Fly Swatter Game Effect on Seventh Grade Students' Vocabulary at SMP Parulian 2 Medan

Nur Anjelina Safna [1], Sahlan Tampubolon [2], Febrina S.L. Lumbantobing [3], Ali Wafa [4*]

[1,2,3] Universitas HKBP Nommensen Medan, [4] Universitas Islam Internasional Darullughah Wadda'wah, Indonesia
[1] nuranjelina.safna@student.uhn.ac.id; [2] sahlantampubolon@uhn.ac.id; [3] febrinalumbantobing@uhn.ac.id; [4] aliwaffa@uiidalwa.ac.id*
*Corresponding author

Abstract. This research examines the impact of the Fly Swatter Game on seventh-grade students' vocabulary proficiency at SMP Parulian 2 Medan. The research employed a true experimental design, categorizing students into an experimental group that participated in the Fly Swatter Game intervention and a control group that received traditional instruction. Both groups took pre-tests and post-tests to assess their vocabulary enhancement. This study utilized a total sampling technique, comprising fifty-eight students as the sample. The study's findings indicated that the experimental group demonstrated a significant enhancement in vocabulary knowledge compared to the control group. The average score of the experimental group increased from 58.26 (pre-test) to 77.33 (post-test). The t-test analysis resulted in a t-count of (3.144,) which was higher than t-table at the level of significance= 0,05 (1,673) or t-count > t-table 3,144 > 1,673. Ha was accepted, whereas Ho was refused. demonstrating a statistically meaningful impact. The findings indicate that employing the Fly Swatter Game as a vocabulary instruction technique can improve students' engagement, motivation, and retention of new lexicon. The game-based learning methodology enables students to engage actively with vocabulary, enhancing both enjoyment and efficacy in the learning process.

How to cite this paper:
Safna, N. A., Tampubolon, S., Lumbantobing, F. S. L., & Wafa, A. (2025). Fly Swatter Game Effect on Seventh Grade Students' Vocabulary at SMP Parulian 2 Medan. *Linguapedia, 9*(1)*,* 50-62*.*

INTRODUCTION

In the age of globalization, communicating in English has become one of the most important skills. English is taught as a compulsory subject at the secondary education level in Indonesia, beginning with high school and continuing through senior high school and university. Vocabulary is a key component of linguistic skills. It gets difficult to communicate in English when one's vocabulary is limited. Teaching vocabulary is thus an essential component of learning English, particularly for pupils whose native language is not English.

Learning new words can help children improve their output. Vocabulary is considered a deciding component in someone's development of English ability.

Many English students struggle to express their ideas, thoughts, feelings, and experiences because they sometimes lack the words to speak or write. They also miss some information when reading or listening since they do not fully grasp the meanings of those words. Without having enough knowledge and vocabulary, students had difficulty in developing or elaborating their ideas. Vocabulary development is a vital skill that should be emphasized. If students wish to succeed in their studies, they must be able to utilize a broad vocabulary in English. Along with grammar and pronunciation, vocabulary is a key component of language. Mastering vocabulary is essential for language learning, particularly in English. Without mastering English vocabulary, we are unable to communicate effectively in English.

English vocabulary mastery is essential for language acquisition in educational institutions, as it bases students' reading, writing, listening, and speaking skills. The 2013 English learning curriculum supports this, listing vocabulary mastery as one of the core competencies that students must achieve. Without sufficient vocabulary, learners struggle to understand and speak English. Learners who lack vocabulary often find it challenging to comprehend teachers' explanations and participate in class discussions. As a result, teachers are looking for new ways to teach and acquire more engaging vocabulary for both the teacher and students. One of the interesting ways to teach vocabulary is by using games. Games are helpful for teachers in creating a meaningful language context. Wood (2001) states that using games as a learning aid is more effective at capturing students' attention than traditional media such as textbooks.

Vocabulary represents a collection of words employed by people for communication in daily contexts. Vocabulary is an essential need for students to achieve success in studying English. Without words, human communication is impossible; nevertheless, with vocabulary, individuals may convey information effectively.

