
The Impact of Snakes and Ladders Game on Students' Vocabulary Mastery

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Abstract

Learning vocabulary is an essential part of language development, as it helps students improve their communication and comprehension skills. Teachers play a key role in this process by using effective methods to teach new words in ways that are engaging and meaningful. Games such as Snakes and Ladders is one of the tools for teaching vocabulary, creating enjoyable learning experiences that enhance students' understanding and retention of new words. The study aims to explore whether this game-based learning approach can help students learn and remember new vocabulary more effectively. The research seeks to provide valuable insights into the role of interactive games in making vocabulary learning more enjoyable and impactful. This study uses an experimental design to investigate the effect of the Snakes and Ladders game on students' vocabulary mastery. A sample is divided into an experimental group, using the game, and a control group, following traditional methods. Both groups complete a pre-test and post-test consisting of 25 multiple-choice questions based on the *Merdeka Curriculum*. The data is analyzed using descriptive statistics and a T-test to compare the scores, determining whether the game significantly improves vocabulary mastery. The results show a significant improvement in students' vocabulary mastery after using this game. The results revealed an average increase. Statistical analysis using the paired sample T-test confirmed that this improvement was highly significant. These findings highlight the effectiveness of this game as an engaging tool for enhancing students' vocabulary skill. This study demonstrates that this game significantly enhances students' vocabulary mastery.

Keywords: *The Effect, Snack and Ladder Game, Vocabulary Mastery*

Introduction

The teaching of vocabulary is a critical component of language development, especially in teaching English context. Traditional methods of vocabulary instruction, such as rote memorization and repetitive drills, often fail to engage students, resulting in diminished motivation and retention (Nation, 2001). This approach typically involves presenting lists of words, definitions, and exercises focused on memorizing these terms without meaningful context. So, students may have a strong effort to apply new words to real-life situations or understand how to use words in different contexts. This lack of interaction and practical application can lead to superficial understanding, where students can recall definitions but fail to incorporate the words into their active vocabulary. To foster deeper learning, it's essential to integrate more dynamic and contextual strategies, such as interactive games, collaborative activities, and real-world applications, allowing students to engage with vocabulary in a way that promotes lasting mastery and practical usage (Thornbury, S., 2002).

To foster deeper learning, it is essential to integrate more dynamic and contextual strategies. One way to achieve this is by incorporating interactive and engaging teaching methods, such as collaborative activities and real-world applications, which encourage students to actively engage with vocabulary. Thornbury (2002) emphasizes that students are more likely to retain new words when they interact with them in meaningful ways, such as through discussions, storytelling, and role-playing.

Building on this approach, teachers should use strategies that enhance students' vocabulary mastery by providing structured yet flexible learning experiences. Introducing vocabulary lists from textbooks, supplemented with additional relevant words tailored to students' needs, can be an effective starting point. It is essential for teachers to be well-versed in their teaching materials, with a solid understanding of vocabulary, including word meanings, forms, and usage. Vocabulary should be taught through both spoken and written forms, allowing students to engage in multiple ways (Nation, 2013). When teachers are knowledgeable about various instructional techniques, they can create lessons that are both engaging and effective (Blachowicz & Fisher, 2020). By implementing diverse instructional approaches, such as games, discussions, and reading activities, teachers can help students develop stronger language skills, making it easier for them to communicate and comprehend written and spoken texts.

An essential aspect of vocabulary instruction is student engagement, which can be achieved through a variety of interactive activities. Buehl (2017) suggests that students should be exposed to new vocabulary through discussions, hands-on activities, and playful learning experiences. Discussions encourage students to share ideas and ask questions, fostering deeper comprehension. Similarly, hands-on activities, such as drawing pictures or creating word maps, help students make connections between words and real-life situations. By incorporating multiple activities, vocabulary learning becomes more enjoyable and leads to better long-term retention.

As a response to these challenges, teachers are increasingly exploring innovative approaches that promote a more interactive and enjoyable learning experience. One such approach is Game-Based Learning (GBL), which integrates game elements to enhance student involvement and motivation in the educational process (Hartt et al., 2020). Research suggests that GBL not only fosters a positive learning environment but also leads to improved language skills and vocabulary retention (Gee, 2003; Hamari et al., 2016). By incorporating games into vocabulary instruction, teachers can create dynamic classroom experiences that spark students' interest and facilitate meaningful language acquisition.

