The Effect of Ice Breaking Activities on Vocabulary Mastery Among EFL Students' at SMA NU Palangka Raya

Alya Audria[1*], Sabarun[2], Zaitun Qamariah[3]

UIN Palangka Raya, Indonesia

Email: alyaaudriatbi@gmail.com* , sabarunwhs@gmail.com, zaitun.qamariah@uin-palangkaraya.ac.id

Keywords:	ABSTRACT
Ice-Breaking Activities; Vocabulary Mastery; EFL; Student Engagement; Language Learning.	*Mastering vocabulary is indispensable for English as a Foreign Language (EFL) learners, as it underpins all language skills. However, many students continue to face difficulties in retaining and applying new vocabulary effectively. Prior studies have explored various strategies, yet few have examined the effect of engaging, student-centered techniques such as ice-breaking activities on vocabulary mastery among twelfth-grade EFL students at SMA NU Palangka Raya. Utilizing a quasi-experimental design, the researcher involved one experimental group and one control group, each undergoing pre-tests and post-tests to assess vocabulary mastery. The results showed that students in the experimental group demonstrated greater improvement than those in the control group, with post-test mean scores of 84.17 and 69.62, respectively (t(23) = 3.884, p < .001), indicating a statistically significant difference. These findings highlight the potential of ice-breaking activities to enhance vocabulary mastery by increasing student motivation, reducing anxiety, and encouraging active participation in learning. The study has important implications for educational practice, suggesting that ice-breaking activities should be integrated into regular EFL instruction as a pedagogical strategy rather than merely as warm-up exercises. Furthermore, these findings can inform teacher training programs and curriculum development policies aimed at creating more engaging and effective language learning environments in Indonesian secondary schools.*

INTRODUCTION

Vocabulary mastery is a key determinant of success in learning English as a Foreign Language (EFL), as it directly affects learners' reading, writing, speaking, and listening abilities. Despite its importance, many EFL students—particularly in Indonesia—continue to encounter persistent challenges in developing sufficient vocabulary knowledge. Studies have shown that the structural differences between Indonesian and English can create barriers in vocabulary mastery (Aniuranti & Hidayah, 2023).

According to Ali (2021),vocabulary is crucial for learners of a second or foreign language because having a limited vocabulary can hinder successful communication in conversation practice. This aligns with the research conducted by Polyzi & Moussiades (2023),also states gaining vocabulary is fundamental for developing other key skills in learning a foreign language, including listening, speaking, writing, and reading.

Alya Audria[1*], Sabarun[2], Zaitun Qamariah[3]

Similarly, research by Zuhairi & Mistar (2023), revealed that although students apply a range of vocabulary learning strategies, their effectiveness varies considerably. Among these, metacognitive strategies emerged as the strongest predictors of vocabulary achievement. In response to these ongoing difficulties, educators have been experimenting with more engaging pedagogical approaches. One such strategy involves the integration of ice-breaking activities into classroom instruction.

Ice-breaking refers to brief, interactive exercises designed to ease social tension, build rapport, and stimulate student engagement. Recent findings by Sasan et al., (2023) indicate that incorporating ice-breaking activities into EFL lessons can lead to a noticeable increase in student participation and motivation, particularly in senior high school contexts.

To further support this approach, Madden & Robinson (2025) introduced a creative and innovative icebreaker in EFL classes and found that students not only enjoyed the activity but also viewed it as memorable, original, and engaging. In addition, the instructor noted that such activities provided a low-pressure opportunity to informally assess students' speaking skills. These findings point to the potential of ice-breaking activities not only as motivational tools but also as valuable pedagogical strategies. By introducing and practicing new vocabulary in a fun and interactive way, students are more likely to retain and use the new words effectively. This is evidenced by research performed by Huei et al., (2021)they state the use of games brought an interesting competitive aspect to students' vocabulary performance.

Recent studies propose that in the context of language learning, ice-breaking activities have emerged as effective tools for enhancing student engagement and reducing anxiety in the classroom. Ice-breaking activities have been found to increase interest in learning among students, particularly in language-based subjects like English (Khodijah, 2023). Ice-breaking activities are particularly useful at the start of lessons to establish a positive tone and motivate students to engage with new material. They also encourage peer collaboration and interaction, which are essential components in active vocabulary learning (Gustanti & Ayu, 2021). These strategies promote active learning, foster student interaction, and consequently improve vocabulary acquisition, aligning with the findings of previous studies that have demonstrated a correlation between the use of interactive learning methods and increased language mastery Amien et al. (2022).

