



Using Online Scrabble Game as a Learning Media for Students' Vocabulary Achievement

Sulistiyawati¹, Hery Nuraini², Purnawati³

¹English Language Education, Faculty of Teacher Training and Education, Universitas Islam Syekh-Yusuf, 15118, Indonesia

Abstract

The purpose of this research is to find out the effect of using online scrabble game as a teaching media for tenth grade students' vocabulary achievement at Madrasah Aliyah Attaqwa Kota Tangerang in academic year 2022/2023. There were 47 students' as the sample of the population, 26 science students as the experimental class and 21 social students as the control class. The experimental class uses the online Scrabble technique in its teaching process, while the control class uses conventional techniques in its teaching process. Data was collected through pretest and posttest. Therefore, type of research is quasi experimental with quantitative methods. The results of t-test (2-tailed) statistical calculation is 0.000, that was smaller than 0.05 ($0.000 < 0.05$). This significance score led to H_0 was rejected and H_a was accepted, which means that there is a significant difference between pre-test and post-test. Therefore, there is a significant effect of using Online Scrabble game as an effective teaching media. This study can be used to further develop students' understanding of vocabulary learning using online scrabble.

Keywords: Online Scrabble Game, Quasi-Experiment, Vocabulary Achievement

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1. INTRODUCTION

Languages are means of communication that are created through speaking and writing, and they are through listening and reading (Pongsapan & Patak, 2021). English is a major foreign language in Indonesia that offered as a subject in many schools and courses. Moreover, English is universal language used by every country on earth (Forsia et al., 2022). Meanwhile, vocabulary is one of language components that supports the mastery of others language skills (speaking, reading, writing, and listening). However, one of the biggest problems that students face when acquiring and learning English is lack of vocabulary. As some people know vocabulary is central to language learning and is an important part of its four components: writing, speaking, reading and listening (Herawati et al., 2022).

Vocabulary is one of the subskills of English that students need to be taught. as it plays an important role in all language skills. Vocabulary is also a combination of letters for words that make up a community of users. Vocabulary is the most important part of developing English skills (Sulaiman, 2019). Learning vocabulary

is indeed a difficult thing and not as easy as the hand-required process to master vocabulary. Vocabulary learning for high school students is very important. Because vocabulary can be used by students to learn English, reading and cohesion in particular are determined by vocabulary. If the student's vocabulary is limited, the student's ability to communicate and convey their needs is not conveyed properly. Acquiring a lot of vocabulary makes it easier for someone to listen, speak, read, and write (Hasibuan, 2018).

Several previous studies have explored the use of the Scrabble game as a medium in language learning. The following studies are particularly relevant to the present research. The first study was conducted by Hasibuan (2018), entitled "The Effect of Using Scrabble Media on Students' Achievement in Vocabulary." The findings of this study indicated that the implementation of Scrabble as a learning medium was effective in improving students' vocabulary achievement. The study further revealed that students demonstrated a positive response toward the use of Scrabble in the learning process. They appeared more relaxed and less anxious compared to traditional instructional methods. Moreover, the use of this medium contributed to increased student motivation, as reflected in their interest in participating in similar activities on a regular basis.

The second study was carried out by Khaira, Ritonga, and Halim (2021), entitled "The Effectiveness of Scrabble Game Media in Improving Learning Outcomes." The results of this study showed that the application of Scrabble game media significantly enhanced students' Arabic vocabulary. This conclusion was supported by statistical analyses, including the Mann-Whitney test and N-gain analysis, which indicated that the experimental group achieved higher post-test scores than the control group. The third study was conducted by Sari et al. (2022), entitled "Scrabble Game Technique: A Game Changer for English Vocabulary Learning." The findings of this study revealed that students' reading vocabulary skills improved significantly after the implementation of the Scrabble Game Technique (SGT). This suggests that the integration of SGT contributed positively to the enhancement of both students' vocabulary mastery and their reading comprehension. The fourth study was carried out by King (2020), entitled "A Pre-Experimental Study on Teaching English Vocabulary Through Scrabble Game to the Tenth Grade Students of SMK Negeri 1 Sengah Temila in Academic Year 2018/2019." The results indicated that the use of the Scrabble game as a teaching medium led to a notable improvement in the vocabulary mastery of tenth-grade students at SMK Negeri 1 Sengah Temila.