Among the various vocabulary games available, Snakes and Ladders has been recognized as an effective and enjoyable method for teaching new words. Activities such as word bingo, vocabulary charades, and matching games make learning fun and encourage student participation. According to Tuan and Doan (2010), vocabulary games motivate students and help them understand word meanings and usage more effectively. By integrating elements of competition and teamwork, these games foster a lively classroom atmosphere where students feel comfortable experimenting with new vocabulary, ultimately enhancing their language skills.

Specifically, the Snakes and Ladders game has been shown to be a highly effective tool for vocabulary acquisition. Research indicates that incorporating this game into language learning makes lessons more interactive and enjoyable, improving vocabulary retention and student motivation (Kearney & Schuck, 2018; Amin et al., 2021). Through gameplay, students practice using words in sentences, reinforcing their understanding and enabling them to apply vocabulary in context (Rahman & Siti, 2022; Latifah et al., 2023). Furthermore, the game can be adapted into digital formats, making it suitable for diverse teaching environments, including

remote learning (Lopez et al., 2023). Several studies have highlighted the positive impacts of Snakes and Ladders on vocabulary acquisition across various educational settings, demonstrating its potential to engage students and facilitate language learning (Hayuningtyas, 2023; Ifayatun & Fajarina, 2022; Kasanah et al., 2022; Maria Dimitrij & Angie Pavita, 2022; Pratiwi et al., 2023).

Despite these promising findings, there remains limited quantitative research specifically examining the effectiveness of the Snakes and Ladders game in improving vocabulary skills among SMP students. Recognizing this research gap, the present study seeks to investigate the impact of using the Snakes and Ladders game on students' vocabulary mastery. The central research question guiding this study is: "Is there an impact of using the Snakes and Ladders game on students' vocabulary mastery?" By focusing on this area, the study aims to provide valuable insights into how game-based learning strategies can enhance vocabulary development in a fun and engaging way. Through this investigation, the writer hopes to contribute to the growing body of research on innovative vocabulary instruction and support the integration of effective, interactive learning tools in language education.

Research Method

This study deals with the effect of *snakes and ladders* game in students' vocabulary mastery. It conducts experimental research which used statistical method to prove the hypothesis of the research. The hypothesis is "*Snakes and Ladders* Game has significant effect in enhancing students' vocabulary mastery".

The population for this research includes all seventh-grade students at SMPN Karya Sakti. It consists of five classes about 144 students. From this group, a sample will be selected 50 students to participate in the study. This sample will consist of two classes of seventh graders. One class uses snakes and ladders game for vocabulary mastery, it is called experimental class and another class follow traditional method, it is called control class.

The instrument used to collect data is a test. The students in both groups are given 25 multiple-choice vocabulary questions posttest at the first meeting. Each student selects the best answer for each question. After the experimental group receives lessons with *Snakes and Ladders* and the control group with a textbook (traditional method), the researcher gives a post-test to all students in the sample. Each correct answer is worth 4 points, so the highest possible

score is 100 (if a student answers all questions correctly), and the lowest score is 0 (if no questions are answered correctly).

The test used in the vocabulary instrument for seventh-grade students is designed based on the *Merdeka Curriculum* textbook. This instrument has undergone a validity assessment conducted by a co-writer who is a senior teacher with extensive experience in the field. The senior teacher's involvement ensured that the instrument aligns with curriculum standards and effectively measures students' vocabulary knowledge. This curriculum aims to help students learn and understand English vocabulary in a meaningful way. The vocabulary test includes simple words that students often encounter in daily life and in their lessons. It focuses on words that are practical and useful, helping students build a strong foundation in English. Through this test, students can improve their understanding of English words, making it easier for them to use these words in real situations. The test is also intended to match the learning goals of the *Merdeka Curriculum*, supporting students' language skills development.

Data analysis techniques in this research involve several steps to understand how effective this game is on students' vocabulary mastery. The first is Score Comparison, researcher will compare the pre-test scores (before using this game) with the post-test scores (after using *snakes and ladders*). This helps to see if there are any changes in students' reading skills. A higher post-test score suggests improvement. The second is Descriptive Statistics, writer will use descriptive statistics to summarize the data. This includes calculating averages (mean scores) for the pre-test and post-test, as well as finding the highest and lowest scores. This summary gives a clear picture of how students performed overall.

