

The Use of Make A Match Method to Increase Mechanical Engineering Student's Vocabulary

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Abstract

The low understanding of machine student Vocabulary on machining terms in English requires an appropriate method to overcome them. This study aims to apply the use of Make A Match method to improve students learning outcomes in mastering Vocabulary. The subject in this study is students of Mechanical Engineering Study Program of Politeknik Harapan Bersama Tegal, about 30 students. The determination of this sample is based on the results of preliminary research on the class to be studied and the results of referrals from lecturers. While the object of this research is the effect of using the Make A Match learning method in Vocabulary mastery to increase student learning outcomes in English subjects.

The implementation of the stages of activities carried out in 2 cycles. The research was carried out in the odd semester of the 2019/2020 academic year from November to December 2019. The first cycle was conducted in the third and fourth weeks of November while the second cycle was carried out in the fifth week of November and the first Sunday in January.

This research is CAR consisting of two cycles with stages of planning, action, observation, and reflection. Both cycles use the application of the Make A Match learning model. Before the first cycle of learning is implemented to describe the initial conditions of students before getting action after the implementation of activities that end with evaluation activities through written tests for each cycle. The results of the research show that the initial ability of students before getting an action scores an average of 65 and a percentage of completeness of 60%. In cycle 1 there was an increase in the average value to 69 with a percentage of completeness of 75%. In cycle 2 there was an increase in the average score to 75 and the completeness reached 87%. And the results of the study showed an increase in achievement in English courses which was very significant, that is 87% of 30 students scored 70 in accordance with the specified minimum value. And student responses to the learning process are in the positive category.

Keywords: Make A Match, vocabulary, action research

INTRODUCTION

English is a language that is very important in the international world, especially in the current era of globalization or it is often known as the 4.0 era. English is used as a medium of communication with other people from various countries. The development of the era, English is really needed by students to support their competitiveness in this globalization era. Thus, English functions as a tool to communicate in order to access information, exchange information and enjoy the aesthetics of language in English culture.

Teaching English for higher level includes four aspects of skills that must be mastered by students, such as: reading, listening, speaking and writing. All of that is supported by other language elements, such as: vocabulary, grammar and so on in accordance with the theme as a means to an end. Vocabulary understanding is considered to play a very important role in

mastering those four skills. Vocabulary teaching is taught implicitly, meaning the teaching of vocabulary is taught along with other material that appears during the learning at the time, or not independently. By mastering Vocabulary, students will be easier to master the four aspects of skills in English. English is a tool to communicate verbally and in writing. Students should already have good English skills because they have been introduced to English from elementary school until high school so that they are expected to be able to practice English verbally and in writing. But mastery in learning English is not as easy as imagined.

The fact in class shows that students' mastery of English vocabulary is still very low. It caused by several factors, including: (1). Low mastery of English vocabulary, (2). The use of learning methods that are less precise, (3). Student activeness in learning activities is still low, (4). Lecturers only stick to the textbooks used in class so that lecturers cannot develop subject matter, and (5). Lecturers are less creative in using active, creative, effective and fun learning techniques for students in learning English. Besides this, Mechanical Engineering study program students get English in semester 5 and 6 so students must strive to recall English material they got during high school / vocational school. So in the beginning of lectures lecturers also need to repeat basic English material.

To overcome this problem, Make A Match method is considered more communicative, fun and can attract students to learn. Munawaroh (2017), in her research at MTs Al-Khairiyah Kubangsari, states that the use of make a match method in the teaching learning process has some benefits for the students. It can be used as an excellent teaching tool for developing communication and active thinking skills. Whereas, Fransiska (2013) in her research entitled Increasing students' mastery of English Vocabulary using the Make A Match learning method in grade IV elementary school, concludes that the Make A Match method can improve student learning outcomes in English.

According to (Zawil, 2016) there was a significant difference in vocabulary mastery between the students who were taught by using the Make a Match technique and those who were taught through the techniques of the commonly used teacher. Based on Reni (2019), the combination of methods and appropriate learning media can support each other and increase students' activeness and understanding of the material. Visual learning media can actually help lead students to the real world which is added by the make a match method of learning can be more fun so that it can increase the activeness, motivation and student learning outcomes. In line with Zawil, Miftahul (2011: 135) conveys that the Make A Match method is a learning method for finding a partner while learning a particular concept or topic in a pleasant atmosphere. Whereas Suprijono (2009: 94) argues that the Make A Match method is a method whose application uses cards consisting of question cards and answer cards.

