

English Lexical Acquisition Through Mobile Legends Bang Bang: A Game-Mediated Language Learning Perspective

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Abstract

Language serves as a fundamental means of communication and social interaction. Mobile Legends Bang Bang is a popular online game among adolescents worldwide. The implementation of Mobile Legends Bang Bang as an instructional tool was investigated to identify its contribution to improving lexical mastery among tenth grade students at SMAN 1 Parongpong. The research adopted an explanatory sequential mixed method design. Participants consisted of 30 students in class 10 E. Data collection involved tests, observations, questionnaires, and interviews. Quantitative data were examined through descriptive statistics, a normality test, and paired sample t tests in SPSS to identify significant changes in students' pre test and post test score. Findings revealed notable improvement in students' performance. The increase in the mean score from 63.83 (pre-test) to 79.67 (post-test) demonstrates an improvement in students vocabulary after being taught using Mobile Legends Bang Bang as an instructional medium. Questionnaire data revealed positive student responses regarding the integration of Mobile Legends Bang Bang into lexical instruction, while observation and interviews highlighted increased engagement and motivation. These findings suggest that incorporating popular mobile games into language instruction can be an effective and enjoyable strategy for enhancing students' vocabulary acquisition.

Keywords: English Language Teaching; Vocabulary Mastery; Game-Based Learning

INTRODUCTION

Language is a crucial element in human life, as it enables individuals to communicate effectively and interact socially. According to Ravinder & Mahesh (2023) English is widely recognized as a global lingua franca and remains one of the most widely used languages worldwide. It is extensively used in international trade, diplomacy, mass media and entertainment, telecommunications, and scientific publications, as well as in newspapers and other forms of printed media. Throughout Indonesia's educational institutions, English has been officially introduced at various levels of education, from primary school to university. Yudha & Mandasari (2021) state "Language Skills are involving reception such as listening and reading and production such as speaking and writing". In the initial stages of language acquisition, lexical knowledge serves as a fundamental basis for learning English. According to Richards and Renandya (2002) as cited in Adha et al. (2022) vocabulary is a central component of language competence and serves as the foundation for learners' speaking, reading, and listening skills. Diantoro, Mulyati, & Halim (2020) added, English also consists of three main language components, namely vocabulary, grammar, and pronunciation, which are taught to students to enhance the mastery of the four core competencies.

Based on preliminary research conducted at senior high school in Parongpong, students experienced difficulties in learning English due to their limited vocabulary. Students often rely

on Indonesian because some of them experience difficulty composing dialogues in English. According to Susanto (2021) without sufficient vocabulary, individuals cannot communicate effectively or express their feelings clearly in either spoken or written form. Perkasa, Lubis, Putri, & Amin (2022) state “Vocabulary is often considered as a critical aspect of foreign language, learners as limited vocabulary in a second language, impedes successful communication”. Limited vocabulary mastery hinders students’ ability to learn effectively and comprehend the learning materials. According to Ekayanti, Amrullah, & Thohir (2019) as cited in Sani et al. (2024) Vocabulary is essential in foreign language learning because a larger vocabulary helps learners understand the language and express ideas more easily, whereas limited vocabulary makes comprehension and expression more difficult. Furthermore, limited vocabulary can make the learning process less enjoyable and become a serious problem in improving students’ vocabulary mastery. Several researchers have identified factors contributing to students’ limited vocabulary knowledge. According to Derakhsan & Khatir (2015) as cited in Balqish & Hadi (2023) vocabulary learning is often perceived as monotonous by language learners. In addition, Ferrer & Gee Carmen (2022) as cited in Balqish & Hadi (2023) argued that achieving language proficiency requires mastery of a large number of commonly used lexical items. They further noted that vocabulary usage can be challenging because many words have multiple meanings and various collocational patterns.

