

QUIZLET APPLICATION EFFECT ON SENIOR HIGH SCHOOL STUDENTS VOCABULARY ACQUISITION

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Abstract

Vocabulary is one of the language features that should be acquired by the students to support them learning other language skills. The students will be easier to receive or produce the English language if they remember the considerable words. After being observed in the actual classroom, however, most students seem difficult to acquire words. Moreover, the influence of using media such as Quizlet Application on vocabulary acquisition needed to be proved by involving large participants since that application was not widely used by EFL teachers in Indonesian educational context. The study aims to find out if there is any significant difference in the grade ten students' vocabulary acquisition between those who use Quizlet Application (QA) and those who do not use it in learning vocabulary. The participants were 110 tenth-grade students in senior high school. Their vocabulary knowledge was assessed through pre-test and post-test conducted before and after the treatment was given. The research finding reveals that there was a significant difference in students' vocabulary acquisition between those who used Quizlet Application and those who were taught using the conventional method in learning vocabulary. That finding was indicated by the value of significant which was below 0.05. Moreover, it is also found that QA was less effective on students' vocabulary acquisition while the conventional method was not effective to students in obtaining words.

Keywords: Quizlet Application, Senior High School Students, Vocabulary Acquisition

Introduction

Vocabulary knowledge is important to be acquired before and while learning English. In the same vein, Nation (2001) states that vocabulary is one of the parts required in developing language and should be deliberately learned by students. One of his reasons is many unknown vocabularies contain in the activities of meaning-focused input such as reading a book or magazines, listening to the news or stories, etc. There are other reasons why vocabulary has a crucial part in language learning. First, vocabulary is considered as a language component that determines how well students speak, write, listen, and read (Richards & Renandya, 2002). Second, reading comprehension and vocabulary knowledge are correlated with each other so that it is necessary to use a good strategy in vocabulary learning (Hyso & Tabaku,

2011). It is supported by Gomathi (2016), who states that one of the best predictors of reading ability and the capability is vocabulary knowledge. Then, vocabulary knowledge will improve students' comprehension about the content of text given and help them to memorize it in terms of a long time goal (Munir, 2016). Last, vocabulary knowledge should be possessed by foreign language learners because a limitation of vocabulary in using target language will make them failed in communication (Al-qahatani, 2015).

Despite the importance of vocabulary in language learning, a preliminary study conducted at Senior High School 1 (hence SMAN 1) and Muhammadiyah Vocational High School (SMK Muhammadiyah Dua) in Mantingan area, It was found that many students have difficulty in acquiring the

words due to their bad results in vocabulary exercises. Thus, providing appropriate media in the process of teaching and learning activities of the classroom is highly required so that the students can easily obtain the words and store them in terms of long term memory. Added to this, many researchers believe that using media can influence the students' vocabulary acquisition (Hsu, Hwang, Chang, & Chang, 2012; Bavaharji, Alavi, & Letchumanan, 2014; Rivera, Mason, Moser, & Delzell, 2014). One of the reasons is that the media can be used to facilitate the students in the process of receiving vocabulary materials (Wijayanti, 2018). Moreover, students can easily know the meaning of the word by seeing the media such as pictures and objects (Nation, 2001).

Another issue found in the preliminary study was teachers' dependence on the English books' exercises of gap-filling related to vocabulary tasks. This one-way activity could affect the students to keep the words on their minds in inappropriate ways since they only gained those words through guessing. A scholar, on the other hand, believed that different exercise types will increase the students' retention in learning vocabulary (Hashemzadeh, 2012). Moreover, some vocabulary exercises such as hierarchy exercises in which matching the words and multiple choice are included in this type can be implemented to make students easily acquire and rote vocabulary (Lin & Hsu, 2013). In other words, giving different types of vocabulary exercises for students is considered to be very essential.