Alqahtani (2015) asserts that vocabulary acquisition is a crucial component of foreign language education, as the meanings of new lexicon are frequently highlighted in both literature and educational settings. It is essential to language instruction and crucial for a language learner. Further, Arwila (2022) adds that vocabulary knowledge is vital for attaining proficiency in a foreign language and is fundamental to language acquisition. Vocabulary is an essential component of linguistic ability. One cannot effectively express anything unless mastering vocabulary (Hrp, 2023), emphasizing the significance of vocabulary in language development. Without grammar, minimal communication is possible; without vocabulary, no communication is achievable (Alharthi et al., 2020). Consequently, vocabulary is crucial for acquisition of knowledge.

The researcher concludes that vocabulary comprises a set of meaningful terms utilized in a language for communication. It generates the impact of all competencies. In the absence of an adequate vocabulary, students are unable to grasp the four English skills of hearing, speaking, reading, and writing. They will also be confused or lack confidence in communication due to all of the English language's work-related skills.

A fundamental element of language is vocabulary. The primary emphasis of vocabulary is on words that express meaning. Proficiency in vocabulary is essential for

effective language use. Mastering vocabulary is difficult as pupils struggle to retain all English lexicon. Consequently, we, as educators, are tasked with designing a distinctive lesson. We require an approach that effectively engages kids in memorizing English vocabulary.

Vocabulary mastery refers to students' capacity to recall all the words in a language and utilize them appropriately in sentences. According to Tampubolon et al. (2023), vocabulary mastery can be defined as some vocabulary or words in the memory of users or learners. Vocabulary mastery refers to pupils' capacity to remember all of the words in a language, as well as how to utilize those words in sentences (Gushendra, 2017). It involves not only understanding word meanings but also being able to pronounce, spell, and use them effortlessly.

Based on observations conducted by the researcher in the seventh grade of SMP Parulian 2 Medan, it was discovered that pupils' vocabulary knowledge remains below expected levels. Interviews with the English teacher and classroom observations revealed that many students struggled to recall and apply vocabulary in English successfully, both in spoken and written contexts. When asked to answer questions, create sentences, or participate in speaking exercises, several kids were reluctant, weak to reply, or unable to retain relevant language. This issue shows that the vocabulary acquisition process is not complete.

Understanding the importance of vocabulary development, English teachers should provide their pupils with rich, engaging exercises that should help them expand their vocabulary and enhance their communication skills in the language. The researcher should be innovative in providing the content to inspire and make vocabulary learning fun for the pupils. To overcome the challenges, the teacher needed various tactics, including music, drawings, and games, to keep students interested.

Media conveys information or a message from the sender to the recipient. Media is a crucial element in the learning process; educators utilize media to enhance students' comprehension (Suryadi et al., 2024). The media serves a crucial purpose in the learning process; communication would be hindered without it, and the learning process, as a communicative endeavor, is compromised. would not operate well (Lumbanraja et al., 2023). As we all know, teaching media refers to all of the tools and aids the teachers and students might utilize to achieve specific educational objectives. Soeparno (1988) categorizes teaching media utilized in the educational process into five distinct types. First, non-projector viewing media refers to media that cannot be projected onto another surface. Examples include flashcards, images, and so forth. Second, projector-viewing media refers to the ability to display a transparent object onto other surfaces, such as an overhead projector. Third, auditory media refers to instructional methods that use sound to convey information. Examples include tapes, recorders, and so on. Fourth, audio-visual media is a type of educational media that conveys a lesson through both sound and visual elements. For example, television, VCD, and so on. Fifth, game-based education can be done individually, in groups, or in pairs. For example, puzzles, guessing, words, and so on.

Therefore, the researcher would do this research using a game, such as Fly Swatter. This game can enhance student engagement and facilitate easier learning. This method boosts students' interest and proves effective in improving their vocabulary acquisition. A

game is a necessary step for teachers to incorporate into their teaching-learning process. In terms of vocabulary, games can assist pupils in comprehending new words and their meanings. There are numerous ways that teachers can help students enhance their vocabulary, and one excellent way is to employ the fly swatter game. Rezkiah & Amri (2013) states that the Fly Swatter game is a vocabulary activity in which students must swat a word on the whiteboard according to the teacher's directives. They also explain that the Fly Swatter game is an exercise in which students utilize a fly swatter to strike the word on the whiteboard that the teacher announces. In Indonesia, it is referred to as *alat pemukul lalat*. In this game, kids engage in small groups and utilize a Fly Swatter. In the Fly Swatter Game, students are required to anticipate the teacher's statements by striking the corresponding answer on the whiteboard. The student's assignment was to locate the words on the board according to the teacher's directives. If students locate the word "meant," they may strike the word with students who identify the correct answer will be awarded points. The students then have to speak and spell the meaning of the word. When students could play different English games, they got better at learning new words (Muadah et al., 2019). Their inability to remember simple word meanings and the fact that they had learned less vocabulary made it clear.

