

Word Ladder Game in Teaching Vocabulary: An Experimental Study in Indonesia

Reski Ramadhani¹, Siti Nuraeni Muhtar¹, Anugrah Imani², Yayan Carlian¹

¹State Islamic University of Sunan Gunung Djati Indonesia, Jl. A.H. Nasution No. 105, Indonesia

²Western Sidney University, Australia

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Abstract: This study is intended to know how Word Ladder game improves students' vocabulary mastery. This study was conducted at Junior High School in Indonesia. This experimental study employed a quantitative method with one experimental group and one control group. Then, the samples in both groups were tested by pre-test and post-test items. In the first meeting, it was administered 20 multiple-choices of vocabulary items as a pre-test. In the following four meetings, the samples in the experimental group received Word Ladder game as treatment, while the samples in the control group received conventional vocabulary practice. At the end of the treatment, the same vocabulary test was administered to the samples of both groups as the post-test to know the influence of the treatment. Then, the t-test was used to compare the means score of two groups. The result indicated that there was the statistically significant difference between vocabulary which was taught by using Word Ladder and by using the conventional method. It was concluded that the subjects who received Word Ladder game on vocabulary significantly improved their vocabulary mastery.

1 INTRODUCTION

Vocabulary is the main aspect of a language. Students can easily develop their idea if they have enough vocabularies. Alqahtani (2015) states that vocabulary is fundamental to a language. Furthermore, Hornby (1995) mentions that vocabulary is the word that people know to help them in learning a new language and use in conversation. It shows that vocabulary becomes the part of the language that cannot be separated from each other. In addition, vocabulary also determines the success of communication.

Based on the explanation above, it shows that many experts explained the importance of vocabulary for the language learner. It means that if students want to master a language, they have to master the vocabulary. In fact, English as a Foreign Language (EFL) students sometimes are less interested to learn English because they think it is difficult to understand. Besides, this importance of vocabulary does not make them aware and less of motivation to learn it. This problem occurs because they actually lack vocabularies. Achmad (2013) says that the phenomenon of insufficient English mastery

occurred, because of the lack English vocabularies owned by the students, and it does not make them understand either the oral or written English texts.

This problem happened in one of the schools in Indonesia as the preliminary research where students have difficulties in comprehending a text in English. They sometimes seemed puzzled when the teacher gave them a text in English. They tended to ask the teacher what the meaning of the words based on the text. It happened because they did not have enough vocabularies. Consequently, it needed more time to discuss because they deeply needed to understand what they read. This problem appeared because the teacher used to apply the traditional strategy in teaching vocabulary to students. Students only asked to memorize the vocabularies so that students were bored in learning English. In addition, it can be seen from the resulting score of students. Most of the students only got score 60, which is less than enough. It means that this problem needs the solution by finding the appropriate strategies in teaching vocabulary so that students are actively engaged in learning English and they can comprehend what they learn.

There are some strategies that can be used in teaching vocabulary. One of them is a game. The

game is able to encourage students to learn the language quickly. Rohani & Pourgharib (2013) say that students learn new vocabulary more quickly if the process of learning is relaxed and comfortable such as playing games. Furthermore, the game helps students in learning the language more easily (Derakhshan & Khatir, 2015). It means that the game is one of the strategies that can be used to make students more joyful and fun in learning a language, especially the vocabularies.

One of a research by Kestha & Al-Faleet (2013) show that the game is one of the effective strategies for teaching vocabulary because students' vocabulary mastery increased after the strategy has been implemented. It means games can encourage students to learn English and increase their motivation. However, the writer tries to find another strategy in teaching vocabulary by using Word Ladder game. As Amalia (2015) investigated that Word Ladder can improve students' vocabulary. But in this research, the writer applied the different design and method of the research. Besides, it used the different samples to know how Word Ladder can influence a student's ability in a different level of students in improving their vocabulary. Rasinski (2008a) said that Word Ladder game can motivate students in learning English because this game guides them how to remember the words easily. Therefore, It is expected that the research can be implemented in Indonesia to help students learning English well especially in increasing their vocabularies.