Several relevant studies have also provided empirical support for the integration of ice-breaking activities in EFL classrooms, particularly in relation to vocabulary development and learner motivation (Chao & Fan, 2020; Khoirunnisaa et al., 2024; Mahmud et al., 2023). For instance, Khoirunnisaa' et al. (2024) conducted a qualitative study on EFL teachers' experiences in using ice-breaking strategies with Taiwanese students. Their findings highlighted how such activities effectively lowered students' anxiety and created a more welcoming classroom environment. As a result, students became more engaged and open to acquiring new vocabulary, indicating that a positive emotional climate can significantly enhance the language learning experience.

In a similar study, Al Ghifarah & Pusparini (2023) examined students' perceptions of ice-breaking activities in an Indonesian senior high school context. The study revealed that students felt more motivated and less anxious when participating in these activities. Many participants associated the interactive and enjoyable nature of ice-breakers with increased willingness to learn and retain English vocabulary (Hamrin, 2022; Hoseini Shavoun et al.,

2024; Reffalleo et al., 2024). This suggests that emotional and psychological readiness plays a vital role in vocabulary acquisition.

Further supporting this perspective, (Sari, 2023) explored the implementation of ice-breaker techniques at Senior High School 1 Gunung Labuhan. The research focused on students' speaking skills and their motivation levels, and the results showed a notable improvement in students' performance across various language components—particularly grammar, vocabulary, and fluency. The study concluded that incorporating fun, interactive elements into English lessons not only promotes active participation but also creates a dynamic classroom atmosphere that supports vocabulary mastery.

Taken together, these previous studies demonstrate a consistent pattern: ice-breaking activities serve not merely as energizers but as pedagogical tools that enhance students' emotional comfort, engagement, and ultimately, their vocabulary learning outcomes. This growing body of evidence strengthens the rationale for integrating such activities into EFL instruction, especially in contexts where learners often struggle.

Importantly, the educational effectiveness of ice-breaking activities is supported by several well-established learning theories. From a social constructivist perspective, Bandura's Social Learning Theory (1977) proposes that learning occurs through observation, imitation, and social interaction. Ice-breaking activities, which encourage peer modeling and cooperative engagement, provide authentic opportunities for such learning to take place (Bandura, 1977) . In line with Self-Determination Theory, these activities satisfy students' psychological needs for autonomy, competence, and relatedness—thus fostering intrinsic motivatin (Ryan & Deci, 2017). Additionally, Kolb's Experiential Learning Theory (1984) offers a framework through which ice-breaking can be viewed as a concrete learning experience that triggers reflective observation and active vocabulary application (Kolb, 1984).

Despite the growing evidence supporting the use of ice-breaking activities in EFL contexts, a significant gap remains in the literature regarding their specific impact on vocabulary mastery in Indonesian secondary schools. While previous studies have examined ice-breaking activities in relation to general engagement, speaking skills, or motivation, few have systematically investigated their direct effect on vocabulary acquisition and retention among Indonesian EFL learners. This gap is particularly notable in the context of SMA NU Palangka Raya, where students face unique challenges related to limited exposure to English outside the classroom, large class sizes, and traditional teaching methods that emphasize rote memorization over interactive learning. Furthermore, most existing research on ice-breaking activities has been qualitative in nature, focusing on perceptions and experiences rather than measuring quantifiable learning outcomes. The present study addresses this gap by employing a quasi-experimental design to provide empirical evidence of the effectiveness of ice-breaking activities specifically for vocabulary mastery.

The urgency of this research is underscored by several factors. First, vocabulary knowledge is recognized as the single most important factor in reading comprehension and overall language proficiency, yet Indonesian EFL students consistently score below international benchmarks in English proficiency assessments. Second, the COVID-19 pandemic has exacerbated learning losses, making it imperative to identify and implement effective, engaging teaching strategies that can quickly improve learning outcomes. Third, the Indonesian government's emphasis on 21st-century skills and student-centered learning in the

Alya Audria[1*], Sabarun[2], Zaitun Qamariah[3]

2013 Curriculum (Kurikulum 2013) and the Independent Curriculum (Kurikulum Merdeka) necessitates research on innovative pedagogical approaches that align with these policy directions. Finally, the specific context of SMA NU Palangka Raya—a school serving diverse socioeconomic backgrounds with varying levels of English exposure—makes it an ideal site to investigate accessible, low-cost interventions that can be replicated in similar educational settings across Indonesia.

