THE EFFECTIVENESS OF *ENGKLEK* THROUGH FLASCARD IN TEACHING VOCABULARY

[1]*Nina Anggraini,* [2]*Olyvia Revalita Candraloka,*
[1.2]*Universitas Islam Nahdlatul Ulama'*
[1]*211320000635@unisnu.ac.id,* [2]*olyviarevalita@unisnu.ac.id*

Abstract
This study aimed to examine the effectiveness of using flashcards integrated with the traditional game *engklek* to improve English vocabulary mastery among seventh-grade students at MTs Al-Falah, Tuban. A quantitative approach with a quasi-experimental design (Nonequivalent Control Group Design) was employed. The sample included two classes: the experimental group (VII A), which received instruction using flashcards and the *engklek* game, and the control group (VII D), which received conventional instruction. Pretests and posttests were used as the primary instruments. The results revealed a significant improvement in the posttest scores of students in the experimental group compared to the control group. The paired samples t-test showed a significant value ($p < 0.001$) and a large effect size (Cohen's d = 1.85). These findings indicate that a learning method combining traditional games and visual media is effective in enhancing vocabulary mastery, while also increasing student motivation and engagement. This approach is also suitable for schools with limited digital resources, particularly in rural areas.
Keywords: Vocabulary, flashcards, traditional games, *engklek*, English language learning

INTRODUCTION

Vocabulary is a fundamental aspect of English education that significantly influences language development (Saputri & Prasetyarini, 2024). It serves as the foundation for acquiring and improving other skills. Language functions as the primary tool in human communication, and vocabulary is its essential component (Luardini, 2020). The important role of vocabulary in language learning should not be overlooked, as vocabulary forms the foundation for the development of a person's language skills. By mastering vocabulary, students can understand and convey ideas accurately, allowing them to actively participate in various communication situations (Fengyu, 2023). Based on this, it is very important to prioritize vocabulary learning, because without sufficient vocabulary, it is impossible to communicate effectively and master other language skills (Aprilani & Suryaman, 2021).

Vocabulary remains one of the most persistent weaknesses among junior high school students. Many students at the Junior High School level exhibit limited vocabulary knowledge, which significantly hampers their ability to comprehend texts, express ideas orally, and engage in academic conversations (Supriatin & Rizkilillah, 2018). This vocabulary gap often manifests in students' lack of confidence, passive classroom behavior, and difficulty understanding English instructions or materials (Priscilla S et al., 2021). Numerous studies have shown that junior high school learners struggle with vocabulary acquisition due to various factors, including lack of exposure to English outside the classroom, insufficient practice, and traditional rote memorization techniques that fail to promote long-term retention (Matruty & Que, 2021).

Therefore, helping students expand their vocabulary is not just beneficial but essential, junior high school students greatly benefit from structured and contextual vocabulary learning, as it equips them with essential words that support reading comprehension, writing, and even public speaking skills (Supriyatin & Argawati, 2021). Integrating vocabulary instruction with engaging contexts, multimedia, and communicative tasks has been found to significantly enhance students' motivation and retention (Berta, 2020). This emphasizes the need for educators to adopt effective vocabulary teaching strategies that align with the cognitive and affective needs of adolescents (Authar et al., 2021). In that explanation, vocabulary learning must be at the core of English instruction, particularly at the junior high school level, where students are in the formative stages of their language development. A strong vocabulary base not only facilitates academic success but also fosters learners' confidence and willingness to communicate in English. Without deliberate and strategic vocabulary instruction, students will continue to face barriers in mastering other language skills such as listening, speaking, reading, and writing.