In teaching vocabulary, various modern platforms can be utilized to make English learning more enjoyable, including game-based approaches. According to Sadiqin, Syahri, & Tahrum (2022) Various methods can make language learning more enjoyable, one effective techniques is the use of games, as they can increase learners’ interest and enthusiasm, particularly among young learners. Currently, numerous online games are widely played by high school students and can potentially support the improvement of their English skills. Mobile Legends Bang Bang has become one of the widely played digital platforms among adolescents. Dayanti & Yulianti (2025) added, MLBB provides a potential alternative approach, as it aligns with the principles of Digital Game Based Learning by offering repeated and meaningful English input through gameplay and real time communication. Yudanto (2025) states that learning English through video games can provide enjoyment and entertainment, which may increase students’ motivation and engagement in the learning process. Rahmatika (2025) showed that digital gaming has increasingly been recognized as a potential medium for enhancing English vocabulary learning among senior high school students.

Previous studies have demonstrated the educational potential of Mobile Legends Bang Bang in enhancing students’ motivation and communication skills. According to Genson, Aboy, & Turano (2023) despite the potential for Mobile Legends Bang Bang to encourage aggressive communication during gameplay, the game can also enhance interpersonal communication by promoting self expression, social interaction, and leadership skills among player. Similarly, Sauca, Wahyudi, & Sumariyani (2025) reported that the implementation of Mobile Legends Edu Strategy as a learning medium positively influenced students’ understanding of the material and learning motivation, while encouraging both collaborative and independent learning experiences. Waqidah & Fajar (2025) found that Mobile Legends Bang Bang contributed significantly to students’ English language proficiency, particularly in listening and reading skills, by providing authentic language exposure through in game communication, instruction, and interactions within a digital environment. Qothrunnada, Asmiyah, Siraj, & Hasnawati (2024) demonstrated that Mobile Legends Bang Bang supported students’ English narrative writing skills by fostering creativity, enriching vocabulary use, improving story development, and increasing learners’ engagement through gamified learning experiences. Taken together, previous studies have demonstrated various educational benefits of Mobile Legends Bang Bang

across different learning domains. Nevertheless, research specifically examining its role in lexical development among tenth grade learners remains limited, especially studies employing a mixed method design to explore both learning achievement and learners' perspective. Responding to these issues, integration of Mobile Legends Bang Bang into lexical instruction for tenth grade learners in Parongpong became the central focus of this research. This research is carried out to examine whether the game contributes to students' vocabulary improvement and to identify students' perceptions of learning vocabulary through this game based approach. To achieve these purposes, the researcher is guided by the following research questions:

1. Is there a significant impact of using Mobile Legends Bang Bang in vocabulary teaching for 10th grade students at a secondary school in Parongpong?
2. How is Mobile Legends Bang Bang used in teaching vocabulary for 10th grade students at a secondary school in Parongpong?
3. What are the obstacles faced by students and teachers in teaching vocabulary for 10th grade students at a secondary school in Parongpong?

In light of the background presented, this research investigates integration of Mobile Legends Bang Bang into English lexical instruction for tenth grade learners in Parongpong. This research investigate the impact of the intervention on learners' lexical competence, explores its implementation in the classroom, and identifies challenges encountered during instructional activities. Results from this research are anticipated to broaden understanding of game based learning as an alternative approach to lexical instruction.

METHOD

An explanatory sequential mixed method design was employed, combining the collection and analysis of quantitative data, followed by qualitative methods for further interpretation. According to Tashakkori and Creswell (2007), mixed method research refers to an approach that combines numerical and descriptive data analysis to produce comprehensive interpretations within one investigation. Mixed method approach integrates quantitative and qualitative data to enhance the interpretation and validity of research findings. In addition, a mixed method design enables researchers to obtain more comprehensive findings by integrating the advantages of both qualitative and quantitative data. The participant consisted of 30 students from class 10 E at SMAN 1 Parongpong, a public senior high school located in West Bandung Regency. Participants were selected through purposive sampling. The class was chosen based on the English teacher's recommendation due to students' difficulties in learning English vocabulary. This research utilized tests, questionnaires, observation sheets, and interviews as data collection instruments. The vocabulary test was used to measure learners' lexical competence before and after the intervention. Observation sheets were utilized to document students' participation during classroom activities. Questionnaire were administered to investigate students' perceptions of the instructional approach, while semi-structured interviews were conducted to obtain more detailed insights into their learning experiences. Data collection was conducted in three meetings, including a pre test, implementation of the intervention, and a post test. Questionnaires and interviews were subsequently administered to explore students' perceptions of the intervention. Quantitative data obtained from the tests were analyzed using descriptive statistics, normality tets, and a paired sample t test through SPSS. Questionnaire using Likert scale. Qualitative data collected through observations and interviews were analyzed using data reduction, data display, and conclusion drawing procedures. The test items and questionnaire were reviewed by an English education expert to ensure content validity.