Furthermore, there are many advanced technologies that can be used as learning media. As said by Velarde et al. (2023) technology in education and training can be used to improve the efficiency and effectiveness of parental, pupil and administrator relations, and to analyze, plan, standardize and develop work processes. One of the technologies or media that students can use to improve their vocabulary is using scrabble games. Scrabble is a game commonly played by everyone, regardless of age or culture. The game is played by 2 or 4 players who place words on a board and score according to the value of the words they form. The board is 15 rows by 15 columns (Herawati et al., 2022). This game can increase vocabulary by memorizing words arranged in rows and columns one by one to

stimulate students' interest to continue solving a word for word. Scrabble is not as it were a fun diversion, it is moreover a incredible learning apparatus (Sulaiman, 2019).

This research attempts to determine the effect of using Online Scrabble game for students' vocabulary achievement at Madrasah Aliyah Attaqwa in learning English. The use of Online Scrabble game is a form of learning media for students in honing their vocabulary. In addition, to find out the significant difference between using Online Scrabble game and not using Online Scrabble game.

1.1 Vocabulary

Vocabulary is a set of meaningful words in either spoken or written forms (Hiebert & Kamil, 2005). Words are the most important elements of a language. They are collections or sets of words. Vocabulary is an necessarily part of any language that has to be learned (Kainta & Rombot, 2020). Students use vocabulary to communicate their points of view when speaking and writing. Vocabulary is one of the components of the English language, along with grammar, pronunciation, phonology, and spelling (Habil et al., 2023). Vocabulary is not only the knowledge of words and their meanings, but also the understanding of how words sound and how they are used in context (Nation & Newton, 2012).

1.2 Vocabulary Achievement

Vocabulary achievement is designed for students' to learn new words. Vocabulary achievement facilitates the acquisition of a broad vocabulary through systematic teaching strategies (Baumann et al., 2002). Vocabulary achievement is the basis of other language skills to build other skills, especially reading and writing (Al-Omari & AbuSeileek, 2023). The vocabulary achievement skills will reflect reading and writing skills because they are the basis and building blocks of learning English as a foreign language. The process of learning vocabulary is not an easy one.

1.3 Online Scrabble as a Teaching Media

Media from an educational point of view is a very strategic tool, able to give a certain dynamism directly to students, that determine the success of the process of teaching and learning (Naimah, 2022). In Amri (2021) learning media not only relevant to those principles, but also suitable as educational game to improve students' creative thinking skills is Scrabble. Scrabble is one of the types of media that can be used as an educational tool, especially when it comes to learning vocabulary. Hebbleth waite said in Voinov (2010) that scrabble has something to offer players.

1.4 Online Scrabble Game

Online games are structured games designed for fun and also serve as learning tools. Online games are also electronic media that are loved by children and adults alike (Munawir, 2019). Online games are effective in helping students' learn English vocabulary (Amal Shehadeh AlNatour & Dima Hijazi, 2018). Games in learning are strategies and techniques that teachers use to keep learners engaged in the learning process. Scrabble games are simple and energy-efficient educational games because they are played traditionally and modernly (Training et al., 2022). According to P D Harris (2005) cited in King (2020) Scrabble is a word-playing game.

2. METHOD

This research used a quantitative approach with quasi-experiment method, therefore pre- and post-test were implemented. Quasi-experimental design is a form of experimentation for the development of a true experimental design, which is very difficult to do. (Sugiyono, 2013). The population of this research was the tenth grade of Madrasah Aliyah Attaqwa, which consisted of three parallel classes with 88 students of X IPA, X IPA, X Agama. While, sample included 47 students of tenth grade which consisted of two classes, namely X IPS as experiment class (26 students) and X IPA as control class (21 students).

The data were collected by giving 2 tests to the students namely pre-test and post-test. Each test consists of 20 multiple choice questions with distribution is showed by Table 1. Then, the instruments were being tested for validity and reliability were examined prior the implementation. Validity of the test were examined calculating the Cronbach alpha' score with result of exclusion of 30 questions (originally, the test consist of 50 multiple questions), therefore only 20 questions were implemented for pre and post test. Meanwhile, the reliability test of the instruments were implemented by expert evaluation. The experiments were conducted for 3 months (6 meetings) including pre-test in the first meeting, and post-test in the last meeting. Each meeting took 60 minutes in offline classroom.

