The Effect of Make a Match Technique Toward Students’ Vocabulary

(Pengaruh Teknik Make a Match Terhadap Kosakata Siswa)

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Abstract (Bahasa Inggris)
This research intends to find out whether the application of Make A Match technique can enhance students’ vocabulary achievement at SMA Negeri 4 Gorontalo. It was conducted to first grade particularly class X IPA 1 as the sample of this research. The researcher used pre-test post-test design in order to find out the significant difference of students’ vocabulary achievement before and after the application of Make a Match technique. The quantitative method is applied for this research due to this type of research is explaining a phenomenon by collecting numerical data that are analyzed statistically. As the result, after application of Make a Match technique it can be seen that the students’ vocabulary increased. It showed based the result of mean score in pre-test is 16,25 and in post-test increased to 19,3. In addition, the application of this technique made the students actively participate and focus on the vocabulary learning process, interested to follow the learning process due to the learning media and the role that they play during the section. Finally, the students can build communication and corporate with other students.

Keywords:
Vocabulary, Make a Match Technique, Students

Abstrak (Bahasa Indonesia)

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1. INTRODUCTION

The vocabulary is one of the most crucial aspects of learning English. If students have a limited vocabulary, they will struggle to articulate their feelings and ideas to others. Renandya & Ricard (2002) argued that vocabulary is a fundamental aspect of language ability and offers a substantial foundation for how well language learners speak, listen, read, and write. In addition, Rachmatillah (2019) noted in their study that learning English without vocabulary could cause individuals to have difficulty in speaking and prevent them from replying to certain questions in both oral and written form. It can be concluded that vocabulary is a crucial thing that need to mastery in order to learn a language.

In learning English, vocabulary is a basic need before mastering the four skills: speaking, listening, reading, and writing. In instances, according to Sinaga et al. (2018) stated on her study that when vocabulary is taught as an integral part of reading competence, the teacher could present a paragraph from a short story and question students to identify the word's synonym or antonym. There is a connection between vocabulary and language proficiency; thus, it is safe to assume that students cannot become proficient in other areas until they have mastered vocabulary.

Besides, in Indonesian curriculum which is contained in the regulation of Permendikbud No. 37 tahun 2018 about Standard of Content for senior high school level. The standard competence is achieved by applying indirect teaching includes providing a role model through text, habit, school culture based on the characteristics of subject and students need and circumstance. In instances, in senior high school there are several reading texts are thought such as descriptive, narrative, and recount text. Through this fact, in order to understand the reading text, the students require to mastery the vocabulary. On the other hand, being mastery to vocabulary also will help the students to analyze the text by answering some comprehending questions and determine the synonym and antonym of certain words. Indeed, without having good vocabulary mastery, the students will face difficulty in understand the text and will affect their score in English subject.

Based on the preliminary observation to the students of class X at SMA Negeri 4 Gorontalo, the researcher discovered that the students showed to possess low level of English vocabulary. For instance, this research had them read English texts and it was showed that they often made mistakes in pronouncing words and kept questioning about the words' definition in a text. Moreover, the several students also said that learning English become difficult to them because they have limited vocabulary in order understand the teacher instruction or express their ideas. In additional, through the preliminary observation, the researcher also found that the English teacher less in apply some method or technique while they are teaching in class. Hence, it will make the English learning process not efficient and they students will easily get bored.

However, teacher should be able to select and implement an effective strategy or technique in the classroom. Utilizing a method or technique will assist students in actively and effortlessly comprehending material. Additionally, some strategy or technique will assist students learn language more efficiently and engagingly. For instance, the teacher could use Make a Match technique to assist students expand their vocabulary. Make a Match technique is a technique developed by Curran (1994) for cooperative learning. Make a Match could be utilized in the teaching and learning process by providing flashcards to students. The student who is given a card must find the proper partner within a set time limit. Whoever can find a compatible partner immediately will be rewarded, while those who cannot find a suitable spouse within a given time frame will be punished, as set by the teacher.