The data analysis technique for examining the effect of this game on students' word mastery involves using the T-test to test the research hypothesis. First, researchers conduct a pre-test to measure students' initial vocabulary levels before introducing the game as an instructional tool. After a period of learning through the *snakes and ladders* game, a post-test is administered to see if there is any improvement in vocabulary. The T-test, a statistical technique for comparing the average values of two groups, is used to examine the difference between the pre-test and post-test scores. If the T-test results indicate a significant difference, it implies that the game positively impacts vocabulary mastery, supporting the hypothesis that using the Snakes and Ladders game can notably improve students' vocabulary skills. This

method provides reliable evidence of the game's impact by allowing researchers to quantify improvements in vocabulary scores, (Nuridayanti et al., 2024)

The research will begin with a pre-test. A pre-test is given to both groups in the study to check their vocabulary knowledge before any treatment or intervention. This test will help understand the students' vocabulary skills at the start, before any additional learning activities are introduced.

Next, the writer will use the game as a teaching method in the experimental class, but it will not be used with the control group. Here is the step-by-step process the teacher will follow to teach the class using *Snakes and Ladders*. First, use a regular Snake and Ladder board, but add a vocabulary task to each square. For example, each square could have a word that students need to spell, define, or use in a sentence. Then, tell students that every time they land on a square, they have to complete the vocabulary task for that square. If they answer correctly, they stay on the square. If they miss it, they go back to their previous square. Next, have students take turns rolling the dice and moving their pieces. When they land on a square, they do the vocabulary task. If they land on a ladder, they go up, and if they land on a snake, they go down—just like in the original game. The teacher or another student can help if anyone is stuck. This way, students learn from each other and feel supported. The teacher has to encourage students by praising their correct answers. This helps them feel confident and excited about learning. The last step is to end the game and give review of the game. Once someone wins, or when time is up, go over some of the vocabulary words together as a class. This review helps reinforce what they learned during the game.

The last step is doing the post-test. The same test as pre-test is given after the game as a post-test to measure any improvement. Comparing the scores from these two tests allows us to see how much vocabulary mastery has changed as a result of the game.

Results and Discussion

After conducting the procedure of the research to measure students' vocabulary mastery using the game of snake and ladder, the results were obtained as follows. The pre-test provided a baseline of the students' initial vocabulary knowledge, while the treatment sessions involved engaging them in learning activities with the game. Finally, the post-test evaluated their

progress and the effect of the game as a media of learning. The table below displays the descriptive statistics for both the pre-test and post-test.

Table 1. Descriptive statistics of pre-test and post-test

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Pre	50	16	60	36.56	14.252
Post	50	24	88	52.56	16.041
Valid N (listwise)	50				

The table displays the descriptive statistics for the pre-test and post-test scores, illustrating the effect of this game on students' vocabulary mastery. In the pre-test, scores ranged from a low of 16 to a high of 60, with an average score of 36.56 and a standard deviation of 14.252. This suggests that, prior to the intervention, students' vocabulary skills showed considerable variation, with an overall moderate level of performance.

The post-test scores improved noticeably after the treatment. The scores varied between 24 and 88, with a higher average score of 52.56 and a standard deviation of 16.041. This suggests a marked improvement in students' vocabulary mastery compared to the pre-test. The increase in the mean score indicates that this game was effective in enhancing vocabulary skills. Additionally, the larger range and higher maximum score in the post-test reflect that some students achieved substantial progress during the treatment.

Overall, these results highlight that incorporating this game as a learning media had a good impact on vocabulary development. The increase in both the mean score and range of performance shows the potential of this interactive and engaging method in improving vocabulary mastery among students.

Prior to performing the paired sample T-test, a normality test was conducted to verify that the data followed a normal distribution. This step is crucial as the paired sample T-test relies on the assumption of normality. The outcome of the test is presented in Table 2.

Table 2. Test of Normality
Tests of Normality

	class	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Pre	experiment class	.141	25	.200*	.934	25	.110
	Control class	.162	25	.090	.917	25	.043
Post	experiment class	.121	25	.200*	.956	25	.338
	Control class	.175	25	.046	.918	25	.046

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

The normality test results give important insights into how the data is distributed in this study on the effect of this game on improving students' vocabulary. For the pre-test in the experimental group, the significance values are 0.200 and 0.110, both higher than 0.05. This show that the pre-test data in the group of experiment follow a normal distribution.

In the control class, the pre-test significance values are **0.090** and **0.043**, with the Shapiro-Wilk value being less than 0.05. This indicates that the pre-test data in class of control may not follow a perfectly normal distribution.

The data of post-test in class of experiment, the significance values are **0.200** and **0.338**, both above 0.05. This confirms that the data of post-test in the class of experiment are also distributed in normal way. On the other hand, the post-test significance values in the class of control are **0.046** for both tests, which are close to the threshold of 0.05. This suggests that the post-test data in the class of control only slightly meet the assumption of normality.