This study has determined that Fly Swatter is an engaging exercise for pupils, as it facilitates learning via play. Students must strike the word on the whiteboard in line with the instructor's directives or the teacher's prior utterances. This exercise is a strategy the teacher might utilize to motivate students in the learning process. Some benefits of using the Fly Swatter Game to teach and learn language are listed by Rezkiah & Amri (2013), including: avoiding boring tasks, enjoyed by students, facilitating learning and word acquisition, engaging pupils in a spirit of camaraderie while maintaining their interest, helping kids learn how to spell and pronounce words, and more engaging class.

Current researches show that using the Fly Swatter game significantly improves students' vocabulary acquisition. For instance, Suhendra's (2023) research discovered a significant enhancement in students' vocabulary test scores subsequent to instruction utilizing this strategy. This game effectively increases students' learning engagement and motivation. While other games like charades, puzzles, board games, and card matching games might help kids improve their vocabulary, the researcher chose the fly swatter game because it mixes physical components with interactive learning. Unlike past games, which often required players to sit still, this one may be less attractive to certain people. This game motivates children to move and helps them concentrate and focus by engaging in enjoyable physical activities. In addition, the Fly Swatter Game is more straightforward to grasp than other games. The game promotes cooperation and communication among players, creating a competitive environment that can increase social interaction in the classroom.

Other researcher, Ningsih & Zuhriyah (2024), assesses the effectiveness of the fly swatter game in vocabulary instruction through a pre-experimental approach. The hypothesis test results indicated that the fly swatter game facilitated vocabulary acquisition among students; the significance level was $\alpha = 0.05$, the computed T value was 11.803, and the critical T value was 2.093. An effective method for instructing lower and elementary school pupils in vocabulary acquisition is through the fly swatter game. The similarity between prior studies and this study replicated prior studies by assessing students'

vocabulary knowledge before and after the fly swatter intervention. The same employed the fly swatter game to assist kids in acquiring new vocabulary. The difference is that this study focused on seventh-grade junior high school pupils, in contrast to prior research conducted in primary schools.

Other related study focusing on seventh-grade students of SMP N 22 Medan was conducted by L. et al. (2022). This study used Classroom Action Research (CAR) to determine whether the fly swatter game improved students' mastery. The results showed that students' vocabulary mastery had increased, with an average score of 53.3 before the study, 70.9 after the first test, and 83.5 after the second cycle. The survey results indicated that employing the fly swatter game for vocabulary instruction and acquisition correlated with heightened positive feedback. The mean pre-survey response was 47.09 percent, whereas the mean post-survey response was 94.8 percent, reflecting an increase of 47.71 percent. Observations and interview findings indicate that students were actively engaged in teaching and learning during the fly swatter game. The main similarity between prior studies and this study is the utilization of a fly swatter. This research employs experimental quantitative methods, in contrast to other studies that utilized CAR.

This study intends to find whether the Fly Swatter Game affect the students' vocabulary mastery of seventh-grade at SMP Parulian 2 Medan.

METHODS

This research utilizes experimental design. Ary et al. (2010) describe an experiment as a scientific investigation in which the researcher alters one or more independent variables, controls other relevant variables, and assesses the effects of these alterations on the dependent variable. They categorize experimental designs into three types: pre-experimental, real experimental, and quasi-experimental.

This study employed a total sampling technique, which is a technique in which the entire population is used as a research sample. Thus, the number of samples in this study was 58 students. The total sampling technique was chosen because the population is relatively small and can still be included entirely in the study. Group division was based on existing classes because each class has a balanced number of students and similar characteristics. So, the researcher chose class VII 1 as a sample.