The novelty of this study lies in several key aspects. First, it provides the first quantitative evidence of the direct impact of ice-breaking activities on vocabulary mastery in an Indonesian EFL context, filling a critical gap in the literature. Second, it focuses specifically on twelfth-grade students who are preparing for national examinations and higher education, a population whose vocabulary needs are both urgent and consequential for their academic futures. Third, the study employs a rigorous quasi-experimental design with both pre-test and post-test measurements, allowing for causal inferences about the effectiveness of the intervention. Fourth, unlike previous studies that have examined ice-breaking activities as standalone warm-up exercises, this research integrates them systematically throughout the instructional sequence as pedagogical tools for vocabulary introduction, practice, and reinforcement. Finally, the study's focus on a specific school context allows for deep insights into how ice-breaking activities function in real-world classroom conditions, including the challenges and adaptations necessary for successful implementation.

This study therefore aims to fill this gap by examining the effect of ice-breaking activities on students' vocabulary mastery at SMA NU Palangka Raya. The researcher seeks to answer the following research question: Is there any significant effect of ice-breaking activities on vocabulary mastery among EFL students at SMA NU Palangka Raya? The central research problem focuses on the effectiveness of these activities in improving students' vocabulary retention and usage. By examining this issue in a real-world classroom setting, the study aims to generate practical insights for teachers seeking to adopt more interactive and student-centered methods in vocabulary instruction. The findings are expected to contribute to both theoretical understanding of vocabulary acquisition processes and practical knowledge about effective teaching strategies that can be implemented with minimal resources.

Furthermore, the study's results have implications for teacher professional development programs, curriculum design, and educational policy, particularly in promoting more engaging and effective approaches to EFL instruction in Indonesian secondary schools. Beyond vocabulary learning, this research also explores how ice-breaking activities can transform overall classroom dynamics by reducing anxiety, building classroom community, and creating a more supportive learning environment—factors that are essential for successful language acquisition but often overlooked in traditional instructional approaches.

RESEARCH METHOD

This study employed a quantitative research approach. Specifically, a quasi-experimental design was used. The research consists of a pre-test and post-test, a format widely applied in educational research to measure learning gains over time.

The study was conducted at SMA NU Palangka Raya in the academic year 2025, involving a total of 25 students selected through purposive sampling. The experimental group comprised 12 students from Grade 12 Science (XII IPA), while the control group consisted of

13 students from Grade 12 Social Studies (XII IPS). The instrument used to collect data was a vocabulary test, which assesses learners' knowledge of word forms, meanings, and usage in context, and is considered an effective tool for evaluating vocabulary mastery in EFL contexts.

In the pre-test stage, both groups were given the same vocabulary test to determine their initial proficiency levels. During the treatment phase, the experimental group received instruction that incorporated ice-breaking activities. In contrast, the control group was taught using conventional methods without the integration of ice-breakers. After the treatment period, the same test was administered again as a post-test to measure changes in students' vocabulary mastery.

The data obtained from both the pre-test and post-test were analyzed using SPSS, a widely used software for both basic and advanced statistical analyses. Iskandar et al. (2025) highlight the relevance of SPSS in educational research involving pre-test and post-test designs, illustrating how the software supports the verification of statistical assumptions and the execution of appropriate hypothesis testing. Their study reinforces SPSS's value in improving the precision and transparency of analytical findings.

RESULTS AND DISCUSSION

The aim of this study was to examine whether the effect of ice-breaking activities in EFL instruction could significantly improve students' vocabulary mastery compared to conventional teaching. The findings provide clear evidence that both the experimental and control groups made progress from pre-test to post-test, yet the experimental group achieved substantially higher post-test scores.

Descriptive Statistics

Table 1. Descriptive Statistics for Control Group (12 IPS)

Statistics		Pre-Test 12 IPS Scores	Post-Test 12 IPS Scores
N	Valid	13	13
	Missing	0	0
Mean		47.31	69.62
Std. Error of Mean		3.652	3.020
Median		50.00	70.00
Mode		40	70
Std. Deviation		13.168	10.890
Variance		173.397	118.590
Range		45	35
Minimum		25	55
Maximum		70	90
Sum		615	905

Table 2. Descriptive Statistics for Experimental Group (12 IPA)

Statistics		Pre-Test 12 IPA Scores	Post-Test 12 IPA Scores
N	Valid	12	12
	Missing	0	0
Mean		44.58	84.17
Std. Error of Mean		4.941	2.117
Median		42.50	85.00

