

**IMPROVING THE SECOND YEAR STUDENTS' ACHIEVEMENT IN  
VOCABULARY THROUGH STUDENTS TEAM ACHIEVEMENT  
DIVISIONS (STAD) AT SMP MUHAMMADIYAH 3 BANDAR LAMPUNG**

**(A Script)**

**BY  
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**FACULTY OF TEACHER TRAINING AND EDUCATION  
UNIVERSITY OF LAMPUNG  
BANDAR LAMPUNG  
2017**

## **ABSTRACT**

### **IMPROVING THE SECOND YEAR STUDENTS' ACHIEVEMENT IN VOCABULARY THROUGH STUDENTS TEAM ACHIEVEMENT DIVISIONS (STAD) AT SMP MUHAMMADIYAH 3 BANDAR LAMPUNG**

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This research was intended to find out whether there was a statistically significant difference of students' vocabulary achievement after they were taught through STAD technique. The objective of this research was to find out whether STAD can increase students' achievement in vocabulary between the pretest and the posttest.

This research applied one group pretest-posttest design. The subjects of this research were 34 students of of SMP Muhammadiyah 3 Bandar Lampung in academic year 2015/2016. Multiple choice tests were used to collect the data.

The result showed that there was a statistically significant difference of the students' mean score between the pretest and the posttest with significant level  $p < 0.05$  ( $p = 0.000$ ). This suggests that STAD can be used to improve students' achievement in vocabulary.

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DIVISIONS (STAD) AT SMP MUHAMMADIYAH 3 BANDAR LAMPUNG**

**BY  
YOANNITA SUHERMAN**

**A Script  
Submitted in a Partial Fulfillment of  
The Requirements for S-1 Degree  
In  
The Language and Arts Department of  
Teacher Training and Education Faculty**



**FACULTY OF TEACHER TRAINING AND EDUCATION  
UNIVERSITY OF LAMPUNG  
BANDAR LAMPUNG  
2017**

**Research Title : IMPROVING THE SECOND YEAR STUDENTS' ACHIEVEMENT IN VOCABULARY THROUGH STUDENTS TEAM ACHIEVEMENT DIVISIONS (STAD) AT SMP MUHAMMADIYAH 3 BANDAR LAMPUNG**

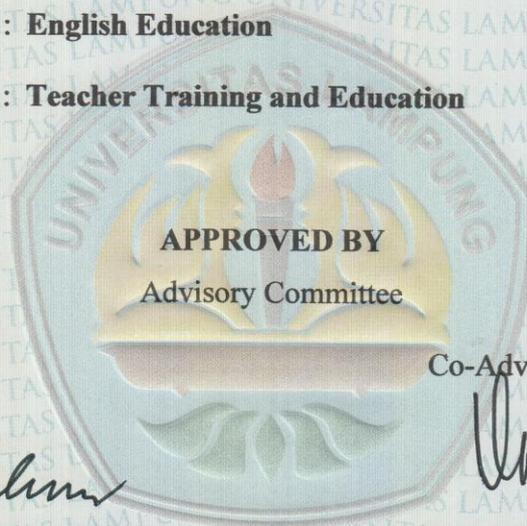
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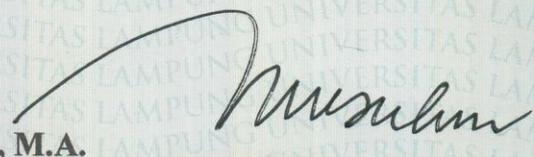
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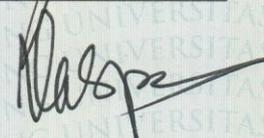
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## **CURRICULUM VITAE**

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## **DEDICATION**

With love and appreciation, this undergraduate thesis is proudly dedicated to:

My beloved father and mother, Sony Suherman and Sri Wahyuni

My beloved brothers and sister, Bayu Bastiyan Suherman, Febriyan Suherman,  
and Sarah Nur Fatayah

My dearest Rachmat Pradikta, S.Pd.

My friends in KOPED (Komunitas Pelajar English Department 2010)

My almamater, Lampung University

**MOTTO**

“That which does not kill me, will only make me stronger”

(Friedrich Nietzsche)

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Praise is merely to The Mightiest Allah SWT for the gracious mercy and tremendous blessing so that the writer is enabled to accomplish this script entitled “*Improving the Second Year Students’ Achievement in Vocabulary through Students Team Achievement Divisions (STAD) at SMP Muhammadiyah 3 Bandar Lampung*”. This script is submitted as a compulsory fulfillment of the requirements for S1 degree of English Education at Teacher Training and Education Faculty, Lampung University.

It is necessary to be known that this script would never have come into existence without any supports, encouragement and assistance by several outstanding people and institutions. Therefore, the writer would like to address her respect and gratitude to Dr. Muhammad Sukirlan., M.A., as the writer’s first advisor for his guidance, support and great kindness in guiding this script into existence and Mahpul, M.A., Ph.D., as the writer’s second advisor for his assistance, encouragement, constructive correction and comment within the process of accomplishing the script. Her deepest gratitude is also extended to Dr. Flora, M.Pd., as the writer’s examiner who has given valuable contribution and suggestion for this script.

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Finally, the writer realizes that this script still has some weaknesses. Therefore, critics and suggestions are invited for its improvement. Hopefully, this script can give benefit to the readers or those who want to carry out further research.

Bandar Lampung, February 13<sup>th</sup> 2017

The writer,

Yoannita Suherman

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## **I. INTRODUCTION**

This chapter is concerned with introduction of the research dealing with several points. i.e., background of the problem, formulation of the problem, objective of the research, uses of the research, scope of the research, and definition of terms.

