

The Effectiveness of Using Cake-Learning Application on Students' Vocabulary Mastery At MA Nurul Habibi NW Liwung

M. Alwan Hadi¹, Muliani², Tawali³

^{1,2,3} FBMB, Mandalika University of Education, Indonesia

Corresponding Email: muliani@undikma.ac.id

Abstract: *This research is aimed to investigate the effectiveness of utilizing the CAKE-Learning Application in enhancing students' vocabulary mastery at MA Nurul Habibi Nahdlatul Wathan Liwung in academic year 2023/2024. The objective of the study was to know whether the CAKE-Learning Application is an effective tool to improve students' vocabulary mastery. The design of research method used pre-experimental study or quantitative method. The subject of the study was second grade student of MA Nurul Habibi Nahdlatul Wathan Liwung, consist of seven female students. The technique of collecting the data were pre-test and post-test. The instrument of the research used written test in the form of multiple choice. The procedure to analyze data were mean score, mode, median, and t-test was used according to Sudijono, 2007: 22. The data was analyzed using statistical formula of t-test. The result of data analysis showed that the value of t-test was 9.756 and t-table 1.501 so the value of t-test is higher than t-table in significance level of 005 (95%) with degree of freedom 7. It means that t-critical value was significant for this confidence level. And alternative hypothesis (Ha) was accepted and null hypothesis (Ho) was rejected. Therefore, it could be concluded that there was effective of using Cake-Learning Application on students' vocabulary mastery at MA Nurul Habibi Nahdlatul Wathan Liwung in Academic Year 2023/2024.*

Keywords: *Cake-Learning Application, Vocabulary Mastery.*

INTRODUCTION

English is very important in the Indonesian system of education. It is a compulsory subject taught to Indonesian students from junior to the university level or even English has been introduced from elementary school. Furthermore, in the independent curriculum general English learning is focused on students' language skills according to the stages of development of language skills.

Sadewo in Armina (2018) explain that vocabulary is one of element of language that should be learned and taught. Its mean without having vocabulary, the students have difficult to know the meaning of what they listen and read as well as to express their aim in communication. It is known that having limited vocabulary would limit the students in using the English skills such as writing, listening, reading and speaking. The more vocabulary we master, the better for academic skill it will be. Because everything that we say and statement, question and answer integral part of vocabulary mastery.

On May at 12 2023, the observation was conducted during 4 days to see how the teaching learning process conducted in this school. At the first day and second day I only observed the teaching media use by teacher, and the third and fourth days I observed focus on the competence of the students focus on vocabulary by looking at the instruction between teacher and students, the result of the students' exercises and school report. It is caused of the teacher never use interesting media in teaching process, therefor the students lack of vocabulary, especially students cannot pronouncing the word, for instance the students the pronounce between "Cat" and "Catch", the students write every sentence or question by using properly grammar, for instance students "Iam sicking" it should be "I am sick" the students do not know the meaning of word, for instance the students do not know the meaning unfamiliar word such as "find out" and "meet".

Every teaching learning process activity is required device to help the students and the teachers to understand every subject easly, and as we know there are some media and approach strategy cannot be stand-alone, they need others methods to apply



the media itself such as in this study Cake-Learning Application it does not work alone, that is way the researchers decided to choose appropriate method in others the skill or component of language can be delivered properly. In this study Cake-Learning Application work together with Problem based Learning (PBL) because Problem Based Learning (PBL) may help teaching learning process which used the media.

To solve the students` problem in learning vocabulary the researchers decided to use media Cake-Learning Application combining by Problem Based Learning (PBL) those are it may help the students be able to improve their vocabulary cover with all indicators. researchers tried to apply the Cake-Learning Application to make students have during teaching and learning process. Based on the problem previously, the researchers was interested in conducting the study entitle “The Effectiveness of Using CAKE-Learning Application on Students Vocabulary Mastery”.

METHOD

To obtained the data properly, this research was conducted by means of applying quantitative method to answer the statement of the problem. This designed part of free-experimental study according to (Kothari, 2004: 31). This study has only one class to be investigated without control class. This study wanted to know the effectiveness of using Cake-Learning application on students` vocabulary mastery toward student at second grade MA Nurul Habibi Nahdlatul Wathan Liwung in academic year 2023/2024. This research was only one class, it means that there wasn`t control group. Thus, the researchers used One-Group Pretest-Posttest design.

In this research there was no control group and the students was given pre- test before the researchers gave the instruction or treatment to the students` pre-test, treatment, and post-test. It means the researchers at the first meeting gave pre-test to the student in the form of multiple choice, then the researchers conducted the treatment before giving the student post-test. To the students and then, the researchers teach students by using Cake-Learning Application for period of time. At the end of period of time the writer gave post-test. The assessment needed to identify the effectiveness of using Cake-Learning application on students` vocabulary mastery.

