USING BUSUU APPLICATION: ITS EFFECT ON STUDENTS' VOCABULARY MASTERY AT SMP IT AL FITYAH PEKANBARU

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ABSTRACT

Vocabulary is a collection of words in a language that speakers understand and use for communication. However, many students have limited vocabulary knowledge, which negatively impacts their English proficiency. Common challenges include memorizing words, distinguishing meanings, and correct pronunciation. To address these issues, teachers need to implement effective vocabulary learning strategies. One application that supports vocabulary learning is Busuu, an online platform that provides language courses aligned with the Common European Framework of Reference for Languages (CEFR).This study aimed to examine the effect of using the Busuu application on students' vocabulary mastery in class VIII-A at SMP IT Al Fityah Pekanbaru. The research method used was pre-experimental with one-group pretest-posttest design. The sample consisted of 26 students selected through a convenience sampling technique. Data were collected through multiple-choice tests administered before and after treatment, then analyzed using SPSS 30 version. The results showed t-value of -3.257 and p-value of 0.003 (p < 0.05), leading to the rejection of HO and acceptance of Ha. In conclusion, the use of the Busuu application had a significant effect on students' vocabulary mastery.

KEYWORDS: Busuu Application, Students' Vocabulary Mastery

1 INTRODUCTION

Vocabulary is one factor affecting level differences between learners at beginner and intermediate levels. All five factors (i.e., accent, comprehension, fluency, grammar, and vocabulary) affected level differences for learners at intermediate levels and above, but vocabulary frequently appeared as the discriminatory factor." (Koizumi, R., & Innami, Y. 2013). Vocabulary is not an end in itself. A rich vocabulary makes the skills of listening, speaking, reading, and writing easier to perform. Moreover, the more words the students know in any language, the better they can express themselves (Staehr, L. S. 2008). Mastery is a comprehensive knowledge or use of a subject or instrument (Swannel, 1994). Meanwhile, Porter (2001) states that mastery is learning or understanding something completely and having no difficulty in using it. Lewis & Hill (1990) stated that vocabulary mastery is important for students. It is more than grammar for communication purposes, particularly in the early stage when students are motivated to learn the basic words. Without having English vocabulary, students will

have some difficulties in using English. In this research, the researchers focus on using the BUSUU Application on the lesson material about irregular verbs.

According to Alsagof (2012), vocabulary is the biggest success predictor for English language students. It means that the main point of mastering English is to learn vocabulary first. It is because each word will be arranged into one sentence that further is an idea that we can convey to everyone in the world. Roche & Harrington (2013) stated that vocabulary is claimed by several studies to be closely linked with various measures of English language ability and academic achievement. Insufficient vocabulary knowledge can impair student success. Similarly, Alqahtani (2015) argued that vocabulary is often considered a critical tool for second-language learners because a lack of vocabulary causes unsuccessful communication in a second foreign language. Cameron (2001) stated that knowing about a word involves knowing about its form (how it sounds, how it is spelled, the grammatical changes that can be made to it), its meaning (its conceptual content and how it relates to other concepts and words), and its use (it patterns of occurrence with other words, and in particular types of language use).

Mastering a foreign language requires a reflective understanding of the vocabulary (Barcroft, 2004). If language learners have enough vocabulary, it helps them to master the 4 target language skills (Pourgharib & Rohani, 2013). Vocabulary can be defined into 3 main meanings: the number of words in composing language, all the words that someone knows or uses in a book, and a list of words and their meanings (Nation & Hunston, 2013). Vocabulary plays a vital role in language learning, especially in building reading, writing, speaking, and listening (Kamil & Hiebert, 2005; Nation & Hunston, 2013). Thus vocabulary mastery is an important basis in measuring language proficiency in mastering foreign languages.