Besides the need to expand their vocabulary, students also face significant difficulties in consistently applying what they have learned (Alnajjar & Brick, 2018). In addition, vocabulary knowledge supports students in using the language accurately and appropriately in various situations. However, many students face challenges in learning vocabulary. They often lack consistency in memorizing new words and show minimal interest in the learning process (Turnip et al., 2020). Although they have been learning English for several years, many students continue to struggle with vocabulary mastery (Agung et al., 2021). One of the most pressing challenges in English language learning at *Madrasah Tsanawiyah (MTs) Al-Falah Sidokumpul, Bangilan, Tuban*, is the low motivation among students, particularly in mastering vocabulary. Many students perceive English as a difficult and foreign subject, often unrelated to their daily lives. This perception is evident in their passive participation during lessons, reluctance to respond to questions, and consistently low performance in language-based assessments. Observations and informal interviews with English teachers reveal that most instructional approaches still rely heavily on traditional methods, such as lecturing and rote memorization of vocabulary lists without meaningful context or real-life application.

These conventional techniques often lead to monotonous and uninspiring classroom experiences, failing to engage students cognitively or emotionally. in the conventional classroom setting at *MTs Al-Falah*, English instruction is primarily delivered through lectures. This teacher-centered approach tends to be less interactive, resulting in limited student engagement. As a consequence, students often lack motivation to learn, making it difficult for them to fully grasp and retain English vocabulary. These challenges do not only stem from the vocabulary itself, but also reflect the broader difficulties that students experience in learning English as a whole. English is still often considered a difficult subject by many students. Specifically, according to (Ramadhan et al, 2023) vocabulary is often seen as boring and hard to master, which contributes to low student motivation. As a result, it is not uncommon for them to frequently make mistakes when completing English assignments or misinterpret and even fail to understand the material presented (Suja et al., 2024). Considering the close relationship between language and communication, having a strong vocabulary is crucial to support students' speaking skills. This condition indicates that the application of effective and engaging learning media is very important in the teaching and learning process to foster students' interest, motivation, and understanding (Arifah, 2022).

This on-going challenge shows that the problem is more than just the vocabulary itself. This issue reflects a more complex challenge that not only involves students' abilities but also their motivation to learn (Maharani et al., 2023). Students' perception of English as a difficult and unimportant subject often results in low enthusiasm and interest during the learning process. This negative attitude contributes to a decline in motivation and interest, which ultimately hinders optimal vocabulary mastery (Aba, 2019).

One of the main factors underlying this condition is the limited ability of teachers to use engaging and appropriate learning media that meet the needs of students. In the context of teaching English as a foreign language, vocabulary instruction remains one of the most challenging aspects. (Amelia et al., 2023). Improving learning outcomes and fostering greater motivation in vocabulary acquisition, the use of traditional games has also proven to be an effective approach to enhancing students' learning motivation, particularly in English language instruction at the junior high school level. (Hidayati, 2020) Traditional games not only create an enjoyable and engaging learning environment but also encourage active student participation, foster collaboration, and provide meaningful, action-oriented learning experiences. (Authar et al., 2021) A game like *engklek*, for example, is not merely a physical activity but can be adapted into an interactive learning tool to introduce and reinforce English vocabulary.

Engklek, a well-known traditional game among Indonesian children, involves hopping through a series of numbered squares in a specific pattern. (Fauzi et al., 2023) This game can be modified into a vocabulary learning activity by writing words or placing images in each square (Yulianti, 2012). As students hop onto a square, they are required to pronounce the word, explain its meaning, use it in a sentence, or match it with the correct picture. This activity naturally integrates movement, visual cues, and verbal expression, aligning with kinesthetic, visual, and auditory learning styles (Authar et al., 2021). By incorporating familiar games into the classroom setting, students are more likely to feel comfortable, motivated, and enthusiastic about learning, as it connects academic content with enjoyable experiences rooted in their cultural background (Aziza, 2020). This strategy offers a promising alternative to traditional rote memorization and can significantly increase student engagement and vocabulary retention.