Furthermore, as cited in Suprijono (2009), the Make a Match technique can provide benefits in the vocabulary acquisition process, such as making students feel pleased and relaxed in class. A further benefit of this style is that students become more engaged, confident, and interested in the learning process. This technique also will help the students express their idea or giving more feedback. Last, this technique is simple and not need a lot of preparation to apply in class. Based on the advantages of this technique it can be conclude that this technique could be the best technique toward the students’ vocabulary achievement.

Previously, there are several researchers that have conducted the research related to vocabulary mastery by using Make a Match technique. The first researcher is Rachmatillah (2019) conducted a research entitled “Facilitating Students English Vocabulary Learning Using Make a Match Technique: A Case Study At The Eighth Grade Smp Negeri Prigen”. The research findings showed that by using Make a Match technique in teaching vocabulary is quite successful. The students can be easy to get the new vocabularies and understand the material through Make a Match technique. In addition, the students feel more interested and active in learning English. Conversely, this research is merely concerned on students vocabulary achievement by using Make a Match technique and restricted on noun vocabulary.

In addition, Utami et al. (2020) conducted a study titled "Improving Students' Vocabulary Through Make a Match Technique." The results of this study revealed that the Make a Match Technique improves students' vocabularies. The Make a Match Technique is an effective and engaging teaching and learning practice that
could encourage students to be more active, focused, and motivated in their vocabulary learning. The students actively participate in the learning process since they learnt cooperatively with their classmates, sharing their own thoughts about the meaning of vocabulary terms and identifying their card partner.

Based on the explanation above, it can be concluded that the application of Make a Match technique can give effect to the students vocabulary achievement. Therefore, the researcher interested to apply this technique in order to know whether this technique can give effect to the students achievement in SMA Negeri 4 Gorontalo.

2. METHOD
The aim of this research is to find out whether the Make a Match technique can enhance students vocabulary. Therefore, the quantitative method is the appropriate method to analyze this research. Sugiono (2016) on his study stated that quantitative method is a method in analyzing the data statistically and presented in numerical form to measure the data finding in order to answering the research question. Moreover, the result of this research will reveal by compare the result of pre-test and post-test.

POPULATION AND SAMPLE OF RESEARCH
This research is conducted in SMA Negeri 4 Gorontalo and the population of this research is the students at ten grade that consist of five classes which are XI IPA 1, X IPA 2, X IPS 1, X IPS 2, and X IPS 3. Moreover, this research will use purposive sampling technique in choosing the sample. Consequently, class XI IPA 1 (20 students) is chosen as the sample of this research. This class is chosen due to based on the observation the students on this classes can not comprehend the text and have lack of vocabulary. Therefore, the students on this classes need vocabulary improvement in order to help them understand the reading comprehension material.

TECHNIQUE ANALYZING THE DATA
In this research, the data are analyzed by using statistical analysis by following several steps, as follow:

Normality Test
In this part, the data are analyzed by using normality test to find out the normality of the data. The step of normality test explain as follows:

1. Observation X_1, X_2, X_3,.................X_n become derivation Z_1, Z_2, Z_3,.................Z_n
   by using formula \( Z_i = \frac{X_i - \bar{X}}{S} \)
   - \( Z_i \): Standard of value
   - \( X_i \): Students score
   - \( \bar{X} \): Mean score
   - \( S \): Derivation Score

2. Each definition used the distribution of normal and then count the definition by using the formula = \( F(Z_i) - P(Z \leq Z_i) \)

3. Then, count the proportion \( Z_1, Z_2, Z_3, .........Z_n \) which small or similar with \( Z_i \). If the proportion is stated by \( S(Z_i) \), therefore:

   \[ S_{zi} = \frac{\text{amount of } Z_1, Z_2, .......Z_n \leq Z_i}{n} \]