Research Design

This research was designed in the form of free-experimental study regarding Kothari`s theory (2004: 31). This study has only one class to be investigated without control class. This study wanted to know the effectiveness of using Cake-Learning application on students` vocabulary mastery. In this research there was no control group and the students was given pre- test before the researchers gave the instruction or treatment to the students` pre-test, treatment, and post-test. It means the researchers at the first meeting gave pre-test to the student in the form of multiple choice, then the researchers conducted the treatment before giving the student post-test. To the students and then, the researchers teach students by using Cake-Learning Application for period of time. At the end of period of time the writer gave post-test. The assessment needed to identify the effectiveness of using Cake-Learning application on students` vocabulary mastery.

Subject of Research

The subject of this study used second grade of students of MA Nurul Habibi Nahdlatul Wathan Liwung that consist of one class. The total number of the students are 7 students as the subject to be investigated, the whole subject is female in this school.

Instruments

The instrument of the study is very important because as the tool to use in recognizing the ability of the students, the instrument usually divided into 2 tests there are written test and oral test. In this study the writer used written test. The test in this study in the form of multiple-choice cover with indicator of vocabulary, the total number are 20 questions with for options (a, b, c, and d). The students have to choose one of the right answers. The students will be gotten 5 score if it is one correct. And 0 score for answer wrong.

Data Analysis

In general, there are two types of methodology data analysis, namely; Statistics analysis and non-Statistic analysis. In this study, the researchers applied the Statistic analysis. The Statistic analysis applied in this study as follows: Descriptive analysis, It used to display the important features of the data. The most commonly used to measures of central tendency are mean, mode, median and standard deviation. It is used to decide whether the results confirmed the prediction effects of the independent variable. In order words, this analysis draw the conclusion whether the scores between the pre-test and post-test is significant and the effectiveness of using Cake-Learning Application effective or not. for the sake of computation, the writer used the formula which is recommended by Sudijono in Imran (2013: 24).

RESULT AND DISCUSSION

RESULT

In this chapter the researchers presented the result of the study. The score of pre-test and post-test were taken from the data of this study. In the first meeting the researchers organized pre-test to know the student's ability in vocabulary mastery. In taking the score, the researchers gave the students the test consists of 20 items of multiple choices.

After that, the researchers applied the treatment to the students by using Problem Based Learning, then the researchers conducted post-test to the students, the test was 20 items of multiple choices that based on the materials that has taught in the treatment.

Based on the research question in chapter one that was "is the use of Cake-Learning application effective on students' vocabulary mastery at MA Nurul Habibi Nahdlatul Wathan Liwung?" To find out the solution of the problem on the research intends to analyze the data obtained from students' test result. Data of the study consists of two steps, pre-test and post-test. The first step was pre-test, it conducted to know the students' ability in vocabulary mastery before conducting the treatment, then the second steps was post-test as the last of test in this research. Then the researchers presented the statistical computation of mean, mode, median and standard deviation. The discussion continued in analyzing and interpreting the finding. The statistical computation covered the calculation of Pre-test, Post-test, Deviation and Deviation Square.

DISCUSSION

In this part of the research, the researchers of the study started from determining the tittle of the study based on the problem faced by students at the school. The problem focused on the vocabulary mastery in learning English subject. After that the researchers search out the appropriate media to solve their problem, and also another article or journal that might help to compare, to one and another not only the result of the study but also another aspect, finally after all have relationship and be able to support my

research then discussions about some theories that had supported the researchers to collaborate one media with other, the researchers of the study decided to use “Cake-Learning Application in learning vocabulary (www.nawangsihjournal.blogspot.com).

The application of this media cannot be used without supporting other method or strategy, to make the research goes smoothly, so the researchers chosen PBL (Problem Based Learning) as the device to apply Cake-Learning Application. Cindy E (2004) “Problem Based Learning:” said, Problem Based Learning was a student-centered pedagogy in which students learn a subject through the experience of problem-solving students learn both thinking strategies and domain knowledge. The problem-based learning format originated from the medical school of thought and was now used in other school of thought too. The goals of problem-based learning were to help the students develop flexible knowledge, effective problem-solving skills, self-directed learning, effective collaboration skills and intrinsic motivation. Problem based learning was a style of active learning.

This model was characterized by the use of real-life problems as something students need to learn to train and improve the skills of critical thinking and problem solving, and gain knowledge of important concepts, where the task of the teacher should focus on helping students achieve self-directing skills. Use problem-based learning in higher level thinking, problem-oriented situations, including how to learn.