Table 1. Test Specification

No.	Aspect	Indicator	Number of Item	Total Item
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1.	Word Classes	a. Noun	1, 7, 13, 19	4
		b. Verb	2, 8, 14, 20	4
		c. Adjective	3, 9, 15	3
		d. Adverb	4, 10, 16	3
2.	Meaning	a. Synonyms	5, 11, 17	3
		b. Antonyms	6, 12, 18	3

3. RESULT and DISCUSSION

3.1 Result of Descriptive Statistics

The results of pre-test and post-test were presented in descriptive statistics as follows on table 4.:

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest Experimental Class	26	10	75	37.50	19.039
Posttest Experimental Class	26	55	95	73.27	10.765
Pretest Control Class	21	15	80	45.71	19.703
Posttest Control Class	21	55	90	72.62	8.749
Valid N (listwise)	21				

Source: SPSS 25

Based on the table, in the experimental class, the minimum pre-test score is 10, while the post-test minimum score is 55, so the comparison value is 45. In the control class, the pre-test minimum score is 15, while the post-test minimum score is 55, the ratio of the two values is 40. Furthermore, in the experimental class, the maximum pre-test score is 75, while the maximum post-test score is 95, the difference is 20. In the control class, the maximum pre-test value is 80, while the maximum post-test value is 90, then the difference is 10.

3.2 Result of Normality Test

The researchers used SPSS version 25 to calculate the pre-test and post-test data normality tests in the experimental class and control class. The results of data testing can be seen in table 2.

Table 2. Tests of Normality

	Shapiro-Wilk		
	Statistic	Df	Sig.
Pretest Experimental Class	.933	21	.156
Posttest Experimental Class	.961	21	.545
Pretest Control Class	.955	21	.414
Posttest Control Class	.966	21	.649

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: SPSS 25

According to the table, the significance value of the Shapiro-Wilk test of the pre-test of the experimental class was 0.156, the significance value of the post-test of the experimental class was 0.545 ($p > 0.05$) and the significance value of the control class was 0.414 and 0.649 ($p > 0.05$). This means that the pre-test and post-test of experimental class and control class were higher than 0.05. So, the data of the experimental class and the control class were normally distributed.

3.3 Result of Homogeneity

Homogeneity is used to determine whether or not the data obtained are homogeneous. The results of the homogeneity test are shown in Table 3. as

Table 3. Test of Homogeneity of Variances

		Levene	df	Sig
		Statistic	1	df2
Post Test Experiment	Based on Mean	1.192	1	45
				.28
	Based on Median	1.183	1	45
				.28
	Based on Median and with adjusted df	1.183	1	44.79
				.28
	Based on trimmed mean	1.227	1	45
				.27
				4

follows:

Source: SPSS 25

The testing criteria are if significant score was smaller than 0.05 (< 0.05) then the variant data has not the same variant group and if significant was higher than 0.05 (> 0.05) so the variant data has the same variant group. Therefore, the researchers concluded that the variant of two sets of data, namely the control class and experiment class is the same. It showed from the

significant value 0.281 was higher than 0.05 ($0.281 > 0.05$). It means the data was homogeneous.

3.4 Result of Independent Sample T-test

The results of the Independent Sample T-Test can be seen in table 4.

Table 4. Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
PrePost test Experim ent Control	Equal variances assumed	21.131	.000	9.962	92	.000	-31.809	3.193	-38.150	-25.467
	Equal variances not assumed			9.962	78.62	.000	-31.809	3.193	-38.181	-25.436

Source: SPSS 25

Based on the table, the result of output t-test that showed result Sig. (2-tailed) is 0.000 was smaller than 0.05 ($0.000 < 0.05$). So, H_0 was rejected and H_a was accepted, which means that there is a significant difference between pre-test and post-test in the experimental class students who used online Scrabble game as a teaching media. It can be concluded that there is a significant effect of using Online Scrabble as a teaching media for tenth grade students' vocabulary achievement at Madrasah Aliyah Attaqwa Kota Tangerang.