RESULTS AND DISCUSSION

Results

The analysis revealed important insights into how Mobile Legends Bang Bang was integrated into vocabulary instruction, including the teacher role during the lessons, the learning content provided, the use of the game as instructional support, students' level of involvement, and their overall perceptions of the learning experience.

1. The significant impact of using Mobile Legends Bang Bang in teaching vocabulary.

This study was conducted in class 10 E, which consisted of 30 students. The first meeting was held on Tuesday, April 15th, 2025, during which pre-test was administered. The final meeting took place on Tuesday, April 29th, 2025, to administer the post-test.

Table 1. Students' Pre Test and Post Test Scores

No	Participants	Pre-Test Score	Post-Test Score
1	Student 1	65	75
2	Student 2	70	75
3	Student 3	30	100
4	Student 4	75	80
5	Student 5	65	75
6	Student 6	55	75
7	Student 7	75	85
8	Student 8	65	80
9	Student 9	45	95
10	Student 10	55	60
11	Student 11	65	80
12	Student 12	65	65
13	Student 13	30	70
14	Student 14	80	85
15	Student 15	60	60
16	Student 16	55	75
17	Student 17	75	75
18	Student 18	60	80
19	Student 19	70	80
20	Student 20	75	75
21	Student 21	90	85
22	Student 22	85	85
23	Student 23	80	75
24	Student 24	45	80
25	Student 25	50	95
26	Student 26	80	90
27	Student 27	75	80

28	Student 28	40	65
29	Student 29	85	95
30	Student 30	60	95
Total		1925	2390

As shown in the table, the cumulative score increased from 1925 in the pre test to 2390 in the post test. Among the 30 students, 23 showed improvement, 5 obtained the same score, and 2 experienced a decline. These results suggest that most learners benefited from instructional activities, possibly due to increased engagement and exposure to lexical items during learning. However, the lack of improvement among some students may be attributed to individual differences in participation, prior knowledge, or learning preferences.

Descriptive Statistic

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Test	30	30	90	63.83	16.172
Post Test	30	60	100	79.67	10.250
Valid N (listwise)	30				

Figure 1. Descriptive Statistic Results

The descriptive statistics presented in the table summarize the pre test and post test results of 30 students. The higher mean score in the post test indicates overall progress in learners’ lexical competence following the intervention. This improvement may be associated with increased engagement and exposure to lexical items throughout the learning activities. In addition, the lower standard deviation suggests that students’ performance became more uniform, indicating that the intervention benefited learners across different achievement levels. However, variations in individual performance remained, possibly due to differences in prior knowledge, participation, and learning preferences.

Normality Test

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre Test	.129	30	.200*	.947	30	.138
Post Test	.158	30	.055	.949	30	.154

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

a. Lilliefors Significance Correction

Figure 2. Normality Tests Results

As shown in the table, the Kolmogorov-Smirnov and Shapiro-Wilk tests were conducted at a significance level (α) of 0.50. For the pre test, the Kolmogorov-Smirnov significance value was 0.200, whereas the Shapiro-Wilk significance value was 0.138. Both values exceeded 0.50, indicating that the pre test scores were normally distributed. For the post test, the Kolmogorov-Smirnov significance 0.05 and the Shapiro-Wilk significance value was

0.154. Both values exceeded 0.50, showing that the post-test scores were also normally distributed. In light of these results, both the pre test and post test data were considered to be normally distributed. Therefore, the normality assumption was satisfied, and the data were appropriate for further analysis using paired sample t-test.

Paired Sample T-Test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre Test	63.83	30	16.172	2.953
	Post Test	79.67	30	10.250	1.871

Figure 3. Paired Sample T-Test Result

As shown in the table, the mean score for the pre test was 63.83 with a standard deviation of 16.172 and standard error mean 2.953. The mean score for the post test was 79.67 with a standard deviation of 10.250 and a standard error of mean 1.871. The increase in the mean score indicates an improvement in students vocabulary after the treatment. The lower standard deviation also indicates that post-test scores were more consistent than pre test scores.

