

# GAME-BASED LEARNING ACTIVITIES IN ENHANCING SEVENTH-GRADE STUDENTS' ENGLISH VOCABULARY RETENTION

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## ABSTRACT

According to the current Basic Education Core Curriculum in Thailand, lower secondary learners are expected to possess proper knowledge of vocabulary, which is one of the crucial pillars of good communication skills. However, the decline in seventh-grade students' scores on vocabulary retention indicates a need for improvement. In an effort to address this problem, game-based learning strategies were adopted to determine their effects on students' English vocabulary retention. To address the research problem, this study was designed to examine students' vocabulary retention immediately after participation and fourteen days later, and to investigate their satisfaction with the game-based activities. Forty seventh-grade students from a public school in Pathum Thani, Thailand were selected as research participants. The instruments used included a post-test and a satisfaction questionnaire. The findings showed that game-based learning activities can enhance students' retention of vocabulary, as their retention rates immediately after participation and fourteen days later showed statistical dissimilarity. Moreover, the students reported the highest level of satisfaction with game-based learning activities.

**Keywords:** English Vocabulary, English Vocabulary Retention, Game-Based Learning

## INTRODUCTION

Focusing on vocabulary is one of the initial steps in learning a foreign or second language because possessing adequate vocabulary knowledge plays a crucial role in stimulating learners to develop language and literacy skills and effectively communicate (Wallace, 1984). Therefore, the current Basic Education Core Curriculum in Thailand mandates that seventh-grade students acquire knowledge of approximately 1,400-1,550 words encompassing topics such as self, family, school, environment, food, drinks, leisure activities, health, purchasing and selling, weather, education, career, travel, services, locations, languages, science, and technology (Ministry of Education, 2008). However, vocabulary teaching and learning pose continuous challenges for teachers and students due to the prevalent use of rote-vocabulary teaching methods or memorization-based learning in Thai EFL/ESL classrooms. According to Nation (2001) and Brown (2007), while rote learning may be effective for short-term memorization, it is often deemed less effective for long-term retention and comprehension. Students are instructed to focus solely on memorizing isolated words or phrases without grasping their meaning or context (Nation, 2001; Brown, 2007), leading to surface-level learning and difficulty in applying vocabulary in real-world scenarios or discerning nuanced meanings. Recognizing this challenge in vocabulary teaching and learning, this research followed global trends and recent literature in the field of teaching English to speakers of other languages, acknowledging the potential of utilizing games in the classroom or game-based learning as a method to aid students in learning new English vocabulary.

Game-based learning provides a dynamic and interactive environment conducive to vocabulary acquisition through engagement, contextualization, active learning, reinforcement, and motivation. As noted by Chitchadavanich and Pansriket (2020), games inherently engage and delight learners, motivating them to actively participate in the learning process, thereby enhancing attention and retention of vocabulary. Moreover, teaching vocabulary through games offers context for vocabulary usage, enabling learners to observe words in meaningful contexts, thereby fostering deeper comprehension and retention (Gee, 2003). Research on the use of games in language classrooms has identified game-based learning as an innovative approach to teaching English due to several reasons. Firstly, games involve active engagement, necessitating learners to actively utilize vocabulary rather than passively memorizing it. This hands-on approach encourages learners to practice using words in varied contexts, reinforcing understanding and retention. Secondly, games enable learners to assess their progress and rectify mistakes in real-time, thereby strengthening the learning process and solidifying vocabulary knowledge. Lastly, games incorporate elements of competition, collaboration, or achievement, which can boost learners' motivation to engage with the material and strive for improvement (Meesiri & Unnanantn, 2021; Lakkanasutra, Seubsang, & Ngiwline, 2021; Annetta, 2010; Johnson, 2001).

Given the challenges in teaching and learning vocabulary and the noteworthy attributes of game-based learning, this research has opted to explore game-based learning for enhancing seventh-grade students' English vocabulary retention in the Thai context.

## OBJECTIVES

**This research aims to:**

1. Examine the students' vocabulary retention immediately after participation and fourteen days later.
2. Investigate the students' satisfaction with their participation in game-based learning activities.

## METHODOLOGY

In this study, a mixed-methods approach was employed to investigate the effectiveness of game-based learning in enhancing seventh-grade students' English vocabulary retention in the Thai context. The research design involved both quantitative data collection methods using a vocabulary test to and learning satisfaction questionnaire.

The research participants consisted of seventh-grade students from one at a secondary school in Thailand. The participants were randomly selected.

Data analysis involved statistical techniques namely percentage, mean, standard deviation, and t-test statistics.

Ethical considerations were taken into account, ensuring confidentiality and voluntary participation. Informed consent was obtained from both students and parents/guardians, and the study adhered to all relevant ethical guidelines.

## RESULTS

### *Vocabulary Retention*

The findings showed that the results of the post-test of a total 40 points administered immediately after participation in the game-based learning activities revealed a statistically significant dissimilarity in students' vocabulary retention compared to their pre-test scores.