3.5 Discussion

The purpose of this research is to find out the effect of using online scrabble game as a teaching media for tenth grade students' vocabulary achievement at Madrasah Aliyah Attaqwa Kota Tangerang. The researchers taught by online scrabble as a teaching media. First, the researchers conducted a pretest during in first meeting. Then, the researchers applied the treatment by teaching using online scrabble. The last, the researchers gave a post-test. This study differences from previous studies in Sari et al. (2022) that it uses pre-experimental methods, namely with one group pre-test and post test. In contrast to Amri (2021), this research used scrabble as a media to improve children's reading skills. The researchers started by giving a pre-test to measure students' vocabulary achievement in both classes. The pre-test was in the 20 multiple choice question items. After conducting the pre-test, the researchers gave treatment to both classes. The research has been conducted in the experimental class by using online scrabble and in the control class by using conventional learning. The treatment learning process has been carried out for four meetings in each class. The researchers gave a post-test after treatment. The post-test was in the 20 multiple choice questions. The post-test was made to determine whether or not there was a significant effect on students' achievement in learning English vocabulary by using online Scrabble.

Furthermore, the experimental results of the online Scrabble learning process media were positive, as improvements were seen in the post-test. In addition, the experimental class score was higher than control class. There is a significant difference between pre-test and post-test, which mean H_0 is rejected and H_a is accepted. The results of this study have been supported by Hasibuan (2018) said that vocabulary achievement with Scrabble is effective and can improve students' vocabulary. Several students showed interest in learning English with Scrabble. Also, the other researchers Dewani (2022) and King (2020) said that students' using the Scrabble game essentially improved the students' English vocabulary. While students' can increase their vocabulary while playing Scrabble games.

This research has some limitations such as limited time to conduct research, when the researcher only had six meetings, and each meeting was 60 minutes, so this research lacked treatment and reinforcement even though there were many factors that could affect student learning outcomes. There are several reasons behind this, such as the students' have entered the final exam schedule at school.

4. CONCLUSION

The statistical results were starting in the hypothesis testing section . This is obtained by analyzing the data through the statistical calculation of the Independent Sample T-test. It showed that Ho is rejected and Ha is accepted. This means that there is a positive effect of using online scrabble game as a teaching media for tenth grade students' vocabulary achievement. Therefore, it can be concluded that there is a significant effect of using online scrabble game as a teaching media for students' vocabulary achievement. This findings supports game-based and interactive learning principles, suggesting that vocabulary acquisition is enhanced through active engagement and meaningful word manipulation. Furthermore, it indicates that teachers can effectively integrate online Scrabble as a complementary instructional medium to reinforce vocabulary learning, increase motivation, and promote student participation. Therefore, schools are encouraged to facilitate the use of digital learning tools by providing adequate technological support. Suggestion for future research is to explore long-term effects, application to other language skills, and comparison with other instructional strategies to strengthen the evidence base for digital game-based learning in vocabulary instruction.

REFERENCES

- Al-Omari, D., & AbuSeileek, A. F. (2023). The Effect of Using Tablets on EFL Learners' Vocabulary Acquisition and their Attitudes toward Them. *Journal of Applied Linguistics and Language ...*, 10(1), 87–114. <https://www.jallr.com/~jallrir/index.php/JALLR/article/download/1273/1373>
- Amal Shehadeh AlNatour, & Dima Hijazi. (2018). The Impact of Using Electronic Games on Teaching English Vocabulary for Kindergarten Students. *US-China Foreign Language*, 16(4), 193–205. <https://doi.org/10.17265/1539-8080/2018.04.001>
- Amri, N. A. (2021). Pengaruh Penggunaan Permainan Scrabble Dalam Meningkatkan Kemampuan Membaca Permulaan. *Jurnal Panrita*, 2(1), 23–27. <https://doi.org/10.35906/panrita.v2i1.153>
- Baumann, J. F., Tereshinski, C. A., & Kameñeni, E. J. (2002). To Fifth-Grade Students. *Reading Research Quarterly*, 37(2), 150–176.
- Dewani, A. N. F. (2022). *the Use of Scrabble Game in Improving Vocabulary*. 2(2), 1–8. <https://ayunetafd.wordpress.com/2013/07/24/the-use-of-scrabble-game-in-improving-vocabulary/>
- Forsia, L., Fitri, I. S., & Purnawati, P. (2022). Correlation of Students' Reading Interest, Vocabulary Mastery and Their Reading Comprehension. *English Education, Linguistics, and Literature Journal*, 1(2), 122–131. <https://doi.org/10.32678/ell.v1i2.6561>
- Habil, M. A., Agus, M., & Hery, N. (2023). *The Correlation between Students ' Vocabulary Mastery and Their Reading Ability at Tenth Grade of SMAN 5*

