



THE EFFECT OF GAME-BASED ICE-BREAKING ACTIVITIES ON ENGLISH VOCABULARY MASTERY AMONG SEVENTH-GRADE STUDENTS

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ABSTRACT

Vocabulary mastery is one of the essential components of English learning, yet many junior high school students experience difficulties in acquiring and retaining English vocabulary due to limited engagement during classroom instruction. This study aimed to investigate the effect of game-based ice-breaking activities on the English vocabulary mastery of seventh-grade students at SMP Negeri Satu Atap 3 Kubutambahan. A pre-experimental study employing a one-group pretest-posttest design was conducted with 19 seventh-grade students selected through total sampling. The research instrument consisted of a vocabulary test administered before and after six treatment sessions incorporating game-based ice-breaking activities. The collected data were analyzed using descriptive statistics, the Shapiro-Wilk normality test, and the Wilcoxon Signed Rank Test. The findings revealed that the students' mean score increased from 50.87 in the pretest to 86.25 in the posttest. The hypothesis testing showed a significance value of 0.001 ($p < 0.05$), indicating a statistically significant improvement in students' vocabulary mastery after the treatment. These findings suggest that game-based ice-breaking activities effectively enhance students' English vocabulary mastery by promoting active participation and meaningful vocabulary practice in the classroom. Therefore, this strategy may serve as an effective alternative for English teachers to create a more engaging and interactive learning environment.

Keywords: English Learning, Game-Based Ice-Breaking Activities, Junior High School Students, Pre-Experimental Study, Vocabulary Mastery

A. INTRODUCTION

Vocabulary mastery is an essential aspect of English language learning because it enables learners to understand, express, and communicate ideas effectively. Adequate vocabulary knowledge also supports the development of the four language skills listening, speaking, reading, and writing and plays an important role in successful language learning (Nation, 2001). For junior high school students, vocabulary learning serves as a foundation for building communicative competence and supporting their overall language development (Cameron, 2001). Despite its importance, many students still find vocabulary difficult to learn because they often struggle to remember unfamiliar words, understand their meanings, and use them appropriately in different contexts (Thornbury, 2006). These challenges highlight the need for learning activities that encourage students to participate actively while making vocabulary learning more meaningful.

One approach that may address these challenges is the use of game-based ice-breaking activities. By combining language games with short ice-breaking sessions, teachers can create a classroom atmosphere that is both enjoyable and supportive of learning. Wright et al. (2006)

explain that language games provide meaningful opportunities for learners to practice vocabulary through interaction and active participation. Ice-breaking activities also help reduce tension, increase students' confidence, and encourage them to become more involved in classroom learning (Adawiyah, 2022). Supporting this view, Kurdi and Meena (2023) found that the use of ice breakers, warmers, and energizers helped students become more prepared, focused, and engaged before the learning activities began. These advantages suggest that game-based ice-breaking activities have the potential to support vocabulary learning while creating a positive classroom environment.

The benefits of game-based and ice-breaking activities have also been reported in a number of previous studies. Sari et al. (2024) found that English teachers frequently used game-based ice-breaking activities to increase students' participation and create a more engaging classroom atmosphere. Chao and Fan (2020) reported that integrating board games into ice-breaking activities reduced students' anxiety and made English learning more enjoyable. Similar positive outcomes were reported by Sofyan et al. (2021), who found that ice-breaking activities increased students' motivation to learn English. In addition, Sinaga et al. (2023) demonstrated that ice-breaker activities contributed to improving students' vocabulary mastery, while Audria and Qamariah (2025) found a significant positive effect of ice-breaking activities on EFL students' vocabulary achievement. Overall, these studies indicate that game-based and ice-breaking activities can positively influence students' learning experiences as well as their language development.

Although previous studies have shown promising results, most of them focused on students' motivation, classroom engagement, or English learning in general. Research that specifically examines the effect of game-based ice-breaking activities on vocabulary mastery among seventh-grade students, particularly in the Indonesian junior high school context, is still limited. Therefore, this study investigates the effect of game-based ice-breaking activities on the English vocabulary mastery of seventh-grade students at SMP Negeri Satu Atap 3 Kubutambahan. It is expected that the findings will provide empirical evidence regarding the effectiveness of this approach and offer practical insights for English teachers who wish to create more engaging vocabulary learning experiences.

Considering the importance of vocabulary mastery and the limited research on the use of game-based ice-breaking activities in Indonesian junior high schools, further investigation is needed to provide empirical evidence regarding the effectiveness of this instructional approach. Therefore, this study aims to examine the effect of game-based ice-breaking activities on the English vocabulary mastery of seventh-grade students at SMP Negeri Satu Atap 3 Kubutambahan. The findings are expected to provide practical insights for English teachers in implementing more engaging vocabulary learning activities and to contribute to the growing body of research on game-based learning in English language education.

B. METHOD

This study employed a pre-experimental research design using a one-group pretest–posttest design to investigate the effect of game-based ice-breaking activities on students' English vocabulary mastery (Creswell & Creswell, 2018; Sugiyono, 2023). The study was conducted at SMP Negeri Satu Atap 3 Kubutambahan, Bali, Indonesia, involving 19 seventh-grade students selected through total sampling because the population consisted of only one class.