2. The implementation of Mobile Legends Bang Bang in teaching vocabulary. According to the observation sheets, researcher used three activity to measured they knowledge in Pre-Activity, Whilst Activity, and Post-Activity.

A. First Class Meeting

The first meeting held on Tuesday, April 15th, 2025, at SMAN 1 Parongpong.

Pre-Activity

On the first day, the class began with a communal prayer led by the class president, followed by an attendance check. The meeting aimed to engage students in discussions related to the study, introduce the learning module, and familiarize students with Mobile Legends Bang Bang as part of the instructional approach.

Whilst Activity

Students’ lexical comprehension was initially assessed through a pre-test conducted during the first meeting. Assessment material emphasized lexical items related to Mobile Legends Bang Bang within a procedural text entitled “How to Buy a Hero in Mobile Legends Bang Bang” and were designed to measure learners’ word knowledge across five aspects..

Post-Activity

In the post-activity, teacher asked students to form groups of six, there would be five groups in class to study for the next meeting. After that, the teacher explained what would be learned in the next meeting. Last, the teacher expressed her gratitude and asked the class president to lead a prayer after studying.

B. Second Class Meeting

The second class meeting held on Tuesday, April 22th, 2025, the teacher would give a treatment to students based on the pre-test result.

Pre-Activity

Similar to the previous meeting, the class began with a communal prayer led by the class representative. The teacher then checked students’ attendance and reviewed the previous lesson. After announcing the pre-test results, the teacher assessed

students’ retention and ensured that all students had installed Mobile Legends Bang Bang before the learning session began.

Whilst Activity

During the main activity, the teacher explained procedure texts and assigned each group a theme related to Mobile Legends Bang Bang. Students explored their topics, identified unfamiliar vocabulary, worked together to find the meanings, and selected a spokesperson to present their results.

Post-Activity

After the lesson, the teacher conducted a reflection session and randomly asked students to summarize the material. The teacher then informed students about the next meeting, ended the class with a prayer led by the class president, and expressed gratitude.

C. Third Class Meeting

The third class meeting held on Tuesday, April 29th, 2025, the students will take last test to evaluate their vocabulary knowledge.

Pre-Activity

In the pre activity, the class began with a prayer led by the class president. The teacher then greeted the students, conducted attendance, and reviewed previous material to assess students’ retention.

Whilst Activity

During the whilst activity, the teacher administered a post-test to measure students’ learning outcomes from the first and second meetings. Afterward, students shared their opinions about the test, noting that most questions were easier due to familiarity with the vocabulary, although some difficulties remained. The teacher then distributed a questionnaire and selected six students for interviews.

Post-Activity

In the post activity, the teacher thanked the students, gave small gifts for their participation, and ended the session with a prayer led by the class president before saying goodbye.

3. The obstacles experienced by students and teachers during English vocabulary learning activities.

After three meetings involving the pre-test, treatment, and post-test, students shared their experiences of learning vocabulary through Mobile Legends Bang Bang. A questionnaire was then distributed to evaluate the effectiveness of the method and identify obstacles in the learning process. The questionnaire focused on four aspects, including students’ experiences, the effectiveness of the game, the benefits of the technique for vocabulary learning, and the improvement of students’ vocabulary mastery.

Questionnaire Results

Table 2. Questionnaire Data Results

ITEM	TA		A		N		D		TD	
	Likert Scale	%	Likert Scale	%	Likert Scale	%	Likert Scale	%	Likert Scale	%
1	7	23%	14	47%	9	30%	0	0%	0	0%
2	3	10%	20	67%	6	20%	1	3%	0	0%
3	2	7%	8	26%	18	60%	2	7%	0	0%

4	11	37%	8	26%	7	24%	4	13%	0	0%
5	3	10%	17	57%	10	33%	0	0%	0	0%
6	8	26%	8	26%	10	34%	4	14%	0	0%
7	13	43%	11	37%	3	10%	3	10%	0	0%
8	5	17%	16	53%	6	20%	3	10%	0	0%
9	7	23%	10	34%	8	26%	3	10%	2	7%
10	12	40%	14	46%	2	7%	2	7%	0	0%