4. Counting the deviation of \( F(Z_i) - S(Z_i) \) the set the absolute value.

5. After that, determine the big value deviation and take as \( L_0 \)

6. The data called normal if \( L_0 \leq l_{list} \)
Testing Hypothesis

Testing hypothesis is used in order to determine whether the application of Make a Match Technique can enhance students vocabulary or not. The formula is:

\[
t = \frac{Md}{\sqrt{\frac{\Sigma x2d}{N(N-1)}}}
\]

Where:
- \(Md\): The difference mean score between pre-test and post test
- \(Xd\): the derivation of each sample \((d-Md)\)
- \(\Sigma x2d\): the total of square derivation
- \(N\): number of samples
- \(d.b\): The degree of freedom \((N-1)\)

Hypothesis Verification

The hypothesis verification is used in order to determine the result of the research, whether it is accepted or rejected. In this research, the level of significance of \(\alpha = 0.05\) is used. The formula of criteria of hypothesis testing is:

- \(H_0\) will be accepted if \(t_{\text{count}} < t_{\text{table}}\)
- \(H_1\) will be rejected if \(t_{\text{count}} > t_{\text{table}}\)

\(H_0\) = Make a Match Technique cannot enhance students vocabulary
\(H_1\) = Make a Match Technique can enhance students vocabulary

3. RESULT

Pre-Test

The pre-test held on 16th Mei 2022 and there are 20 participants follow the test. This test aimed to find out the participants ability in mastery the vocabulary before the Make a Match technique is apply to the learning process. The total of valid and reliable questions are 30 numbers. The result of the pre-test showed as follow:

Students’ Score in Pre-Test Data

| The lowest score | 9 |
| The highest score | 30 |
| The mean \((\bar{X})\) of score | 16.25 |
| The standard derivation \((S_d)\) of score | 4.9 |
| The range of interval class \((R)\) | 21 |
| The amount of interval class \((K)\) | 6 |
| The wide of interval class \((P)\) | 3 |

Moreover, the pre-test interval score is presented in the table that contained 3 parts. First, frequency absolute which the total number of students who got certain range. Second, frequency relative is the percentage of frequency absolute.

The interval frequency of Pre-test data

<table>
<thead>
<tr>
<th>No.</th>
<th>Class Interval</th>
<th>F Absolute</th>
<th>F Relative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>9 — 11</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>2.</td>
<td>12 — 14</td>
<td>6</td>
<td>30%</td>
</tr>
<tr>
<td>3.</td>
<td>15 — 17</td>
<td>6</td>
<td>30%</td>
</tr>
<tr>
<td>4.</td>
<td>18 — 20</td>
<td>4</td>
<td>20%</td>
</tr>
</tbody>
</table>
Result of Treatment

First Meeting (May, 17th 2022)

The result of first meeting showed the students feel surprise and excited toward the application of Make a Match Technique. At the beginning of meeting the researcher open the class with English instruction. However, not all the students cannot response the instruction well. This evidence proved that the students still have lack English vocabulary. In order to make the learning process understandable for all the students, the researcher switch the language into Indonesian.

Moreover, when the researcher explained the recount text most of the students familiar with the kind of text. Conversely, when the researcher gave the text entitled “Reformation of Indonesia”, the students still need help and time in order to comprehend the text. Furthermore, the Make a Match Technique applied after the students understand the text. Based on the observation during the technique application all the students feel excited toward the technique although they need much time in order to find out the pair who hold the appropriate card of question and answer. In conclude, the students can follow the learning process and the technique although they need much time and effort to be familiar with the technique. Finally, because the limited of time on this first meeting the researcher couldn’t ask the feedback from the students.

Second Meeting (May, 18th 2022)

The result of the second treatment is almost same with the first meeting, the students still feel difficulty in understanding the English instruction. As the result, the researcher switched the instruction into language. Moreover, after gave the recount text entitled “The Youth Pledge” the researcher help the students to comprehend the text due to most of them feel difficulty in understanding the vocabulary on the text.