2 GAME

The game is an engaging way that can be used to teach English in the class. The game is also used to address student's needs. As Rohani & Pourgharib (2013) state that games are a great way to encourage students in learning English in the class and it helps them to remember and absorb some information than if they learn with the simply studying that is usually used in the class. It showed that games can stimulate the students and attract them to participate in teaching learning process and also aid the teacher to create a context in order to make the language more useful and meaningful. On the other hand, learning English especially for EFL students by using traditional technique might be provided less priority since the process does not interest them. But, it should be considered some factors before implementing the game in the class in order to gain the outcome based on students' need, such as choosing the game based on the number of students,

ages, abilities, durations and contents, and level of difficulties. However, teaching English especially vocabulary by using game is considered to aid learners develop and use the different context of words to make the process enjoyable. In summary, games are useful and great ways that may be implemented in the classroom.

2.1 The Advantages of Using Game

The game becomes one of the ways that can be implemented to help students to learn a language more joyful. In addition, games play the important role in students' development and language learning. In addition, implementing game is a great way to create a comfortable process of learning, increase students' motivation in learning, and encourage group work in order to make teaching-learning process more effective (Derakhshan & Khatir, 2015). Furthermore, According to Yiltanlilar (2015), using games in the classroom is the easiest way for the students to build their creativity, to imagine and to contact with the object around them and they can learn with their environment so whenever games are used in language classes, it encourages students' motivation. This means all the students have the same opportunity to be active in the learning process and encourage them to follow all the instructions from the teachers. Besides, it also helps the teacher to transfer the knowledge more effective.

The impact of the games is students can be easy to learn a language because they feel comfortable and think that learning a language is fun. In addition, it does not need much time to implement it because the teacher can use it in the beginning even at the end of the meeting to make children more relax while studying. Therefore, using games as a strategy in teaching a language can encourage many learners to learn target language easily and quickly.

2.2 The Disadvantages of Using Game

There are many advantages of games that can make teaching-learning more effective in order to help students easier in studying language, especially English. However, teachers have to be aware because games have a few potential pitfalls. There are some disadvantages of the game that have to be considered by the teachers, Lee (2014) explains the factors:

2.2.1 Planning and organization time

The purpose of games is to make teaching-learning process more relax and comfortable. But, it doesn't mean that all games have the pedagogical purposes. There are some variety of games that available to be implemented in the class. However, it is more time-consuming if the teacher wants to choose and design the appropriate games that can be applied in the class. Therefore, teachers need extra workload in preparing the games that support the materials.

2.2.2 Complexity of games can be distracting

Games can divert students' attention from the pedagogical goal. It is because games are structurally complex, they could have a dependence on games and their focus is not on the materials but in the games. It means the pedagogical purpose is not achieved.

2.2.3 Games can be viewed as busywork

Using game in teaching vocabulary demands students to do some activity that relates to informal interactions between them and teachers. In addition, some teachers think that it is unproductive busywork because most of the time the students do activities but sometimes they only focus on the games but not on the lessons.

2.2.4 Games require resources to develop

Teachers have to find many varieties of games which can be applied in the class. But, students can be bored if the teachers use the same games at every meeting. For some teachers, the availability of resources is one of the factors that can be a challenge. Teachers have to find many varieties of games that relate to the materials so that students are relaxed and they do not get bored and the pedagogical purpose are achieved.

3 VOCABULARY

The essential component of a language is words. It is known as "vocabulary", it is the material to create a language. Learning vocabulary is considered as the first step in learning a language because it aids students to reach the language proficiency. Kasim (2011) states that vocabulary is the essence of language that aid students in learning and it keeps all

the information. It can be said that to know the information from a language, vocabulary connects it to the brain and create the understanding of the information. Every learner needs a hard work to learn a new language because learning a new language needs a long process. Vocabulary becomes the essential part of it because it is central to language. If the learners want to be able to connect a language to other languages, their vocabulary must be rich. Vocabulary supports them to comprehend every message in a language. In the other way, the success of learning a language depends on the strategy or technique which is applied to help learners learn the target language easily.

In fact, learning vocabulary is considered as one the common obstacle for EFL students since students may not use the word properly based on its context. It means limited knowledge of words is viewed as the main problem. Vocabulary consists of the entire numbers of words in a language and their meanings (Hornby, 1995). Learners without a strong base of vocabulary may not be able to comprehend and use a language properly. Furthermore, they do not only know the words and their meaning but they also know how to recognize words effectively, use it in different contexts, and pronounce it correctly. It can be summarized that vocabulary is the first step that students must be recognized and comprehended in order to aid them to understand to kind of information from a language and also help them reach the language proficiency.

3.1 The Importance of Vocabulary Learning

Vocabulary is the central requirement that supports students in studying the language. Language cannot be separated from words because words link all skills used by the students. The importance of vocabulary can be shown from the need of understanding all messages and information which can only be accessed by words (Kasim, 2011). This means that if a number of vocabularies that students have are not adequate, they cannot comprehend all the messages and information from a language.