In this 21st century, the Information and Communication Technology (ICT) can be applied as one of the solutions to those problems. Based on the principles of learning following the 2013 curriculum, ICT is applied to make learning activities more effective and efficient (Mulyasa, 2018). Moreover, the implementation of ICT in teaching vocabulary promotes students' autonomy, makes them actively involved in the learning process, and

develops their critical thinking skills (Vahdany & Majidi, 2015). Besides, the smartphone, one of the ICT tools, contains several mobile applications that were viably and effectively is used in vocabulary learning too (Jafari & Chalak, 2016; Mahdi, 2017; Gurkan, 2018). One of the mobile applications namely the Quizlet Application (QA) known also as the digital flashcard that can be used via both computers and smartphones (Wright, 2016). Moreover, Nation (2001) states that through flashcards, the learners can easily get the connections between form and meaning of the words. Therefore, Quizlet Application is considered as the digital flashcard that provides the picture cards used via electronic devices such as smartphone to help learners memorize the meaning of the words.

Quizlet Application is suggested to be the convenience and enjoyable learning vocabulary method (Davie & Hilber, 2015). It also provides many vocabulary exercises such as matching the words, multiple choices, and false & true. Moreover, the QA also gives positive impact on the students' success in learning vocabulary (Toy & Buyukkarci, 2019). The use of QA also offers some benefits for students in vocabulary learning (Wahjuningsih, 2018) such as studying words every time and everywhere, remembering the words with interactive and attractive ways, and collaborating with other students when doing the tasks. However, the previous studies that had conducted similar research only involved small number of participants. Moreover, QA has not been widely used for vocabulary learning in senior high schools. Therefore, in this study, Quizlet Application (QA) is chosen as media for vocabulary learning. The students who were previously taught using conventional method will be integrated into a new way of learning via smartphone to enlarge their vocabulary size. This research sets out to examine the effectiveness of Quizlet Application on students in acquiring vocabulary. In other words, this study aims to find if there is any

significant difference in the grade ten students' vocabulary acquisition between those who use quizlet application and those who do not use it in learning vocabulary.

In brief, this study is conducted to answer the following question: Is there any significant difference in the term of vocabulary acquisition between the students who are taught by using QA (Quizlet Application) and other students who are taught without using QA? How effectively do Quizlet Application and conventional method on students' acquisition of vocabulary?

Most learners considered that acquiring a language is a difficult task, especially if it is aimed to achieve second language literacy (Bogaards & Laufer, 2004). It is further said the language learning become more manageable and effective if learners able to choose the words which are more important to be learned than other words.

Moreover, the selection of words could be done by understanding the word frequency. Nation (2001) states that there two types of the frequency of words such as high-frequency word and low-frequency words in which high-frequency words are more suggested to be learned. Then, it can be concluded that words are needed to be selected, for example through their frequency, before learning them based on their level of importance so that vocabulary acquired by learners are useful to help them achieve the literacy of the second language.

On the other hand, there are two learning ways to acquire vocabulary, implicit and explicit learning (Ma, 2009). Implicit learning is defined as the process of learning without the learners' consciousness. Moreover, the meaning of explicit learning is contrary to the previous one. Its definition is the learning process with the learners' awareness of what they learn. Besides, the meaning of implicit learning is similar to incidental learning, while explicit learning is the same meaning with intentional learning (Ma, 2009). In the implicit or incidental learning, for example,

the learners attempt to find out the meaning of the word contained in a text. Even though this kind of activity only focused on the words meaning and not their form, it is useful for the learners when they meet the same words in a different context because they will know that they saw them somewhere before. In addition, explicit or incidental learning is the way of acquiring the vocabulary used in this study.

Recognizing the ways of communicating the meaning of words is regarded very essential. It is said that "The choice of way of communicating meaning of a word should be based on two considerations: the reason for explaining the meaning of the word, and the degree to which the way of explaining represents the wanted meaning for the word. (Nation, 2001, p. 85)". There are three ways presented by Nation (2001) such as using actions, objects, pictures or diagram, translation (shifting word from the target language to the first language) and defining word in second language (e.g. synonym, antonym, definition by function, grammatical definition, etc.). Furthermore, one of those ways or all of them should be utilized in the process of learning vocabulary.

On the other hand, the use of technology has also influenced the way in which the teacher applies the teaching methodology of vocabulary in language classroom. In addition, the development of technology has also created a tendency for teachers to use computer, one of ICT tools, in teaching vocabulary (Cahyono & Widiyati, 2008). This is because the ICT tools are proven can help the students to learn the new words. For instance, the students are able to gain more words when leaning vocabulary via mobile phone (Lu, 2008). Moreover, the use of iPad gives positive effectiveness for the students in acquiring vocabulary (Wang, Teng & Chen, 2015) Therefore, it is no doubt ICT tools is appropriately used in teaching and learning vocabulary.