Problem based learning includes the submission of questions or problems, focusing on inter-disciplinary linkages, authentic inquiry, collaboration and produce work and demonstration. Problem-based learning was not designed to help teachers provide as much information on the student. Problem-based learning, among others, aims to help students develop thinking skills and problem-solving skills (Ibrahim 2002:5). In problem-based learning, learning attention not only to the accusation of declarative knowledge, but also the acquisition of procedural knowledge. Therefore, the assessment was not just enough to test. Assessment and evaluation in accordance with problem-based learning model was to assess the work produced by the students as a result of their work and discuss the work together.

H.S. Barrows (1982) states that the definition of Problem Based Learning was an instructional method that was based on the principle that the wrasse (problem) can be used as a starting point to obtain or integrate the science (knowledge). Based on the opinion of experts, it can be concluded that the Problem Based Learning (PBL) was an instructional method that encourages students to know how to learn and work in teams to search for the solution of problems in the real world. Simulation was used to activate the curiosity of a problem before the students start learning a subject. Problem Based Learning (PBL) prepare students to think critically and analytically, and to be able to obtain and use appropriate learning resources.

It can be interpreted that the PBL was that the starting point of the learning process of learning based on real-life problems in the past on this was sue stimulated students to study the problem was based on the knowledge and experience they have had before (prior knowledge) so that prior knowledge of this will form a new knowledge and experience. Using small group discussions were the main points in the application of PBL. PBL was a learning process in which the problem was the main guide to the direction of learning. Thus, there was a problem which was used as a means for students to learn something that can contribute their knowledge.

As in mentioned in the research problem stated in chapter one, the researchers conducted an experiment in one group pre-test and post-test design. The procedures

done during teaching and learning process were divided into three steps. The first step was administering a pre-test. It was conducted to know the students' basic competence and earlier knowledge before getting the treatment. The next step was applying the treatment that was using Cake-Learning Application. The answer the question by choosing by researchers. The treatment was done in three meetings. The last step was giving post-test. In the post-test, the students were given a test to know their scores after they were treating by Cake-Learning Application. After the steps was conducted, the researchers got data in the form of pre-test and post-test scores. Next, the researchers analyzed them by using paired sample t-test through SPSS 16.0.

As presented in table, the researchers presented a descriptive statistics of post-test scores and it was found that there was the different means of pre-test and post-test. The mean of pre-test score is lower than post-test mean score (35.00 < 82.00). It can be roughly seen that there is a gain of mean score from pre-test to post-test. However, it is still needed to statistically proven through hypothesis testing. As required in hypothesis, if the t-table was smaller than or t-test to df (0.05), then the alternative hypothesis (H_a) is accepted and the null hypothesis (H_o) is rejected. Thus, it was found that using Cake-Learning Application in teaching vocabulary mastery to the second-grade students of MA Nurul Habibi Nahdlatul Wathan Liwung in academic year 2023/2024. Based on the research finding, by using Cake-Learning Application for vocabulary teaching shows real effective that is it can help the students to improve their vocabulary mastery. It seems that this was due to the fact that using Cake-Learning Application, the students' feel interested because they can choose the material they like. The students might feel more enjoyable and enthusiastic when being thought by using Cake-Learning Application because there are various genres of stories from movie clips which the students could select to watch. The result of this study is in line with the result of previous studies, namely from Hiebert and Kamil (2005: 47) states that vocabulary is the meaning of unfamiliar word forms the next. The speaking skills referred to in this study are intonation, clarity, write, pronunciation and vocabulary mastery. Based on the result Cake-Learning Application which is effective in improving vocabulary mastery in speaking skill is in with the result of this study. In line with the effectiveness, students' responses to Cake-Learning Application in Hiebert (2005: 3) stated knowledge of words also comes in at least two forms, receptive that which we can understand or recognize and productive the vocabulary we use when we write or speak.

The students know how to using grammar correctly and also the students know more vocabulary. This finding verifies the theory by Thornburry (2002: 13) stated without grammar very little can be conveyed, without vocabulary nothing can be conveyed. Based on the explanation above, it can be concluded that Cake-Learning Application was effective to be used to enhance the students' achievement in vocabulary mastery. The result of this study can be offered that Cake-Learning Application was significance toward the students' vocabulary mastery of the eleventh grade of MA Nurul Habibi Nahdlatul Wathan Liwung in academic year 2023/2024. The statistical of the data gathered has been already counted. In this term, the result of the value, it is needed consult t-table by using N-1 as the degree freedom (df). The df is $N-1 = 7-1 = 6$, having known the value of df, the researchers needed to cheek up the t-table of df 6. And the researchers found that the value was 1.501 for confidence level of 0.05 (95%)

Based on the condition above, the researchers concluded that Null hypothesis (H_o), which state: "is the use Cake-Learning application) effective on student's

vocabulary mastery at MA Nurul Habibi NW Liwung in academic year 2023/2024, clearly was expected. Therefore, the alternative hypothesis (H_a), which state: “is the use of Cake-Learning application effective on students’ vocabulary mastery at MA Nurul Habibi Nahdlatul Wathan Liwung in academic year 2023/2024 clearly was accepted.