Alya Audria[1*], Sabarun[2], Zaitun Qamariah[3]

Mode	35	75
Std. Deviation	17.117	7.334
Variance	292.992	53.788
Range	65	20
Minimum	20	75
Maximum	85	95
Sum	535	1010

The descriptive statistics reveal several important patterns in the data. First, both groups showed improvement from pre-test to post-test, indicating that learning occurred regardless of the instructional method used. The control group's mean score increased by 22.31 points (from 47.31 to 69.62), representing a 47.1% improvement. The experimental group's mean score increased by 39.59 points (from 44.58 to 84.17), representing an 88.8% improvement—nearly double the improvement rate of the control group. Second, the standard deviation decreased in both groups from pre-test to post-test (from 13.168 to 10.890 in the control group; from 17.117 to 7.334 in the experimental group), suggesting that students' vocabulary knowledge became more homogeneous and that the instruction was effective in bringing lower-performing students closer to the group mean.

The more substantial reduction in standard deviation in the experimental group (from 17.117 to 7.334, a decrease of 57.2%) compared to the control group (from 13.168 to 10.890, a decrease of 17.3%) suggests that ice-breaking activities may have been particularly beneficial for students who started with lower vocabulary levels. Third, the range of scores also narrowed in both groups, with the experimental group showing a more dramatic reduction (from 65 to 20 points) compared to the control group (from 45 to 35 points), further supporting the conclusion that ice-breaking activities helped to close achievement gaps. Finally, the minimum score in the experimental group increased substantially from 20 to 75, while in the control group it increased from 25 to 55, indicating that even the lowest-performing students in the experimental group achieved higher absolute scores than their counterparts in the control group.

Normality Test

Table 3. Shapiro-Wilk Test of Normality

	Shapiro-Wilk		
	Statistics	df	Sig.
Pre-Test 12 IPS Scores	0.964	13	0.807
Post-Test12 IPS Scores	0.892	13	0.103
Pre-Test 12 IPA Scores	0.911	12	0.223
Post-Test 12 IPA Scores	0.907	12	0.197

The normality test using the Shapiro–Wilk statistic indicated that all datasets were normally distributed. Specifically, the pre-test scores of the control group (W = 0.964, p = .807) and the experimental group (W = 0.911, p = .223) met the assumption of normality. Similarly, the post-test scores of both the control group (W = 0.892, p = .103) and the experimental group (W = 0.907, p = .197) were normally distributed. Since all p-values exceeded .05, the assumption of normality was satisfied for both groups at both testing points.

Homogeneity Test

<p align="center">**Table 4. Levene's Test of Homogeneity of Variances (Post-Test)**</p>

	Levene Statistic	df1	df2	Sig.
Based on Mean	.893	1	23	.355

The homogeneity test further confirmed that the variances of the two groups' post-test scores were equal (Levene's test, F = 0.893, p = .355). This result indicates that the spread of scores in the experimental and control groups was comparable, satisfying the homogeneity of variance assumption required for independent samples t-tests. Together, these results indicate that the assumptions for parametric testing were met, justifying the use of independent samples t-tests in the subsequent analyses.

Independent Samples T-test test (pre test)

<p align="center">**Table 5. Independent Samples T-Test Comparing Pre-Test Scores**</p>

	Levene's Test for Equality of Variances				
	F	Sig	t	df	Sig. (2-tailed)
Equal Variances Assumed	0.153	0.700	0.448	23	0.658

Not significantly different (p = 0.658) → the initial groups are equivalent.

At the beginning of the study, the two groups showed comparable levels of vocabulary mastery. The experimental group had a mean pre-test score of 44.58, while the control group scored 47.31. This small difference was not statistically significant (p = .658), confirming that both groups started the study at a similar baseline. This finding is crucial for the validity of the study, as it demonstrates that any differences observed in post-test scores cannot be attributed to pre-existing differences between the groups. The baseline equivalence strengthens the causal inference that the observed effects are due to the treatment (ice-breaking activities) rather than to initial group differences. Furthermore, the non-significant difference in pre-test scores validates the purposive sampling approach and confirms that the two classes were indeed comparable in terms of their English vocabulary knowledge at the outset of the study.

Independent Samples T-test test (post test)

<p align="center">**Table 6. Independent Samples T-Test Comparing Post-Test Scores**</p>

	Levene's Test for Equality of Variances				
	F	Sig	t	df	Sig. (2-tailed)
Equal Variances Assumed	0.893	0.355	-3.884	23	0.001

Significantly different (p < .001) → the increase in IPA class scores is higher than in IPS class scores.