Building upon the integration of traditional games into vocabulary learning, one particularly innovative method is combining flashcards with the traditional game of *engklek*. This method merges the visual learning advantages of flashcards with the kinesthetic and contextual engagement offered by *engklek,* forming a multimodal instructional strategy that caters to various learning styless (Sitepu & Mutiarani, 2023). In practice, flashcards containing vocabulary words, images, or definitions can be placed within each square of the *engklek* layout (Matruty & Que, 2021). As students hop from square to square, they interact directly with the content whether by identifying the meaning of a word, translating it, using it in a sentence, or matching it with an image. This integration not only reinforces vocabulary through repetition and movement but also transforms passive memorization into an active, meaningful learning experience (Authar et al., 2021). The playful nature of *engklek* reduces students' anxiety and builds confidence, making English more approachable and less intimidating.

The combination of flashcards and *engklek* addresses a critical gap in vocabulary instruction at the junior high school level, particularly in rural or under-resourced educational

settings where digital access and exposure to authentic English contexts are limited (Yuniwanti et al., 2024). Many students struggle with vocabulary retention due to the overuse of conventional techniques such as memorizing word lists or taking vocabulary quizzes without adequate context, meaningful interaction, or opportunities for authentic usage (Alnajjar & Brick, 2018). These methods often reduce vocabulary learning to a mechanical process, detaching it from the students' lived experiences and interests(Fauzi et al., 2023). Previous studies have predominantly focused on either digital media or game-based learning in isolation, often overlooking the potential of integrating culturally familiar activities with visual aids to create a more holistic and contextualized vocabulary learning experience(Adinda Amelia Anugerah Putri & Masub Bakhtiar, 2022). The novelty of the proposed method lies precisely in this blended approach: it bridges traditional, culturally embedded games like *engklek* with flashcards simple yet powerful visual tools to create a learning environment that is both cognitively stimulating and emotionally engaging.

By embedding vocabulary practice into the steps and structure of *engklek*, a game already familiar to most Indonesian children, learners engage in physical movement, peer collaboration, and active recall in a dynamic and enjoyable setting (Sitepu & Mutiarani, 2023). This kinesthetic and social dimension has been shown to support memory retention and motivation, especially for students with diverse learning styles (Authar et al., 2021). Moreover, the physical nature of the game aligns with principles of embodied cognition, suggesting that learning tied to movement and context can be more deeply encoded in memory. This method also holds strong relevance in the context of educational equity. In many low-income or remote areas, digital tools and internet access remain a luxury rather than a norm (Yulianti, 2012). Thus, introducing vocabulary instruction that does not rely on expensive technology but instead leverages accessible and locally familiar materials is a highly practical and scalable solution (Susantini & Kristiantari, 2021). The simplicity of flashcards combined with the playfulness of *engklek* makes this method easy to implement across different classroom settings without requiring significant teacher training or external resources.

The purpose of this study is to explore an innovative approach to vocabulary instruction that integrates flashcards with the traditional game *engklek* as a response to the lack of interactive, contextual learning methods in conventional classrooms. This approach presents a pedagogical novelty by combining culturally rooted physical games with visual media to create a multisensory learning environment. Unlike conventional teaching that relies heavily on rote memorization and lectures, this model provides active, student-centered engagement that supports vocabulary retention. This method also aligns with the current direction of curriculum reform, which emphasizes contextual and differentiated learning that develops not only cognitive but also affective and psychomotor domains. By incorporating *engklek* a traditional and familiar game teachers are empowered to adapt instruction to local culture while still achieving national educational goals. In addition, this strategy allows for differentiation; students with varying proficiency levels can be provided flashcards of different difficulty levels, ensuring inclusivity and personalized learning experiences. implementing such innovative strategies stems from the persistent challenges observed in English classrooms, particularly in rural settings such as *MTs Al-Falah Sidokumpul*. Students often struggle not only with memorizing vocabulary but also with recognizing the relevance of English in their daily lives. This disconnection leads to low motivation and engagement.

Therefore, integrating flashcards with *engklek* is not only an innovative instructional method but also a necessary response to bridge the gap between curriculum demands and students' real learning needs. It fills a crucial instructional void by making English learning more meaningful, accessible, and enjoyable.