CONCLUSION

This is final consideration of my investigation in my study started from 5 August until 5 September 2023, the researchers clarified briefly for the finding. The statistical analysis of the data obtained showed that figures of students’ mean score of pre-test was 35.00 and for post-test 82. The students’ mean score of post-test was higher than pre-test; and the result of t-test was 9.756 higher than t-table 1.501 so, it can be concluded that, if the t-test was higher than t-table there was significant effect of using Cake-Learning application. It showed that Alternative Hypothesis (H_a) was accepted and Null (H_o) Hypothesis was rejected.

Based on the result and discussion in previous chapter, it can be concluded that is the effectiveness of using Cake-Learning application on students’ vocabulary mastery was effective on students’ vocabulary mastery at MA Nurul Habibi NW Liwung in academic year 2023/2024.

RECOMMENDATION

Based on the result of the data analysis and conclusion, some recommendations are addressed for both teachers and students as follow:

For Teachers

This study expected to be able to help the English teacher in teaching learning process by using CAKE Learning Application especially focus on vocabulary mastery anytime needed in English subject. The researchers hoped that for teacher to use various kind of methods, techniques, media in conducting English course in order the teaching and learning process will be more effective and interesting, thus it can enhance the student motivation and achievement in learning English. Especially in teaching vocabulary, the language teachers should be able to motivate, control, and facilitate the students in undergoing the process of vocabulary either during the class time or beyond the class time. For making this possible, the researchers offers to apply in long time in teaching English as a foreign language especially in teaching English vocabulary. Besides will make the class more fun and enjoyable, it is also making the class more interesting.

For Students

This study expected use Cake-Learning Application could help students to understand the meaning of word, pronunciation, spelling and grammar. It increases the students in learning English vocabulary. The students are suggested to become more interest in learning English language especially vocabulary mastery. It is important indeed because the students themselves know what kinds of text talk about it is need the discussion with other people.

REFERENCES

- Andriani, R. (2016). *“Improving Students’ Vocabulary Mastery using Interactive*
Arikunto. 2012. *The Effect of Using Snowball Drilling Method Toward the*
Students Vocabulary Achievement. Thesis, Unpublished. Panca Sakti Tegal.
Arikunto, S. (2010). *Dasar-dasar evaluasi pendidikan edisi 3*. Bumi Aksara. 58- 312.

- Armina, "Cake-Learn English application toward students' motivation in learning English vocabulary at SMP Negeri 2 Kediri in academic year 2022/2023", Universitas Pendidikan Mandalika (UNDIKMA Mataram)
- Harmer, (2007) *Students' Perception on the Use of English Movies to Improve Vocabulary Mastery*. 16-22
- Hiebert and Kamil, (2005) *Using Pictionary Game to Increase Learners' Vocabulary Mastery in English Instruction*. 47.
- Hiebert, (2005) *Analysis on the Students' Vocabulary Mastery a Descriptive Study on the MTs*. 1-10.
- Judy K, (2007) *Comparing Effectiveness and Engagement of Data Comics and Infographics*.
- Kothari, (2004). *Research Methodology*. New Age International Publisher. New Delhi.
- McCarten, Jeanne. 2007. *Teaching Vocabulary. Lessons from the Corpus. lessons from the classroom*. USA: Cambridge University Press.
- Miller, Stave. 2005. *Experimental Design and statistic*. Second edition. London and New York: Routledge.
- Nawangsih. (n.d). *cake learn English*. Retrieved from nawangsihjournal.blogspot.com
- Nurina Almas Laila Fatin, "Effectiveness of using Cake Application on Vocabulary Mastery at VII MTS PSM Rejotangan. Institut Agama Islam Negeri (IAIN) Tuungagung
- Richard and Renandya, (2022) *Pictures Combination to Improve Students' Vocabulary Mastery*. 255
- Sadewo, (2016) "The Explanation of Vocabulary"
- Sugiyono, (2007). *The Influence of English Song Toward Students' Vocabulary Mastery and Students' Motivation*. 124.
- Sugiyono, D. (2016). "Metode penelitian kuantitatif dan R&D. Bandung": Alfabeta, 49–312.
- Tamhani, (2015) *Investigating the Role of the "Cake Application" in Enhancing English Foreign Language Learners' Speaking Skill the Case of Fisrt Year Students of English at Biskra University Dr. 2019-2020*.
- Thornburry, (2005) *The Effectiveness of Using Youtube for Vocabulary Mastery*. 1-12.