According to Harmer (1991), understanding the meaning, word use, word formation, and word grammar are all part of having a good vocabulary. This is similar to Lado's (1957), states that there are some aspects that have to be known in vocabulary, such as word meaning, word spelling, word pronunciation, word classes, and word use. He also stressed the significance of term meaning, spelling, pronunciation, classifications, and usage, among other components of vocabulary knowledge. This thorough approach to vocabulary emphasizes the complexity of language learning and usage. Word Meaning is Communication and language comprehension depends on an understanding of word meanings. It means knowing word definitions, meanings, and contextual aspects; spelling of words. Spelling correctly is crucial for written communication. It indicates that readers understand and interpret words appropriately.

Mobile phones, one of the technologies, have led to an increase of studies that explore their use in education. Language teaching studies and practices have also been affected by this tide of change, as well (Well, S., 2010). Mobile phones have become one of the most crucial means of teaching and learning English. Particularly with the help of the mobile applications that are operated on these mobile phones, language learning entered a new era. Nowadays, lots of applications for smartphones are being designed to learn English (Hockly, 2014). Mobile devices could open new doors with their unique qualities such as "accessibility, personalize, and portability" (Saran & Seferoglu, 2010), and "the physical characteristics (e.g., size and weight), input capabilities (e.g., keypad or touchpad), output capabilities (e.g., screen size and audio functions), file storage and retrieval, processor speed, and the low error rates" (Alzu'bi

& Sabha, 2013). In the teaching and learning processes, emerging technologies have brought about major changes in the teaching and learning processes (Pavlik, 2015). Wang and Shih (2015), for instance, used mobile vocabulary learning applications in their study and concluded that the experimental group scored significantly better than the control group who used paper-based learning materials.

One of the applications that can be used on smartphones to support vocabulary learning is BUSUU. BUSUU is an online learning platform delivering internationally recognized professional language courses to corporations and businesses across the world, and a language learning platform that teaches vocabulary and grammar through short, bite-sized lessons that take between 5-15 minutes to complete (Niesner, B., & Hilti, A., 2022). According to Vallejos (2018), BUSUU is defined as "the largest social network in the world for language learning media". This application provides courses in 14 different languages on the web and mobile to more than 70 million students around the world. Students can practice language skills through learning associations independently by following the Common European Framework of reference for languages from levels A1 to C1. BUSUU is a mobile application trusted by a global community of 100 million learners and a self-taught language learning app that provides native speaker-approved language material (Nee, 2014). BUSUU offers four levels of language courses, which are divided into beginner, elementary, low intermediate, and upper intermediate. In this research, the researcher was using the BUSUU Application in lessons at the Elementary A2 level.

Robinson (2006) claims that the limitations on time and space associated with traditional teaching methods have been replaced by information and communications technology (ICT) tools. The teacher-student relationship in the classroom can now go beyond the confines of the classroom's time and size. There are several advantages to integrating ICT tools into English teaching and learning. In addition to motivating students and boosting their confidence and self-worth, ICT can improve students' communication, interaction, and participation in group projects. First and foremost, educators must address teachers' ICT proficiency. In all schools and higher education facilities, internal ICT skill training should be increased. Then, the students are eager to master English skills.

2 METHODOLOGY

According to Creswell (2012), Quantitative research is describing a research problem through a description of trends or a need for an explanation of the relationship among variables. There are two variables in this research, the independent variable and the dependent variable. The independent variable is BUSUU Application, symbolized by "X", and the dependent variable is vocabulary mastery, symbolized by "Y". According to Sugiyono (2007), research data on the quantitative approach in the form of numbers and analysis using statistics. This study used a pre-experimental research design, specifically the one-group pretest-posttest design to investigate the effect of using the BUSUU Application on students' vocabulary mastery at SMP IT Al Fityah Pekanbaru. According to Creswell (2014), pre-experimental design is useful when researchers aim to study a single group with an intervention during the experiment. This design is appropriate for this study as it allows for the examination of the effect of the BUSUU Application on a specific group of students without a control group. In the context of this study, it allows for a focused examination of vocabulary improvement after using the BUSUU Application (Gall & Borg, 2007). The sample of this research is

the students of class VIII-A, which consists of 26 students. The time for this research was from October to December 2024.

