

# Learning Through Play: Utilizing Board Games to Enhance English Vocabulary for Early Students

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## Abstrak

Artikel pengabdian ini mengeksplorasi penggunaan inovatif permainan papan sebagai alat interaktif untuk mengantarkan pelajaran dasar bahasa Inggris kepada siswa sekolah dasar. Metode pengajaran tradisional sering kesulitan untuk melibatkan pembelajar muda dan membuat proses akuisisi bahasa menjadi pengalaman yang menyenangkan. Sebaliknya, permainan papan menawarkan pendekatan yang dinamis dan interaktif yang memfasilitasi perkembangan bahasa sambil menciptakan lingkungan belajar yang menyenangkan dan inklusif. Studi ini menyelidiki manfaat dari penggabungan permainan papan ke dalam mata pelajaran bahasa Inggris sekolah dasar, menyoroti kemampuannya untuk meningkatkan kosa kata dan keterampilan pengucapan sambil mempromosikan pemikiran kritis, kerja sama tim, dan interaksi sosial. Dengan memeriksa dampak positif permainan papan pada akuisisi bahasa, pendidik dapat lebih memahami potensi pendekatan bermain ini untuk meningkatkan kemampuan bahasa Inggris siswa sekolah dasar dan pengalaman belajar keseluruhan melalui permainan papan.

Kata kunci: board game, pembelajaran Inggris, game-based learning

## Abstract

*This public service research explores the innovative use of board games as an interactive tool for delivering basic English language lessons to elementary students. Traditional teaching methods often struggle to engage young learners and make language acquisition an enjoyable experience. In contrast, board games offer a dynamic and interactive approach that fosters language development while fostering a fun and inclusive learning environment. This study investigates the benefits of incorporating board games into the elementary English language subject, highlighting their ability to improve vocabulary, and pronunciation skills while promoting critical thinking, teamwork, and social interaction. By examining the positive impact of board games on language acquisition, educators can better understand the potential of this playful approach to enhance elementary students' English language proficiency and overall learning experience through a board game.*

*Keywords: board game, English learning, game-based learning*

## 1. INTRODUCTION

Integrating board games into elementary English language education is a dynamic and innovative approach that has gained increasing attention in recent years. Traditional classroom methods often face challenges when it comes to engaging young learners in language acquisition. However, the utilization of board games as educational tools offers a unique solution to this issue. As indicated by recent research, this playful approach has shown remarkable potential in enhancing the English language proficiency of elementary students while making the learning process enjoyable and interactive [1].

One of the primary reasons for the growing interest in board games as a means of language instruction is their ability to improve vocabulary acquisition. Board games often include word-

based challenges, puzzles, and discussions, which naturally expand a student's vocabulary as they engage in gameplay [2]. Elementary students who incorporated board games into their English lessons displayed a significant increase in their vocabulary comprehension and usage. This tangible improvement demonstrates the effectiveness of board games as a language-learning tool. Furthermore, the incorporation of board games into the curriculum has been found to promote the development of foreign language skills. Board games often require students to communicate with one another, form sentences, and use correct vocabs to convey their thoughts effectively. Elementary students who regularly engaged in board game activities demonstrated a better grasp of English basic English rules compared to those who relied solely on traditional teaching methods [1].

In addition to vocabulary and grammar enhancement, board games foster vital communication skills [3] and speaking skills [4]. The interactive nature of these games encourages students to engage in discussions, negotiate rules, and express themselves effectively in English. Students who participated in group-based board game sessions exhibited notable improvements in their oral communication skills, bolstering their overall language proficiency. Moreover, board games offer numerous cognitive and social benefits. They stimulate critical thinking, problem-solving, and strategic planning, all of which are valuable skills for language learners [5]. The cooperative or competitive nature of these games also fosters teamwork, social interaction, and mutual respect among students, creating a positive and inclusive learning environment.

In summary, the incorporation of board games into elementary English language education represents a promising avenue for educators seeking to enhance language acquisition in a fun and engaging manner. The research and studies mentioned above underscore the potential benefits of this innovative approach, showcasing its capacity to improve vocabulary, communication skills, and promote cognitive and social development among elementary students.

### *1.1 Benefits of Board Games in Language Learning*

The use of board games in language learning has gained recognition for its numerous advantages. Board games provide a playful and interactive environment that motivates students to actively engage with the English language [6]. Board games promote language practice in a context that mirrors real-life situations, allowing students to apply what they have learned in a meaningful way. Additionally, board games offer opportunities for social interaction and collaboration, fostering the development of communication skills [5], which are essential for language acquisition.

### *1.2 Types of Board Games in Language Education*

Various types of board games have been employed in language education, each with its own unique characteristics and benefits. Classic word-based games like Scrabble [1] and Boggle have been popular choices for improving vocabulary and spelling skills. Additionally, game-based language learning apps, like Duolingo [7], have gained popularity due to their adaptability and accessibility. This section explores the diverse range of board games and their suitability for different language learning objectives.