<p align="center">**Table 7. Post-Test Score Comparison**</p>

Class	N	Mean	SD	SE	Coefficient of variation
12 IPA	12	84.17	7.334	2.117	0.087
12 IPS	13	69.62	10.890	3.020	0.156

Alya Audria[1*], Sabarun[2], Zaitun Qamariah[3]

The mean post-test score of the experimental group (Science: 84.17) is significantly higher than that of the control group (Social Studies: 69.62), with a mean difference of 14.55 points. The independent samples t-test yielded a t-value of -3.884 with 23 degrees of freedom and a p-value of .001, which is well below the significance threshold of .05. This result provides strong statistical evidence that ice-breaking activities had a significant positive effect on students' vocabulary mastery.

To better understand the magnitude of this effect, Cohen's d was calculated as a measure of effect size. The effect size was d = 1.56, which is considered a large effect according to Cohen's (1988) conventions (small: d = 0.2; medium: d = 0.5; large: d = 0.8). This large effect size indicates that the difference between the two groups is not only statistically significant but also practically meaningful and educationally important. In practical terms, the experimental group's mean score was approximately 1.34 standard deviations above the control group's mean, meaning that the average student in the experimental group performed better than approximately 91% of students in the control group. This finding has important implications for educational practice, as it suggests that ice-breaking activities can produce substantial improvements in vocabulary learning outcomes.

During the experiment, both groups showed notable improvement. The experimental group improved substantially from pre-test to post-test (t(11) = –7.404, p < .001), and the control group also demonstrated progress (t(12) = –5.147, p < .001), though to a lesser extent (p < .001). In the post-test comparison, the experimental group achieved a higher mean score (M = 84.17) than the control group (M = 69.62). This difference was statistically significant (t(23) = 3.884, p < .001), indicating that the use of ice-breaking activities had a stronger effect on vocabulary mastery compared to conventional teaching. In summary, the results suggest that while both groups improved their vocabulary knowledge, the students who received ice-breaking activities achieved better outcomes.

These findings provide evidence that the use of ice-breaking activities had a significant effect on students' vocabulary mastery. This indicates that ice-breaking activities had a positive effect on students' vocabulary acquisition. These results confirm the initial hypothesis and directly answer the research question. The absence of significant differences between the two groups in the pre-test further supports the validity of the findings, since it shows that both groups started from a comparable level of vocabulary mastery. Thus, the greater improvement observed in the experimental group can be attributed to the treatment.

In terms of practical implications, the results suggest that teachers can employ ice-breaking activities not only as warm-up exercises but as pedagogical tools that facilitate vocabulary learning. Even short and simple activities can increase student engagement, reduce classroom anxiety, and make the learning environment more interactive. For schools and educators, integrating ice-breakers into EFL instruction may therefore represent a low-cost yet effective strategy to enhance language outcomes.

Despite these promising findings, the study has several limitations. The sample size was relatively small (25 students) and drawn from a single institution, which limits the generalizability of the results. Furthermore, the study only measured immediate post-test performance and did not assess the long-term retention of vocabulary. Future research could address these limitations by involving larger and more diverse samples, applying longitudinal

designs to examine retention, and exploring the effectiveness of different types of ice-breaking activities across language skills beyond vocabulary.

CONCLUSION

This study examined the impact of ice-breaking activities on vocabulary mastery among twelfth-grade EFL students at SMA NU Palangka Raya. The findings revealed that both the experimental and control groups showed improvement in their vocabulary knowledge, with the experimental group, which used ice-breaking activities, achieving significantly higher post-test scores. The statistical analysis confirmed the equivalence of the groups at the pre-test stage, with the significant differences in the post-test attributed to the treatment. The study suggests that ice-breaking activities not only serve as warm-up exercises but also enhance vocabulary acquisition by promoting student engagement, reducing anxiety, and fostering an interactive learning environment. Practical implications include using interactive ice-breaking activities to boost motivation and participation in English lessons. However, the study's limitations include a small sample size and a focus on short-term outcomes. Future research is recommended to involve larger, more diverse samples, explore other language skills, and investigate the long-term retention of vocabulary.

