Improving the Students’ Vocabulary Mastery by Using Word Cloud at the Tenth Grade of SMK Negeri 1 Gunungsitoli In 2022/2023

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ABSTRACT
Vocabulary mastery is a skill that refers to a high level of proficiency in processing words in a language. The students at the tenth grade of SMK Negeri 1 Gunungsitoli lacked vocabulary mastery, so they found it difficult to understand texts properly and did not achieve the minimum competency criteria (MMC) that has been set at school. The purpose of this study was to improve the students' ability to vocabulary mastery. In improving students' vocabulary mastery, the researcher used Word Cloud and applied it in Classroom Action Research (CAR). This research was conducted in Cycle II, there were four steps in conducting research, namely: planning, action, observation and reflection. In Cycle I, there was no student who was classified in "very good level", there were two students (5.72%) in "good level". Instead of that, there were 19 students (54.28%) in "fair level", 14 students (40%) in "poor level". In addition, the average of the students' mark was 53.00. The results show that many students were at enough and less levels so it really needed to be improved in the next cycle. In Cycle II, there was 1 student (2.86%) in "poor level", there were 7 students (20%) in "fair level", there were 6 students (17.14%) in "good level", and 22 students (62.86%) in "very good level". In addition, the average of the students' mark was 86.42. The students' average mark was higher than the MMC that was 75. Based on the explanation above, it is concluded that the Word Cloud can improve the students' vocabulary mastery at the tenth grade of SMKNegeri 1 Gunungsitoli in 2022/2023.

Keywords: Vocabulary Mastery, Word Cloud, CAR.

Introduction
Mastery of English is an important aspect in the current era of globalization because almost all countries, including Indonesian, use English as the language of instruction in communicating. In mastering English, students must first master vocabulary so that it is easy to communicate with others. Thornbury (2002) in Manurung et al. (2021) explains that "without grammar very little information can be conveyed, without vocabulary nothing can be conveyed". In other words, the first thing that language learners need to master when learning a language is vocabulary, because when students only learn grammar without learning vocabulary, students cannot express what they want to convey. So vocabulary mastery is the key for students to understand what they hear, write and read at school and to communicate successfully with others.

Vocabulary is an important component in the process of achieving language because it is used for all language skills namely listening, speaking, reading, and writing Vitasmoro et al.(2019). This means that vocabulary is not only for constructing our words but also for supporting the four skills in language, and providing many of the foundations for students to speak, listen, read and write. Thus, vocabulary will be very useful in conveying ideas. For example, when students read simple texts in English, if the students' mastery of vocabulary is good it will be easy for students to capture the information or content of the text. When speaking and listening, if the student's vocabulary is good then the student can use his ability to communicate directly with other students who also use English. When students write, if the student's vocabulary is large, it is easier for students to compose a simple text in English. So, based on the explanation above, the researcher concludes that vocabulary cannot be separated from reading skills. To understand a reading text, students need to know a lot of vocabulary so that they are closely related to one another.

In the syllabus of Curriculum 2013 in tenth grade of SMK Negeri 1 Gunungsitoli has Core Competency 3 (Knowledge) which expects students to be able to understand, apply and analyze a text to improving vocabulary related to social functions, text structure and linguistic
elements related to science and related technology with related material. To achieve the target in the syllabus, the school has set Minimum Competency Criteria in tenth grade English lesson with a standard score is 75.

Based on the observations of researchers which were held on Wednesday, March 08th, 2023 there were several problems found in the teaching and learning process in understanding a reading text for students of SMK Negeri 1 Gunungsitoli in tenth grade. First, the limited vocabulary of students in learning English, so that students found it difficult to read and understand texts in English. Second, the students' motivation in learning English was low so that there was a lack of student activity in the learning process. Third, the ability of the students in mastering English vocabulary was still relatively low or has not yet developed. Fourth, the students had difficulty remembering new vocabulary in learning English. Fifth, the lack of use of attractive English vocabulary teaching media by the teacher caused the learning process to become monotonous and boring. Sixth, lack of the students’ understanding of learning materials. From some of the problems above, it affected the students’ ability to achieve the Minimum Competency Criteria (KKM), while they must pass the exam and got a score of 75. Many students did not reach this score and fail. Therefore, to solve this problem, the researcher collaborated with the English teacher to try to find the right strategy, method or media especially in vocabulary mastery.