As Ferreira (2007) states that students have the ability to comprehend the message in listening, speaking, reading even writing only if they know the meaning of many words which are used in oral or written texts. Furthermore, knowing the knowledge of the words and having the ability to comprehend many words are the essential factors in language learning and the keys to mastery a language. However, having the adequate vocabulary

helps learners to learn a foreign language properly and effectively.

3.2 Vocabulary Mastery

Vocabulary and mastery are the elements of learning a language especially words. The term mastery can be defined as the ability of students in comprehending knowledge. So, vocabulary mastery is the ability of students in comprehending the words and their meaning and use them in a different context. In addition, vocabulary mastery is the fundamental knowledge of learning English. Nihayah, Yukesty, & Pujiati (2013) investigate that the learners can master a language if they master all the words. This is because words determine their success in understanding all the information from a language.

Willis (2008) also argued that students can be easier in developing their ability to express their idea, knowledge, and speech effectively if they try to build their vocabulary mastery. It means that vocabulary mastery helps students to show their ideas or thoughts in order to be able to understand the message or information from others.

Learning a language cannot be done successfully without the ability in learning the words so that the role of vocabulary mastery is to build students' ability in using the words that can be applied to communicate in oral even written text. Furthermore, after learning the vocabulary, it may result in the vocabulary mastery.

Meierding (2005) showed some levels of vocabulary mastery and it can be analyzed that there are two levels of vocabulary mastery where the first one is full mastery which provides the learners to have the ability to use the vocabulary especially in speaking and writing ability. The second is the second level where learners provide the ability to comprehend kinds of texts in reading the passage in order to improve their reading ability. The last level is called as the simple ability or mastery; it means they only use the words to understand the text that they want to read. Thus, vocabulary mastery is considered as the ability to use the kinds of words in different context in order to comprehend four skills in English; those are listening, speaking, reading and writing skills.

4 WORD LADDER GAME

Word Ladder is one of the vocabulary games that helps engage all the learners in the learning process. According to Rasinski (2008), Word Ladder is one of the great games that teacher can use in building student's decoding, phonics, spelling, and vocabulary skills. From that definition, it showed that Word Ladder does not only improve a number of words of students but also provide the understanding of the words such as how to spell the words and how they use the phonetic symbols. This game is very useful for the students in order to increase their vocabulary. As Rasinski & Zutell (2010) say that Word Ladder is a game that focuses on word building for students which are guided by the teacher or on their own, begin with one word and build the new words by changing one or more letters. It means this game builds students' understanding of the words and not only their meaning but also the concept of the words.

The focus of this game is how students improve their vocabulary effectively. This game helps the student to learn new words and they are unnecessary to memorize it. Besides learning the new words, students also learn how to cooperate with each other in finishing the games. Word Ladder can be used by the students of any age and it also can be done independently by the students.

According to Rasinski & Zutell (2010), there are some procedures for implementing this game in the classroom:

- Divide students into some groups by playing the game.
- Start with choosing the words that can be used that consist of 5-7 words.
- Draw a ladder on the board that is used for the game.
- List all the answers for the ladder that is the words for each rung in random order on the board.
- Start with the first word and make some clues that relate to the next words. The aim is to help students to change the words.
- At each new word, students get two clues: the kinds of changes they need to make to the previous word ("change the first letter," "change the vowel," and so on) and a definition of or clue to the meaning of the word.
- In helping the students, add your own clues to give students extra help in working the game.

- If students are stuck on the particular rung, you can say the word aloud and see if the student get it or can spell it correctly by making appropriate changes in the previous word.
- Challenge students to come up with alternative definitions for the same words.
- Make sure that all students work together in finishing the game.

5 METHOD

5.1 Design

The quasi-experimental design was used in this study, where the sample of second-grade students in Junior High School was assigned to the experimental and control groups with random sampling. There were two groups that were taken for this study. First, it was the experimental group which was teaching vocabulary by using Word Ladder game, and the second was the control group in which was teaching by using the translation method.

5.2 Participants

The population of this research was the eighth-grade students of Junior High School in Indonesia. The selection population was narrowed by a sample. This sample only took two classes from the four existing classes, one as the experimental group and one class as a control group. The classes were chosen by using a random sampling technique in which choosing the classes had the opportunity as the sample with the same level of proficiency of English consideration. The participants consisted of seventy-six students and one class consisted of thirty-eight students.

