IMPROVE STUDENTS' VOCABULARY COMPREHENSION THROUGH STUDENT TEAMS ACHIEVEMENT DIVISIONS METHOD IN CLASS VII D SMPN 29 SEMARANG

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Abstract

The purpose of this study is to determine: (1) whether the Student Teams Achievement Division (STAD) cooperative learning approach may improve students' vocabulary comprehension; and (2) how students respond when studying using the STAD method.

This study is a classroom action research. This study involved students of SMP N 29 Semarang class VII D for the 2022/2023 academic year. This study was divided into two cycles, each of which included stages of planning, acting, observing, and reflecting. Data collection strategies used in each cycle included test results from the pretest and post-test as quantitative data and students' questionnaires as qualitative data.

According to the findings of this study, students' vocabulary comprehension improves after using the STAD learning method. This can be seen from the test results of students. The pretest results show a score of 69.5 on average. Meanwhile, the average cycle 1 post-test score was 78, and the average cycle 2 post-test score was 88. The pretest findings showed that only 10 students, or 32.2%, reached the minimum criterion, while in the post-test cycle 1 there were 20 or 78% of students who succeeded in achieving the minimum criterion and 28 students or 90.3% in the post-test cycle 2 who reached the minimum criterion. The results of the questionnaire data indicate that students responded positively to learning by implementing the STAD approach.

Keywords – vocabulary, cooperative learning, Student Teams Achievement Divisions (STAD)

Introduction

Learning a language means learning new vocabulary. The vocabulary is used for communication in written or spoken form. Various messages, information, responses, ideas are used in language. Generally speaking, no language can be used without understanding its vocabulary. The more vocabulary is understood, the easier it is for learners to communicate. An abundant understanding of vocabulary gives a broader opportunity to learners to access various reading materials. A rich vocabulary understanding also improves the learners' ability to communicate through listening, speaking, and writing.

Vocabulary is one of the important aspects of English because it is a basic part of language skills. Without sufficient vocabulary understanding, learners will have difficulty reading, writing, and speaking in English. Hornby (1994) stated that the vocabulary is the total of the words that make up a language. Another opinion said, vocabulary is a whole word that is in a person's memory, which will immediately trigger a reaction when heard or read (Keraf, 2006). From the above understanding, it can be known that a vocabulary is a word or more that expresses meaning or idea to form a sentence for communication. In learning English at junior high school, students are

expected to be able to understand basic vocabulary before studying more complex grammar. However, many students still have difficulty understanding English vocabulary. Some factors that make it difficult for learners to understand English vocabulary are the lack of interest and motivation of learners, as well as less varied learning methods. Lack of interest and motivation can hinder their ability to understand English vocabulary. In addition, less varied learning methods can make learning feel boring and less interesting for students.

Based on observations in class VII D SMPN 29 Semarang, it is known that the vocabulary understanding of students is still low. Many of the students are still afraid and think that English is difficult especially when it comes to mastering new vocabulary and applying it to communicate. Students rely only on teachers and practice English less. This makes classroom learning ineffective. Students often easily forget new vocabulary learned from the dictionary. They tend to memorize vocabulary but fail when they have to apply and understand the word in the context of the sentence. When they have to speak and write, they find it difficult to find the right vocabulary to express their ideas because of a lack of understanding of the vocabulary.

For these reasons, learning methods are needed that can improve the understanding of the student's vocabulary and make the vocabulary easy to understand and develop. One of the most common approaches is cooperative learning. The cooperative approach facilitates the learners to actively interact. The type of cooperative learning used in this study is Student Teams Achievement Division (STAD). The STAD approach is a cooperative learning strategy in which students are divided into small groups of 4-5 people. The STAD method has proven to be effective in improving student academic performance and social skills (Slavin, 1995). Research by Rifanti (2022) showed the impact of STAD application can improve student learning outcomes on English language subjects.

According to Slavin (1995) STAD is a group-centric learning that consists of four or five students selected heterogeneously based on academic ability, race, or ethnicity. In the STAD method, students work in groups to understand the material and get help from other group members about the material. Each member of the group is responsible for the success of their group. The implementation of the STAD method itself in vocabulary learning relates to several aspects such as speech, spelling, meaning and use of words. Related to this, the students help each other in understanding the word by asking and applying the word according to its usefulness, and in the group they learn the correct speech of the word. Expected that the collaboration of the group can train learners to improve common understanding of concepts, learners will feel better when understanding concepts with the help of their friends.