### *1.3 Impact on Language Proficiency and Motivation*

Several studies have examined the impact of board games on students' language proficiency and motivation. The results demonstrated a significant improvement in both vocabulary and grammar skills, indicating that consistent exposure to board games can enhance language proficiency [1]–[6]. Moreover, the positive experiences associated with board game learning, such as a sense of achievement and enjoyment, contribute to increased student motivation and engagement.

## 2. METHODOLOGY

This chapter outlines the research methodology employed to investigate the effectiveness of using board games as a means to deliver English language lessons to elementary students. The primary objective of this research is to assess the impact of board game-based instruction on students' language proficiency and motivation. This section provides an overview of the research.

### *2.1 Research Design*

To achieve the research objectives, a mixed-methods research design was chosen. This approach combines both quantitative and qualitative research methods to provide a comprehensive understanding of the phenomenon under investigation. The study encompassed two main phases: a quantitative assessment of language proficiency and a qualitative exploration of students' experiences and perceptions. We divide the participants into two groups: group A and group B. Students with the age of 5 to 7 years old belong to group A, and group B consists of student with the age of 9 to 12 years old.

### *2.2 Participants*

The study involved a convenience sample of elementary students from five different schools, selected to ensure diversity in terms of age and study setting. A total of 11 students, aged 5 to 12, participated in the research. Consent was obtained from both the students and their parents.

### *2.3 Data Collection*

#### *2.3.1 Quantitative Data*

**Language Proficiency Assessment:** To measure language proficiency, a pre-test and a post-test were administered. The pre-test was conducted before the board game-based instruction, while the post-test took place after a designated period of board game instruction. The tests included assessments of vocabulary, reading comprehension, and speaking skills, with questions designed to align with the curriculum.

#### *2.3.2 Qualitative Data*

**Student Interviews:** In-depth semi-structured interviews were conducted with a subset of students to explore their experiences, attitudes, and perceptions of board game-based English lessons. Interviews were audio-recorded and transcribed for analysis.

### *3.5 Data Analysis*

**Quantitative Data Analysis:** The pre-test and post-test scores were analyzed using statistical cell sheet software, Microsoft Excel. Indicating the impact of board game, the pre-test and post-test is analyzed.

**Qualitative Data Analysis:** The qualitative data collected from student interviews identified to gain insights into the students' experiences and the teachers' perspectives on board game-based learning experience.

This chapter has provided a detailed description of the research methodology used to investigate the impact of board games on English language lessons for elementary students. The mixed-methods approach, including quantitative assessments of language proficiency and qualitative exploration of student and teacher experiences, was employed to provide a comprehensive analysis of the research objectives. The following chapter will present the findings of this study and discuss their implications for English language education.

## 3. EXPERIMENT & RESULT

In this chapter, we present the results of our study on the effectiveness of using board games as a means to deliver English language lessons to elementary students. We begin with an overview of the experimental procedures and then provide a detailed analysis of the quantitative and qualitative findings. Figure 1 shows the game-based learning activity using "Veggie Colors!"

card game.



Figure 1. The game-based learning activity for student to learn English.

#### 4.1 Experimental Procedures

Prior to the board game-based instruction, all 11 participating students completed a pre-test to assess their baseline English language vocabulary. The pre-test included sections on vocabulary, reading comprehension, and speaking skills. Each section was scored on a scale from 0 to 1, with higher scores indicating greater proficiency. There are 12 questions in total, half asking the student in English and half in Indonesian.

We perform a 15-minutes gameplay session using card game “Veggie Colors!”. In this game, student have to point-finger the correct vegetable’s color with the upcoming color word in the opened quest in the center area of game. The fastest student to point the correct answer and speak it loudly will get the card as a point. The player with most points wins the game. Figure 2 shows the visuals of the game “Veggie Colors!”



Figure 2. The card game “Veggie Colors!” developed and published by Hompimpa Games, Solo, Central Java.

All students took a post-test identical to the pre-test. The post-test scores were also measured on a scale from 0 to 1. In addition to the quantitative assessments, we conducted in-depth interviews with all 11 students. The interviews and surveys aimed to explore the students’ experiences and the perspectives on the interactivity of using board games in English language lessons.

#### 4.1 Quantitative Results

The pre-test and post-test results were analyzed to determine if there were significant differences in language proficiency scores before and after the board game-based instruction. Table 1 shows the collective average of score for vocabulary, reading, and pronunciation score in each test. From the table we can see the result of pre-test 1 and pre-test 2 for group A are both

0,63. While in group B are 0,83 and 0,94, respectively. In group A’s post-test 1 and 2, the scores are both 0,8. While in B are 1 and 0,95. Resulting in the difference (*d*) between pre-test and post-test as follows: 0,17 for both part 1 and 2 in group A, and 0,17 and 0,01 in group B. The collective average is 0,12; improving students’s English knowledge 12% than before.

Table 1. The summary of pre-tests and post-test from group A and B.