However, when it comes to the Make a Match technique section the students feel excited to follow all the steps though the still need time to find out the pair of their card. At the third row, the students who hold the card change into assessor team and the assessor team play as question card holder until the fourth row.

Furthermore, before the class end the students gave feedback to the Make a Match technique. The students enjoy the learning process. It also can be seen that the all the students active in class due to all of them got role and actively participated in the technique application.

Third Meeting (May, 19th 2022)

The result on this third meeting, quite different from the first and second meeting. On this meeting the students did not need much effort to understand the text. In additional, the students also more familiar with the kind of text and the Make a Match technique application. It can be seen, through the application of the technique the students take their role as the card holder and excited to find out their pair.

Moreover, at the end of meeting the researcher tried to evaluate the new vocabularies that they have been learned on the third meeting. Based on their feedback, they learn several vocabularies especially related to people, place, and thing in recount text.
Fourth Meeting (April, 20th 2022)

On this the last meeting of treatment, it can be seen that all of the students enjoy the learning process which proved by feedback at the end of class one of the students stated that the use of Make a Match Technique in learning process is better than usual learning process that they got.

Moreover, on the section of Make a Match technique applied, the students just flow into the step. They feel more familiar with the step which proved by their initiative to start the row without any instruction. Furthermore, the students can easily find out the pair of cards that they hold and the assessor team work as their role to check whether the students just found the correct pair or not.

Furthermore, at the end of meeting the researcher do evaluation related to vocabulary that they learn on the last meeting. Based on the feedback, most of the students stated that they learn many new vocabularies along the four meeting of treatment.

Post-Test

Post-test is applied after the several Make a Match technique treatment are done. Moreover, the post-test held on May 21st 2022 which the result show on the table below:

<table>
<thead>
<tr>
<th>Students’ Score in Post- Test Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>The lowest score</td>
</tr>
<tr>
<td>The highest score</td>
</tr>
<tr>
<td>The mean (X) of score</td>
</tr>
<tr>
<td>The standard derivation (S_d) of score</td>
</tr>
<tr>
<td>The range of interval class (R)</td>
</tr>
<tr>
<td>The amount of interval class (K)</td>
</tr>
<tr>
<td>The wide of interval class (P)</td>
</tr>
</tbody>
</table>

Moreover, The interval score of post- test data is presented below, as follow:

The interval frequency of Post-test data

<table>
<thead>
<tr>
<th>Class Interval</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 – 12</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>13 – 15</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>16 – 18</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>19 – 21</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>22 – 24</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>25 – 27</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>28 – 30</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100%</td>
</tr>
</tbody>
</table>
Data Analysis

After analyze the result of pre-test and post-test data, it can be seen the differences of the result. The pre-test result shown the students lower score was 9 and the higher score was 30. However, in post-test result the students lower score was 10 and the higher score was 30. It can be seen that the score increased. Moreover, in pre-test the mean score was 16.25 and after applied the Make a Match technique the post-test mean score highly increased into 19.3. Based on the result, it can conclude that after applied the Make a Match technique the students vocabulary increased.

Normality Analysis of Pre-Test

In this research, Lilliefors method is used to analyse the normality of pre-test data. As a result of the normality testing, the researcher found the $L_0 = 0.15$. This value is obtained from the big value of $\sum F(Z_i) - S(Z_i)$. Moreover, the researcher uses the level of significance with $\alpha = 0.05$. The samples of this study were 20 students. The critical of value $L_{list} = 0.19$. It can be concluded that the data of pre-test was normal because $L_0 < L_{list}$ or $0.15 < 0.19$.