### **1.1. Background of the Problem**

Learning language aims at enabling the students to use the language for communication when the essential of communication is understanding. Wilkins (1972) prints out that without grammar very little can be conveyed, without vocabulary nothing can be conveyed. It implies that as long as the students possess enough vocabulary, they will be able to understand others or express their own ideas.

Schmidt (1998) says that learners carry around dictionaries and not grammar books. It shows that the students instinctively recognize the importance of vocabulary to their language learning, they actually only bring their word bank when they are dealing with any situation.

The number of vocabulary possessed by the students will be helpful in improving language skill, i.e., listening, speaking, reading, and writing. When students improve their language skill, their social confidence and competence will do, too.

Nation (2001) states that there are some aspects of vocabulary, which are:

1. Recognizing the form and knowing the meaning of the word.
2. Knowing its word class(es).
3. Knowing how it is pronounced.
4. Knowing how it is spelled (and how this differs from similarly pronounced words)
5. Knowing synonyms, antonyms and hyponome of it.
6. Knowing constraints on the use of the word (e.g., concerned with frequency or formality)

Vocabulary, the smallest part of language learning also hold important part in the successful of learning a language. Therefore it requires a serious way in handling the process of teaching vocabulary. That's why the investigation of what teaching technique which provides good result in teaching vocabulary is important. As we know that teaching vocabulary is not easy and simple, not just about words; it involves knowledge of English vocabulary and how to go about learning and teaching it.

Based on the researcher's experience and observation in classroom activities during teaching English at SMP Muhammadiyah 3 Bandar Lampung, there was a

problem regarding the teaching of vocabulary; the teaching learning process tended to use teacher-centered activity. The researcher also found that the students' word mastery was low. It appeared when the researcher gave them an assignment related to vocabulary. In the activity, the researcher asked the students to make four groups contains 8-10 students then the researcher wrote ten English words in whiteboard to every group that have to be translated in to bahasa Indonesia. The group who finished early would be the winner, but none of those groups could solve all of the words. In other words, the students could not follow the activity because they did not know the meaning of most of the words.

Referring to the problems above, it was necessary for language teacher to improve the student's vocabulary, the teacher should use appropriate technique which is interesting to the students. There are actually various techniques that can be applied for teaching vocabulary, one of which was cooperative learning method.

Nur'aeni (2011) states that a cooperative learning method is believed as being able to give chance for the student to be involved in teaching learning process and take responsibility of his/her own learning. It is seen as an active learning process because students learn more through a process of constructing and creating working in a group and sharing knowledge. Students Team Achievement Divisions (STAD) was a type of cooperative learning and was taken as the technique to be implemented in this research.

Slavin (1987) states that STAD is the way to give stimulus to the students and motivate them to learn, then the students will be active. It means that by using this technique, the students were the center. They will be in the team that consists of various students. Every team consists of 4-5 students. They study together to get better achievement in the form of individual improvement score after taking the individual quiz or individual test. Every member in team needs to be responsible for their team progress. STAD is the technique that has implemented in this research.

Based on the statements mentioned above, the researcher had conducted a research entitled *"Improving the Second Year Students' Achievement in Vocabulary through Students Team Achievement Divisions (STAD) at SMP Muhammadiyah 3 Bandar Lampung"*.

## **1.2. Formulation of the Problem**

The formulation of the problem is: "Did STAD technique improve students' vocabulary achievement?"

## **1.3. Objective of the Research**

In relation to the research question above, the objective of the research is: "To find out whether STAD technique can be used to improve students' vocabulary achievement."

#### **1.4. Uses of the Research**

The uses of the research are:

1. Theoretically, to be used as a reference for further research.
2. Practically, the result of this research can be used as a consideration for English teacher to used STAD technique in teaching vocabulary.

#### **1.5. Scope of the Research**

The research was conducted in the second year of SMP Muhammadiyah 3 Bandar Lampung in academic year 2015-2016. The subjects that were taken as the sample of the research were one of the second year students that was determined by random sampling technique.

The vocabulary to be taught was focused on content words (noun, verb and adjective). In implementing the materials, the researcher applied STAD technique. The research used quantitative designs. There were three times treatments in this research. The students' vocabulary achievement was measured by a set of pretest and posttest.

#### **1.6. Definition of Terms**

1. *Vocabulary* is a set of words known to a person or entity, or that the part of a specific language which will make the language meaningful (Procter, 1978).
2. *Student Team Achievement Division (STAD)* is a cooperative learning strategy in which small groups of learners with different levels of ability work together to accomplish a shared learning goal (Slavin, 1987).

3. *Students Achievement* is having students reach their individual highest potential of personal and academic growth as they become lifelong learners and problem solvers to contribute productively to society (Berkeley, 2012).

## **II. LITERATURE REVIEW**

This chapter provides theories related literature review. This chapter includes the concept of vocabulary, vocabulary teaching, Students Team Achievement Divisions (STAD), advantages and disadvantages of using STAD in teaching vocabulary, procedure of teaching vocabulary using STAD, review of relevant research and theoretical assumption.

### **2.1. Vocabulary**

Vocabulary is a central in learning a language and without sufficient vocabulary people cannot communicate effectively or express their ideas in both oral and written form. According to Rivers (1970), vocabulary, like grammar, is an essential component of all uses of language. So, when the student cannot follow the English learning activity, might be caused by their lack of vocabulary mastery.

Although vocabulary is the one that is emphasized, it does not mean that the other kinds of language components, grammar and pronunciation, are less important. All of these aspects are attached one to another because learning language is not only learning one component separately. For example, if language learner only learns vocabulary and ignores the other language components, he/she will not be able to use the language in communication smoothly.