For this investigation, the researcher employed a true experimental design. The research involved students divided into two groups: an experimental group and a control group at SMP Parulian 2 Medan. Both groups will undergo a pre-test to assess their beginning vocabulary proficiency. The experimental group receives treatment via the Fly Swatter Game, whereas the control group is taught using conventional methods. Following the treatment, both groups will have a post-test to evaluate any changes in their vocabulary proficiency.

This study's population consisted of all Seventh graders of SMP (Junior High School) Parulian 2 Medan. The research population involves two groups of seventh-grade students at SMP Parulian 2 Medan. The total number of students is 58, categorized into two classes. Each class consists of thirty students and twenty-eight students.

The researcher employed a vocabulary assessment to collect data relevant to the research subject. The vocabulary test utilized both the pre-test and the post-test. The students took a pre-test before therapy and a post-test after treatment. The pre-test and post-test comprise 50 multiple-choice questions.

The researcher must devise a plan for collecting data that aligns with the study's requirements. This study employed an English vocabulary test to gather data from the experimental and control groups. The assessment was administered twice: initially prior to the intervention (pre-test) and subsequently following it (post-test). The researcher collected data by selecting seventh-grade students from SMP Parulian 2 Medan.

The data was collected from a vocabulary assessment given to students through a pre-test and a post-test. A pre-test was administered to evaluate the students' vocabulary proficiency. Following this, fly swatter games were employed as a therapeutic approach within educational settings. The post-test was carried out after the study. The assessment exhibits a comparable degree of challenge to the preliminary evaluation. The t-test formula assessed the pre-test and post-test findings to ascertain the treatment's impact. The process of gathering unprocessed data and turning it into information that can be used to assist users in making wise decisions is known as data analysis. An overview of the interactions that take place in the classroom during the learning process was given by the data. The researcher used the following t-test formula to analyze the data between the experimental group and the control group. The researcher employed the T-test formula to analyze the data between the experimental group and the control group as follows:

$$t = \frac{Mx - My}{\sqrt{\left[\frac{dx^2 + dy^2}{Nx + Ny - 2}\right]\left[\frac{1}{Nx} + \frac{1}{Ny}\right]}}$$

Notes:

t : the effect

Mx: The experimental group's mean

My: The control group's mean

Nx: number of experimental group samples

Ny: number of control group samples

dx^2: The experimental group's deviation

dy^2: The control group's deviation

FINDINGS

The data for this study were obtained from the vocabulary test scores of the pupils. The scores were derived from the pre- and post-test outcomes of both the experimental and control groups. The vocabulary test comprised 50 multiple-choice items for both the experimental and control groups. The experimental group learned language using a fly swatter game, whereas the control group underwent conventional education. Both groups had identical testing both prior to and subsequent to the intervention. The experimental group comprised 30 kids, while the control group consisted of 28 pupils. The total sample

size for this study comprised 58 seventh-grade pupils. This study's data analysis was to evaluate the impact of the Fly Swatter game on students' vocabulary proficiency at SMP Parulian 2 Medan. The t-test method was employed in the data analysis to ascertain the score disparities between the experimental and control groups and to validate the study's hypothesis. Concerning the lexical proficiency of students at SMP Parulian 2 Medan.

Table 1. Data Analysis of Experimental Group

No	Students' Initial Names	Pre-Test (X_1)	Post-Test (X_2)	Difference Score ($d=X_2-X_1$)	Square of Difference Score (d^2)
1	AS	50	74	24	576
2	AKBM	54	72	18	324
3	BSS	70	84	14	196
4	AL	62	74	12	144
5	CKS	60	84	24	576
6	CASH	60	76	16	256
7	CJHS	64	84	20	400
8	DS	50	70	20	400
9	EFHG	48	72	24	576
10	EJS	68	78	10	100
11	FPS	82	98	16	256
12	JYH	60	76	16	256
13	HMP	78	94	16	256
14	JS	60	74	14	196
15	JAMG	54	78	24	576
16	KH	52	72	20	400
17	LFS	50	74	24	576
18	MRS	44	70	26	676
19	MEN	50	72	22	484
20	PLM	52	80	28	784
21	PJPP	44	66	22	484
22	RAS	50	76	26	676
23	SRRPS	50	72	22	484
24	SMBS	54	74	20	400
25	SG	72	82	10	100
26	TFP	54	68	14	196
27	VCHB	46	70	24	576
28	YPS	66	82	16	256
29	RZH	54	76	22	484
30	VP	90	98	8	64
	Total	1748	2320	$\Sigma x = 572$	$\Sigma x^2 = 11728$
	Mean	58,26	77.33	19,06	390,93