Normality Analysis of Post-Test

In analysing the normality data of post-test, the Lilliefors method is also used in this research. As a result of the normality testing, the researcher found the $L_0=2.71$. This value is obtained from the big value of $\sum F(Z_i) - S(Z_i)$. Moreover, the researcher uses the level of significance with $\alpha = 0.05$. The sample of this study were 20 students. The critical of value $L_{list} = 0.2$. It can be concluded that the data of post-test was not normal because $L_0 > L_{list}$ or $2.71 > 0.19$.

Testing Hypothesis

The researcher used t-test to analyse the result of pre-test and post-test. It can be explained detail as follows:

$$t = \frac{M_d}{\sqrt{\frac{\sum x^2d}{N(N-2)}}}$$

Arikunto (2009 p.325)

$M_d =$ the difference mean score between pre-test and post-test

$X_d =$ the derivation of each sample

$\sum x^2d =$ the total of square derivation

$N =$ number of samples

$d.f =$ the degree of freedom $(N-2)$

<table>
<thead>
<tr>
<th>N</th>
<th>Df (n-2)</th>
<th>Tcount</th>
<th>Tlist</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>18</td>
<td>5,998</td>
<td>2,101</td>
</tr>
</tbody>
</table>

Notes:

$N =$ The number of samples

$Df =$ Degree of freedom

$Tcount =$ The value acquired by the computation result of t-test analysis

$Tlist =$ The value acquired on the level significance $\alpha = 0.05$

Hypothesis Verification

In verifying the hypothesis, in this research use $df = (n-2)$ and the level significance $\alpha = 0.05$. The formula as follow:

- $H_0$ will be rejected if $Tcount < Ttable$
- $H_1$ will be accepted if $Tcount > Ttable$

To get value of tlist the researcher used the statistical formulation of tlist by Siregar as follow:
\[
\begin{align*}
N &= 20 \\
Df &= N - 2 \\
&= 20 - 2 \\
&= 18 \\
Tlist &= (\alpha^{1/2}) (n-2) \\
&= (0,05^{1/2}) (18) \\
&= (0,025) (18) \\
&= 0,025 \cdot 18 \\
&= 2,101
\end{align*}
\]

\[\text{ttest higher than Tlist : } 5,998 > 2,120\]

Based on the statistical formulation of tlist, it acquired the value of tlist was 2,120. It can be seen on the table of distribution two tile test \(\alpha = 0,05 = 2,120\).

After determining the value of item that shows on the table and calculation above, based on the data result, it proved that the hypothesis \((H_0)\) rejected and the \((H_1)\) was accepted. \(T_{count} = 5,998\), and \(t_{list} = 2,120\). Therefore, the formulation of the hypothesis can be determined \(t_{count} > t_{list}\) or \(5,998 > 2,120\).

4. DISCUSSION

This research is conducted to figure out whether Make a Match technique enhance students’ vocabulary. This research conducted at Ten Grade of SMA Negeri 4 Gorontalo. Based on the result of pre-test, treatment, and posttest it can be seen that after the application of Make a Match technique can enhance the students vocabulary increased from mean score 16.25 to 19.3. The result proved that Make a Match can make the students easy to gain more vocabularies.

Based on research finding, through the application of Make a Match technique there are several factors that make this technique succeeded in improving the students vocabulary which explain as follows:

First, the technique is better than conventional learning process. This evidence proved by the first meeting of treatment when the researcher introduced the Make a Match technique the students feel excited to follow the step. This technique is quite new to the students and different, therefore the students motivated to being active in learning process. Sinaga et al. (2018) also stated on her study that Make a Match Technique make teaching and learning process in the classroom interesting and pleasing. In additional she also defined that the technique changed the passive learning into the active learning. Moreover, the learning become active due to on this technique used card as the learning media which make the students become more interested to follow the learning process.