Based on the above opinion, it can be explained that the Make a Match learning method is an active and fun learning method that involves students to find a partner while learning a concept using card media, where the card consists of problem cards and answer cards.

The make a match learning method or known as finding a partner was developed by Lorna Curran in 1994. One of the advantages of this learning method is that students work in groups in pairs while learning to recognize concepts or topics in a pleasant atmosphere so that the material taught is easier to understand and remember by college student. The steps of the make a match learning method proposed by Lorna Curran (1994) are as follows:

1. The lecturer prepares several cards containing several concepts or topics that are suitable for the review session, instead one section of the question card and the other part of the answer card;
2. Each student gets one card;
3. Each student thinks of answers / questions from the card held;
4. Every student looks for a partner who has a card that matches the card (answer questions);
5. Every student who can match the card before the deadline is given points;

6. After one round of cards shuffled again so that each student gets a different card than before;
7. And so on;
8. Conclusion / closing.

RESEARCH METHODS

1. Data Collection Techniques

In this study, the data collection tools used by the author are:

a. Observation Sheet

Done to observe the activities of students and lecturers during the learning process. Learning is said to be effective if the results of observation of learning activities are included in both categories.

b. Test

Done to determine the level of student understanding of vocabulary mastery. This test takes the form of multiple choices about machining terms, such as parts of car, tools, health and safety at work. These questions are taken from the module "Strokovna Terminologija V Tujem Jeziku - English for Mechanical Engineering (2009)

2. Data Analysis Techniques

This analysis was conducted to determine the success or failure of the actions taken in this study. To find out the percentage of students' abilities done by the formula Arikunto (2008) as follows:

a. Individual absorption

PPH: $x \ 100\%$,

PPH is a percentage assessment of individual results

With student completeness criteria as follows:

0 - 69 = students have not yet finished learning

70 - 100 = students have finished learning

b. Classically average value =

Where :

= Average value

= Number of values

= Number of students

From the description above it can be seen that students who are not yet finished and have mastered vocabulary mastery by knowing the percentage of their learning outcomes.

Classically it can be identified by the formula from (Sudjono, 2009: 43):

$P = x \ 100\%$

Information :

P = Number of percentages that have changed

F = Number of students experiencing changes

n = Total number of students

Based on mastery learning, students who get a score of dikatakan 70% are said to be successful or complete and if the mastery learning in the class has reached 70% then classical learning completeness has been achieved.

To find out the success of students and lecturers in using the Make A Match method the formula can be used: Observation Results = $x \ 100$ maximum score for number of observations

0 - 59 = Less

60 - 69 = Enough

70 - 89 = Good

90 - 100 = Very Good

RESEARCH RESULT

The results showed that in the pretest the researcher obtained data from 30 students, only students who achieved completion scores with a percentage of 60%, and 12 students obtained incomplete grades with a percentage of 40% with an average value of 65. Student difficulties were analyzed and then learning by applying the Make A Match method in cycle I. The results obtained increased from 30 students there were 22 students who achieved completion scores with a percentage of 70% and 8 students did not achieve completion scores with a percentage of 30% with an average value of 69. This value is still relatively low, then it must be continued to cycle II. After this cycle II, it has increased from 30 students to only 4 students who have not yet completed with a percentage of 13% and 26 students who have completed with a percentage of 87% with a classical average value of 75. While the percentage of student observations on the test initial of 60%. Thus it can be concluded that the use of the Make A Match learning method can improve students' Vocabulary mastery.

I. Cycle Description

From the results of the analysis of students' activities and participation before conducting research, researchers conduct reflections on the English course as follows:

a. Pre-cycle

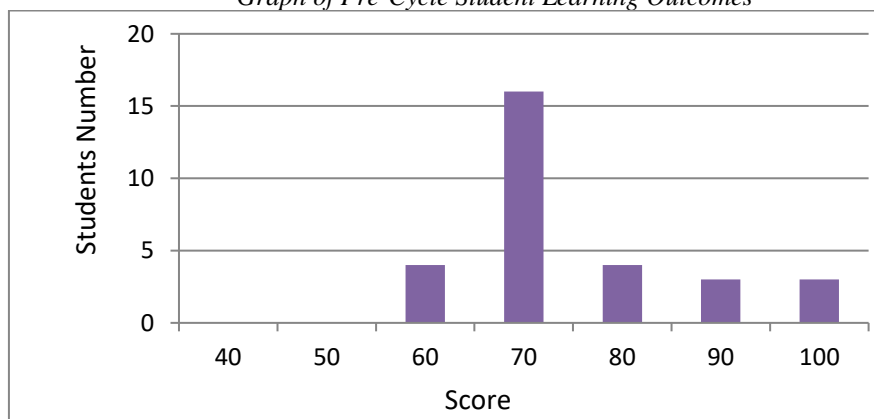
Based on pre-cycle learning, student learning outcomes are not satisfactory. In this case the authors present the following data:

NO	Score (x)	Number of Students (f)	Total (fx)
1	40	4	160
2	50	6	300
3	60	2	120
4	70	12	840
5	90	6	540
Total		30	1960
Average		65	

Score Information

- The highest score : 90
- The lowest score : 40
- Average : 65
- High score/ completion value (70) : 18 students (60 %)
- Low score/ under completion value (70) : 12 students (40 %)

Graph of Pre-Cycle Student Learning Outcomes



a. Cycle 1

Generally, it can be said that the implementation of learning improvement went quite well, with an average value of 69

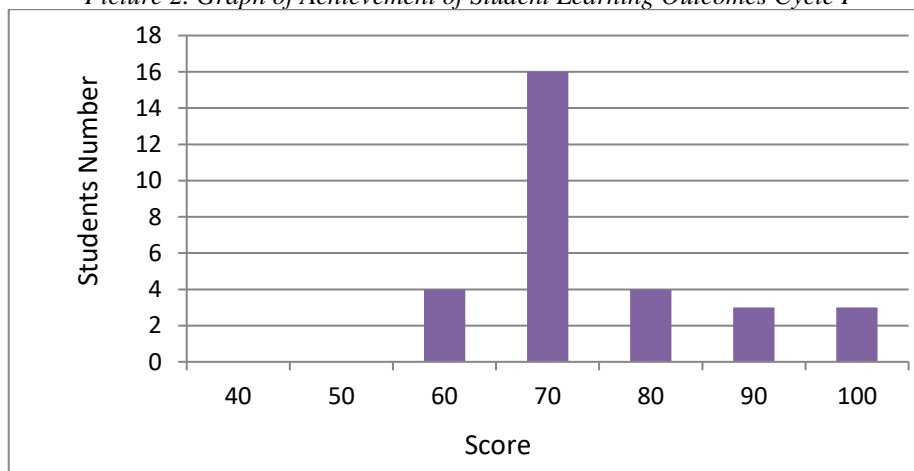
Table 2. Cycle I Student Learning Outcomes

NO	Score (x)	Number of Students (f)	Total (fx)
1	40	0	0
2	50	8	400
3	60	0	0
4	70	10	700
5	80	12	960
6	90	0	0
7	100	0	0
Total		30	2060
Average		69	

Score Information :

The highest score : 80
 The lowest score : 50
 Average : 69
 High score/ completion value (70) : 22 students (75 %)
 Low score/ under completion value (70) : 8 students (25 %)

Picture 2. Graph of Achievement of Student Learning Outcomes Cycle I



Finding Description

The implementation of each learning activity that is the center of attention in good observation can be described as below:

1. Activation of students
 Implementation Lecturers ask questions about the material being studied, observation value 4, good category.
2. Class processing
 The lecturer activates the Student to focus on the material studied observation value 3, enough categories
3. Implementation of questions and answers
 Lecturers use the question and answer method to discuss material to provoke student opinions, observation value 2, lack category.

4. Implementation of questions and answers

Lecturers use the Make A Match method. Observation value 4, good category.

5. Exercise

Lecturers carry out exercises to help students master the material. Observation value 2, less category.

At the end of the implementation of teaching improvement, the lecturer conducts formative tests. From the formative test results it is known that the average grade of the class is 69. The results of this student learning show that the improvement of new student learning is able to lead students to middle achievement.

a. Cycle 2

Generally, it can be said that the implementation of learning improvement went quite well, with an average value of 75.