Based on the background that has been outlined, then some problems can be formulated as follows:

1. How is the application of cooperative learning methods type Student Teams Achievement Division to improve the understanding of the vocabulary of students of class VII D SMP N 29 Semarang?
2. How do students of grade VII D SMPN 29 Semarang respond to cooperative learning methods such as Student Teams Achievement Division to improve vocabulary understanding?

The aim of this study is to find out whether or not the influence of cooperative learning methods type STAD to improve the understanding of students, as well as how students respond to STAD methods. The benefits of this research are:

For students:

- Students can understand vocabulary more easily.
- Increase the learning performance of the students.
- Students can be active and collaborative.

For teacher:

- Facilitating the delivery of teaching materials.
- Improve the quality of learning
- Increase learning innovation

For school:

- Making a better contribution to English learning.
- Improve the quality of resources.
- The results of this study can enrich and complement the results of research that have been done by other teachers.

Methodology

This study is a Classroom Action Research or often abbreviated to PTK in Indonesia. This is a research method used by teachers to improve student teaching practices and learning outcomes. PTK involves identifying problems in the classroom, developing plans to address problems, implementing plans, and evaluating results. Therefore, the problem – the problem studied in PTK – is a problem that emerges in the classroom.

The subject of research is students of class VII D SMP State 29 Semarang semester of the academic year 2022/2023. With the number of students male – male 16 and female students 15 total there are 31 students. data collection procedures

This research uses two variables namely understanding of vocabulary and STAD. Class action research involves identifying problems or problems in the classroom, developing plans to address problems, implementing plans, and evaluating results. Research is carried out in two cycles, with each cycle consisting of planning, action, observation, and reflection. The data collection technique in this study is carried out with two techniques: test and non-test. Test data is collected through pre-test results and post-test evaluation of vocabulary understanding. Non-tested data is the response of students to the use of STAD learning methods. The instrument used is a test (pretest and post-test) and a questionnaire response of the students. Students respond to the Student Teams Achievement Division (STAD) cooperative learning method in improving their understanding of the student's vocabulary. The test instrument is the assessment of vocabulary understanding taken from the questions of pretest and post-test. The results of the test are used to see the results of students before and after the treatment.

Data analysis techniques used are quantitative and descriptive data analysis. Quantitative data is obtained from the results of vocabulary understanding tests before and after the application of the STAD method. The maximum score of the participants is taken to obtain the final score. The data was then analyzed quantitatively to find out the increased understanding of the student's vocabulary after the application of the STAD method. Qualitative descriptive analysis techniques are used to collect and analyze qualitative data obtained from the questionnaire of student response and field records during the implementation of actions. The data is then used to analyze the student's response to the use of STAD learning methods.

Finding and Discussion

A. Finding

1. Preliminary

Before entering the 1st cycle, the researchers conducted a preliminary study to obtain actual data on the condition of problems encountered by students in learning English, especially vocabulary. Preliminary study was conducted in class VII D SMPN 29 Semarang as a subject of research selected by researchers. In this preliminary study, the researchers found several problems that exist in class VII D. The first problem is the activity of students when they are in group work, students tend to rely on one or several of their friends to work while there will be one or two students who will only follow or prefer to remain silent. The second and most prominent problem is the limitation of student vocabulary ownership that leads to a lack of understanding of students when learning English.

2. Pretest

The pretest was carried out to identify the original skills of the learners regarding vocabulary. In the pretest, the students were asked to answer some of the questions prepared by the researchers related to the competence of vocabulary in particular adjectives on the material describing local food. There are 10 questions about local food adjectives.

Table 4.1 Students Preliminary Result

Students	Pretest
Students 1	76
Students 2	66
Students 3	78
Students 4	65
Students 5	65
Students 6	76
Students 7	66
Students 8	66
Students 9	66
Students 10	76
Students 11	80
Students 12	65
Students 13	65
Students 14	67
Students 15	66
Students 16	66
Students 17	84
Students 18	65
Students 19	65
Students 20	78
Students 21	66
Students 22	76
Students 23	65
Students 24	67
Students 25	66
Students 26	80
Students 27	65
Students 28	65
Students 29	65
Students 30	76
Students 31	65
MEAN	69,5