Smartphone is one of ICT tools that provides many applications for language learning purpose. Among researchers, Quizlet Application, also known as digital flashcard, is considered appropriate to assist the students as learning vocabulary (Cinar & Ari, 2019; Andarab, 2019;). In the Merriam-webster dictionary, flashcard is defined as a card that probably contains a picture, number, and words used by teachers in the class a learning media. Moreover, Nation (2001) states that through flashcards, the learners can easily get the connections between form and meaning of the words. Therefore, Quizlet Application is considered as the digital flashcard that provides the picture cards used via electronic devices such as smartphone to help learners memorize the form and meaning of the words together.

A study conducted by Dizon (2016) shows that QA useful and effective tool for students to help them learn vocabulary. Another researcher suggest that Quizlet Application has the potential to help students increase their vocabulary skills in more effective way (Wright, 2016). Moreover, there are some features contained in this application that are useful for the students such as flashcard, game, collaborative activity, etc. (Bryson, 2012). Baptist (2018) has also explored the effect of Quizlet Application on high school students' vocabulary acquisition in northern New Jersey. There is also another study conducted by Christanti (2018) who suggests that QA can be applied to improve senior high school students' vocabulary acquisition in Yogyakarta. Most students, moreover, were also considered eager to learn vocabulary through using Quizlet Application (Setiawan, 2020). Therefore, it is no doubt that Quizlet Application is an appropriate media for students to learn new words.

Methodology

The current study used Quasi-Experimental method and its design was

adopted from Phakitis' Model namely "the pretest-posttest non-randomized control-group design" (Phakiti, 2014). Through this design, the researcher used the experimental group with the compared group (control group) in which both groups were given different treatment. Furthermore, this research was intended to find out Quizlet Application impact on students in the process of mastering vocabulary in the classroom.

The number of participants in this research were 110 tenth-grade students of senior high schools in Mantingan Area. Their age ranged from 15 to 17. Moreover, they were chosen by using purposive sampling. The researcher also used this kind of technique sampling to select two senior high schools based on the criteria of quality, high and low. Those criteria depended on the value of minimum completeness criteria or KKM for English language subject in each school. According to those values, Senior High School 1 (SMAN 1) has high quality with a value of 75 and Muhammadiyah Vocational High School 2 (SMK Muhammadiyah 2) has low quality with a value of 65. The school with the high category was coded as School A and another school with the low category was coded as School B.

On the other hand, the researcher used mixed nonprobability-probability sampling (Daniel, 2012) in which two different types of sampling method were combined to select the class sample. First, purposive sampling was used to select two groups that have no significant difference results in pre-tests. This is because the results of pre-test in both groups should be similar (Lodico, Spaulding, Voegtler, 2010). Second, the researcher also used simple random sampling. The technique used in this kind of

sampling method was the lottery in which the researcher flipped a coin to determine the experimental and control group. As the results, class MIPA 1 from School A and class BDP 1 from school B had been selected as the experimental group, while class MIPA 2 from school A and class BDP 2 from school B had been chosen as the control group.

The kind of test research applied in this research was research made-test (Phakiti, 2014). It was created by the guidance of the supervisor and the basis of creating the test was the standard competence of curriculum 2013. Moreover, expert judgment was required to make sure that an instrument was appropriate and feasible for use. The test was validated before the main study is undertaken. According to Phakiti (2014), some test techniques can be used to test students' language skill. Two of them are selected response technique (e.g. multiple choices) and constructed response techniques (e.g. gap-filling). Multiple choice test is selected due to its ease of being assessed and examined (Thornbury, 2002). Moreover, the reason for choosing the gap-fill test is to measure the students' ability in producing a word and encourage them to recall the words that have been learned (Thornbury, 2002). The writer combined those techniques in creating the vocabulary test. Therefore, the test was made in the form of multiple-choice and gap-filling. The test was given before and after treatment to all participants in both control and the experimental group. In this test, there were 15 items provided in the multiple choices section and 15 items provided in the gap-filling section so that the total of items in the test was 30 questions. Those questions were

related to the vocabulary material contained in the Quizlet Application.