Vocabulary is extremely large and also varies. Nobody ever learns all the words in any language, but they can enlarge the number of words they have. The more words they know the better their chance will be to do well on the vocabulary questions, in the school. Therefore, it is highly essential for English teachers to help their students in mastering vocabulary along with grammar and pronunciation.

In some literatures, we find the meaning of vocabulary. There are several definitions of vocabulary. Hornby (1995) defines vocabulary as a list of words used in book, etc. usually with definition and translation. Hester in Waton (2014) states that our mind is constantly working with words. When we speak, listen, read, or write, we use words. So, that most of all our communications are based on our knowledge of words.

From the definitions above, it means that vocabulary is a component of language and number of words used by a person, class, profession, etc. In the communication and every aspect such as in trade, education, business, etc. The more vocabulary the learners had, the easier for them to develop their language skills (listening, reading, writing, and speaking).

Vocabulary is such a crucial thing for everyone who need to learn in order to understand someone else's utterances. In more specific, Fries (1975) classified the vocabulary into four types, those are content words, function words, substitute

words, and distributed words. In this research, the researcher focused on content words.

Frank (1972) in Wijayanti (2011) defines that content words constitute the bulk of vocabulary of the language. It represents the name of objects or things, those are:

### **1. Noun**

Noun is the name of subject or things which have a part of speech inflected for case signifying a concrete or abstract entity. Noun can be classified into five types:

- 1) Concrete noun is a noun that name anything (or anyone) that can perceive through physical sense. Concrete noun such as in:
  - a. He gives me a nice car.
  - b. I have a beautiful bird.
- 2) Abstract noun is usually the name of a quality, state or action.
  - a) Quality, for example: honesty, wisdom, bravery, darkness, etc.
  - b) State, for example: freedom, sickness, health, death, childhood, life, youth, etc.
  - c) Action, for example: laughter, judgement, treatment, movement, theft, etc.
- 3) Proper noun is the name of some particular person, place or thing. A proper noun always begin with capital letter, for example: Mr. Barrack Obama, Paris, Dutchman, Christmas Day, etc.
- 4) Countable noun is noun with both a singular and plural form, and it names anything (or anyone) that can count such as in:

- a. The television is broken of my false.
- b. He pushes the table to the front of the class.

Non-countable noun is a noun which does not have a plural form. It always take a singular verb in a sentence. The example of non countable-noun such as in:

- a. I need some sugar for a cup of tea.
- b. My little brother is playing sand in a beach.

5) Collective noun is the name of a group of person, things, or animals taken together and spoken of as one whole. The example of collective noun such as in:

- a. The school committee held a meeting.
- b. This class is so dirty.

## 2. Verb

Verb is an action done by those things which have a part of speech without case inflection, but inflected for tense, person and number, signifying an activity or process performed or undergone. Verb typically have four or five forms (*walk, walks, walked, walking, etc.*). Verb can be classified into five types. They are :

### 1) Finitive and Non-finitive Verb

A finitive verb (sometimes called main verb) is a verb that has a subject; this means that it can be the main verb in a sentence. For example:

I live in Germany. (*I* is the subject, *live* describes what the subject does and *live* is a finitive verb).

A non-finitive verb has no subject, tense and number. The only non-finitive verb forms are infinitive (indicated by to). The gerund or the participle. For example:

I travelled to Germany to improve my German (*to improve* is the infinitive form).

## 2) Auxiliary Verb

A sentence or phrase can have two interlocked verbs. The main verb gives the primary action, whilst the auxiliary verb adds subtle detail. Common auxiliary verbs include the verbs to be, to have, to do. Auxiliary verb, which are sometimes called helping verbs, act as helpers to the other verbs. For example:

- a. The artists are coming after school today.
- b. You will be happy.

## 3) Reflexive Verb

A reflexive verb is a verb whose agent performs an action that is directed at it. It characteristically takes a reflexive pronoun as its object.

Examples:

- a. He perjured himself.
- b. He shaved.

## 4) Transitive and Intransitive Verb

A transitive verb acts on an object and hence connects the subject of a sentence with its object, and hence requires both to exist. For example of transitive verb:

I hit the wall.

An intransitive verb does not act on an object and hence acts on its own. It can connect the subject with the object, but needs a preposition to do so. For example:

I sleep on the bed.

### 5) Linking Verb

Linking verb does not express action. Instead, they connect the subject to the verb to additional information about the subject. The predicating or linking verbs as in sentences:

- a. He wants to be a pilot.
- b. He seems like my classmate in Junior High School.
- c. My sister looks like an movie star.

## 3. Adjective

Qualities of the things, that is adjective. Most short adjective has three forms to show degree, for example:

- a. Reno is a smart student.
- b. Rika is smarter than Reno.
- c. Nilam is the smartest student in my school.

Adjective is used to modify nouns and pronouns. Frank (1972) categorizes the types of adjectives into three determiners article (*a, an, the*), such as:

- a. We will visit the great museum today.
- b. He buys a nice ring for his fiance.
- c. I give my mother an expensive bag.

#### 4. Adverb

How the action is done, that is adverb. Adverb has a part of speech without inflection, in addition to a verb. Adverb also does not change form, but has characteristic forms of its own. It is used to modify anything but nouns and pronouns. Adverb has five categorises, adverb of manner (*slowly, silently*), adverb of place (*inside, there*), adverb of time (*yesterday, tomorrow*), adverb of frequency (*sometimes, often*), and adverb of degree (*very, completely*). For example:

- a. My grandfather walks slowly.
- b. I will visit Uncle Joe tomorrow.
- c. I feel very dissapointed.

#### 5. Pronoun

The pronouns are I, you, they, we, he, she, it and who with their compound. Pronoun has a part of speech substitutable for a noun and marked for person. It is also used as substantives and they might be considered sub-class of noun, but their inflections are quite different and their use does not exactly parallel those of nouns.