5.3 Instrments

5.3.1 Validity of Test

The validity of the test is guaranteed by the validity test to know the appropriateness of the instruments before disseminating to the real sample. Furthermore, to know the validity of the test, it is used the Anatest. The research instrument was given to the same grade but different classes which had the same level of proficiency of English consideration.

5.3.2 Pre-test and Post-test

To make sure the validity of the tests, a validity test is conducted. Both experimental and control groups were administered to the pre-test and post-test. The pre- test was conducted in both experimental and control groups to show students' basic of knowledge and vocabulary which was aimed to show the uniformity in the results. In addition, the implementation of pre- test is conducted in class as a standardized test which has the requirement of validity and reliability test.

Then, post-test is used to know the significant improvement of teaching vocabulary mastery by using Word Ladder. Besides, it determines whether the independent variable influences the outcome or not. This post-test is given to both of experimental and group classes.

5.4 Research Procedure

Before conducting the research, the instrument has been prepared. In the research, the class was divided into two classes, experimental and control classes. Before giving the pre-test, the writers conducted the validity test to know the appropriateness of instrument which is given to the real sample to know the students' ability and the problem that might be faced in the real research. The research was conducted in three weeks where the treatment was held in four meetings.

In the first meeting, experimental and control classes were given pre-test with the same instruments. There are twenty questions in a multiple-choice item about vocabulary mastery that must be answered by the students in the available sheet. Then, students had thirty minutes to finish the test. Then, after given the pre-test, the games were implemented in teaching vocabulary for both of classes. Meanwhile, the experimental class was taught using a Word Ladder game while the control class was taught by using the translation method. The treatments are implemented for four meetings and both of classes had the same ability before doing the treatments.

In the last meeting, both of classes were given the post-test. The post-test was held after four treatments with different questions with the pre-test, it aimed to know the differences between students was taught by using Word Ladder game and them who taught by using the translation method.

6 FINDINGS AND DISCUSSION

After conducting the research, it can be shown as a result finding:

6.1 The Result of Pre-test in Experimental Class

In the first meeting, the writer gave the students a pre-test in order to know their ability before conducted the treatments. The result of pre-test showed that 9 students (24%) got good criteria, 10 students (26%) got fair criteria and 19 students (50%) got poor criteria. The result showed that most of the students got the poor score and only nine students who got the good score. It means that most of them had limited knowledge of vocabularies so that they could not answer the questions properly. They seemed puzzled when answered the questions.

6.2 The Result of Post-test in Experimental Class

After giving the pre-test, the writer conducted the treatment by using the Word Ladder game for four meetings. They were the different topics of vocabularies in every meeting. The writer explained how to play the Word Ladder game correctly and students try to implement the game by working with groups. Based on the post-test result, 12 students (32%) got very good criteria, 21 students (56%) got good criteria, 3 students (7%) got fair criteria and 2 students (5%) got poor criteria. Based on the result, it showed that most of the students got good criteria after the implementation of Word Ladder game in the class. It means Word Ladder influenced their vocabulary mastery. It can be seen from the figure below:

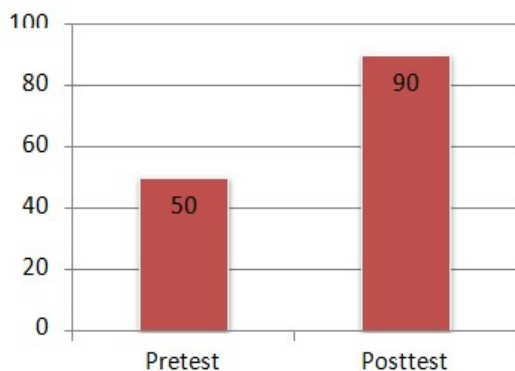


Figure 1: The Result of Pre-test and Post-test

From the figure, it showed that the score of students in pre-test only fifty and after implementing the treatment by using the Word Ladder game, their score significantly improved.

6.3 The Result of Pre-test in Control Class

Similar to the experimental class, students in the first meeting were also given the pre-test in control class with similar questions. The result of pre-test showed that 8 students (21%) got good criteria, 12 students (32%) got fair criteria and 18 students (47%) got poor criteria. The result showed that most of the students got the poor score and only eight students who got the good score. It means that most of them also had limited knowledge of vocabularies so that they could not answer the questions properly. It means the ability of students in the experimental and control classes were equal.