The test was used to measure vocabulary acquired by students in senior high schools. Every student who participates in this study was given a test before and after the treatment. The researcher was involved as a teacher who controls, guides, and instructs the students in answering the question items provided in the test. To calculate the scores obtained by the students in both pre-test and post-test, the researcher used Anates software V4. The scores in the test were different in every section. In section A (multiple choices), the maximum score obtained was twelve. Moreover, in section B and C (gap-filling), the maximum scores were forty and thirty. Then, the total scores if the students answer all questions correctly was one hundred.

In this research, the data collected were analyzed through descriptive and inferential statistics. Descriptive statistic was used to provide and analyze the data so that they would become more useful and communicative. Therefore, the results of data taken from vocabulary test were analyzed to find out the mean scores, Normalized Gain score, standard deviation and percentages. Therefore, SPSS program version 20 used for that purpose. On the other hand, the mean the inferential statistic was also used in this study. The results of inferential statistics were aimed to answer the questions of the research. If the significant value was higher than 0,05, it meant that there is a significant difference between experimental and control group. Moreover, before using independent sample t-test, the data were tested for its normality and homogeneity first. In this study, the distribution of data was considered normal based on the results showed in Shapiro

Wilk-Test in which all significant values were higher than 0,05. Moreover, the data were also homogenous in which all significant values were lower than 0,05. In

more detail, the results of both normality and homogeneity test could be seen in the table 1 and table 2.

Table 1. *The Results of Normality Test for Students' Scores in Vocabulary Test*

Table 2. *The Homogeneity Vocabulary*

Test	Participant	Shapiro-Wilk			Results of Test of Test	
		Statistics	Df	Sig.		
Pre-test_vocabulary	Experimental	.095	53	.513		
	Control	.105	57	.258		
Post-test_vocabulary	Experimental	.963	55	.093		
	Control	.971	57	.192		
Test	Levene Statistics	df1	df2	Sig.		
Pre-test vocabulary	.483	1	108	.488		
Post-test vocabulary	.1381	1	110	.242		

Besides, the normalized gain was also analysed in this study. It could be applied if there is a significant difference between the mean score of the experimental group and the mean score of the control group. To meet this assumption, the results of a significant value obtained through independents sample t-test should be below 0.05. Moreover, the formulation of Normalized Gain or N-Gain Score was presented below.

$$N\text{ Gain} = \frac{\text{Post-test Score} - \text{Pre-test Score}}{\text{Ideal Score} - \text{Pre-test Score}}$$

Moreover, Normalized Gain (N-Gain) scores obtained through SPSS were Through this study, the researcher was excited about seeing vocabulary test scores obtained by students of senior high school who participate in both experimental or

categorized based on the value of N-Gain in the percentage (%) (Hake, 1999). The value of N-Gain could measure how effective the influence of using the Quizlet Application and conventional method on tenth-grade students' vocabulary acquisition. Those categories of N-Gain value in the percentage were shown in the table below.

Interpretation of N-Gain Effectiveness Category	
Percentage (%)	Interpretation
< 40	Not Effective
40 – 55	Less Effective
56 – 75	Effective Enough
> 76	Effective

control group before and after the treatment was given to them and also wanted to accept or to reject Null Hypothesis and Alternative Hypothesis. Before figuring out that

hypothesis, the assumption of similarity in the results of pre-test should be met first or there was no significant difference in terms of vocabulary acquisition between students who participate in the experimental group and those who participate in control group before the treatment was given. Moreover, the hypotheses that had been formulated are as following:

- 1 Null Hypothesis (H₀): There is no significant difference in the term of vocabulary acquisition between the

students who are taught by using QA (Quizlet Application) and other students who are taught without using QA.

- 2 Alternative Hypothesis (H_a): There is a significant difference in the term of vocabulary acquisition between the students who are taught by using QA (Quizlet Application) and other students who were taught using conventional method in learning vocabulary.

Findings and Discussion

This section presented the results of the vocabulary test obtained by students who were influenced by the independent variable (i.e. Quizlet application and conventional method). Vocabulary test was given to the students two times, before and after the treatment. A total number of participants in this study was 110, and every

one of them had followed the treatment sessions conducted in the language classroom activity and taken both pre-test and post-test. Moreover, the table 3 showed the description of results of students' vocabulary acquisition. The researcher used SPSS V.23 to find out the means score and the standards deviation of two groups. The output of data obtained was displayed in the following table.