Based on the explanation, this research focused mainly on vocabulary which classified into content words and more specifically dealing with noun (*bag, shirt, table, chair, etc*), verb (*walk, run, jump, swim, etc*), and adjective (*big, green, nice, clean, etc*).

## **2.2. Teaching Vocabulary**

Teaching vocabulary plays an important role in language learning because the mastery of vocabulary will help students to master all the language skills. Rivers (1970) states that the skills needed in learning vocabulary are to be able to guess the meaning of words from context, and discusses exercise that can be used to help students recognize prefixes, suffixes, and roots; read diagram and charts which may provides clues to the meaning of new vocabulary items; recognize definitions, infer meaning of words from context; and use grammatical clues to infer word meaning.

Therefore it can be inferred that teaching vocabulary is aimed at helping the students to be able to acquire the skills that had been mentioned above. In teaching learning process, language teachers should possess considerable knowledge on how to manage an interesting classroom so that the learners can gain a great success in the students vocabulary learning. The vocabulary will make the students practice life and will strengthen belief that English can be used to express the same ideas or feeling they express in their native language (Nunan, 1999). It implies that learning vocabulary can help students to be confidence in using the foreign language.

Allen and Vallete (1977) state that the application of better way of teaching vocabulary can be meaningful and useful and the students will find it easier to understand the words which are taught and they can develop their language skill as well. If the teaching technique can influence the students' understanding, it

requires serious consideration in determination of the teaching technique. Wallace (1988) explains that teaching vocabulary should consider these following factors:

1. Aims

The aim of teaching vocabulary is to make the teacher easy to formulate the materials, which will be taught to the students

2. Quantity

The teacher has to decide the number of vocabulary items to be learned. The learners will get confuse or discouraged if they get many new words. Therefore, the teacher should select new words, which can be easy to understand by the learners.

3. Need

In teaching vocabulary, the teacher has to choose the words which really needed by the students in communication.

4. Frequent exposure and repetition

Frequent exposure and repetition here means that the teacher should give much practice on repetition so that the students will master the target words well. They also give opportunity to the students to use words in writing or speaking.

5. Meaningful presentation

In teaching vocabulary the teacher should present target words in such a way that the meaning of the target words are perfectly clear and unambiguous.

#### 6. Situation and presentation

The teachers tell the students that they have to use the words appropriately.

The use of words depends on the situation in which they are used and depends on the person to whom they are speaking.

Understanding the above factors is very important for the teacher before teaching vocabulary. Besides that, there are some techniques in teaching vocabulary. These techniques are delivered to make the students interested in learning vocabulary. It also make them actively speak in the class, so that they are creative in interpreting the meaning.

One important things in teaching vocabulary is that the teacher should realize that learning a language always deals with a large number of words, and that it is difficult for the students to memorize such a large number of words. Giving and asking students to memorize a large number of words is not an effective way in teaching vocabulary. However, teaching vocabulary needs a good technique in order to help the students learn a language.

Wallace (1988) states that there are four techniques which can be considered in teaching vocabularies, they are:

1. To explain the difficult words, that is by giving the translation or explanation.
2. To lead the students to be creative in raising some questions about the words.
3. To get the students to check up the target words in their dictionaries.

4. To get the students to guess or infer the meaning of words by using the clues given.

From the theories stated above, the researcher assumes that a good technique of teaching vocabulary will make it more enjoyable, interesting and motivating so that the students will not be bored in process of learning. It means that the teacher has to be aware with the kind of teaching technique that he/she will use to achieve the goal of teaching learning process. Besides the technique that should be considered, the teacher also should consider the vocabulary that will be taught. The students tend to learn and have a passion to learn if the teaching material is simple, is related with their daily lives and things around them and enjoyable for the students.

### **2.3. Student Teams Achievement Division (STAD)**

Student Teams Achievement Division (STAD) is one a set of instructional techniques developed and researched by Robert E. Slavin at John Hopkins University in 1987 and collectively known as Student Team Learning. These techniques are based on the idea of having students work in cooperative learning teams to learn academic objectives.

Slavin (1990) says in his book "*Cooperative Learning: Theory, Research and Practice*", cooperative learning is an approach in teaching that maximize the use of cooperative activities involving pairs and small groups of learners in the

classroom. The researcher found that by applying this method, the students became active in language classroom.

Richard and Rodgers (2001) define cooperative learning is group learning activity organized so that learning is dependent on the socially structured exchange of information between learners in groups and in which each learner is held accountable for his or her own learning and is motivated to increase the learning of others. So, when cooperative learning is applied in classroom, the students had responsibility on themselves and their group.

Besides that, Slavin (1987) states that cooperative learning comprises at instructional methods in which teachers organize students into small groups, which then work together to help one another learn academic content. Cooperative learning consists of five basic elements: positive interdependence, promotive interaction, individual accountability, teaching of interpersonal and social skills and quality of group processing.

Johnson & Johnson (1998) says that cooperative learning has demonstrated the academic, social, affective and psychological growth of students who work together in groups. So, cooperative learning grounded in the belief that learning is most effective when students are actively involved in sharing ideas and work cooperatively to complete academic tasks.

According to McCafrerty, et al (2006) cooperative learning is more than just putting students into groups and giving them something to do. Cooperative learning principles and techniques are tools which teachers use to encourage mutual helpfulness in the groups and the active participation of all members. Slavin (1990) writes that cooperative learning techniques adaptable to most subject and grade levels. It means that cooperative learning can also be apply in teaching vocabulary. There are some techniques in cooperative learning that can be used by the teacher, such as Student Team Achievement Division (STAD), Team Games Tournament (TGT) and Jigsaw.