Media is a strategy that supports the teaching and learning process that teachers can use. There are several teaching media available, one of which is the Word Cloud which can be used to increase student vocabulary. Word Cloud is useful for teaching English. Word clouds are developed from web-based social networking sites, which are websites that allow a common group of users to share information. Word Cloud is useful in teaching English. According to Mahmodi&Talang (2013) in cited Pratiwi&Andriani (2019)“Word Cloud affects long-term vocabulary retention positively and it can help both teachers, in presenting the materials, and learners, to improve their long-term vocabulary retention”. Pratiwi & Andriani (2019) entitled “Improving Vocabulary Mastery of the Eight Grade Students of SMP Negeri 2 Wagir-Malang Using Word Cloud in Reading Class”, it concludes that teaching English vocabulary using Word Cloud Media can improve students’ vocabulary mastery. In addition, according to Mahmodi&Talang (2013) cited in Pratiwi&Andriani (2019) also explained that “Word Cloud has a positive effect on increasing students' long-term vocabulary retention and can help teachers with delivering material”. Regarding the advantages of Word Cloud and the previous studies, the researcher is willing to learn more about Word Cloud to be investigated in study entitled: Improving the Students’ Vocabulary Mastery Using Word Cloud the Tenth Grade at SMK Negeri 1 Gunungsitoli in 2022/2023.

**Method**

In this research, Classroom Action Research (CAR) would be the method of the research. This kind of research has systematic procedure by teachers (or other individuals in educational setting) to gather information about, and to improve the ways educational setting involve teaching and students learning. Action and research are combined, they can serve as a means for individuals to personally strive to comprehend, enhance, and reform their own practices. According Sanjaya, (2013) cited in Jalaludin et.al (2021)Classroom Action Research (CAR) is one of the techniques so that learning managed by teachers/lecturers increased through continuous improvement. This means that learning quality must be evaluated from two perspectives: the learning process and the evaluation of learning outcomes/assessments. As a result, every lecturer is obligated to take action in the classroom at all times in order to improve the quality of learning. CAR is intimately linked to a lecturer's professional responsibilities, which comprise the core dharma of higher education, namely education and teaching Hayati et al., (2018) in cited Jalaludin et.al (2021).

Based on those explanations, it is concluded that action research or classroom action research is method that is used to improve the quality of teaching and learning condition in a class scientifically throughout systematic processes. So the researcher used CAR to overcome the problem of this research. The researcher tried to search about improving the students’ vocabulary mastery by Using Word Cloud at the tenth grade of SMK Negeri 1 Gunungsitoli in 2022/2023. Therefore, the researcher need help of the English teacher of the tenth Grade of SMK Negeri 1 Gunungsitoli as the teacher-collaborator to observe the students and the researcher’s activities during teaching learning process as requirement todo CAR. The object of this research is the students’ vocabulary mastery of explanation text by Using Word Cloud.

**Findings and Discussion**

The researchers performed the research for Cycle I and II consisted of four meetings; each cycle consisted of two meetings. Each meeting followed the procedure of CAR (planning, action,
observation, and reflection). In doing Cycle I, the researchers took two meetings. Both of the meetings were done in X-TKJ2 which consisted of 35 students and all of them were present at the time. In this cycle, each meeting was done with 2×45 minutes. The researcher did it on May and June 2023 were the first meeting did on Friday, 26th May 2023, and the second meeting did on Friday, 2nd June 2023.