The deviation of the control group has been calculated as follows:

$$dx^2 = (\Sigma x^2) - \frac{(\Sigma x)^2}{N}$$

$$dx^2 = 11728 - \frac{(572)^2}{30}$$

$$dx^2 = 11728 - \frac{327,184}{30}$$

$$dx^2 = 11728 - 10,906.13$$

$$= 821,87$$

The calculated mean of the experimental group was 19.6, with an average variation of 821.87.

Table 2. The calculation score of pre-test and post-test of control group

No	Students initial	Pre-test (Y1)	Post-test (Y2)	Deviation (d= Y2-Y1)	Square of Deviation
1	AAS	54	70	16	256
2	ACCN	56	70	14	196
3	ACGS	52	72	20	400
4	BS	54	70	16	256
5	CWH	62	72	10	200
6	DGS	62	80	18	324
7	DAG	58	70	12	144
8	GJNM	60	78	18	324
9	GGS	94	98	4	16
10	GCL	52	72	20	400
11	JMS	50	70	20	400
12	JMS	76	80	4	16
13	JAO	62	70	8	64
14	KAS	52	70	18	324
15	K	54	70	16	256
16	KMS	60	70	10	200
17	LAS	54	72	18	324
18	MEEH	52	70	18	324
19	MSBG	54	74	20	400
20	OFS	52	68	16	256
21	PS	60	70	10	200
22	PABS	52	64	12	144
23	RSN	54	70	16	256
24	RFS	50	68	18	324
25	SS	60	72	12	144
26	SAG	58	74	16	256
27	TEBN	52	60	8	64
28	TVG	50	68	18	324

Total	1606	2012	406	6792
Mean	57,35	71,85	14,5	242,57

The deviation of the square of the control group was calculated as follows:

$$dy^2 = (\Sigma y^2) - \frac{(\Sigma y)^2}{N}$$

$dy^2 = 6792 - \frac{(406)^2}{28}$

$dy^2 = 6792 - \frac{164,836}{28}$

$dy^2 = 6792 - 5887$

$dy^2 = 905$

The calculated value indicates that the mean of the control group was 14.5, with a deviation of 905.

The author employed the T-test formula to determine if the Fly Swatter Game Strategy significantly impacts students' vocabulary knowledge; the data was analyzed using the T-test formula as follows:

$$t = \frac{Mx - My}{\sqrt{\left[\frac{dx^2 + dy2}{Nx + Ny - 2}\right]\left[\frac{1}{Nx} + \frac{1}{Ny}\right]}}$$

$$t = \frac{19,06 - 14,5}{\sqrt{\left[\frac{821,87 + 905}{30 + 28 - 2}\right]\left[\frac{1}{30} + \frac{1}{28}\right]}}$$

$$= \frac{4,56}{\sqrt{\left[\frac{1,726.87}{56}\right][0,069]}}$$

$$= \frac{4,56}{\sqrt{[30,836][0,069]}}$$

$$= \frac{4,56}{\sqrt{2,127684}}$$

$$= \frac{4,56}{\sqrt{2,127684}}$$

$$= \frac{4,56}{1,45}$$

$$= 3,144$$

Based on the calculation above t-count was 3,144.

This research investigated the impact of the Fly Swatter game on the vocabulary proficiency of seventh-grade students at SMP Parulian 2 Medan. The findings from this study demonstrate a significant effect of the Fly Swatter game on vocabulary acquisition, as the mean score of the experimental group (77.3) exceeded that of the control group (71.85). The results demonstrated that utilizing the Fly Swatter Game for vocabulary education surpassed conventional teaching methods in effectiveness. The t-test statistic surpassed the t-table

value at a significance level of 0.05. The mathematical results demonstrated that t-count (3.144) surpassed t-table (1.673), or t-count > t-table. 3,144 exceeds 1,673. This indicates that Ha was accepted but Ho was refused.

The data analysis results indicate that, in contrast to the traditional way, utilizing the Fly Swatter game for vocabulary instruction markedly enhanced children's vocabulary acquisition.