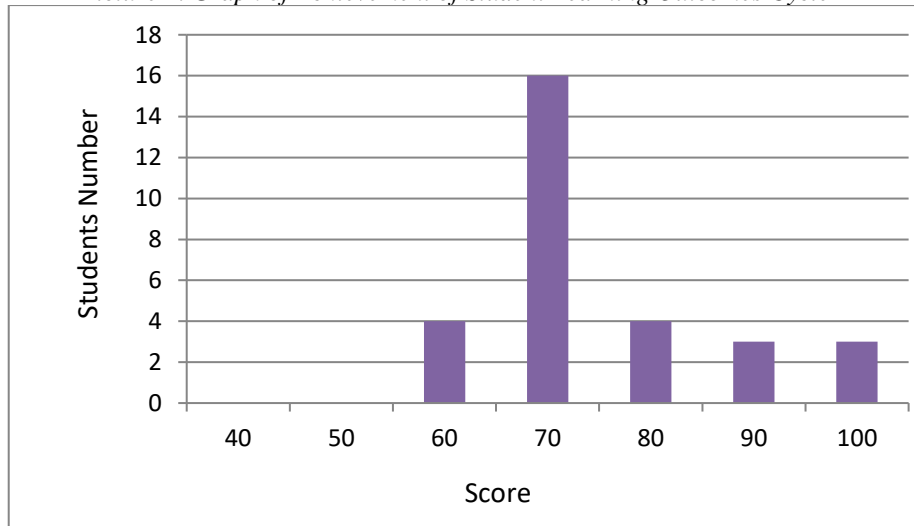
Table 3. Cycle 2 Student Learning Outcomes

NO	Score (x)	Number of Students (f)	Total (fx)
1	40	0	0
2	50	0	0
3	60	4	240
4	70	16	1120
5	80	4	320
6	90	3	270
7	100	3	300
Total		30	2250
Average		75	

Score Information :

- The Highest Score : 100
- The Lowest Score : 60
- Average : 75
- High score/ completion value (70) : 26 students (87 %)
- Low score/ under completion value (70) : 4 students (13 %)

Picture 2. Graph of Achievement of Student Learning Outcomes Cycle II



Description of Findings

The implementation of each learning activity that is the center of attention in good observation can be described as below:

1. Student Activation

Implementation Lecturers ask questions about the material being studied, observation value 4, good category.

2. Class processing

The lecturer activates students to focus on the material learned observation value 3, enough categories

3. Implementation of questions and answers

Lecturers use the question and answer method to discuss material to provoke student opinions, observation value 4, good category.

4. Implementation of questions and answers

The lecturer uses the Make A Match method. Observation value 4, good category.

5. Exercise

Lecturers carry out exercises to help students master the material. Observation value 4, good category. At the end of the implementation of teaching improvement, the lecturer conducts formative tests. From the results of formative tests it is known that the average grade of the class is 75. Student learning outcomes show that improvement in student learning and able to lead students to good achievement.

DISCUSSION

Based on the results of the data obtained by researchers shows that in the initial test (pretest) the average value of the class is 65 and is still far below the value of completeness and said to have not been successful either individually or classically. Then in the first cycle obtained the average value of the class increased to 69 and the value is still below the expected completeness value.

In cycle II, the researcher returned to using the same method, the Make A Match method with the same material in order to improve the deficiencies found in cycle I. In cycle II there was an increase after the action was taken and the test was given to students so the average obtained the grade average increased to 75 with a passing grade of 87%. Because students' vocabulary mastery ability has increased in cycle II in learning English using the Make A Match method implemented by researchers, the cycle in this study is considered complete.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of research that has been conducted on increasing mastery of English Vocabulary of students by using the Make A Match learning method in VA class, the researcher can conclude that the results of research conducted with the Make A Match method can improve student learning outcomes in English. This can be seen from the results of research while in class;

1. In the preliminary test the researcher obtained data on the results of the student's average score of 65 and the classical percentage of 60%. And the data is still far below the desired standard value
2. In cycle I has not achieved the desired results, where there are still many students who have not experienced an increase in Vocabulary mastery in English lessons using the Make A Match learning method to score 69 with a classical percentage of 75%
3. In cycle II the results of the average value obtained has increased to 75 with a classical percentage of 87%
4. From the research results prove that the role of lecturers in the learning process is very

important, with the selection of appropriate methods such as the Make a Match learning method can improve students' Vocabulary mastery in English.

Based on the results of this study, the researchers conveyed the following suggestions:

1. The use of appropriate learning methods during the learning process in English in particular is very important because it can improve the ability and student learning outcomes.
2. It is expected that the campus can be equipped with adequate facilities and infrastructure to support student learning processes to be more effective.
3. For lecturers are expected to be able to master the subject matter to be studied beforehand so that the learning process runs smoothly.
4. It is expected that students will do more exercises at home and also ask lecturers more frequently during the learning process so that students are more active in class.

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