F
28	Syahfitri Diska Saraswati	F
29	Zada Wildaningrum M	F
30	Nia Diniati	F
	Female= 21	
	Male = 9	
	Total = 30	

Appendix K

The List of the Students' Groups of Students Team Achievement Division in the Experimental Class (XI IPA 3)

Team	Name	Gender	Achiever
Team 1	1. Muhammad Nur	Female	High
	2. Anita M	Female	Middle
	3. Rofika I	Male	Middle
	4. Khusnul K	Female	Low
	5. Ayatul L	Female	low
Team 2	1. Merisa E	Female	High
	2. Zada W	Female	Middle
	3. Dimas D	Male	Middle
	4. Dwi Ratnawati	Female	Low
	5. Nia Diniati	Female	Low
Team 3	1. Miranti W	Female	High
	2. Maya N	Female	Middle
	3. Maulana N	Male	Middle
	4. Ria R	Female	Low
	5. Muhamad Eko S	Male	Low
Team 4	1. Andri H	Female	High
	2. Nedia P	Male	Middle
	3. Anis F	Female	Middle
	4. Febriana T	Female	Low
	5. Dwi Riky C	Male	Low
Team 5	1. Noviana S	Female	High
	2. Itok D	Male	Middle
	3. Desy A	Female	Middle
	4. Jamilatus	Female	Low
	5. Syahfitri D	Female	Low
Team 6	1. Rani F	Female	High
	2. Muhammad Abdul F	Male	Middle
	3. Mohamad Jajang I	Female	Middle
	4. Dhika E	Female	Low
	5. Nikmatul K	Male	Low

Note : High   = 81-100
        Middle   =70-80
        Low   = 0-69

Appendix M

The Calculation Team improvement Scores of Students Team Achievement Division in Experimental Class (Meeting 2)

Team	Gender	Base score	Test 2	Improvement point	Point for group	Final point
Team 1						
6. Muhammad Nur	F	85	90	20		
7. Anita M	F	80	90	20		
8. Rofika I	M	70	80	20	100:5	20
9. Khusnul K	F	65	80	20		
10. Ayatul L	F	55	70	20		
Team 2						
6. Merisa E	F	85				
7. Zada W	F	80	80	10		
8. Dimas D	M	70	80	20	70:4	17.5
9. Dwi Ratnawati	F	65	70	20		
10. Nia Diniati	F	65	70	20		
Team 3						
6. Miranti W	F	85	100	30		
7. Maya N	F	80	80	20		
8. Maulana N	M	70	70	20	100:4	25
9. Ria R	F	65	80	30		
10. Muhamad Eko S	M	60				
Team 4						
6. Andri H	M	85	80	10		
7. Nedia P	F	80	90	20		
8. Anis F	F	75	70	10	60:4	15
9. Febriana T	F	65	70	20		
10. Dwi Riky C	M	60				
Team 5						
6. Noviana S	F	85	80	10		
7. Itok D	M	80	80	10		
8. Desy A	F	70	60	10	80:5	16
9. Jamilatus	F	65	80	20		
10. Syahfitri D	F	60	80	30		
Team 6						
6. Rani F	F	85				
7. Muhammad Abdul	M	80	80	10		
8. Mohamad Jajang	M	70	70	10	40:4	10
9. Dhika E	F	60	60	10		
10. Nikmatul K	F	60	70	20		

Appendix O

The List Students' Groups of Control Class (XI IPA 2)

Group based on students' seatmate	Name	Gender
1	6. Samsul A	Male
	7. S. Azzam	Male
2	1. Fiki Nur Zakiyah	Female
	2. Fitriatul Khusna	Female
3	1. Putri Yolanda	Female
	2. Trias Alfiliati	Female
4	6. Zuhrotul Umi Hanik	Female
	7. Zuhrotul Aini	Female
5	1. Amin Raiz	Male
	2. A. Marjan	Male
6	6. Ratih Setiawati	Female
	7. Midza arif T	Male
7	1. Izzun Nur Amaliyati	Female
	2. Linda Faiqotul H	Female
8	1. Erma Estiasih	Female
9	6. Aris Tri W	Male
	7. M. Nur Hamid	Male
10	1. Mei Nurul Huda	Female
11	1. Endar Pril Yanti	Female
	2. Poncowati Oktavia	Female
12	6. Eka Rayyan G	Female
13	1. Clara Ayuning A	Female
	2. Eni Charotun	Female
14	1. Dewi F	Female
	2. Ditta	Female
15	6. Apriliani	Female
	7. Chyntia	Female
16	1. M. Nur Hamid	Male