According to the literature, English comprises four primary skills: hearing, speaking, reading, and writing. Instructing vocabulary is essential for enabling students to comprehend word meanings and utilize them accurately. Vocabulary constitutes a core element of language and has been a central concern for applied linguists. It is of considerable importance in communication, regardless of whether in one's own or foreign language. The author executed the Fly Swatter Game in this research to improve students' language proficiency. Learning vocabulary is essential in acquiring any language.

Mastering vocabulary is crucial to language learning, enabling individuals to express their ideas, opinions, and emotions effectively. The writer conducted tests on the experimental and control groups using multiple-choice questions covering nouns, verbs, and adjectives in this study. Before answering, students were expected to predict their choices; however, during the pre-test, they relied solely on their prior knowledge, resulting in scores that did not meet expectations. This outcome was due to their limited understanding of denotation, antonyms, and synonyms.

DISCUSSION

After implementing the Fly Swatter game**,** students in the experimental group significantly improved their vocabulary mastery. This study's results align with Jannah et al. (2020) research, revealing that the application of games in the learning process can increase student participation, reduce boredom, and accelerate vocabulary understanding. In this study, students taught using the Fly Swatter Game experienced a higher score increase compared to the control group taught using conventional methods. This confirms that game-based interactive learning media, as described by Wood (2001), is more effective in attracting students' attention than traditional methods such as lectures or textbook-based learning.

In addition, this study supports the results of Suhendra's (2023) study, which showed that using the Fly Swatter Game contributed to increasing students' engagement and motivation in learning vocabulary. Students in the experimental group were more active in recognizing and finding words displayed on the board, consistent with Rezkiah & Amri (2013), showing that physical activity in learning can strengthen memory and concept understanding. Direct interaction through games makes students more enthusiastic and can remember vocabulary better. This is also supported by (Muadah, 2019), explaining that the Fly Swatter Game can improve students' memory because it involves visual, auditory, and kinesthetics' aspects in learning. Additionally, the strategy helped students activate their prior knowledge by stimulating curiosity through engaging learning activities. Overall, this study demonstrated that the Fly Swatter Game effectively enhances students' vocabulary skills.

Despite the positive results, this study possesses some limitations that must be acknowledged when interpreting the results and evaluating the validity of the findings. The sample was confined to seventh-grade junior high school students in a particular educational environment, potentially impacting the generalization of the findings to other grade levels or school contexts. The intervention's duration was relatively short, leaving the long-term effects of the Fly Swatter Game on language retention unclear. The study focused solely on vocabulary mastery, neglecting to explore other linguistic competencies such as grammar, reading comprehension, or writing, which could also be affected by game-based learning. Furthermore, the impact of teacher influence and classroom dynamics, which may affect student engagement and performance, was neither controlled nor thoroughly studied. Although these limitations do not affect the importance of the findings, they indicate a need for more research, including larger, more diverse populations and extended intervention durations, to validate and enhance the existing results.

CONCLUSION

The game helped students actively engage in learning, making the process more interactive and enjoyable. Additionally, it facilitated better word retention and comprehension as students had to physically and cognitively engage with the vocabulary. This study supports the idea that interactive learning methods like educational games can enhance students' motivation and language acquisition. In addition, the Fly Swatter Game has effectively enhanced students' vocabulary mastery. The research emphasizes the significance of active and collaborative pedagogical approaches in enhancing language acquisition results. Through the integration of innovative techniques, educators may promote a more dynamic and effective learning environment for pupils.

This study has limitations, such as a small sample size, a brief duration, and an exclusive emphasis on vocabulary. It needs to assess additional language competencies or consider the impact of educators and classroom interactions. Future research should include larger samples and extended interventions and investigate supplementary language competencies to enhance validation and broaden the findings..

REFERENCES

Alharthi, M., Bown, A., & Pullen, D. (2020). The Use of Social Media Platforms to Enhance Vocabulary Developing in Learning a New Language: A Review of The Literature. *Arab World English Journal*, *6*. https://doi.org/10.24093/awej/call6.21

Alqahtani, M. (2015). The importance of vocabulary in language learning and how to be taught. *International Journal of Teaching and Education*, *III*(3), 21–34. https://doi.org/10.20472/te.2015.3.3.002

Arwila, P. P. (2022). Strategies Used by English Teachers in Teaching Reading Comprehension. *Journal of Educational Study*, *2*(1), 17–25. https://doi.org/10.36663/joes.v2i1.250

Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A. (2010). *Introduction to Research in Education* (Linda Stewart, Ed.; 8th ed.).