Based on the statement from Richards in Renandya (2011), the objective of cooperative learning is to enhance learning and achievement by encouraging peer-to-peer interaction and cooperation. The cooperative learning requires students to be active in the group and achieved the main goal of every member in the group. It means that if students want to succeed as a team, they will encourage their teammates and do the best for their team.

Based on those statements, the researcher summarizes that cooperative learning is a learning model which provides opportunity to interact and communicate with each other. Cooperative learning is one of useful technique to motivate student to encourage and to help each other in mastering materials presented by the teacher.

In STAD, student are assigned to four or five members learning teams that are mixed in performance, level, gender and ethnicity. It is to accelerate the

achievement of all students. STAD shares the idea that students work together to learn and responsible for their teammates' learning as well as their own. Sharan (1999) described that there are three concepts that are central to STAD :

1. Teams rewards

Teams may earn certificates or rewards if they achieve above a designated criterion. But there is no competition among the students.

2. Individual accountability

It means that in STAD, the teams' success depend on the individual learning of all team members.

3. Equal opportunity for success

It means that what students contribute to their teams is based their improvement over their own past performance.

Slavin (1990) stated that STAD consists of five major components, they are:

1. Class Presentation

Material in STAD is initially introduced in a class presentation. This is most often direct instruction or a lecture discussion conducted by the teacher.

2. Teams

Teams are composed of four or five students who represent a cross-section of the class in term of academic performance, sex and race or ethnicity.

3. Quizzes

After teacher presentation and team practice, the student who take individual quizzes are not permitted to help one another during the quizzes.

#### 4. Individual Improvement Score

Each student is given a “base” score, derived from the student’s average past performance on similar quizzes.

#### 5. Team Recognition

Team may earn certificate or other rewards if their average scores exceed a certain criterion. It is based on:

##### a. Improvement point

Students earn points for their teams based on the degree to which their quiz score (percentage correct) exceed their base score.

**Table 2.1 Improvement Point**

<b>Quiz score</b>	<b>Improvement Points</b>
More than 10 points below base score	5
10 points below to 1 point below base score	10
1 point above to 10 points above base score	20
More than 10 points above base score	30
Perfect paper (regardless of base score)	30

##### b. Recognizing Team Accomplishments

Three levels of awards are given. These are based on average team score, as follows:

**Table 2.2 Recognizing Team Accomplishments**

<b>Criterion (Team Average)</b>	<b>Award</b>
15	GOOD TEAM
20	GREAT TEAM
25	SUPER TEAM

From the several statement above, the researcher concluded that the STAD is one of the cooperative learning techniques that students are assigned to four or five member learning teams that are mixed in performance level, gender, and ethnicity. Students will have equal opportunity to learn and students are rewarded for doing better than they have in the past, they will be more motivated.

#### **2.4. Advantages and Disadvantages of STAD**

Nichols and Miller (2007) write that there are some advantages and disadvantages of using STAD, they are:

##### 1. The advantages of using STAD

- Students feel better about themselves and to be more accepting of others.
- Students will have an equal opportunity to learn.
- Students with lower abilities are more likely to improve their achievement in mixed group.
- Students will be active in teaching learning process

##### 2. Disadvantages of using STAD

- Taking much time in organizing the group
- The class situation becomes noise because students work in group, so the teacher needs to control the student often.
- Wasting instructional time. Teacher has to state clear instruction, sometimes she has to repeat the instruction often because they concern with their group and they ignore the teacher.
- It needs more time for teacher to implement STAD well in class. Because for the first time, students need to adapt with their teammates.

## 2.5. Procedure of Teaching Vocabulary Using STAD

Before teaching, there were some general procedures to follow when preparing STAD stated by Anita Lie (2003):

### 1. Materials

The materials are specifically designed for STAD and adapted from text book or other published sources or with teacher-made materials.

### 2. Assigning Students to Teams

Teams in STAD should be heterogeneous. Do not let students choose their own teams, because they will tend to choose others like themselves. Instead follow these step:

- a. Make copies of team summary sheets for every students in your class.

**Table 2.3 Team Summary Sheet**

No	Team Members	Gain 1	Gain 2	Gain 3	Gain 4
1					
2					
3					
4					
Total Team Score					
Team Average					
Team Award					

- b. Rank students in your class from highest to lowest performance

**Table 2.4 Assigning Students to Teams**

Student	Rank	Team Name
High-Performing Students	1	A
	2	B
	3	C

	4	D
	5	E
	6	F
	7	G
	8	H
Average-Performing Students	9	H
	10	G
	11	F
	12	E
	13	D
	14	C
	15	B
	16	A
	17	A
	18	B
	19	C
	20	D
	21	E
	22	F
	23	G
	24	H
Low-Performing Students	25	H
	26	G
	27	F
	28	E
	29	D
	30	C
	31	B
	32	A

- c. Decide on the number of team. Each team should have four or five members if possible.
  - d. Assign student to teams
3. Determining Initial Base Score

The base score represent student' average score on past quizzes.
4. Team Building

Before starting any cooperative learning program, it is a good idea to start off with one or more team-building exercises just to give team members a chance to do something fun and to get to know one another. For example, teams might be given a chance to create a team logo or yell.
5. Grading

Report card grade should be based on students' actual quiz score, not only their improvement points or team scores.

Based on the details, the researcher summarized that before implementing teaching using STAD, the teacher should prepare some materials and team-building excercises in order to make teaching learning activities fun and enjoyable. The researcher applied the teaching procedures as follows:

#### **1. Pre-Activity**

- a. The teacher prepares 20 vocabularies that related to materials. If one group contains 4 members, so every student will get 5 vocabularies as their individual assignment.
- b. The teacher informs the students what they are going to learn and the objective of the learning or brainstorming.