Table 1. Research Design

Stage	Activity
1	Pretest
2	Six treatment sessions using game-based ice-breaking activities
3	Posttest

As presented in Table 1, the study followed a one-group pretest–posttest design consisting of three stages: pretest, treatment, and posttest.

The primary research instrument was a multiple-choice vocabulary test administered as both the pretest and posttest. The instrument initially consisted of 30 items developed based on the seventh-grade English learning objectives. Following the validity test, 18 valid items were retained and used to measure students' vocabulary mastery. An observation sheet was also employed to monitor students' participation throughout the implementation of the treatment.

The study was carried out in three stages. First, a pretest was administered to identify the students' initial vocabulary mastery. Second, students participated in six treatment sessions in which game-based ice-breaking activities were integrated into English lessons. Each session lasted approximately 60 minutes, with 10-15 minutes allocated for ice-breaking activities, including Word Guessing Game, Find Someone Who, Mime and Guess, Change Roles, Greeting Chain, and Spinning Game. These activities encouraged students to actively participate and practice newly learned vocabulary in meaningful learning contexts. Finally, a posttest was administered to evaluate students' vocabulary mastery after the treatment.

The collected data were analyzed using IBM SPSS Statistics. Descriptive statistics were used to summarize the students' pretest and posttest scores, while the Shapiro–Wilk test was conducted to examine the normality of the data. Since the posttest scores were not normally distributed, the Wilcoxon Signed Rank Test was employed to determine whether there was a significant difference between the pretest and posttest scores at a significance level of 0.05.

C. FINDINGS AND DISCUSSION

Findings

This section presents the results of the statistical analyses conducted to examine the effect of game-based ice-breaking activities on students' English vocabulary mastery. The analyses

include descriptive statistics, the Shapiro-Wilk normality test, and the Wilcoxon Signed Rank Test.

Table 2. Descriptive Statistics of Students' Vocabulary Scores

Test	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	19	16.66	88.88	50.87	18.45
Posttest	19	55.55	100.00	86.25	12.75

The descriptive statistics indicate an improvement in students' English vocabulary mastery after the implementation of the game-based ice-breaking activities. The mean score increased from 50.87 in the pretest to 86.25 in the posttest. The minimum score also increased from 16.66 to 55.55, while the maximum score improved from 88.88 to 100.00. In addition, the standard deviation decreased from 18.45 to 12.75, suggesting that students' scores became more consistent after the treatment.

Before testing the research hypothesis, the data were examined to determine whether they met the assumption of normality.

Table 3. Results of the Shapiro–Wilk Normality TEST

Test	Sig.	Interpretation
Pretest	.708	Normal Distribution
Posttest	.004	Not Normal Distribution

The normality test showed that the pretest scores were normally distributed (Sig. = 0.708), whereas the posttest scores were not normally distributed (Sig. = 0.004). Since the assumption of normality was not fully met, the hypothesis was tested using the Wilcoxon Signed Rank Test.

Table 4. Wilcoxon Signed Ranks

Ranks	N	Mean Rank	Sum of Ranks
Negative Ranks	0	0.00	0.00
Positive Ranks	19	10.00	190.00
Ties	0	—	—

The Wilcoxon Signed Ranks analysis indicates that all 19 students obtained higher scores in the posttest than in the pretest. No students showed lower scores, and no tied scores were found. These results demonstrate a consistent improvement in students' English vocabulary mastery following the implementation of the game-based ice-breaking activities.

Table 5. Results of the Wilcoxon Signed Rank Test

Test	Z	Asymp. Sig. (2-tailed)	Decision
Wilcoxon Signed Rank Test	-3.839	.001	Reject H ₀

The Wilcoxon Signed Rank Test produced a Z value of -3.839 with an Asymp. Sig. (2-tailed) value of 0.001, which was lower than the significance level of 0.05. This result indicates a significant difference between the students' pretest and posttest scores. Therefore, the null hypothesis was rejected, confirming that game-based ice-breaking activities had a significant effect on students' English vocabulary mastery. Furthermore, all students achieved higher posttest scores than pretest scores, demonstrating consistent improvement following the treatment.

Discussion

The findings of this study demonstrate that the implementation of game-based ice-breaking activities significantly improved students' English vocabulary mastery. This was evidenced by the substantial increase in students' vocabulary scores after the treatment, as well as the results of the Wilcoxon Signed Rank Test, which confirmed a statistically significant difference between the pretest and posttest scores. These findings suggest that incorporating game-based ice-breaking activities into English lessons can effectively facilitate vocabulary learning by creating a more engaging and interactive classroom environment. Rather than merely serving as energizers, the activities also provided meaningful opportunities for students to practice and reinforce newly learned vocabulary through active participation.