The result is obtained from the calculation of the mean score with the following formula:

$$X = \frac{\sum_x}{n}$$

$$X = \frac{2157}{31}$$

$$X = 69,5$$

The percentage of students who reached the minimum score is obtained using the following formula:

$$P = \frac{F}{N} \; x \; 100\%$$

$$P = \frac{10}{31} \; x \; 100\%$$

$$P = 32,2\%$$

Based on the results of the pre-test obtained, the data indicates the mean score or the average result of the pretest is 69.5. Only ten students or 32.2% of students achieved maturity while the other 21 students did not mature. From the results of the data above, it can be seen that the understanding of the vocabulary of the students of class VII D SMPN 29 Semarang is still low.

After analyzing data from the pre-test, it can be concluded that most students of class VII D SMPN 29 Semarang have a low understanding of vocabulary especially on adjectives. We need a solution to solve this problem. Researchers use STAD learning methods as innovative solutions to new methods in learning. This classroom action research is carried out in two cycles. Each cycle follows the CAR procedure of planning, acting, observing, and reflecting.

3. Post-test cycle 1

The post-test scores on the 1st cycle of students were seen to increase compared to their pretest scores. At the execution of the 1 cycle, the students showed extraordinary enthusiasm when the quiz was ongoing. The post-test scores of the students increased to 78, which is 20 students declared to be eligible. Post-test results are obtained from the calculation of mean score with the following formula:

$$X = \frac{\sum_x}{n}$$

$$X = \frac{2422}{31}$$

$$X = 78$$

The percentage of students who reached the minimum score is obtained using the following formula:

$$P = \frac{F}{N} \; x \; 100\%$$

$$P = \frac{20}{31} \; x \; 100\%$$

$$P = 64,5\%$$

From the above data, more than 50% of students increased their understanding of vocabulary after performing post-test 1 using the STAD learning method.

Table 4.2 Students Results in Post-test cycle 1

Students	Post-test 1
Students 1	87
Students 2	76
Students 3	87
Students 4	70
Students 5	70
Students 6	90

Students 7	76
Students 8	76
Students 9	70
Students 10	90
Students 11	90
Students 12	68
Students 13	68
Students 14	77
Students 15	76
Students 16	76
Students 17	90
Students 18	70
Students 19	70
Students 20	87
Students 21	76
Students 22	87
Students 23	76
Students 24	78
Students 25	76
Students 26	87
Students 27	75
Students 28	75
Students 29	73
Students 30	85
Students 31	70
MEAN	78

4. Post-test cycle 2

In the implementation of the post-cycle test 2 students who reached the intensity increased considerably. In this cycle 2 students are also more active when working in groups and just like in cycle 1 students are very excited when the quiz is ongoing. Participants also learn faster in finding adjectives on the given description text.

Table 4.3 Students Results in Post-test cycle 2

Students	**Post-test 2**
Students 1	80
Students 2	90
Students 3	90
Students 4	80
Students 5	100
Students 6	90
Students 7	90
Students 8	100
Students 9	70
Students 10	90
Students 11	90
Students 12	50
Students 13	50
Students 14	90
Students 15	90
Students 16	80
Students 17	100
Students 18	90

Students 19	90
Students 20	100
Students 21	100
Students 22	90
Students 23	80
Students 24	100
Students 25	90
Students 26	100
Students 27	90
Students 28	100
Students 29	100
Students 30	90
Students 31	80
MEAN	88

From the table above, you can see the achievement of the mean score of the students is 88, which means there are 28 students who reached the point. The result is obtained from the following formula:

$$X = \frac{\sum_x}{\text{n}}$$

$$X = \frac{2730}{31}$$

$$X = 88$$

The percentage of students who reached the minimum score is obtained using the following formula:

$$P = \frac{\text{F}}{\text{N}}\ x\ 100\%$$

$$P = \frac{28}{31}\ x\ 100\%$$

$$P = 90{,}3\%$$

The above percentage indicates that more than 80% of students gained an improved understanding of vocabulary with STAD learning methods.

B. Discussion

1) **Cycle 1**
   - **Planning**

At this stage of planning or planning, the researcher prepares a Lesson Plan (RPP) with the required teaching materials. The researchers also prepared instruments – instruments needed for the purposes of data collection. The instrument is meant to start from the question used as a pretest and the question for the post-cycle test 1. The researchers also set a minimum thickness score with a score of 75.