- c. After the teacher teaches, the teacher divides the class into groups of four or five members that are mixed in performance, level, gender and ethnicity.
- d. The teacher introduces the concept of STAD together with what the benefits for students are.
- e. The teacher explains to the students what to work in teams mean. In particular, before beginning team work, discuss the following team rules:
  - Students have a responsibility to make sure that their teammates have learned the material.
  - No one finished studying until all teammates have mastered the subject.

## **2. While-Activity**

- a. The teacher shows pictures and mentions the vocabulary and explains the function of the things. The teacher asks the students to repeat after the teacher mentions the vocabulary.
- b. The teacher frequently check students' attention by asking many questions while showing the picture
- c. The teacher asks the students to work together in their own teams, the teams had been assigned before.
- d. The teacher distributes the individual assignment (5 vocabularies to each student). During this session, students will have guessing game. Without showing the picture of vocabulary card that they have in hand, the student should give some clues to other students within the

group and the member of the group have to guess the word that have been described before.

- e. During team study, team member' tasks are to master the material that are presented before in the lesson and to help their teammates master the material.
- f. The teacher monitors the teams: observing, listening, and intervening when it is necessary. The teacher also makes a note of the incorrect words that used by the students and gives correction during the learning process.
- g. After all students finish their task, the teacher distributes the quiz. The teacher provides worksheet in the form of fill in the blank for the quiz. Students are not allowed to work together on the quiz.
- h. After the quiz, the students write their improvement point, which are reported for each team on a team recognition chart on the bulletin board, are determined based on the percentage of improvement from the previous base score.

### **3. Post-Activity**

- a. The teacher gives the students a chance to ask some question what they do not understand yet.
- b. As a reflection, the teacher concludes the material by asking some questions to the students about what they have learned that day.
- c. After doing a follow-up, the teacher closes the class.

## 2.6. Review of Relevant Research

STAD has been applied in so many research, some of them are this following research. The first one is the research done by Michael M van Wyk (2007) from University of South Africa. The research examined the impact of STAD in building economic knowledge of secondary school learners. Data was collected from 229 grade 10 economics learners. The results showed that there were any differences in performance on either the pretest or posttest between using STAD technique and Direct Instruction Classes. Based on the data that collected, differences in the STAD mean score compared to direct instruction methods indicates an overall change or difference of 4.1 (10.2%) which shows that STAD is statistically significant compared to direct instruction for this study. It means that, STAD performance better compared to the Direct Instruction method.

Van Dat Tran (2008) also had done a research that investigated the effect of cooperative learning; STAD technique on the academic achievement in mathematics and attitudes of 74 9th-grade mathematics students toward mathematics in a high school in Vietnam. The results of the test showed no statistically significant difference in mathematics pretest scores of the experimental group and the control group. However, the findings obtained from the t test on the mathematics post-test scores showed that the mean scores of the treatment group ( $M = 8.45$ ,  $SD = .778$ ) were statistically significantly higher than those of the control group ( $M = 8.01$ ,  $SD = .860$ ). The results showed that the treatment group, which had engaged in STAD learning, produced a higher overall improvement in scores on the mathematics post-test.

Nur'aeni from Syarif Hidayatullah State Islamic University, Jakarta had conducted a classroom action research in 2011. Her research was intended to find empirical evidence of students reading ability development by using STAD. The data was collected from 36 second year of junior high school students. The results of this research are the students were more active and interested in learning reading activity in the classroom and there was 12.15% improvement of students' average score of reading after using STAD.

Furthermore, several studies report that STAD is the most successful cooperative learning technique for increasing student academic achievement (Van Wyk, 2007; Nichols and Miller, 1998; Dat Tran, 2008, and Nur'aeni, 2011). Therefore, the researcher proposes this research to investigate whether STAD can increase students' vocabulary achievement or not. This research is never been done before and will be completely different with preview.

## **2.7. Theoretical Assumption**

Based on the theories above, the researcher believed that teaching using STAD technique can improve the students' vocabulary achievement of second year of SMP Muhammadiyah 3 Bandar Lampung.

### III. RESEARCH METHOD

This chapter is concerned with research design, population and sample, variables, data collecting techniques, research procedures, criteria of good test, result of the tryout test, data analysis and hypothesis testing.

#### 3.1. Research Design

This research is quantitative study using *one group pretest-posttest design*. The design used one class only as the experimental class. This class was given treatment through STAD technique. This class had pretest, posttest and three times treatments. The pretest is used to find out the students' preliminary ability and the posttest is used to look how far the increase of the students' vocabulary achievements after the treatments. The aim of this research is to investigate whether there is any increase of students' vocabulary achievement after being taught using STAD technique. The design is presented as follows:

**T1    X    T2**

T1    : Pretest

X     : Treatment

T2    : Posttest

(Hatch and Farhady, 1982)

### **3.2. Population and Sample**

#### 1. Population

The populations in this research was all the second year students at SMP Muhammadiyah 3 Bandar Lampung in academic year 2015-2016.

#### 2. Sample

The researcher selects one class as the sample of the research by using random sampling technique which was using lottery and the result was class VIIIIE as the experimental class.

### **3.3. Variables**

The research consists of the following variables:

1. Students' vocabulary achievement is dependent variable (Y). It means the achievement of student's vocabulary partly depends on their ability in memorizing and understanding a number of English words in language.
2. STAD technique is independent variable (X). It means that STAD will influence the dependent variable in this case is students' vocabulary achievement.

### **3.4. Data Collecting Technique**

In order to collect the data, the researcher use the following steps:

#### 1. Administering pretest

The pretest was conducted to know how far the students have mastered the vocabulary. The number of item in the test was 30 items. The pretest was administered once.