Questionnaire results revealed generally positive perceptions toward the integration of Mobile Legends Bang Bang in English learning. Most participants expressed increased interest and enjoyment in learning English through the game, with a majority agreeing that it was more engaging than conventional vocabulary learning techniques. Students also perceived the game as beneficial for lexical development, reporting that it helped them learn new words, improve vocabulary mastery, understand learning materials, and retain vocabulary more effectively. In addition, many participants believed that the game contributed positively to their academic performance and supported them in competing classroom activities. Although a small proportion of students reported difficulties when learning vocabulary through the game, most responses were positively or neutral, suggesting that the instructional approach was generally well received.

Interview Results

To confirm the questionnaire results, semi-structured interviews involved six participants selected from the same class. The results showed that all participants had learned English since elementary school, yet most still faced difficulties in vocabulary mastery. However, they demonstrated a basic understanding of procedural texts as step by step instructional texts. Most students responded positively to the use of Mobile Legends Bang Bang, stating that the activity created a more engaging lexical learning experience and helped them understand new words more easily. Nevertheless, several obstacles were reported, such as distraction from gameplay and unstable internet connection. Overall, the findings indicate that the game support vocabulary learning by increasing students' engagement and motivation.

Discussion

The findings indicate that integrating Mobile Legends Bang Bang into instructional activities contributed considerably to learners' lexical development. Lexical knowledge plays a fundamental role in English acquisition, while learners frequently encounter difficulties in understanding unfamiliar words through conventional instruction. During the implementation of this study at SMAN 1 Parongpong, students showed higher engagement and better vocabulary recall when the game based approach was applied. This finding is consistent with Zhang (2018), who argued that game based learning is an important approach in English instruction because it can increase students' learning interest and improve teaching effectiveness. The improvement in learners' lexical competence indicates that integrating digital games into instruction may facilitate vocabulary acquisition through increased engagement and contextualized language exposure.

In line with Kobis & Tomatala (2020), the implementation of Mobile Legends Bang Bang facilitated the classroom learning process and encouraged students to become more active compared to before the game was introduced. Students became more actively involved in learning tasks, particularly during group discussions and vocabulary exploration. These findings suggest that integrating digital games into classroom instruction can create a more

interactive learning environment and support learners' engagement throughout the instructional process.

The positive responses obtained from the questionnaire are consistent with the findings of Alyana, Sabrina, Citra, Berutu, & Nahria (2024) the terms encountered in the game context become easier to understand because they are directly applied through relevant actions and interactions. However, the present research extends previous studies by specifically examining lexical development through Mobile Legends Bang Bang and employing an explanatory sequential mixed method design. By combining test results, classroom observations, questionnaires, and interviews, this study provides a more comprehensive understanding of how game based activities contribute to vocabulary learning and learners' perceptions in a secondary school context.

CONCLUSION

This study demonstrates that the integration of Mobile Legends Bang Bang into English learning activities can positively support vocabulary acquisition among tenth grade students in Parongpong. The findings indicate an improvement in students' lexical competence following the intervention, suggesting that game based learning can serve as an engaging medium for vocabulary development. Furthermore, the use of Mobile Legends Bang Bang encouraged greater student participation, interaction, and collaboration during classroom activities, contributing to a more active learning environment.

Despite these positive outcomes, several challenge were encountered, including students' limited prior vocabulary knowledge, unstable internet connectivity, and smartphone storage constraints, which may affect the effectiveness of implementation. Therefore, adequate technological support and instructional guidance are essential for maximizing the benefits of game based learning. Overall, the findings suggest that Mobile Legends Bang Bang has the potential to be an effective and enjoyable tool for enhancing vocabulary learning and fostering student engagement in English language classrooms. Future research is recommended to involve larger participant groups, different educational levels, and longer intervention periods to provide a broader understanding of the effectiveness of game based learning in English language education.

ACKNOWLEDGMENTS

The author gratefully acknowledges the support received throughout the completion of this research. Appreciation is extended to the English Education Study Program, IKIP Siliwangi, for its academic assistance. The author also thanks the research participants for their cooperation and valuable contributions, as well as all individuals who provided support during the research process.

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