The data for the experiment class, where this game was used, meet the normality assumption for both pre-test and post-test. However, the class of control data show some deviations, especially in the pre-test. This ensures the validity of further statistical analysis, such as the paired sample T-test, particularly for the experiment class, to analyze the game's effect on students' vocabulary mastery.

Table 3. Paired sample T test of pre-test and post-test
Paired Samples Test

		Paired Differences					Significance		
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	
					Lower	Upper			One-Sided p
									Two-Sided p
Pair 1	pre - post	-16.000	10.474	1.481	-18.977	-13.023	-10.801	49	<.001
									<.001

The paired sample T-test results analyze the difference between pre and post test scores to understand the effect of using this game on vocabulary mastery. The average (mean) difference between the scores before and after the treatment is -16.000. This means that students' scores improved by an average of 16 points after playing the game. The standard deviation, which shows how much the scores vary, is 10.474, indicating that while most students improved, the amount of improvement varied among them. The standard error mean of 1.481 suggests the data are precise enough for reliable conclusions.

The test also provides a range of values with 95% certainty. for the mean difference, ranging from -18.977 to -13.023. This means we are 95% certain that the true average improvement in scores lies between 13 and 19 points. The negative values show that the post-test scores are higher than the pre-test scores, proving an increase in vocabulary mastery.

The t-value of -10.801 is a measure of how strong the difference is between pre-test and post-test scores. With 49 degrees of freedom, the p-value is reported as $<.001$, which is much smaller than the typical significance level of 0.05. This confirms that the improvement is not due to random opportunity but is a result of the procedure—using the snake and ladder game.

In conclusion, the paired sample T-test results clearly show a significant improvement in students' vocabulary mastery after playing this game. The average score increase, the confidence interval, and the very small p-value all point to the game being a highly effective and impactful tool for enhancing vocabulary learning.

Discussion

The findings from this study align with previous research highlighting the effectiveness of using games, such as Snakes and Ladders, in teaching vocabulary. The descriptive statistics for the scores demonstrate a significant improvement in students' vocabulary mastery after the intervention. Specifically, the increase in the mean score from 36.56 to 52.56, along with a broader range and higher maximum score, suggests that the Snakes and Ladders game provided a dynamic and engaging learning environment that enhanced vocabulary acquisition.

These results are consistent with the findings of Kearney and Schuck (2018) and Amin et al. (2021), who emphasize that incorporating interactive games into the learning process fosters better vocabulary retention and increases student motivation. By creating a fun and interactive classroom atmosphere, such games encourage deeper engagement with the material,

leading to more effective learning outcomes. The significant improvement in post-test scores observed in this study further supports this idea, demonstrating that the Snakes and Ladders game makes vocabulary learning more enjoyable and accessible. Through elements of competition, collaboration, and repetition, students were able to practice and reinforce their vocabulary in an engaging context. Additionally, the broader range of scores in the post-test indicates that some students achieved remarkable progress, highlighting the potential of such games to cater to diverse learning needs and proficiency levels.

Further reinforcing these findings, the paired sample T-test results reveal a statistically significant improvement in students' vocabulary mastery after playing the game. The increase in average scores, coupled with a narrow confidence interval and a very small p-value, underscores the effectiveness of Snakes and Ladders as a tool for vocabulary learning. These results align with previous research, such as studies by Rahman and Siti (2022) and Latifah et al. (2023), which suggest that gameplay allows students to practice using words in sentences, reinforcing their understanding and enabling them to apply vocabulary in real-life contexts. This interactive approach helps students retain new words more effectively, making learning both meaningful and practical.

While this study provides strong evidence of the game's impact on vocabulary improvement, other research has explored additional dimensions of its effectiveness. For instance, Lopez et al. (2023) found that adapting Snakes and Ladders to digital formats makes it suitable for online learning, demonstrating its ability to engage students even in remote settings. Similarly, Hayuningtyas (2023) and Ifayatun and Fajarina (2022) highlighted the game's role in boosting motivation and enhancing vocabulary retention across various educational contexts, underscoring its versatility as a teaching tool. Moreover, studies such as Kasanah et al. (2022) emphasize how the game promotes active participation, helping students internalize vocabulary more effectively.