6.4 The Result of Post-test in Control Class

After giving the pre-test, the writer conducted the treatment by translation method for also four meetings. They were the different topics of vocabularies in every meeting. The teacher asked them to write the new vocabularies and find their meaning. Then, they were asked to memorize it. Based on the post-test result, 15 students (40%) got good criteria, 21 students (55%) got fair criteria and 2 students (5%) got poor criteria. Based on the result, it showed that most of the students got fair criteria and only fifteen students who got the good criteria after implementing the translation method in the class. It can be seen from the figure below:

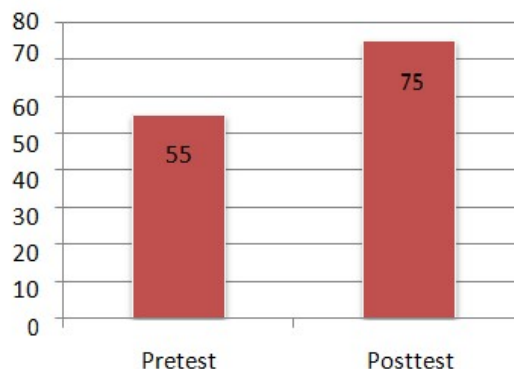


Figure 2: The Result of Pre-test and Post-test

From the figure, it showed that the score of students in pre-test only fifty-five and after implementing the treatment by using the translation method, their score improved but not significant.

6.5 The Result of Hypothesis

Table 1: The Result of Hypothesis

No	Aspect	Pre-test	Post-test
1	F _{count}	0.46	0.23
2	F _{table}	2.93	2.93

In determining the score of hypothesis, according to Subana (2005), the hypothesis: H_a (alternative Hypothesis) is accepted if $t_{table} < t_{count} > t_{table}$, in term H₀ (Null Hypothesis) is rejected. Based on the result above, it is known that T_{count} in pre-test is smaller than T_{table}. It means there are no significant differences of mean in both of pre-test. In other words, the hypothesis of pre-test is rejected and both of groups have equal ability in mastering the vocabulary before the treatment was conducted. On the other hand, the score of T_{count} in post-test is higher than T_{table}. In other words, there were differences of mean between two groups and the differences were significant. It means the result is significant, the hypothesis is accepted. It can be concluded that there is a significant difference between students' vocabulary mastery in experimental and control classes. Students who are taught vocabulary by using Word Ladder get better scores significantly than those who are taught by using the translation method.

6.6 The Result of Gain Score

Table 2: The Result of Gain Score

No	Aspect	Result
1	Experimental Group	0.5
2	Control Group	0.15

From the result above, it is obtained that the gain score of the experimental class is 0.5 and it is considered the medium degree. It means that students improved their vocabulary significantly. On the other hand, it is obtained that the gain score of control class is 0.15 and it is considered as the low degree. It can be concluded that students improved their vocabulary but not significant (Subana, 2005). In summary, teaching vocabulary by using Word Ladder is better than teaching vocabulary by using the translation method. Students were interested to follow the process of learning because it demanded

them to be active and creative so that they were able to reach the learning goal.

7 CONCLUSIONS

After implementing the experiment, it showed that Word Ladder game in teaching vocabulary can improve students' vocabulary mastery. It can be seen from the difference between students' pre-test and post-test score. There is a significant improvement in students' vocabulary after implementing the Word Ladder games. Also, in the post-test score, students significantly increase their score. There is a significant difference in teaching vocabulary by using Word Ladder game and by using the translation method. It can be seen from the result above. In the experimental class, students who got good score were nine students. After implementing the Word Ladder for four meeting, a number of students who got very good score increased. There are twelve students who got ninety scores and is considered as very good criteria.

While in control class, there are only eight students who got a good score. After implementing the translation method for four meetings, no one who got very good criteria. Then, the students who got good criteria of only fifteen students. It means, by using the translation method, students did not significantly improve their vocabulary mastery.

From the gain score, it is known that the score in experimental class get the medium degree (0.5) and the score in control class get the low degree (0.15). It means that students have the significant improvement of their vocabulary mastery after learning by using Word Ladder games than students who learn by using the conventional technique. In addition, for the result of the hypothesis, there are significant difference results.

It can be concluded that most of the students in the class are more comfortable and motivated in learning vocabulary by using Word Ladder game rather than by using the translation method. This result supports theory from Rasinski, (2008a) who says that Word Ladder game can motivate students in learning English because this game guides them how to remember the words easily. It means Word Ladder games a good way of teaching vocabulary that can be implemented by the teacher in the classroom and also students can independently do it in their free time.

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