Table 3. *The Results of Students' Vocabulary Acquisition in Pretest and Posttest*

Group	Pre/Post	Mean	Std. deviation
Experimental	Pre-test	31.41	13.66
	Post-test	64.43	22.30
Control	Pre-test	26.73	12.21
	Post-test	51.01	22.67

Regarding the scores obtained in pre-test that was conducted before treatment was given, it could be seen that students in the experimental group (M=31.41 & Std. Deviation=13.66) was higher than those mean score in the control group (M=26.73 & Std. Deviation=12.21). The difference in means score between the two groups was 4,68. Besides, in the post-test, the mean score of students in the experimental group (M=64.43 & Std. Deviation=22.30) was also higher than those mean score in the

control group (M=51.01 & Std. Deviation=22.67). The result obtained from the difference of means score between experimental and control group was 13,42. Thus, it was indicated that the difference in means score in the post-test between the two groups was larger than those gained in the pre-test.

In this study, the frequency of N-Gain in percentage in both experimental and control group were also analyzed through SPSS program and described in bar chart.

Here, the figure 1 presents N-Gain score frequency for experimental group.

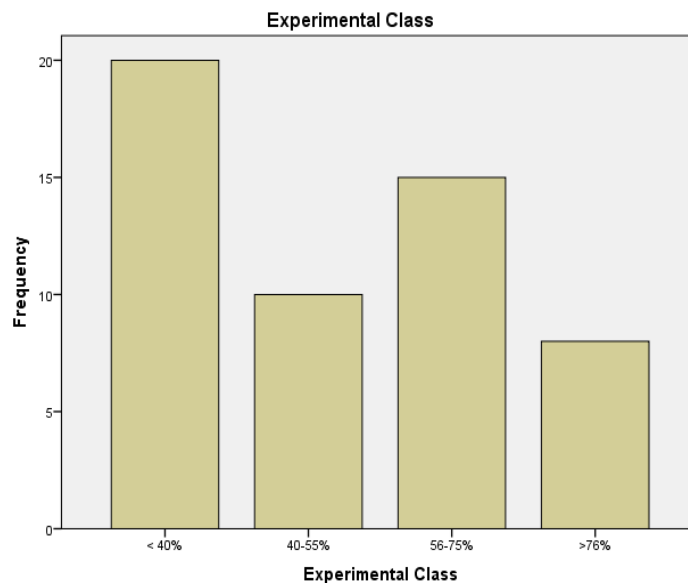


Figure 1. *The Results of N-Gain in Percentage for Experimental Group*

According to Figure 1, the number of participants who included in the first category (< 40%) was 20 students. Moreover, in the second category (40-55%), there were ten students, while fifteen students were included in the third category. At the last category (> 76%), eight students obtained the results of N-Gain in the percentage of more than 76%. To sum up,

the first category has the highest number of students and the last one had the lowest number of students in N-Gain frequency of experimental group.

Moreover, the bar chart was also used to present the results of N-Gain in percentage of control group. The bar chart was contained in the figure 2.

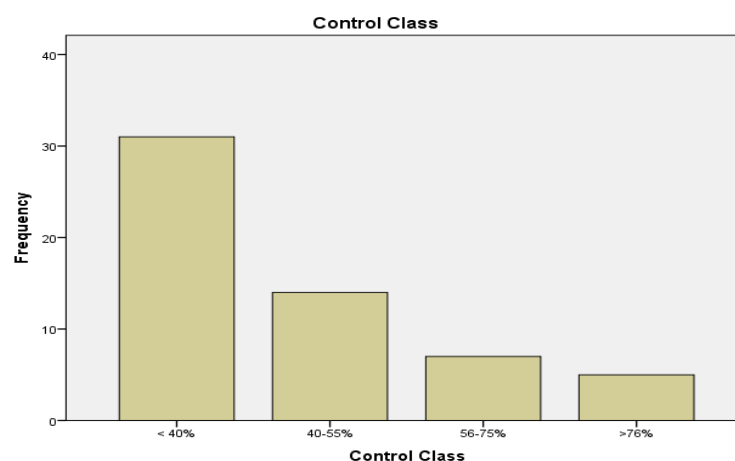


Figure 2. *The Results of N-Gain in Percentage for Control Group*

The Assumption Pre-Test Results

To meet the assumption that the score obtained by the students were alike in the pre-test conducted before giving the treatment, the students' scores in

experimental group and those in control group were compared to find out whether their difference was significant or not. The Table 4 below presents the results of independents sample t-test that was used for that purpose.