Appendix P

Appendix Q

$$= 205 - 6$$
$$= 199$$

6. $MSB = \dfrac{SSB}{dfb}$

$$= \dfrac{1184.4}{5}$$
$$= 237.3$$

7. $MSW = \dfrac{SSW}{dfw}$

$$= \dfrac{16574.06}{199}$$
$$= 83.28$$

8. $F_O = \dfrac{MSB}{MSW}$

$$= \dfrac{237.3}{83.26}$$
$$= 2.8$$

9. $F_t = (dfb)(dfw)5\%$
$$= (5)(199)5\%$$
$$= 2.21$$

Notes:

SST   : Sum of Squares of Total Groups

SSB   : Sum of Squares between Groups

SSW   : Sum of Squares within Groups

dfb   : Total Degree of Freedom between Groups

dfw   : Total Degree of Freedom within Groups

MSB   : Mean Squares between Groups

MSW   : Mean Squares within Groups

Appendix S

The Even Number Scores (Y) of Post Test Items on Each Respondent in Try Out Class (XI IPA 1)

No	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	Σ
1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	17
2	0	1	0	0	0	1	1	1	0	1	0	1	1	1	1	0	1	1	0	0	11
3	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	18
4	1	1	1	1	1	0	0	0	1	0	1	0	1	0	1	1	1	0	1	0	12
5	1	0	1	0	0	1	1	1	0	0	1	1	1	0	1	0	1	0	0	1	11
6	1	1	0	1	1	1	0	1	1	0	0	1	1	1	0	1	1	0	1	1	14
7	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	0	0	16
8	0	0	1	0	1	1	1	0	1	0	1	0	0	1	1	1	1	0	1	0	11
9	0	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	1	0	1	14
10	0	1	1	1	0	1	1	0	1	0	0	1	0	0	1	0	1	1	1	1	12
11	1	1	0	1	1	1	1	1	1	1	1	0	1	1	0	1	1	0	1	1	16
12	1	0	1	0	1	0	1	0	1	1	1	1	1	0	1	1	0	1	1	0	13
13	1	1	1	1	0	1	0	1	0	1	1	1	1	1	1	1	1	0	1	1	16
14	1	0	1	0	1	1	1	1	1	1	0	1	0	1	1	0	1	0	1	1	14
15	0	1	0	1	1	0	0	1	1	1	1	0	0	1	0	1	1	0	0	0	10
16	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	1	0	16
17	1	0	0	0	1	1	0	0	1	0	1	1	1	1	0	1	0	0	0	0	9
18	0	1	1	1	1	0	1	1	1	0	0	0	0	0	0	1	1	1	1	1	12
19	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	1	1	1	0	1	16
20	1	1	1	1	0	1	1	0	1	1	1	1	0	0	1	1	1	1	1	0	15
21	0	1	0	0	1	0	0	1	1	0	0	0	0	1	1	1	1	1	1	1	11
22	1	0	1	0	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	0	13
23	1	1	1	1	0	1	1	1	0	0	1	0	1	1	0	1	1	0	0	1	13
24	1	0	1	1	1	1	1	1	1	0	0	1	0	1	1	0	1	0	1	0	13
25	0	1	0	1	1	1	0	0	1	0	0	1	1	1	1	0	1	1	1	0	12
26	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	16
27	1	0	1	1	1	0	0	1	1	0	1	0	0	1	0	0	0	1	1	1	11
28	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	0	1	0	0	15
29	1	1	0	1	1	1	0	1	0	0	1	0	1	1	0	1	0	0	1	1	12
Σ	21	21	20	20	21	20	18	21	23	13	21	20	20	21	19	22	22	12	19	15	