The researcher's instrument is a vocabulary test. A test is one of the things that is used for collecting data. To collect data from the sample in this research, the researcher used multiple-choice tests. According to Jeri (2012), taking the multiple-choice test improved retention more than a comparable cued recall test for both previously tested and related information, and both short and long delays were reduced. Furthermore, according to Martin (2001), multiple-choice tests allow examinees to select more than one answer to a question if they are uncertain of the correct one, as a result, it forces the students to think more carefully about the answers. This multiple-choice test is used to measure both variables. In the implementation of this research, the pre-test is completed before using the BUSUU Application. This test aimed to investigate the students' vocabulary mastery. The post-test is administered after using the BUSUU Application. This test aimed to examine the students' vocabulary scores after applying the BUSUU Application. The post-test consisted of twenty test items, which were similar to the pre-test. Combined with the pre-test results, the result was analyzed to prove the impact of the BUSUU Application on the development of students' vocabulary.

The test measured the prior students' vocabulary mastery before and after being taught with an application. Each test consisted of 20 items and it was divided into three indicator sections; meaning, form, and use. The vocabulary test in the instrument used by the researcher was adapted from Cameron (2001) & Nation (2012), which is in accordance with the characteristics of the sample from this research and in this instrument.

Table 1. Blueprint of Vocabulary Test

Variables	Indicator	Sub Indicator	Type of the Item
	Meaning	Defining a simple short sentence related to the past experience.	1, 2, 8, 12
Vocabulary Mastery		Identifying words that have the same meaning.	5, 7, 15
		Identifying words that have opposite meanings.	6, 11, 19
		Identifying context (names of object, shapes, sizes, and places).	3, 9, 16, 17
	Form	Rearrange jumbled words correctly.	10, 14, 18
	Use	Identifying the form of a word in a certain grammatical context.	4, 13, 20
		Total	**20**

Adapted from Cameron (2001) & Nation (2012)

This research use content validity to know the validity of vocabulary mastery tests. According to Brown (2003), content validity is partly a matter of determining if the content that the instrument contains is an appropriate sample for the domain it is supposed to represent. To analyze the validity of the vocabulary test, the researcher used the SPSS 30 program to try out 25 items to 30 students from different school, because there was an obstacle that make the researcher cannot to conduct the validity test in the class that are not samples in the same school. The validity test was conducted

to determine whether each item in the instrument was valid based on the comparison between the calculated correlation coefficient (R count) and the critical value from the correlation table (R table). The criteria for determining validity is as follows: An item is considered valid if R count > R table. For this research study, with a sample size of 30 Students, the R table value was 0.361 at a significance level of 5%. The result of the analysis showed that 20 questions were accepted or valid, while there were 5 questions are rejected or invalid, and were dropped.

3   RESULT AND DISCUSSION

A. Result

This study was conducted to determine the effect of using the Busuu application on vocabulary mastery of second-grade students of SMP IT Al Fityah. Furthermore, the researcher found out the students' scores in vocabulary mastery from 26 students. Therefore, the data from this study were obtained from the students' scores in the pre-test and post-test. The pre-test was given in the first meeting of the class before the treatment was conducted. It was conducted on 9th October 2024. The post-test was given in the last meeting of the class after the treatment was conducted. The post-test was conducted on 2nd December 2024.