The first meeting was done on Friday, 26th May 2023. At the first meeting, the researchers did some activities. It needed 2×45 minutes. The material which was taught to the students is about Narrative text with the title “Legend of Malin Kundang”. In planning, the researcher prepared some necessity such as prepared lesson plan, material, syllabus, attendance list, the observation sheet of researcher and the students activity and field note. After planning the researchers conducted the action in the classroom. Teaching-learning process consisted of pre-teaching—learning, whilst teaching-learning and post teaching-learning. The researchers entered the class and conducted the action.

The researchers was accompanied by a collaborator teacher to enter the class. The researchers greeted and asked about the condition of the the students and the students answered. The teacher-collaborator in the corner of the class observed all the activities of the students and researchers. Then the researcher asked one of the students to pray. After praying the researchers introduced herself. After that the researchers checked the attendance list and the students answered by raising their hands and finally the researchers motivated the students to focus and be enthusiastic about following the learning process. Those were some of the activities that the researcher did in pre-learning activities.

Next, the researchers continued whilst teaching learning activities. First, the researcher introduced the topic of learning by showing pictures related to the narrative text material (Legend of Malin Kundang) displayed on the powerpoint slides. It aimed to add information about the topics studied, researcher and the students exchanged ideas about what they knew and then compared the information. However, only a few the students could express opinions about the information they knew in the pictures showed by the researcher.

Then, the researcher showed students Word Cloud images in their own language displayed on the PowerPoint slides. Next, the researcher explained to students that Word Cloud includes content words from the text they read. After, that the researcher directed students to read and understand the narrative text displayed on the powerpoint slides. All students read the narrative text directed by the researchers. After that, the researchers asked the students to use Word Cloud to predict what the contents or keywords of the narrative text. The researcher explained to the students how to use and create Word Cloud from the text provided. Some the students understood and paid attention the explanation from the researcher. Since this was the first time for the students in class X-TKJ2 used Word Cloud, the researcher directed two students as representatives to try using Word Cloud and several other the students paid attention. In accordance with the directions of the researcher, the two students began to make Word Cloud in front of the class and were accompanied by the researchers. After the two the students create a Word Cloud, then they pasted the Word Cloud text they created.

Then they select the words that stand out from the resulting Word Cloud images they created and outline the essay. The researcher directed other the students to write the words/outlines that stood out from the text. However, only a few students who enthusiastically followed the directions of the researcher took part in the activity. Next, the researcher asked the students in pairs to compare two Word Cloud pictures to memorize as much English text as possible and to tell the text according to their views/opinions. Some the students followed the directions of the researchers and told according to their opinion from the narrative text. From the narrative text the students were able to recognize and added new vocabulary in English.

In post-teaching activities, the researchers direct the students to ask questions related to the material. Then the researcher gave answers to students' questions. Furthermore, the researcher and students concluded the material. Finally the researcher closed the class and greeted the students.

Observation

The observation sheet was divided in two parts, there were observation sheet of the researchers activities and the students’ activities. The teacher collaborator observed and wrote down all of the activities happened in the teaching and learning process. Based on the researchers observation sheet, there were several activities that were carried out and canceled at the first meeting in Cycle 1, as follows:

Done : 11 activities (61.11%) of 18 activities.
Undone : 7 activities (38.89%) of 18 activities.

Clearly, the entire of the researchers’ activities in teaching activities process are showed in Graphic I below:
The researchers just explained about the narrative text. Based on the observation sheet result that was explained previously, the researchers did some improvements in the next meeting, such as: the researchers motivated the students to be dare to express opinions and exchange ideas about the material conveyed by researcher. In addition, the researcher motivated the students to have curiosity about getting information from the material being taught by the researcher. The researchers directed the students to find vocabulary that stood out so that it was easy to remember. The researchers taught the students about unfamiliar words needed in the material.