Unlike these studies, this research primarily focused on measuring improvements in students' vocabulary mastery through pre-test and post-test scores, rather than exploring students' perceptions of the game. Understanding students' perspectives on using Snakes and Ladders for learning could provide valuable insights into its motivational and engagement aspects. Comparing the current findings with previous studies suggests that while this research confirms the game's effectiveness in improving vocabulary skills, future studies could further

investigate students' experiences and attitudes. This could offer a more comprehensive understanding of how games enhance learning and provide additional evidence supporting their use in language education.

Conclusion

Using the Snakes and Ladders game in vocabulary learning makes the process more enjoyable and engaging for students. The element of fun keeps them motivated, reducing boredom and making learning feel like play rather than a chore. When students are happy and actively participating, they are more likely to remember new words and use them correctly. The game also encourages repetition in a natural way, reinforcing vocabulary without the pressure of traditional drills. Additionally, the excitement of rolling dice, moving pieces, and interacting with peers creates a positive learning environment where students feel comfortable experimenting with new words. This interactive approach enhances vocabulary retention, as students associate learning with enjoyable experiences, making it easier for them to recall and apply new words in different contexts.

One limitation of this research is the small sample size, as it only involved 50 students, which may not fully represent the broader student population. Additionally, this research focused only on one language aspect, so the long-period effects of this game on other aspects of language learning, such as reading comprehension or speaking skills, were not explored. Another limitation is the use of a single game, which may not account for other potential factors influencing vocabulary development, such as individual learning styles or prior knowledge. Finally, the research was conducted in a controlled classroom setting, which may not fully reflect how the game would perform in different educational environments or with diverse student groups.

For further study, it would be helpful to explore how the snake and ladder game affects on reading, writing, and speaking skills, in addition to vocabulary mastery. Future research could also involve a larger and more diverse sample of students to see if the results can be generalized to various age groups or learning settings. It would be interesting to compare the effectiveness of this game with other learning tools or methods to determine which ones are most beneficial for vocabulary development. Additionally, researchers could investigate the long-term impact of the game by testing students' vocabulary retention over time.

The pedagogical implications of this research suggest that incorporating interactive and enjoyable games, like snake and ladder, can be an effective strategy for enhancing students' vocabulary mastery. Teachers can use this game as a fun and engaging way to reinforce vocabulary learning, making it more appealing and less intimidating for students. By integrating games into the curriculum, teachers can create a positive learning situation that encourages active participation and increases student motivation. This approach also emphasizes the importance of using varied teaching methods to cater to different learning styles, ultimately improving students' overall language skills.

References

- Arfani, S., & Sulistia, A. (2019). TEACHING SPEAKING USING A “SNAKE AND LADDER” BOARD GAME: A TEACHER STORY. *Research and Innovation in Language Learning*, 2(1). <https://doi.org/10.33603/rill.v2i1.1642>
- Amin, F., Ali, S., & Hasan, M. (2021). The impact of Snakes and Ladders game on vocabulary acquisition: A case study in primary education. *Journal of Language Teaching and Research*, 12(4), 560–570.
- Erlyna, A., & Rina Wahyu, S. (2020). TEACHING ENGLISH TO YOUNG LEARNERS BY MEANS OF SONGS AND FOLK TALES WITH INDONESIAN SETTINGS: INDONESIA – INDIA GLOBAL PROJECT PROGRAM. *Erudio Journal of Educational Innovation*, 7(2). <https://doi.org/10.18551/erudio.7-2.4>
- Friscilla Sembiring, Yessica Elisabeth Sinabariba, Nadia Hagana Br. Bangun, Widie Sri Pratiwi, & Witaren Laia. (2023). Increasing English Vocabulary with Snakes and Ladders Media. *Indonesian Journal of Society Development*, 2(1). <https://doi.org/10.55927/ijsd.v2i1.3189>
- Hartt, M., Hosseini, H., & Mostafapour, M. (2020). Game On: Exploring the Effectiveness of Game-based Learning. *Planning Practice and Research*, 35(5). <https://doi.org/10.1080/02697459.2020.1778859>
- Hayuningtyas, N. (2023). The Implementation of Snake and Ladder Game in Teaching Speaking: The Advantages and The Disadvantages. *CREW Journal*, 1(2). <https://doi.org/10.35719/crewjournal.v1i2.1785>