- **Acting**

At this stage, researchers implement learning using STAD-type cooperative learning methods. According to the lesson plan (RPP) that has been made, learning is carried out according to the syntax of STAD: (1) presentation of material in the form of videos displayed in front of the class; (2) group the students to solve the problem given; (3) presentation of group discussion results is done randomly using spin the wheel; (4) the execution of the quiz to see enthusiasm and whether the submitted material is truly understood by the learners; (5) the reward is applause as a sign of reward to the group that answered the most questions. After the STAD method syntax is done, the researchers give the post-test 1 question to the students through the question in the *liveworksheet* that is done individually by scanning the displayed barcode.

- **Observing**

During the acting activities, the researchers simultaneously observed students who were enthusiastic about working in groups and who were very involved in the group.

The researchers saw that the entire students was very enthusiastic when answering questions in the given quiz.

- **Reflecting**

After cycle 1 was successfully implemented, the researchers evaluated the learning process until the post-test work. Based on the results of the post-test 1 showed that there were only 10 additional students who reached the minimum score. It means that there have been 20 students who have increased their understanding. The result is quite satisfactory. However, it is still necessary to improve time management when the students are working on the test, so that the results are even better.

2) Cycle 2

- **Planning**

The planning of the second hammer cycle is the same as the previous cycle. The researchers re-prepared the lesson plan (RPP) and teaching materials, questions for post-test 2 as well as a questionnaire to find out the response of students to the use of STAD learning methods for learning English vocabulary.

- **Acting**

At this stage in accordance with the previous cycle, the researchers re-implemented the STAD method syntax in the classroom in the same sequence: (1) the provision of material in the form of videos displayed in front of the class. (2) the grouping of learners to solve the given problem. (3) the presentation of group discussion results is done randomly using the spin the wheel. (4) the execution of the quiz to see the enthusiasm and whether the submitted material is truly understood by the learners. (5) the award of applause as a sign of reward to the group that answered the quiz most. In the post-test cycle 2 students were given more time to work to maximum results.

- **Observing**

The observation is done the same as the previous cycle. Students looked enthusiastic when the quiz went on and looked excited when they tried to be the fastest to raise the hand to answer.

- **Reflecting**

After seeing the post-test results 2 students showed significant improvement. Based on the STAD method given to the students, it becomes easier in remembering new vocabulary. From these results, it can be concluded that the use of STAD learning methods can improve the understanding of the vocabulary of students.

3) Quantitative Data

Quantitative data is obtained from the test results given to the students at each cycle. Tests are given according to the materials taught and discussed in the class at each cycle. There are two cycles each derived from two meetings.

From the results obtained after each cycle, it is seen that the scores of the students continue to increase. Student scores increase from pre-test, post-cycle 1 test to post- cycle 2 test. Students' score on the post-cycle test is higher than the pre-test. Post-cycle test scores 2 are higher than post-test 1.

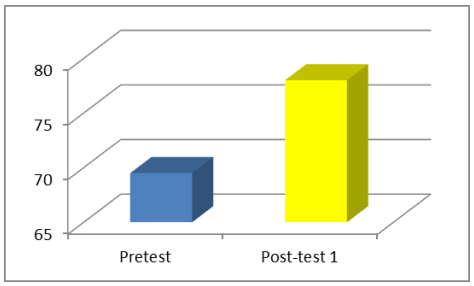

Figure 1. Comparison of mean in cycle 1

The above image shows that the post-test 1 result is higher than the pretest. The

performance of the students in the 1st cycle improved, which can be seen from the average score between the post-test 1 and the pretest. From a pre-test average of 69.5 increased to 78 or from 10 students who crossed the minimum score limit to 20 students. That means there was a 12.2% increase in the average scores of learners. The average percentage increase is obtained from the following formula:

$$P = \frac{y1 - y}{y} \; x \; 100\%$$

$$P = \frac{78 - 69{,}5}{69{,}5} \; x \; 100\%$$

$$P = 12{,}2\%$$

Furthermore, the increase in the average scores of learners from cycle 1 to cycle 2 can be seen from the following image:

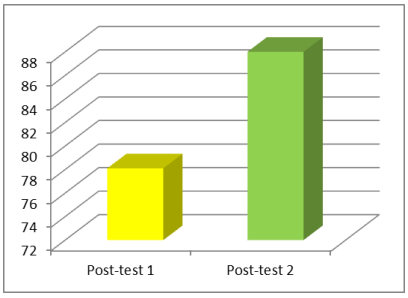

Figure 2. Comparison of mean in cycle 1 and cycle 2

Average percentage increase is obtained from the following formula:

$$P = \frac{y1 - y}{y} \; x \; 100\%$$

$$P = \frac{88 - 78}{78} \; x \; 100\%$$

$$P = 12{,}8\%$$

From the acquisition of scores, the student showed a significant improvement that can be seen from the average score of cycle 1 to cycle 2. From the average on cycle 1 of 78% and the average of cycle 2 of 90,3% there was an increase of 12.8% in the average scores of students.

Table 4.5 The results of the entire data

No	Cycle	Mean	Percentage
1	Pretest	69,5	32,2%
2	Post-test 1	78	78%
3	Post-test 2	88	90,3%

The average achievement score of the student in the 2nd cycle was the highest, so it can be concluded that the student's vocabulary understanding increased after using the STAD learning method from 69.5 to 88.

From the table above, the results showed that there was an increase in student scores from pretest to post test 1, post test 1 to post-test 2. In the pretest, the students who reached the threshold were only 10 out of 31 students (32.2%). In the second test (post-test 1) the students who reached the intelligence limit increased to 20 from 31 students (78%). In the third (post-test 2) test, 28 students achieved the thickness limit (90,3%). Increase from pre-test to post-test 1 by 12.2% and increase from post test 1 to post test 2 by 12.8%.

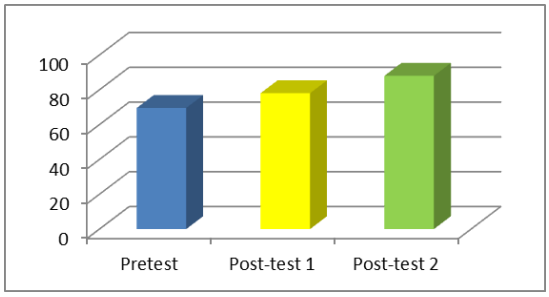

Figure 3. Students increased score

4) Qualitative Data

Qualitative data is obtained from the elevation response of students in learning using the STAD method. The researchers distributed a response lift to all students in class VII D SMPN 29 Semarang. The questionnaire contains 15 questions about

vocabulary and STAD learning methods. The questions are divided into four categories, students' responses to the learning process (number 1,3,14), students' vocabulary learning outcomes (number 7,8,11,13,15), problem solving in vocabulary (number 12) and students' opinions about STAD methods. (number 2,4,5,6,9,10).

In the first category, the student's response to the learning process all the students choose "yes" means that the student feels the process of learning with the STAD learning method is pleasant and the student is more motivated to learn the English vocabulary.
In the second category, the result of learning the vocabulary of the students there was only 1 student who felt a lack of improvement in their understanding of the English language, the remainder of all students chose "yes". In addition, for question no. 15, there were 3 students who felt that their ownership of their vocabulary did not increase, the rest or 90,3% of students felt that they owned more.
In the third category, there was only 1 student who felt difficulty, in addition to 96.7% of students who did not experience difficulty.
The last category of students' opinions about STAD learning methods, all students answered 'yes' meaning they like the STAD teaching method. Students feel learning new vocabulary is better with the STAD method, STAD also makes it easier for students to learn and understand new vocabulary.

Conclusions

After implementing learning with the STAD method in class VII D SMPN 29 Semarang, it can be concluded that the implementation of STAD learning method can improve the understanding of the vocabulary of students. This can be demonstrated by the following facts.

First, the improvement in vocabulary understanding of learners increased by 90,3% from which initially only 32.2% of students crossed the strict limit. In the pretest, there were only 10 students who crossed the limit of tenure. After completing the post-test cycle 1, the students who reached the intensity increased to 20 students or 78% of the total. Results from the implementation of the post-cycle test resulted in an increase of 28 students who achieved a minimum score. Second, the questionnaire response of the students showed that the application of the STAD learning method received a positive response from the students in the vocabulary learning process, this can be seen from the average questionnaire voting ‘Yes’ on the given questionnaire.

In conclusion, this class action research successfully improves the understanding of the vocabulary of the students by using STAD learning methods. Thus, the STAD method can be used as an alternative strategy for teachers to use in teaching vocabulary.

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