Table 4. *The Results of Independent Sample T-test for Pre-Test*

Source	Depe ndent Varia ble	Equal Variance Assumed		
		T	Df	Sig
Partici pants	Vocab ulary Acqui sition	.959	30	.345

Table 4 shows the value of t which was 0,959 and the degree of freedom which was 30 ($16 + 16 - 2 = 30$). Moreover, the value of sig. (p) which is presented in that table was 0.345. It meant that the value of p (0.295) was higher than 0.050 or $p > 0.05$. Therefore, it could be concluded that there was no significant difference between students' scores who participated in the experimental group and those scores who participated in the control group in the pre-observation. It meant that the assumption which states that the results of pre-observation in both groups should be started at the same level or similar was met.

According to the result of both normality and homogeneity test, it could be assumed that the data obtained from students' scores in vocabulary test were normally distributed and their variance was also homogenous. Therefore, the independent sample t-test was able to be used to accept or reject the hypotheses.

It was mentioned before that the results of data were used to accept or to reject two hypotheses. The first was alternative hypothesis (H_a) which states that there is a significant difference in in the term of vocabulary acquisition between the students who are taught by using QA (Quizlet Application) and other students who are taught without using QA; another one was null hypothesis which states that there is no significant difference in the term of vocabulary acquisition between the students who are taught by using QA (Quizlet Application) and other students who are taught without using QA. H_a is accepted if the value of sig (p) is lower than 0.05. Moreover, if the value higher than 0.05, H_o is accepted. The students' scores in both the experimental and the control group will be compared by using "independent sample t-test". In doing that, SPSS was used in which the results were presented as follow.

Table 5. *The Results of Independent Sample T-Test for Vocabulary Acquisition*

Source	Dependent Variable	Equal Variance Assumed		
		T	Df	Sig
Participants	Vocabulary Acquisition	2.942	110	.004

Table 5 shows the results of the independent sample t-test. From the results, it could be seen that the value of t was 2.942 and the degree of freedom was 110 ($55 + 57 - 2 = 110$). Moreover, 0.004 referred to the value of sig. It meant that p (sig. of value) > 0.05 . It also could be concluded that there is a significant difference in the term of vocabulary acquisition between the students

who are taught by using QA (Quizlet Application) and other students who are taught without using QA.

In this study, the N-Gain in the percentage were also analyzed through SPSS program. Here, the table 6 presented the mean scores of N-Gain in the percentage.

Table 6. *The Results of N-Gain in Percentage*

Group	Mean Score	Std. Deviation
Experimental	50,94	22,66
Control	37,52	25,98

Table 6 shows that the mean score of N-Gain score for the experimental group was 50,94 or 50,9% (Std. Deviation=22,66) that included in less effective categorize. Meanwhile, the mean score of N-Gain for the control group was 37,52 or 37,5% (Std. Deviation=25,98) that categorized as ineffective. To summarize, the use of Quizlet Application was less effective on tenth-grade students in acquiring vocabulary. Moreover, the conventional method was not effectively applied to obtain vocabulary.

DISCUSSION

Some theories that are relevant with the findings and other previous findings that supports or contradict with the results of this current study were discussed in this section. First, it was observed that the most students

focused to study words by seeing the pictures and the meanings of the words provided in Quizlet Application. They also listened to the audio recording to know the sounds of the words and attempted to pronounce words they heard correctly. These findings match those observed in the earlier study done by Christanti (2018). She found that the students learned vocabulary with their pictures and listened to how the words pronounced through QA. Moreover, another important finding obtained through observation was that most students re-take the test mode provided in the Quizlet Application if they got a low score in that test. Some of them even learn vocabulary again through flashcard mode before taking the test so that they can remember them well. This finding is consistent with that Anjaniputra and Salsabila (2018) who

found that the students who were disappointed with the results of the test provided in the Quizlet Application back to the set to remind them of the answers of questions.