The improvement in students' vocabulary mastery can be explained by the nature of game-based ice-breaking activities, which encourage learners to actively engage with language during the learning process. According to Nation (2001), vocabulary acquisition becomes more effective when learners repeatedly encounter and actively use new words in meaningful contexts. During the treatment sessions, students were required to recognize, recall, pronounce, and apply English vocabulary while participating in various interactive games. This repeated exposure and active retrieval likely strengthened students' understanding and retention of vocabulary. This explanation is also supported by Thornbury (2006), who emphasizes that vocabulary learning is enhanced through frequent retrieval and meaningful use rather than simple memorization. Therefore, the enjoyable and student-centered learning atmosphere created by the games may have reduced students' anxiety while simultaneously increasing their confidence and willingness to participate in classroom activities.

The findings of this study are also consistent with previous studies. Sari et al. (2024) reported that game-based ice-breaking activities created a more engaging classroom atmosphere and encouraged students to participate actively in English learning. Sinaga et al. (2023) also found that ice-breaker activities significantly improved students' vocabulary mastery through active

classroom participation. Audria and Qamariah (2025) further reported that ice-breaking activities had a significant positive effect on EFL students' vocabulary achievement. The present study supports these findings by demonstrating similar improvements among seventh-grade students at SMP Negeri Satu Atap 3 Kubutambahan. Although the participants, classroom context, and learning activities differed from those of previous studies, the consistent positive outcomes suggest that game-based ice-breaking activities can serve as an effective instructional strategy for improving students' vocabulary mastery across different educational settings.

From a pedagogical perspective, the findings imply that English teachers may consider integrating game-based ice-breaking activities into vocabulary instruction, particularly at the beginning of or during learning sessions to maintain students' attention and engagement. These activities not only create a more enjoyable classroom atmosphere but also provide opportunities for students to interact, collaborate, and repeatedly practice target vocabulary in meaningful situations. Consequently, game-based ice-breaking activities may serve as an alternative teaching strategy that supports more active, enjoyable, and effective English vocabulary learning. Therefore, integrating these activities into English lessons may help teachers create a more student-centered learning environment while supporting students' vocabulary development.

D. CONCLUSION

The findings of this study demonstrate that the implementation of game-based ice-breaking activities effectively improved the English vocabulary mastery of seventh-grade students at SMP Negeri Satu Atap 3 Kubutambahan. The integration of enjoyable and interactive learning activities encouraged students to participate more actively, engage with vocabulary in meaningful contexts, and strengthen their vocabulary retention throughout the learning process. These findings support the view that meaningful learning experiences play an important role in facilitating vocabulary acquisition among English as a Foreign Language (EFL) learners. Therefore, game-based ice-breaking activities can be considered an effective alternative instructional strategy for English teachers, particularly in junior high school classrooms, to create a more engaging, interactive, and student-centered learning environment. Future studies are recommended to investigate the implementation of this strategy using different research designs, larger participant groups, or other English language skills to provide broader evidence of its effectiveness.

REFERENCES

- Adawiyah, Y. R., & Z., M. N. J. (2022). *Ice breaking dalam pembelajaran bahasa Arab untuk meningkatkan maharah al-kalam ala Kampung Inggris Pare*. *Jurnal Jendela Pendidikan*, 2(4). <https://www.ejournal.jendelaedukasi.id/index.php/JJP>
- Audria, A., & Qamariah, Z. (2025). The effect of ice breaking activities on vocabulary mastery among EFL students at SMA NU Palangka Raya. *Jurnal Pendidikan Indonesia*, 6, 5469-5471.
- Cameron, L. (2001). *Teaching languages to young learners*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511733109>
- Chao, C., & Fan, S. (2020). The effects of integrating board games into ice-breaking activities in a fifth-grade English class to reduce students' anxieties. *English Language Teaching*, 13(9), 40. <https://doi.org/10.5539/elt.v13n9p40>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.



- Kurdi, S. M., & Meena, R. S. (2023). The students' perception towards the use of icebreakers, warmers, and energizers in EFL classrooms: A tertiary study. *Arab World English Journal*, 14(4), 233-251. <https://doi.org/10.24093/awej/vol14no4.14>
- Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge University Press.
- Sari, K. C., Rusfandi, R., & Herawati, S. (2024). Exploring the use of game-based ice-breaking activities by English teachers during the teaching and learning process. *Journal of English Language and Education*, 9(6), 28-42. <https://doi.org/10.31004/jele.v9i6.584>
- Sinaga, Y., Simarmata, R. O., Pakpahan, C., & Panggabean, S. (2023). Improving students' vocabulary mastery by using ice breaker activities to the first graders of SMP HKBP Sidorame. *Innovative: Journal of Social Science Research*, 3, 8237-8242.
- Sofyan, M., Riska, A. P., Susanti, A., & Jannah, Q. (2021). The effectiveness of ice breaking to increase students' motivation in learning English. *IJOEEL: International Journal of English Education and Linguistics*, 3(1). <https://doi.org/10.33650/ijoeel.v3i1.2256>
- Sugiyono. (2023). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Thornbury, S. (2006). *How to teach vocabulary*. Pearson Education Limited.
- Wright, A., Betteridge, D., & Buckby, M. (2006). *Games for language learning* (3rd ed.). Cambridge University Press.