Appendix U

The Difficulty Index of Each Test Items and its Interpretation

No	JS	B	P	Interpretation
1	29	21	0.72	Sufficient / Fair
2	29	18	0.62	Sufficient / Fair
3	29	21	0.72	Sufficient / Fair
4	29	19	0.65	Sufficient / Fair
5	29	20	0.69	Sufficient / Fair
6	29	18	0.62	Sufficient / Fair
7	29	20	0.69	Sufficient / Fair
8	29	11	0.38	Sufficient / Fair
9	29	21	0.72	Sufficient / Fair
10	29	16	0.55	Sufficient / Fair
11	29	20	0.69	Sufficient / Fair
12	29	20	0.69	Sufficient / Fair
13	29	18	0.62	Sufficient / Fair
14	29	16	0.55	Sufficient / Fair
15	29	21	0.72	Sufficient / Fair
16	29	15	0.52	Sufficient / Fair
17	29	23	0.79	Sufficient / Fair
18	29	17	0.59	Sufficient / Fair
19	29	13	0.45	Sufficient / Fair
20	29	21	0.72	Sufficient / Fair
21	29	21	0.72	Sufficient / Fair
22	29	18	0.62	Sufficient / Fair
23	29	20	0.69	Sufficient / Fair
24	29	18	0.62	Sufficient / Fair
25	29	20	0.69	Sufficient / Fair
26	29	21	0.72	Sufficient / Fair
27	29	21	0.72	Sufficient / Fair
28	29	20	0.69	Sufficient / Fair
29	29	19	0.65	Sufficient / Fair
30	29	22	0.76	Sufficient / Fair
31	29	22	0.76	Sufficient / Fair
32	29	10	0.34	Sufficient / Fair
33	29	22	0.76	Sufficient / Fair
34	29	11	0.38	Sufficient / Fair
35	29	12	0.41	Sufficient / Fair
36	29	21	0.72	Sufficient / Fair
37	29	19	0.65	Sufficient / Fair
38	29	17	0.59	Sufficient / Fair
39	29	15	0.52	Sufficient / Fair
40	29	16	0.55	Sufficient / Fair

Appendix V

The Tabulation of Student's Vocabulary Post Test Scores

No	Experimental Group		Control Group	
	X	X^2	Y	Y^2
1	85	7225	82.5	6806.25
2	87.5	7656.25	75	5625
3	92.5	8556.25	90	8100
4	90	8100	72.5	5256.25
5	77.5	6006.25	75	5625
6	95	9025	70	4900
7	75	5625	77.5	6006.25
8	87.5	7656.25	80	6400
9	80	6400	60	3600
10	82.5	6806.25	0	0
11	92.5	8556.25	75	5625
12	75	5625	92.5	8556.25
13	82.5	6806.25	67.5	4556.25
14	80	6400	65	4225
15	75	5625	87.5	7656.25
16	90	8100	0	0
17	85	7225	75	5625
18	72.5	5256.25	82.5	6806.25
19	75	5625	85	7225
20	87.5	7656.25	55	3025
21	85	7225	82.5	6806.25
22	92.5	8556.25	80	6400
23	85	7225	75	5625
24	65	4225	85	7225
25	0	0	90	8100
26	82.5	6806.25	75	5625
27	67.5	4556.25	75	5625
28	90	8100	60	3600
29	87.5	7656.25		
30	87.5	7656.25		
$\sum$	2410	201937.5	1990	154625
Mean	83.103448		76.53846154	

PEMERINTAH KABUPATEN LUMAJANG
DINAS PENDIDIKAN
SMA NEGERI TEMPEH
JL.RAYA TEMPEH, TELPON: (0334)-520670, KODE POS: 67371, LUMAJANG

SURAT KETERANGAN
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Yang bertanda tangan di bawah ini :

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Program Studi	: Pendidikan Bahasa Inggris
Asal Sekolah	: Universitas Jember

Telah melaksanakan Penelitian di SMA Negeri Tempeh dengan judul :

" The Effect of Using STAD (Student Team Achievement Division) in Cooperative Learning on the Eleventh Year Students' Vocabulary Achievement at SMA Negeri Tempeh in the 2010 / 2011 Academic Year".

Demikian Surat Keterangan ini dibuat untuk dapat dipergunakan sebagaimana mestinya.

Tempeh, 18 Juli 2011
Kepala SMA Negeri Tempeh,

Drs. DWI NIRWANA, M.Pd
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