1.   The Pre-Test Score

Before using the Busuu Application to provide the treatment, the researcher gave a pre-test to the students to assess their vocabulary mastery. According to the students' scores on pre-test, there were 10 Students (39%) were categorized as very good, there were 13 students (50%) were categorized as good, and 3 students (11%) were categorized as moderate. This indicates that the majority of the second-grade students in class 8A SMP IT Al Fityah were categorized as good category of the pre-test, indicating that their vocabulary mastery was generally good. Based on the descriptive statistics of the pre-test scores, the minimum score was 55, while the maximum score reached 100, with an average score (Mean) was 77.69. The standard deviation (SD) was 12.667, indicating a moderate variation in scores among the 26 students who participated. This result shows that most students have a good mastery of English vocabulary, with some variation in their level of achieved.
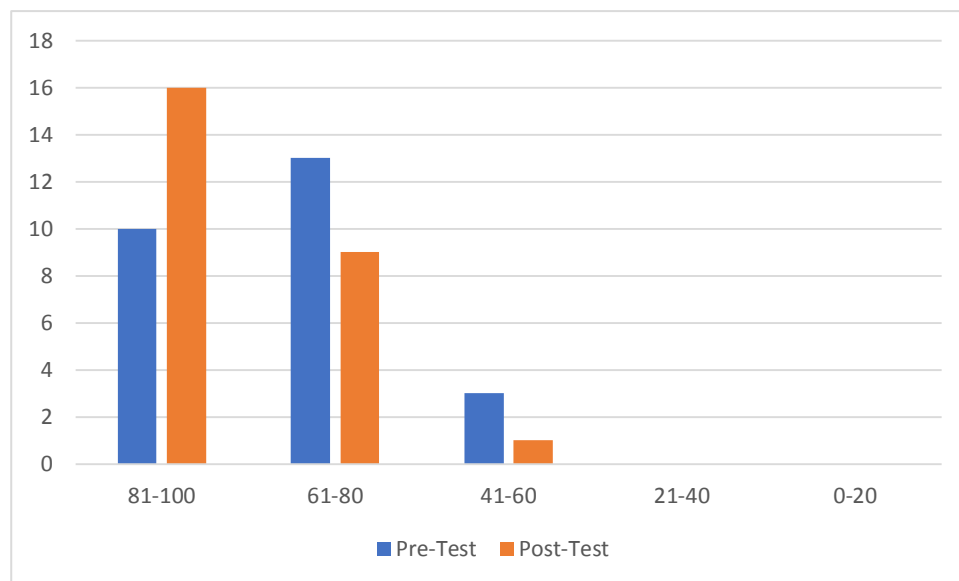
2.   The Post-Test Score

After using the BUSUU Application to provide the treatment, the researcher gave a post-test to the students to assess their vocabulary mastery. According to the students' scores of the post-test, there were 16 Students, or 61% were categorized as very good, there were 9 students (35%) categorized as good, and only 1 student (4%) was categorized as moderate. this indicates that the majority of the second-grade students in class 8a SMP IT Al Fityah were categorized as very good, indicating that their vocabulary mastery is generally very good. Based on the descriptive statistics of the post-test scores, the minimum score was 60, while the maximum score reached 100, with an average score (Mean) of 85.58. The standard deviation (SD) was 11.165, indicating a moderate variation in scores among the 26 students who participated. This result

shows that most students have a very good mastery of English vocabulary, with some variation in their level of achievement.

3. *The Gained Score*

A gain score is defined as the difference between posttest and pretest scores, reflecting the change in performance over time. Fitzmaurice, Laird, and Ware (2004) note that gain scores are useful for evaluating whether there are significant differences in the mean changes. Figure 1 below shows the achievement of pre-test and post-test scores in class VIII of SMP IT Al Fityah.

Figure 1.
Students' Gained Score of Pre-Test and Post-Test

Based on figure above, it was found that the pre-test scores with the lowest gain score are in the range of 41-60. There were 3 students on the Pre-test score and 1 student on the post-rest score who scored in this range. Then, in the gain score in the range of 61-80, it was found that there were 13 students in the pre-test score and 9 students in the post-test score in this range. Then, in the range 81-100, there were 10 students' pre-test scores who scored in this range, and there were also 16 students who scored in the post-test range in this range, and none of the students scored in the range 21-40 and also 0-20.

4. *The Normality Test*

The normality test of the significant effect on students' vocabulary mastery before and after being taught by using the Busuu Application at SMP IT Al Fityah Pekanbaru is calculated by using the SPSS 30 version.