Second, this technique made optimize the vocabulary learning for all the students. This evidence can be seen on the treatment, which all the students have important role on this technique. The first group hold the question card, the second group hold the answer card and the third group as the accessor. By divided the students into these group make them feel important and focus to the vocabulary learning process. Moreover, in the other row of Make a Match technique the students’ role change into the other role. In instance, the students who hold the question card change the role to hold the answer card or become the accessor team. By shuffled the students’ role make the students not bored along the learning process. This proof is also justified by Afriani (2014), who stated that using the Make-A-Match technique to teach vocabulary in the classroom makes it easier for students to remember the vocabulary they have learned. It is also stated that the technique will help students increase their vocabulary and emphasized that learning is enjoyable.
Third, Make a Match technique support the student as the center of learning activity. Based on the application of Make a Match Technique in treatment, it can be seen that almost all the activity done by the students not teacher. The teacher only gives instructions and the students do the step by themselves. This kind of learning will give opportunity to the students to become independent learner who find out their appropriate pair who hold the match card. In additional, this technique also helps the students to build communication with other students. This is happened because the students need to communicate in order to find out their card pair. Moreover, this evidence also supported by Huda (2013) who stated on his study that Make a Match can give opportunity for the student cooperation with the other people in teaching and learning activity.

Furthermore, through the application of Make a Match Technique it can be seen there are several advantages in order to enhance the students’ vocabulary. First, the application of this technique makes the students enjoy and interested in learning process. This evidence also supported by Curan (1994) which state on her study that Make a Match Technique is a learning concept or a particular topic in an interesting classroom atmosphere and using this technique, students will find interesting topic for learn. Second, the students are motivated to be active in learning process due to the role of each group on the technique. Third, the students are easily to remember the vocabulary because the teacher use card as the learning media. Finally, this technique helps the students to cooperate with other students and build the communication through Make a Match technique application.

Beside the advantages, the researcher also found the disadvantages during the application of Make a Match technique. First, the students need much time in order to find out their card pair. This is happened for the first and second meeting due to the students need time to understand the vocabulary on the card. However, on the third and fourth meeting the students can find out their card pair easily because they just familiar with the technique and got vocabulary on previous meeting. Second, the researcher needs to make a clear instruction. On the first and second meeting the students need effort to understand the English instruction therefore the researcher switch the language. This evidence supported by Lie (2007) define on his study that it needs guidance from the teacher to do this activity. If the teacher does not guide students well, there will be many students who find it difficult to match their partner cards. Conversely, on the third and fourth meeting the students can understand the instruction well. Finally, because the application of Make a Match Technique takes take, for first meeting of treatment the research could not ask the feedback from the students. On the other hand, on the third and fourth meeting the researcher got the feedback because the application of Make a Match technique no longer takes time due to the students familiar with the vocabulary and the technique itself.

Despite the disadvantages, the application of Make a Match technique still has many advantages and proved can enhance the students vocabulary by compare the result of pre-test and post-test. In conclude, the implementation of Make a Match technique in English learning process can enhance the students vocabulary in SMA Negeri 4 Gorontalo particularly at X IPA 1.

5. CONCLUSION

The researcher concluded that the adoption of the Make a Match approach can increase students' vocabulary based on an analysis of data findings and a discussion of the results. According to the research findings, the implementation of the Make a Match technique provides various benefits to students during the learning process. First, the use of the Make a Match technique increased student engagement in the learning process. Second,
the technique piqued the students’ interest in following the learning process as a result of the learning material and their involvement during the portion. Lastly, students can develop interpersonal and communication skills with other classmates. Therefore, every student follows and concentrates on learning vocabulary.

Moreover, based on the result of pre-test, it showed that the students vocabulary score was still low. It is proved from the students mean pre-test score was 16.25 and after the implementation of Make a Match technique the result of post-test mean score increased to 19.3. As a result, it can be concluded that the application of Make a Match technique can enhance the students vocabulary.

REFERENSI
Utami, N., et al. (2020). *Improving Student’s Vocabulary through Make a Match Technique*. Tanjungpura University, Pontianak.