On the other hand, regarding the results of pre-test taken before utilizing Quizlet application in the activity of vocabulary learning, it has been assumed that the results obtained by the students who participated in the experimental group were similar with the students' results of the control group. Lodico, Spaulding and Voegtle (2010) had emphasized that the results of pre-test in both groups should be started out equal and the finding of the finding of current study had supported that assumption.

Moreover, in the vocabulary test, it was found that the scores achieved by students after learning vocabulary through Quizlet Application was higher than the scores obtained by them before studying words by using it. This finding is in agreement with Dizon's (2016) findings which show that the students' mean score in the post-test conducted after using Quizlet Application (QA) is higher than those mean scores in the pre-test conducted before using QA. It meant that QA support the students' score enhancement in vocabulary test. Meanwhile, another result showed that the students who were taught by using conventional method achieved a higher score in the post-test than the scores that they obtained in the pre-test. Thus, it was indicated that the use of that method could also help the students in obtaining vocabulary. Moreover, this finding gained in this study mirror that of the previous study that had examined the effect of Quizlet Application and traditional method in vocabulary learning (Atmasari, 2019).

Besides, the scores obtained in the post-test were also compared. As the results, there was a significant difference in the term of vocabulary acquisition between the students who are taught by using QA (Quizlet Application) and other students who are taught without using QA between those who were taught using Quizlet Application (QA) and those who were taught using conventional method in learning vocabulary. It means that the students who use QA acquire more word than those who do not use it in learning vocabulary. This result seems to be consistent with other findings of previous work (Sanosi, 2018; Baptist, 2018). Thus, the Quizlet Application was appropriately used for acquiring vocabulary.

Finally, the students' outcomes that use Quizlet Application were better than those who use the conventional method in which the students use the notebook in learning vocabulary. This is supported by Ozer, Kocoglu and Zeynep (2017) who found that quizlet group obtained better results or scores than the vocabulary notebook group in vocabulary learning and recall. Similar with this finding, Cinar, and Ari (2019) suggested that the students who were given the treatment by using Quizlet based-teaching gained the higher score than those who were given the treatment by using non-quizlet-based teaching in vocabulary test.

However, this study had limitations. First, the participants involved in this current research were not chosen randomly. They were selected purposively regarding some criteria. Moreover, as mentioned earlier, Phakiti's model was used to conduct this study but not fully adopted because of limited time. The reason was the delayed post-test had been removed from the

procedures of research. Thus, it was expected that the delayed-post could be performed by other researchers who were interested in a prolonged effect. This study was also limited to senior high school students in tenth-grade. The Quizlet Application (QA) could be investigated to analyze its effectiveness on junior high school students in every grade and high school students in higher grade level. Other researchers could investigate the effect of Quizlet Application on junior high school

Conclusion

Based on the research findings and discussion, it can be concluded that the students who use Quizlet Application (QA) effectively acquired more word than those who do not use the application. Further, the students' vocabulary acquisition was much higher after using the QA than before. Moreover, the students who are taught using conventional methods also highly acquire vocabulary, as can be seen in the differences between the scores obtained pre-test and post-test. Nevertheless, the students who were taught using the conventional method have a lower acquisition of vocabulary than those who use QA. These conclusions have been formed based on the results of hypotheses that are previously presented in this paper. Besides, based on the categories of N-Gain, QA was considered less effective for senior high school students to acquire vocabulary while the conventional method was not effective for other students to obtain words.

On the other hand, this study provides various ideas and options to English language teachers for using various ICT tools in the teaching and learning process. The findings reveal that the Quizlet Application (QA), which can be used on a smartphone, is highly effective at enhancing

students or senior high school students which was limited on the level of eleventh grade in further studies. By applying similar researcher, students' vocabulary acquisition could be compared based on their gender, male and female, to find out which one of those genders was mostly influenced by QA (Quizlet Application). Moreover, this research merely focused on the outcome of vocabulary learning, and their engagement in the process of studying words are not considered.

the vocabulary acquisition of students in senior high schools. Furthermore, this application can be used to teach vocabulary along with other English teaching materials based on the 2013 curriculum for tenth-grade students. It is also suggested to the next researchers to use QA through both computers and smartphones and then, the students are asked for their perceptions after using those ICT tools

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