In the second meeting, the researchers continued the activities from the first meeting because of the limited time of the first meeting. The time allocation used in the second meeting was 2 x 45 minutes. This meeting was done on Friday, 2nd June 2023. The learning material was same with the first meeting, that was the reading text “Legend of Malin Kundang”. The researchers has planned something before the teaching learning process was done, such as: the material, lesson plan, observation sheet and the last one was evaluation sheet. These all were planned for making the research done well.

After planning, the researcher conducted the action in the classroom. Teaching-learning process consisted of pre-teaching-learning, whilst teaching-learning and post teaching-learning. The researcher entered the laboratory and conducted the action. The observation sheet was divided in two parts, there were observation sheet of the researcher’s activities and the students’ activities. The teacher collaborator observed and wrote down all of the activities happened in the teaching and learning process.

The result of the researchers’ observation sheet activities in the second meeting in Cycle I was as follows:
Done : 13 activities (72.22%) from 18 activities.
Undone : 5 activities (27.78 %) from 18 activities.

The result of the researchers observation sheet above is viewed in Graphic 3 below:
but there were still things that the researchers did not do such as: The researchers are not quick enough to overcome the students' difficulties in making Word Cloud. Thus, created an unconducive situation.

Based on the students' observation sheet results, the students who were done and undone in following the teaching learning process can be described, they are: the students who were done activity consisted of 320(57.14%) and the students who were undone consisted of 240 (42.86%) from the total of activity the students.

The result is viewed in Graphic 4 below:

```
Percentage

<table>
<thead>
<tr>
<th>Cycle 1/Second meeting</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Done</td>
<td>57.14%</td>
</tr>
<tr>
<td>Undone</td>
<td>42.86%</td>
</tr>
</tbody>
</table>
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**Graphic 4.** The Percentage of Done and Undone the Students’ Activities at the Second Meeting of Cycle 1.

Based on the result of the observation sheet the teacher-collaborator found some weaknesses in the second meeting of Cycle I, such as: Fifteen (15) the students had difficulty to create a Word Cloud for the provided text and wrote an essay outline based on the words in the provided Word Cloud. Twelve (12) the students did not pay attention to the researchers in explaining the use of Word Cloud so that the situation in the laboratory was less conducive.

Beside on the weaknesses above, there were also strengths which were found by the teacher-collaborator at the second meeting Cycle I was: Twenty four (24) the students became active and interested in participating in the learning process. Sixteen (16) the students began to give their own opinions when the researchers asked them. Nineteen (19) the students gave a positive response to the material presented by the researchers.

After implementing the action above, the researchers evaluated the students' ability in reading comprehension by using Word Cloud. The researchers examined the students’ ability vocabulary mastery by giving some questions in multiple choice form. The result of their test is explained in Table 1 as follows:

```
<table>
<thead>
<tr>
<th>No</th>
<th>Level</th>
<th>Scoring</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very good level</td>
<td>85 – 100</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Good level</td>
<td>75 – 84</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Enough level</td>
<td>60 – 74</td>
<td>19</td>
</tr>
<tr>
<td>4</td>
<td>Less level</td>
<td>0 – 59</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>35</td>
<td>100 %</td>
</tr>
</tbody>
</table>
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**Table 1.** The Students’ Ability in Vocabulary Mastery Using Word Cloud in Cycle I in Second Meeting

It means the students were still unable to master vocabulary using Word Cloud. The result is viewed in Graphic 5 below:

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Percentage

<table>
<thead>
<tr>
<th>Cycle 1/Second Meeting</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Done</td>
<td>54.28%</td>
</tr>
<tr>
<td>Undone</td>
<td>5.72%</td>
</tr>
</tbody>
</table>
```

**Graphic 5.** The students' ability in vocabulary using Word Cloud in Cycle I in second meeting.

Based on the explanation above, the researchers concluded that the student's ability in vocabulary mastery using Word Cloud in Cycle I was still less, which means that Word Cloud was still unable to improve the students’ ability in reading narrate text. It was indicated by looking the KKM (Minimum Competence Criterion) of the English subject at the tenth grade, the KKM which was 75 points was not achieved by the students by looking at the average of the students mark above. Therefore, the researchers continued to Cycle II. It was also has been stated in the previous chapter, in Chapter III that whenever the students’ ability in vocabulary mastery using Word Cloud was not reached in Cycle I, the researcher decided to continue the research to the next cycle.

Based on the data above, the researchers concluded that the students were still unable to vocabulary mastery through using Word Cloud, she was continued it in the next cycle. However, researchers also made some improvements of the weakness of teaching learning process, as follows; The researchers invited the students to discuss how to overcome students' difficulties in carrying out the procedure for creating a Word Cloud. The students were able to write an essay outline based on the words provided in the Word Cloud. The researchers directed the students to pay attention and be able to control the students’ activities so that the situation in the learning process was conducive and did not disturb other the students.

In doing the Cycle II, the researchers took
two meetings. In this cycle, each meeting was done with 2 x 45 minutes. The first meeting was done on Friday, 09th June 2023, and the second meeting was done on Friday, 16th June 2023. The first meeting was done Friday, 09th June 2023. At the first meeting the researchers did some activities. It needed 2x45 minutes. The researcher taught the students by taking the narrative text with the title “The Legend of Lake Toba”. In planning, the researchers has planned something before the teaching-learning process was done, such as: preparing the material, lesson plan, observation sheet of researcher and students activity. These all were planned for making the research done well. After planning, the researchers conducted the action in the classroom. Teaching-learning process consisted of pre teaching-learning, whilst teaching-learning and post teaching-learning. The researchers entered the class and conducted the action. The observation sheet was divided in two parts, there were observation sheet of the researchers’ activities and the students’ activities. The teacher collaborator observed and wrote down all of the activities happened in the teaching and learning process.

Based on the researchers observation sheet, there were several activities that were carried out and canceled at the first meeting in Cycle 2, as follows:

Done : 16 activities (88.89%) from 18 activities.
Undone: 2 activities (11.11%) from 18 activities.
Clearly, the entire of the researchers’ activities in teaching process are showed in Graphic 7 below:

The result of the researchers’ activities above was found improve but there were still an activities that did not do such as: the researchers did not provide opportunities for students to ask questions about the material. Based on the observation sheet the students’ activities results, there were 350 (71.42%) who were done and 140 (28.58%) who were undone. Clearly, all the students’ activities in following the teaching-learning process are be showed in Graphic 6 below:

Based on the result of the observation sheet of the students’ found some weaknesses in the first meeting of Cycle II, such as: Ten (10) the students are still less active in expressing opinions and less active in the learning process. Twelve (12) the students did not understand and remember the new vocabulary related to the material text Legend of Lake Danau Toba. Beside on the weaknesses above, there were also strength which were found by the teacher-collaborator at first meeting of Cycle II was: Twenty-eight (28) the student’s are able to use and created Word Cloud and wrote essay outlines based on words in Word Cloud provided by researchers. Thirty (30) the student’s observed and pay attention to researchers so that the situation is conducive and orderly.

In the first meeting the researchers did not have enough time to take the evaluation to the students. Based on the observation sheet result that was explained previously, the researchers did some improvements in the next meeting, such as: The researchers again motivated the students and encourage students to express opinions and be active in the learning process. The researchers asked the students difficulties and helped the students learn to memorize new vocabulary using the Word Cloud. In the second meeting, the researchers continued the activities from the first meeting because of the limited time of the first meeting. The time allocation used in the second meeting was 2 x 45 minutes, this meeting was done on Friday, 16th June 2023. The learning material was same with the first meeting, that was the reading text “ Legend of Lake Toba”.