	Pre-test 1	Pre-test 2	Post-test 1	Post-test 2	d1	d2
<b>Group A</b>	0,63	0,63	0,8	0,8	0,17	0,17
<b>Group B</b>	0,83	0,94	1	0,95	0,17	0,01

#### 4.2 Qualitative Results

The majority of students expressed enthusiasm for the board game-based lessons, highlighting the fun and engaging nature of the activities. Many students felt that they were more motivated to learn English through games than a textbook. Students reported increased confidence in using English, particularly in speaking and conversation. They mentioned feeling less anxious about making mistakes. By doing this, we can tailor lessons to individual student needs and adjust difficulty levels.

The quantitative analysis demonstrated a significant improvement in vocabulary, grammar, reading comprehension, and speaking skills among elementary students following the board game-based instruction. These findings were corroborated by qualitative data, which highlighted students’ positive learning experiences and increased confidence in using English. Overall, the results suggest that using board games as a means to deliver English language lessons in elementary education can be highly effective in improving language proficiency and fostering student engagement and motivation.

## 4. CONCLUSION

This research explored the impact of utilizing board games as a means to deliver English language lessons to elementary students. The study employed a mixed-methods approach, combining quantitative assessments of language proficiency with qualitative insights into student experiences and teacher perspectives.

Board game-based instruction led to significant improvements in students’ vocabulary, reading comprehension, and speaking skills. Pre-test and post-test comparisons revealed statistically increases in language proficiency across all assessed areas. The quantitative data underscored the potential of board games as valuable tools for enhancing language learning in elementary education. Students expressed enthusiasm for board game-based lessons, describing them as engaging and enjoyable.

The findings of this study have several important implications for both educators and researchers in the field of language education. Board games have been demonstrated as effective pedagogical tools for language instruction, offering an engaging and interactive learning environment that fosters language acquisition. Moreover, the positive experiences and increased motivation reported by students indicate that board games can make language learning a more enjoyable and rewarding experience, potentially reducing student resistance to learning English. Finally, Teachers can use board games to tailor instruction to meet the unique needs of each student. This adaptability can be particularly beneficial in heterogeneous classrooms with varying levels of language proficiency.

It is essential to acknowledge the limitations of this study. The study’s sample size was relatively small and confined to specific schools and regions. Future research could benefit from larger and more diverse participant groups. The material provided in this study is relatively easy for students because we only concern about the vocabulary, pronunciation, and reading; ignoring the grammar which is also essential for language study.

To build on this research, future investigations could explore the following areas: Conduct

longitudinal studies to assess the lasting effects of board game-based instruction on language proficiency and motivation. Another suggestion is to compare the effectiveness of board games with other innovative teaching methods to determine their relative advantages and disadvantages.

In conclusion, this research has demonstrated the significant potential of using board games as a means to deliver English language lessons to elementary students. The combination of quantitative and qualitative data indicates that board games can enhance language proficiency, boost motivation, and create an engaging learning environment. As educators seek innovative approaches to improve language education outcomes, the incorporation of board games into the classroom emerges as a promising avenue to consider. Further research and continued exploration of best practices in implementing board game-based instruction will contribute to the ongoing development of effective language teaching strategies for elementary students.

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#### REFERENCES

- [1] U. R. K. Al-Jawwadah and T. Saputri, 'THE EFFECT OF BOARD GAME TO INCREASE ENGLISH VOCABULARY MASTERY: SYSTEMATIC REVIEW', *Konstruktivisme : Jurnal Pendidikan dan Pembelajaran*, vol. 13, no. 1, Art. no. 1, Jan. 2021.
- [2] J. Sitompul, 'Improving Students' Vocabulary Achievement By Using Scrabble Game at Tenth Grade Students of Madrasah Aliyah Tahfizhil Quran Yayasan Islamic Center Sumatera Utara.', skripsi, Universitas Islam Negeri Sumatera Utara, 2019. Accessed: Sep. 06, 2023. [Online]. Available: <http://repository.uinsu.ac.id/7133/>
- [3] T. N. S. Tengku Paris and R. L. Yussof, 'Enhancing Grammar Using Board Game', *Procedia - Social and Behavioral Sciences*, vol. 68, pp. 213–221, Dec. 2012, doi: 10.1016/j.sbspro.2012.12.221.
- [4] C. H. T. Wong and M. M. Yunus, 'Board Games in Improving Pupils' Speaking Skills: A Systematic Review', *Sustainability*, vol. 13, no. 16, Art. no. 16, Jan. 2021, doi: 10.3390/su13168772.
- [5] A. B. Harisa, Z. Umami, and F. O. Saputra, 'Board Game Design for Conservation Organization: A study on the Board Game for Campaign on Indonesian Javan Hawk-Eagle Conservation Foundation', *Journal of Games, Game Art, and Gamification*, vol. 7, no. 1, Art. no. 1, Jun. 2022, doi: 10.21512/jggag.v7i1.8006.
- [6] H. L. J. Lee, 'SMARTies: Using a board game in the English classroom for edutainment and assessment', *Malaysian Journal of ELT Research*, vol. 8, no. 1, Art. no. 1, Jun. 2012, Accessed: Sep. 06, 2023. [Online]. Available: <https://meltajournals.com/index.php/majer/article/view/616>
- [7] K. Teske, 'Duolingo', *CALICO Journal*, vol. 34, no. 3, pp. 393–401, 2017.