REFERENCES

Al Ghifarah, N. P. (2023). Students' perception towards the role of ice-breaking activities in learning English at senior high school. *Journal of English Language Teaching and Literature (JELTL), 6*(2). https://doi.org/10.47080/jeltl.v6i2.2793

Ali, N. (2021). The effect of Duolingo usage on students' vocabulary mastery of seventh-grade students at MTs PAB 1 Helvetia. *Jurnal Serunai Bahasa Inggris, 13*(1). https://doi.org/10.37755/jsbi.v13i1.347

Amien, J. A. (2022). Investigating listening to English pop songs in augmenting vocabulary mastery: A case study of Indonesian undergraduate students' views. *JEDU: Journal of English Education, 2*(3). https://doi.org/10.30998/jedu.v2i3.8099

Aniuranti, A. H. (2023). Exploring the students' voices on the use of Wordshake and Shusi Spell games to teach English vocabulary. *English Franca: Academic Journal of English Language and Education, 7*(2). https://doi.org/10.29240/ef.v7i2.8153

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), 40–49. https://doi.org/10.5539/elt.v13n9p40

Gustanti, Y. A. (2021). The correlation between cognitive reading strategies and students' English proficiency test scores. *Journal of English Language Teaching and Learning, 2*(2). https://doi.org/10.33365/jeltl.v2i2.1452

Hamrin, J. (2022). *Icebreakers—An effective teaching strategy or a waste of time? A study of grade 4–6 English teachers' use of icebreakers and their perceived effect on students* [Bachelor's thesis].

Hoseini Shavoun, A., Adeli, S. H., & Ahmari Tehran, H. (2024). Fostering engagement: A review of icebreakers in academic environments. *Medical Education Bulletin, 5*(2), 949–959.

Alya Audria[1*], Sabarun[2], Zaitun Qamariah[3]

Iskandar, A. A., Ully, R., Misbah, I., & Salman, M. N. (2025). Perbandingan hasil uji normalitas dan homogenitas data pretest dan posttest siswa dengan menggunakan software SPSS dan Microsoft Excel. *Jurnal Pendidikan Tambusai*.

Khodijah, S. (n.d.). Implementation of ice breaking in increasing students' spirit of learning. *International Journal of Education, Social Studies, and Management (IJESSM), 3*(3). https://doi.org/10.52121/ijessm.v3i3.185

Khoirunnisaa', T. A. (2024). Teaching English using ice breaking to Taiwanese students: EFL teacher's experiences. *English Review: Journal of English Education, 12*(1). https://doi.org/10.25134/erjee.v12i1.9285

Khoirunnisaa', T. A., Asnas, S. A. M., & Heriyawati, D. F. (2024). Teaching English using ice breaking to Taiwanese students: EFL teacher's experiences. *English Review: Journal of English Education, 12*(1), 149–156.

Madden, N. O. (2025). Using an innovative icebreaker in EFL classes to assess and enhance students' speaking competence. *International Journal of Language Instruction*. https://doi.org/10.54855/ijli.25411

Mahmud, A. F., Yusup, A., & Saban, A. (2023). The implementation of ice-breaking activities in English classrooms. *Langua: Journal of Linguistics, Literature, and Language Education, 6*(1), 108–117.

Polyzi, P. M. (2023). An artificial vocabulary learning assistant. *Education and Information Technologies*. https://doi.org/10.1007/s10639-023-11810-9

Reffalleo, A., Noviyenty, L., & Hidayah, J. (2024). *Investigating the use of icebreaker activity and its influence on students' self-confidence in speaking* [Undergraduate thesis, Institut Agama Islam Negeri Curup].

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory*. The Guilford Press.

Sari, D. M. (2023). The implementation of icebreaker technique toward students' speaking skills and their motivation in English language teaching at Senior High School 1 Gunung Labuhan. *Journal on Education, 6*(1). https://doi.org/10.31004/joe.v6i1.3131

Sasan, J. M. (2023). An exploration of icebreakers and their impact on student engagement in the classroom. *International Journal of Social Service and Research, 3*(11). https://doi.org/10.46799/ijssr.v3i11.566

Szee Huei, L. M. (2021). Strategy to improve English vocabulary achievement during COVID-19 epidemic: Does Quizizz help? *Journal of Education and E-Learning Research, 8*(2), 135–142. https://doi.org/10.20448/journal.509.2021.82.135.142

Zuhairi, A. M. (2023). Vocabulary learning strategies and vocabulary mastery by Indonesian EFL learners. *World Journal of English Language, 13*(8), 453–461. https://doi.org/10.5430/wjel.v13n8p453