- Huseinović, L. (2023). The Effects of Gamification On Student Motivation And Achievement In Learning English As A Foreign Language In Higher Education. *MAP Education and Humanities*, 4(1). <https://doi.org/10.53880/2744-2373.2023.4.10>
- Ibad, W., Sabat, Y., Musyarofah, L., & Sulistyaningsih, S. (2023). Comparing Kahoot, Quizizz, And Wordwall In EFL Reading Class. *Eduvest - Journal of Universal Studies*, 3(11).\ <https://doi.org/10.59188/eduvest.v3i11.954>
- Kasanah, U., Zaini, M., Efendi, N., Wijayanto, A., & Setyowati, E. (2022). Development of Smart Snake and Ladder Media in Mastery of English Vocabulary Grade III at SDI Babussalam Pandean Durenan Trenggalek. *Journal Corner of Education, Linguistics, and Literature*, 1(4). <https://doi.org/10.54012/jcell.v1i4.45>
- Kusrini, E. (2012). Teaching Vocabulary for Junior High School Students Using Snake and Ladder Game. *Aktif*, 19(4).
- Latifah, N., Saifuddin, A., & Widiarini, W. (2023). Developing The Snake And Ladder Game As Media For Teaching Vocabulary At Ma Al Khoiriyah. *Jurnal Ilmiah Mandala Education*, 9(3). <https://doi.org/10.58258/jime.v9i3.5506>
- Lawrance, P. J., Moreira, A., & Santos, C. (2021). GAMIFICATION TO IMPROVE LEARNERS' LEARNING IN HIGHER EDUCATION. *Internet Latent Corpus Journal*, 11(2).
- Lopez, G., Chen, Y., & Kim, J. (2023). Adapting traditional games to digital platforms: The case of Snakes and Ladders in vocabulary learning. *Educational Technology & Society*, 26(3), 45–58.
- Maria Dimitrij Angie Pavita. (2022). Students' Perceptions of the Use of a Snake and Ladder Board Game in Learning Vocabulary at the English Club of SMK N 1 Banyumas. *English Language and Education Spectrum*, 2(1). <https://doi.org/10.53416/electrum.v2i1.60>
- Nuridayanti, S., Sulistyani, S., & Khoiriyah, K. (2024). The effect of joyful learning using the snake and ladder game on students' vocabulary mastery. *ELITICS: Proceedings of Seminar on English Education, Literature, and Linguistics*. Retrieved from <https://prosiding.unipma.ac.id>
- Pratiwi, N. A., Mubarak, T. A., & Saifudin, A. (2023). Developing Snake and Ladder Game to Teach Vocabulary on Recount Text for Eighth Grade Students at MTs Syekh Subakir

- 2 Sumberasri. *Journey: Journal of English Language and Pedagogy*, 6(3).
<https://doi.org/10.33503/journey.v6i3.2885>
- Rahman, H., & Siti, N. (2022). Game-based learning strategies in vocabulary mastery among primary school students. *International Journal of Educational Games*, 10(2), 200–210.
- Roslin, V. P., & Hosseinpour Emam, M. (2021). Investigating the Effect of Serious Games as an Intervention on Iranian EFL Learners' Vocabulary Learning and Retention during COVID-19 Pandemic. *SRPH Journal of Interdisciplinary Studies*.
<https://doi.org/10.47176/sjis.3.2.1>
- Setiawan, I., & Mitra Zuana, M. M. (2018). Teaching Vocabulary Using Modified Snakes and Ladders Game. *ALSUNA: JOURNAL OF ARABIC AND ENGLISH LANGUAGE*, 1(2).
<https://doi.org/10.31538/alsuna.v1i2.86>
- Sofyan, R., Sinar, T. S., Tarigan, B., & Zein, T. T. (2019). USING A “SNAKE AND LADDER” GAME IN TEACHING SPEAKING TO YOUNG LEARNERS. *ABDIMAS TALENTA: Jurnal Pengabdian Kepada Masyarakat*, 3(2).
<https://doi.org/10.32734/abdimastalenta.v3i2.4121>
- Swari, N. K. T. A. (2023). Wordwall As a Learning Media To Increase Students' Reading Interest. *Jurnal Pendidikan Bahasa Inggris Indonesia*, 11(1).
- Taka, S. D. (2019). TEACHING SPEAKING BY USING SNAKE AND LADDER BOARD GAME. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 7(2). <https://doi.org/10.24256/ideas.v7i2.1021>
- Zhang, S., & Hasim, Z. (2023). Gamification in EFL/ESL instruction: A systematic review of empirical research. In *Frontiers in Psychology* (Vol. 13).
<https://doi.org/10.3389/fpsyg.2022.1030790>
- Zikriyati, & Syafei, A. F. R. (2018). Teaching Vocabulary to Young Learners Through Snake and Ladder Game. *Journal of English Language Teaching*, 7(1).