- Kabupaten Tangerang*. 2(1), 23–33.
- Hasibuan, S. H. (2018). The Effect of Using Scrabble Media on Students' Achievement in Vocabulary. *ELS Journal on Interdisciplinary Studies in Humanities*, 1(3), 342–349. <https://doi.org/10.34050/els-jish.v1i3.4910>
- Herawati, H., Gumelar, E. R., & Novari, F. A. (2022). The Effect of Scrabble Game To Students' Vocabulary Mastery at the Eighth Grade Students' of Mts Daarul Ulum Cihara Lebak. *Journal of English Language Learning*, 6(2), 149–154. <https://doi.org/10.31949/jell.v6i2.3627>
- Hiebert, E. H., & Kamil, M. L. (2005). Teaching And Learning Vocabulary. In *วารสารวิชาการมหาวิทยาลัยอีสเทิร์นเอเชีย* (Vol. 4, Issue 1).
- Kainta, E., & Rombot, J. E. (2020). Exploring Students' Motivation and Vocabulary Achievement through Labeling Method. *Vision: Journal for Language and Foreign Language Learning*, 9(1), 1–17. <https://doi.org/10.21580/vjv9i14509>
- King, L. S. (2020). A pre-experimental study on teaching English vocabulary through Scrabble Game to the Tenth Grade students of SMK Negeri 1 Sengah Temila in academic year 2018/2019. *English Journal*, 14(2), 100–126. <http://ejournal.uika-bogor.ac.id/index.php/ENGLISH/article/view/3844>
- Munawir, A. (2019). Online Game and Children's Language Behavior. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 7(2), 337–343. <https://doi.org/10.24256/ideas.v7i2.1050>
- Naimah, A. (2022). The Use of Video as a Learning Media in Science Learning (A Systematic Review). *AL-ISHLAH: Jurnal Pendidikan*, 14(4), 6941–6950. <https://doi.org/10.35445/alishlah.v14i4.1565>
- Nation, P., & Newton, J. (2012). Teaching vocabulary. *Second Language Vocabulary Acquisition, 1953*, 238–254. <https://doi.org/10.1017/cbo9781139524643.017>
- Pongsapan, N. P., & Patak, A. A. (2021). Improving content, organization, vocabulary, language use, and mechanics using movie trailer media. *International Journal of Evaluation and Research in Education*, 10(2), 728–737. <https://doi.org/10.11591/ijere.v10i2.21162>
- Sari, D. F., Sahardin, R., Yani, V., & Yusuf, Y. Q. (2022). Scrabble game technique: A game changer for English vocabulary learning. *Englisia: Journal of Language, Education, and Humanities*, 10(1), 1. <https://doi.org/10.22373/ej.v10i1.12388>
- Sugiyono, D. (2013). *Metode Penelitian Kuantitatif, Kualitatif, dan Tindakan*.
- Sulaiman, S. (2019). The Impact of Teaching Vocabulary for Junior High School Students Using Scrabble Game. *International Journal of English Education and Linguistics (IJoEEL)*, 1(2), 1–9. <https://doi.org/10.33650/ijoeel.v1i2.704>
- Training, T., Syaifuddin, A., & Wijayanto, A. (2022). *The Effectiveness of Scrabble , System Keyboard and Whiteboard*. 292–299.
- Velarde, C. L., Infantas, M. L. V., Ramos, M. S. G., Carrasco, J. L. T., & Jiménez, J. H. A. (2023). Technology in the educational processes of basic education in Peru. *International Journal of Evaluation and Research in Education*, 12(1), 433–443. <https://doi.org/10.11591/ijere.v12i1.24212>
- Voinov, V. (2010). Words should be fun: Scrabble as a tool for language preservation in Tuvan and other local languages. *Language Documentation & Conservation*, 4, 213–230. <papers2://publication/uuid/E6FB6269-B961-4BD6-9347-FDC748BAE716>

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