## 2. Administering posttest

The posttest was conducted to know the students' improvement of vocabulary after the treatments were given. Similar to the pretest, the researcher used 30 items in the test.

### **3.5. Research Procedures**

#### 1. Determining the sample of the research

The sample of the research was selected by using random sampling technique, which was using lottery. The researcher takes one of six classes of the second year students at SMP Muhammadiyah 3 Bandar Lampung as the research sample.

#### 2. Selecting instrument material

In this research, there was one pretest that was proper to the grade VIII students of Junior High School. It focused on vocabulary, which is classified into content words (noun, verb and adjective). The materials were taken from student book and teacher-made materials based on School Base Curriculum.

#### 3. Conducting the try out

This test was aimed at finding out the quality of the test which would be used as the instrument of the research, and determined which item should be revised for the pretest and posttest.

#### 4. Conducting the pretest

It has been conducted before the treatment. It was held to measure the ability of the students before the students get the treatment.

5. Conducting the treatment

After giving pretest, the students were given three times treatment by using STAD technique based on the lesson plan which had been prepared.

6. Conducting the posttest

The posttest was administered after the application of STAD technique. The aim is to find out the students' vocabulary achievement after the implementation of STAD technique.

7. Analyzing the test result

After conducting pretest and posttest the researcher analyzed the data. The data was computed through *Statistical Package for Social Science (SPSS) version 17*. The researcher then analyzed the students' score from pretest and posttest then make a discussion about the result.

8. Reporting the result

In reporting the data, the data was arranged systematically based on the pretest and posttest to see whether there is an increase on the students' vocabulary achievement.

### **3.6. Criteria of Good Test**

In this research, to prove whether the test have a good quality or not, it has to be tried first. Try out is the test to measure the quality of the research instrument. The test can be said had good quality if it has a good validity, reliability, level of difficulty and discrimination of power.

## 1. Validity

The test can be said valid if the test measures the object to be measured and it is suitable with the criteria (Hatch and Farhady, 1982). To measure the test has a good validity, this research used content and construct validity. Therefore, two types of validity will use in this research as follows:

### a. Content Validity

Content validity is concerned with whether the test is sufficiently representative and comprehensive for the test. The researcher uses the vocabulary that is supposed to be comprehended by grade VIII students. In this research, the researcher arranges the instrument based on the material that will be given, which is vocabulary, specifically is content words (noun, verb and adjective). If the instrument have represented all the ideas that connected with the material that will be measured, that measuring instrument had fulfilled the aspect of content validity. Content validity also can be examined from the table of specification that is presented below:

**Table 3.1. Table of Specification of Tryout Test**

No.	Word Classes	Percent	Number	Item Numbers
1	Noun	17,5%	14	5, 7, 9, 17, 22, 28, 30, 42, 45, 49, 62, 68, 70, 78.
2	Verb	45%%	36	1, 3, 6, 10, 11, 13, 14, 16, 20, 24, 26, 27, 29, 32, 34, 35, 37, 39. 41, 43, 46, 50, 51, 53, 54, 56, 60, 64, 66, 67, 69, 72, 74, 75, 77, 79.
3	Adjective	37,5%	30	2, 4, 8, 12, 15, 18, 19, 21, 23, 25, 31, 33, 36, 38, 40, 44, 47, 48, 49, 52, 55, 57, 58, 59, 61, 63, 65, 71, 73, 76, 80.
<b>Total</b>		<b>100%</b>	<b>80</b>	

b. Construct Validity

Construct validity refers to the ability of a measurement tool (e.g. a survey, test, etc) to actually measure the psychological concept being studied. In other words, it is concerned with whether the test is true reflection of the theory of the trait - in our case language which is being measured. It means the items should really measure the students' vocabulary achievement.

**2. Reliability**

Reliability refers to how accurate the test score is (Shohamy, 1985). In this research, the researcher will use the split half method to estimate the reliability of the test. To measure the coefficient of the reliability between the odd items and even items, the researcher uses the Pearson Product Moment formula as follows:

$$rl = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$$

Where:

$rl$  : Coefficient of reliability between odd items and even items

$x$  : Total of items that the students got right in odd items of the test

$y$  : Total of items that the students got right in even items of test

$\sum xy$  : Total score of  $x$  times  $y$

$\sum x^2$  : Total score of  $x^2$

$\sum y^2$  : Total score of  $y^2$

(Arikunto, 1997)

The criteria of reliability are:

0.80 – 1.00 : Very high

0.60 – 0.79 : High

0.40 – 0.59 : Average

0.20 – 0.39 : Low

0.00 – 0.19 : Very low

To compute the coefficient correlation of the whole items, the researcher uses

Spearman Brown Prophecy Formula. The formula is:

$$rk = \frac{2 \cdot rl}{1 + rl}$$

Where:

*rk* : The reliability of full test

*rl* : The reliability of half test

The criteria are:

0.90 – 1.00 : High

0.50 – 0.89 : Moderate (satisfactory)

0.00 – 0.49 : Low

(Hatch and Farhady, 1982)

### 3. Level of Difficulty

Difficulty level is related to how easy or difficult the item is from point of view of the students who take the test by giving the test and counts the

students correct answer. It's important to find out whether test level is appropriate to the students' level or not. To see level of difficulty, this research uses the following formula:

$$LD = \frac{R}{N}$$

Where:

*LD*: Level of difficulty

*R* : The number of students who answer correctly

*N* : The total number of students following the test

The criteria are:

< 0.30 : Difficult

0.30 – 0.70 : Average

> 0.70 : Easy

(Shohamy, 1985)