Table 2. Test of Normality Pre Test and Post Test

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PRE TEST	0.113	26	.200*	0.960	26	0.400
POST TEST	0.147	26	0.156	0.930	26	0.078

Based on the result, it can be seen that the significance of the data in the table of Shapiro-Wilk of pre-test was 0.400 and the post-test is 0.078, which indicates that this data was normally distributed. It was measured by using Shapiro-Wilk, it explained that the data were normally distributed if > 0.05. So, the data of this research were normally distributed.

5. *Paired Sample T-Test*

In this research, the researcher analyzed a paired sample t-test by using the SPSS 30 program.

Table 3. Paired Sample T-Test

		Paired Differences							Significance	
					95% Confidence Interval of the Difference				One-Sided	Two-Sided
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	p	p
Pair 1	PRE TEST - POST TEST	-7.885	12.343	2.421	-12.870	-2.899	-3.257	25	0.002	0.003

The results of the paired samples t-test show a statistically significant difference between the pre-test and post-test scores (t = **-3.257**, df = **25**, p = **0.003).** The mean difference was **-7.885,** with a 95% confidence interval ranging from **-12.870** to **-2.899,** indicating that students' post-test scores were significantly higher than the pre-test scores. These findings suggest that the intervention or treatment applied between the tests positively affected students' performance.

6. *Hypothesis Test*

Based on the results of the analysis, there was a statistically significant difference between the pre-test and post-test scores of

students' vocabulary mastery taught using the Busuu Application. The calculated t-value was −3.257, with df=25 and a p-value of 0.003, which is lower than the significance level of α=0.05. This indicates that the null hypothesis (H$_O$) was rejected and the alternative hypothesis (H$_a$) was accepted.

The mean difference between the pre-test and post-test scores was −7.885 with a 95% confidence interval ranging from −12.870 to −2.899. This result confirms that the students' post-test scores were significantly higher than the pre-test scores, suggesting that the use of the Busuu Application positively affected the students' vocabulary mastery.

B. Discussion

The researcher has provided questions that must be answered by each student. After the questions were answered, the researcher categorized the students' vocabulary mastery. Based on the result, there were 10 students (39%) were categorized as very good, 13 students (50%) were categorized as good, and 3 students (11%) were categorized as moderate. Based on the data of the post-test, there were 16 students (61%) were categorized as very good, 9 students (35%) were categorized as good, and 1 student (4%) were categorized as moderate. It can be concluded from this classification that after the treatment, students' vocabulary mastery has improved.

In addition, to find out the improvement of students' vocabulary mastery by using the Busuu Application, the researcher has calculated the average score of students' vocabulary shown from two tests, namely pre-test and post-test. The pre-test average score was 77.69 and the post-test average score was 85.58. The researcher also used paired sample T-test to determine the hypothesis. The result of the mean difference was -7.885, with a 95% confidence interval ranging from -12.870 to -2.899, indicating that the students' post-test scores were significantly higher than the pre-test scores.

Based on the results, it shows that there was a significant effect of the Busuu Application on students' vocabulary mastery in the second grade of SMP IT AL Fityah Pekanbaru. It is proved by the students' post-test scores which performed better than the students' pre-test scores.

4   CONCLUSION

This study was conducted with the purposes of knowing the students' vocabulary mastery before being taught by using the Busuu Application, the students' vocabulary mastery after being taught by using the Busuu Application and the significant effect on students' vocabulary mastery at SMPIT Al Fityah Pekanbaru. Referring to the data analysis, the researcher finally concluded that the answer to the formulation of the problems are as follows:

1. The students' vocabulary mastery before being taught by using the Busuu Application at the class 8A at SMPIT Al Fityah Pekanbaru was that there were 13 students (50%) who were at the "good" level with an average score of 77.69.
2. The students' vocabulary mastery after being taught by using the Busuu Application at the class 8A at SMPIT Al Fityah Pekanbaru was that there were 16 students (61%) who were at the "very good" level, with an average score of 85.58.

3. There was a significant effect of students' vocabulary mastery after being taught by using the Busuu Application in class 8A at SMPIT Al Fityah Pekanbaru.

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