The researchers has planned something before the teaching learning process was done, such as: preparing the material, lesson plan, observation sheet and the last one was evaluation sheet. These all were planned for making the research done well. After planning, the researchers conducted the action in the classroom. Teaching-learning process consisted of pre teaching-learning, whilst teaching-learning and post teaching-learning. The researcher entered the class and conducted the action.
The observation sheet was divided in two parts, there were observation sheet of the researchers’ activities and the students’ activities. The teacher collaborator observed and wrote down all of the activities happened in the teaching and learning process. Furthermore, the result of observation sheet in the second meeting in Cycle II was as follows:

Done: 18 activities (100%) from 18 activities.
Undone: 0 activity

Clearly, the entire of the researchers’ activities in teaching activities process are showed in Graphic 8 below:

Based on the observation sheet the students’ activity results, there were 560 (100%) who were done and 0 student (0%) who were undone. Clearly, all the students’ activities in following the teaching-learning process are showed in Graphic 9 below.

Table 2
The Students Ability in Vocabulary Mastery Using Word Cloud in Cycle II in Second Meeting

<table>
<thead>
<tr>
<th>No.</th>
<th>Level</th>
<th>Scoring</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very good</td>
<td>85 – 100</td>
<td>22</td>
<td>62.86</td>
</tr>
<tr>
<td>2</td>
<td>Good level</td>
<td>75 – 84</td>
<td>6</td>
<td>17.14</td>
</tr>
<tr>
<td>3</td>
<td>Enough level</td>
<td>60 – 74</td>
<td>6</td>
<td>17.14</td>
</tr>
<tr>
<td>4</td>
<td>Less level</td>
<td>0 – 59</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>35</td>
<td>100  %</td>
</tr>
</tbody>
</table>

Based on the data above, the entire that students were able to vocabulary mastery using Word Cloud. In Cycle II, the students become more done, able and undone in the teaching and learning process. Moreover, the average of their mark was 80. It showed that the students were successful because their average mark was higher than the Minimum Competency Criteria (KKM), that was 75.

Discussion
In this research, the problem is “how can Word Cloud improve students' ability in mastery vocabulary?”. The general response is that the Word Cloud can improve students’ ability to vocabulary mastery by providing motivation to students and explaining to them about the advantages of Word Cloud, one of which is showing pictures and using word cloud web to display words from text.

So, the researchers applied it in class, the students were active in the teaching and learning process. The researcher conducted research in two cycles. In Cycle I, the average score of students in vocabulary mastery through the Word Cloud was 53.00 and in Cycle II the average student score is 86.42. Based on the average the students’ ability in each cycle, the researchers found the improvement of the students’ ability in vocabulary mastery. In addition, the researcher concluded that using Word Cloud can improved the students’ ability in vocabulary mastery.

Conclusion
Word Cloud is a keyword collection that displays unique words with sizes and colors that match their degree of importance. Word Cloud affects long-term vocabulary retention positively and can assist teachers, in presenting material, and helping students to improve long-term vocabulary retention. So that students experience several difficulties including, lack of understanding of students getting keywords when reading texts, and limited vocabulary of students so that they have difficulty remembering new vocabulary in learning English. In Cycle I, there were no students who could be classified in "very good level", there were two students (5.72%) in "good level". Instead of that, there were 19 students (54.28%) in "fair.
In addition, the average of the students' mark was 53.00. The results show that many students are at sufficient and insufficient levels so it really needs to be improved in the next cycle. After knowing the weaknesses above, the researcher continued using Word Cloud so that students could achieve predetermined results. In Cycle II, there was 1 student (2.86%) “poor level”, there were 7 students (20%) in “fair level”, there were 6 students (17.14%) in “good level”, and 22 students (62.86%) in “very good level”. In addition, the average of the students' mark was 86.42. The students' average mark was higher than the MCC that was 75. Students were able to reach the MCC, even the scores were more than the MCC and the researcher stopped and did not continue research in the next cycle. In other words, Word Cloud was successfully applied to solve student problems. Based on the explanation above, it is concluded that the Word Cloud can improving the students' vocabulary mastery in the tenth grade TKJ-2 at SMK Negeri 1 Gunungsitoli in 2022/2023.

References

March/, 2023.