#### 4. Discrimination Power

The discrimination power (DP) refers to the extent to which the item differentiates between high and low level students on the test. It is used to see the difference performances of the individual learners in a group. The important of this test is to discriminate the number of students who answer correctly and who do not answer correctly. To find out the discrimination power of the test, the researcher uses the following formula:

$$DP = \frac{U - L}{1/2 n}$$

Where:

*DP*: Discrimination Power

*U* : The number of upper group students who answer correctly

*L* : The number of lower group students who answer correctly

*n* : Total number of the students

The criteria are:

0.00 – 0.19 : Poor

0.20 – 0.39 : Satisfactory

0.40 – 0.69 : Good

0.70 – 1.00 : Excellent

- (Negative) : Bad items, should be omitted

(Heaton, 1975)

## 5. Scoring System

To see the students' progress achievement from the test, both from pretest and posttest, the writer will use the scoring method according to Heaton (1991). The formula can be illustrated as follows:

$$FS = \frac{S1 - S2}{2}$$

Where:

*FS*: Students' final score

*S1* : Score from pretest

*S2* : Score from posttest

### **3.7. Result of the Tryout Test**

Based on the criteria of the good test, the researcher conducted the tryout test to measure the quality of the research instrument. The tryout was given to find out the reliability, level of difficulty and discrimination power in order to get good test. By using lottery, class VIIIA was chosen to be the tryout class. This class consisted thirty-four students.

There were eighty items of multiple choices related to vocabulary of noun, adjective and verb that consisted of 14 items of parts of body, 30 items of describing objects and 36 items of activities. After analyzing the data by seeing the level of difficulty and discrimination power, it was found 56 items were good. Then, the researcher revised the 4 items and administered 30 items to be pretest and 30 items to be posttest.

Twenty items were bad and dropped because they did not fulfill the criteria of level of difficulty and discrimination power. To find reliability of the test, the statistical formula Pearson Product Moment was used. The computation showed that the reliability coefficient of test was 0.98 (see appendix 6, page 87). It can be stated that the test have a very high reliability since the range of very high criteria for the test reliability is 0,8 – 1.00 (Arikunto, 1997).

After seeing the criteria of good test by using level of difficulty and discrimination power, 20 items were dropped and 4 items were revised. The result of tryout level of difficulty and discrimination power can be seen in (appendix 7,

page 88). Tryout test consisted of 12 difficulty items, 60 average items and 8 easy items. The easy and difficult items were dropped, while the satisfactory were administered in pretest and posttest. For discrimination power, there were 10 bad items, 14 poor items, 37 good items, 17 satisfactory items and 2 excellent items. Items with negative discrimination were dropped and revised, and the items that has satisfactory level of difficulty and good discrimination indexes were administered for pretest and posttest.

### **3.8. Data Analysis**

After conducting pretest and posttest, the researcher analyzed the data. In order to find out whether there is any significant increase of the students' vocabulary achievement. The researcher examined the students' score using the following steps:

1. Scoring the pretest and posttest.

There were 30 items in the pretest and posttest, total correct items will be divided to 3 and times 10. So, the total score of the correct items was 100.

$$TS = \frac{CI}{3} \times 10$$

Where :

*TS* : Total Score

*CI* : Correct Items

2. Tabulating the result of the students' score and calculating the mean of the pretest and the posttest.

3. Drawing conclusion from the tabulated result of the pretest and posttest administered, that is by statistical computerization i.e. *repeated measure T-Test of SPSS version 17.0.*

### **3.9. Hypothesis Testing**

The hypothesis testing is used to prove whether the hypothesis proposed in this research is accepted or rejected. The hypotheses of this research were:

1. There is significant increase of students' vocabulary achievement of the second grade of SMP Muhammadiyah 3 Bandar Lampung after being taught using STAD technique.
2. There is no significant increase of students' vocabulary achievement of the second grade of SMP Muhammadiyah 3 Bandar Lampung after being taught using STAD technique.

## **V. CONCLUSION AND SUGGESTION**

This chapter is consisted of conclusions of the research' result and also the suggestion from the researcher to the other researchers and to English teacher who want to try to use STAD as a technique in teaching vocabulary.

### **5.1. Conclusions**

After conducting the research in SMP Muhammadiyah 3 Bandar Lampung and analyzing the data, the researcher makes some conclusions as follow:

There was a significant increase in the students' vocabulary achievement of noun (parts of body), adjective (describing object) and verb (activities) after being taught using STAD technique.

It was concluded that the use of STAD technique did affect positively on students' vocabulary achievement. It is proven by the improvement on students' score between the pretest and the posttest.

## 5.2. Suggestions

Related to the conclusions above, the researcher proposed some suggestions for the teacher and the further researcher are follow:

1. For the teacher:
  - a) The English teacher is suggested to use STAD technique as one of the ways in teaching because it can help the students who still have problem in vocabulary.
  - b) The teacher has to be well prepared in implementing STAD, especially in preparing the media such as: bulletin board to put the students' improvement points, quiz in every treatment and reward, in order to avoid the inefficiency of time when learning process occurs.
  - c) In applying the guessing game, the teacher is advised to monitor the teams. The teacher is also advised to give correction to the students, concerning the incorrect word which is used by the students, in order to improve the students' ability in vocabulary.
2. For the further research:
  - a) STAD needs to conduct on different level of students, such as in elementary school or senior high school. So, there will be a further research with different discussion which can make a revision within development of STAD technique. The researcher hopes the result of this research can be used as an additional reference.
  - b) Since there was a difficulty on applying this technique, which was teaching through STAD needs longer time than 2x45 minutes. It might caused by the activities in team building phase were too much time

consuming, the future researcher needs to learn how to simplify the students' assignments. Hopefully, there will be any further research of how to apply STAD technique more effectively.

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