Specifically, the immediate post-study scores ranged from 18 to 40, with a mean score of 31.4 out of 40 points. The standard deviation for immediate retention was 6.52. After a fourteen-day delay, the retention scores ranged from 19 to 40, with a mean score of 31.2 out of 40 points. The standard deviation for delayed retention was 6.31 (see Table 1). A comparison of the mean retention scores immediately after studying and after a fourteen-day delay indicates a slight decrease in mean scores over time. However, the difference in mean scores between immediate and delayed retention was minimal.

**Table 1** Comparison of Overall Statistical Result between the Immediate and Fourteen-Day Delayed

	<b>n</b>	$\bar{x}$	<b>S.D.</b>	<b>t</b>	<b>df</b>	<b>Sig.</b>
<b>Immediate post-test</b>	40	31.4	6.52	1.599	39	.118
<b>Fourteen-day delayed</b>		31.2	6.31			

The t-value calculated for the comparison between immediate and delayed post-test scores was 1.599, with degrees of freedom (df) equal to 39. The corresponding significance level (sig) was found to be .118 (see Table 1).

Overall, the results suggest that there was no statistically significant difference in vocabulary retention between the immediate post-test and the delayed post-test conditions, as indicated by the nonsignificant p-value (.118). This implies that the game-based teaching method used in this study resulted in comparable levels of vocabulary retention among seventh-grade students, both immediately after studying and after a fourteen-day delay.

### ***Satisfaction with Game-Based Learning Activities***

The analysis revealed that students expressed a high level of satisfaction with the game-based learning activities, with a mean satisfaction score of 4.77 and a standard deviation of 0.13. This finding indicates that the game-based learning method was effective in meeting students' satisfaction needs. Moreover, the highest satisfaction rate was on enjoyment and enhanced vocabulary retention, and well-organized teaching. Students reported that the games used in teaching were enjoyable and helped them remember vocabulary more effectively. The interactive and engaging nature of the games contributed to a positive learning experience, fostering enthusiasm and interest in the English subject. Students praised the organization of teaching, noting that the vocabulary used was appropriate and did not lead to boredom. They appreciated the efforts of the teachers in creating a stimulating learning environment, which contributed to a more positive attitude towards the English subject.

Overall, the feedback provided by students further supports the notion that game-based learning was well-received and perceived as beneficial in enhancing vocabulary retention and overall satisfaction with the learning process.

**Table 2** Satisfaction with Game-Based Learning Activities

<b>Items</b>	<b>Mean (<math>\bar{x}</math>)</b>	<b>Standard Deviation )S.D.(</b>	<b>Interpretation</b>
.1 The game has helped me learn new words.	4.83	0.39	Highest
.2 The game has helped students memorizing vocabulary.	4.52	0.68	Highest

Items	Mean ( $\bar{x}$ )	Standard Deviation )S.D.(	Interpretation
.3The vocabulary taught in the class is neither too much nor too.	4.88	0.33	Highest
4. Game used in the class can create a friendly learning environment.	4.83	0.45	Highest
5. Game used in the class promote students' attention.	4.60	0.59	Highest
6. Games used in the class are appropriate to the student level.	4.73	0.45	Highest
7. The teacher provides students with clear and understandable game instructions.	4.77	0.42	Highest
8. Length of the class period is appropriate.	4.85	0.36	Highest
9. The teacher actively seeks to get the students to engage in the activities.	4.95	0.22	Highest
10.The game activities encourage active participation.	4.73	0.51	Highest
<b>Total</b>	<b>4.77</b>	<b>0.13</b>	<b>Highest</b>

## CONCLUSION AND FUTURE WORK

In conclusion, the findings of this study indicate that game-based learning is an effective approach for enhancing English vocabulary retention and satisfaction among seventh-grade students in the Thai educational context. The results revealed that students exhibited comparable levels of vocabulary retention immediately after studying and after a fourteen-day delay, suggesting that the game-based teaching method was successful in promoting long-term retention of vocabulary knowledge.

Additionally, the analysis of students' satisfaction with game-based learning demonstrated a high level of overall satisfaction, with students expressing enjoyment and appreciation for the interactive nature of the activities. The qualitative feedback provided by students further emphasized the positive impact of game-based learning on their engagement, enthusiasm, and attitude towards the English subject.

These findings have important implications for EFL/ESL educators and curriculum development as follows:

EFL/ESL educators and curriculum developers should prioritize organizing learning activities using games before implementing them in the classroom to ensure effective learning management. Emphasizing group games over individual or pair competitions can enhance student engagement and foster collaboration among students with varying abilities. Additionally, diversifying teaching games to cater to different learning styles is essential to promote active participation among students.

Suggestions for further research include investigating methods to accommodate students with varying English proficiency levels to ensure equitable learning outcomes, exploring and addressing challenges encountered when implementing game-based learning strategies to optimize their effectiveness, and extending research to assess the applicability and

benefits of game-based teaching methods across different subject areas to promote holistic learning experiences.

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