Gushendra, R. (2017). an Experimental Study: Improving Students' Vocabulary Mastery By Using English Songs. *Indonesian Journal of Integrated English Language Teaching*, *3*(1), 53–64. https://doi.org/10.24014/ijielt.v3i1.3968

Hrp, N. C. (2023). The Effect Of Using Fly Swatter Game As The Media In Teaching Vocabulary At Seventh Grade Of MTS Al-Washliyah Medan. *Universitas Muslim Nusantara Al Washliyah English Education Journal (UMNEEJ)*, *1*(1), 1–5.

Jannah, I. M., Kuswari, N., Muna, I., & Nabilla, K. (2020). *Exploring the Effects of Using Game on Students' Vocabulary Mastery: A Case Study in Instructional Material and Media Development Class*. https://doi.org/10.2991/assehr.k.200427.037

L., S., Sadapotto, A., Anwar, P., & Hermansyah, S. (2022). Improving Students Vocabulary Mastery By Using Fly Swatter Game At The Seventh Grade Students Of SMP Negeri 2 Kulo. *La Ogi : English Language Journal*, *8*(1), 35–39. https://doi.org/10.55678/LOJ.V8I1.609

Lumbanraja, S., Tampubolon, S., Simarmata, R. O., Siregar, N., & Sigiro, M. (2023). The Student's Perceptions of the Media Used by Teacher in Teaching English at SMP N 4 Pematang Raya. *INNOVATIVE: Journal Of Social Science Research*, *3*, 5029–5040.

Meri, E. P., Safitri, L., Putri, H. P., & Reflinda, R. (2022). The Effect of Fly Swatter Game on Students Vocabulary Mastery At First Grade Students of SMPN 1 Inuman-Kuantan Singingi. *Journal of Educational Management and Strategy*, *1*(1), 46–56. https://doi.org/10.57255/JEMAST.V1I1.66

Muadah, A. (2019). *IMPROVING STUDENTS' VOCABULARY MASTERY BY USING FLY SWATTER GAME*.

Ningsih, I. S. T., & Zuhriyah, M. (2024). THE EFFECTIVENESS OF USING FLY SWATTER GAME TO TEACH VOCABULARY. *J-Shelves of Indragiri (JSI)*, *6*(1), 1–14. https://doi.org/10.61672/JSI.V6I1.2728

Rezkiah, H., & Amri, Z. (2013). USING FLY SWATTER GAME TO IMPROVE STUDENTS' VOCABULARY OF GRADE 5 OF ELEMENTARY SCHOOL. *Journal on English Language Teaching*.

Soeparno. (1988). *Media pembelajaran bahasa* . PT. Intan Pariwara.

Suhendra, K. K. A. (2023a). The Effect of Fly Swatter Game Toward Students' Vocabulary Mastery. *The Art of Teaching English as a Foreign Language*, *4*(2), 36–43. https://doi.org/10.36663/tatefl.v4i2.613

Suhendra, K. K. A. (2023b). The Effect of Fly Swatter Game Toward Students' Vocabulary Mastery. *The Art of Teaching English as a Foreign Language*, *4*(2), 36–43. https://doi.org/10.36663/tatefl.v4i2.613

Suryadi, Erlangga, F., & Pahamzah, J. (2024). Penggunaan Media Pembelajaran Google Word Coach Game Bagi Siswa Madrasah. *Jurnal Pengabdian Kepada Masyarakat*, *5*(2), 395–403.

Tampubolon, S., Sitorus, N., & Panjaitan, R. K. (2023). An Analysis of Students ' Vocabulary Mastery in Using Antonym of Second Grade Students in SMP Swasta Advent 5 Medan. *Journal of Language Education (JoLE)*, *1*(1), 96–102.

Wood, J. (2001). Can software support children's vocabulary development? *Language Learning & Technology*, *5*(1), 166–201. https://doi.org/10125/25116