Previous studies on vocabulary instruction in English as a Foreign Language (EFL) contexts have primarily focused on digital tools, multimedia applications, or conventional techniques such as rote memorization and repetitive drilling. While these methods can support vocabulary acquisition, they often lack cultural relevance and fail to engage students meaningfully, especially in under-resourced rural schools where access to technology is limited. Additionally, most game-based learning research tends to emphasize either digital gamification or isolated use of traditional games without integrating them with visual media or structured pedagogical frameworks. Few studies have explored the combination of culturally rooted traditional games with concrete visual aids like flashcards to support vocabulary learning in a multisensory, contextualized, and student-centered manner.

this study lies in its innovative integration of *engklek* a traditional Indonesian children's game with flashcards to create a multimodal instructional strategy. This approach bridges cultural familiarity with educational functionality by incorporating kinesthetic, visual, and verbal elements into one cohesive learning activity. Unlike previous research that treats traditional games and flashcards as separate tools, this study merges them into a unified method that enhances vocabulary retention, student motivation, and engagement. Moreover, it responds directly to the pedagogical challenges faced in low-tech environments, offering a low-cost, culturally responsive, and easily replicable model that aligns with current educational reforms emphasizing differentiated and contextual learning.

.

METHOD

This study employed a quantitative approach using a quasi-experimental design. This approach was chosen because the researcher did not assign subjects to groups randomly, yet aimed to determine the effect of a treatment on an experimental group compared to a control group. The purpose of this study was to investigate the effect of using flashcards integrated with the traditional game "*engklek*" on students' vocabulary mastery in English among seventh-grade students at Madrasah Tsanawiyah Al-Falah.

The population of this study consisted of all seventh-grade students at *Madrasah Tsanawiyah (MTs)* Al-Falah, located in Sidokumpul Village, Bangilan District, Tuban Regency. The sample was selected using a purposive sampling technique, which involves selecting participants based on specific criteria relevant to the research objectives. The sample included two classes: Class VII A, consisting of 38 students, was designated as the experimental group, while Class VII D, with 37 students, was designated as the control group. The selection of these two classes was based on the recommendation of the English teacher, who stated that the academic abilities and levels of student participation in both classes were relatively equal. Therefore, the two classes were considered representative and appropriate for this research

The researcher selected purposive sampling as the sampling technique for this study to ensure that the selected participants met specific criteria relevant to the research objectives. In this case, the focus was on assessing the effectiveness of integrating flashcards and the traditional game *engklek* in teaching English vocabulary to seventh-grade students. Therefore,

it was essential to choose classes that had relatively similar academic backgrounds, learning characteristics, and instructional conditions. Purposive sampling allowed the researcher to deliberately select two classes Class VII A as the experimental group and Class VII D as the control group based on the recommendation of the English teacher. The teacher confirmed that both classes demonstrated comparable levels of English proficiency, class size, and behavioral dynamics, which are important factors to maintain internal validity in a quasi-experimental design. By using purposive sampling, the researcher could control for variability between groups, ensuring that any observed differences in learning outcomes could be more confidently attributed to the instructional intervention rather than to pre-existing differences among students. Additionally, this technique was considered appropriate due to the limited number of classes available at *MTs Al-Falah*, making random sampling impractical. The design of this research is illustrated in the table below:

Table 1 The Illustratation of Research Design

Group	Pretest	Treatment	Posttest
Experimental	Yes	Flashcards with *Engklek* Game	Yes
Control	Yes	Conventional Vocabulary Instruction	Yes

According to the table above, This study employed a Nonequivalent Control Group Design, which is a type of quasi-experimental design. The research involved two groups: an experimental group and a control group, both of which received a pretest and a posttest to measure students' vocabulary mastery before and after the treatment. The experimental group received instruction using flashcards integrated with the traditional game *Engklek*, while the control group was taught using conventional vocabulary instruction, primarily through lectures without interactive media. This design allowed the researcher to objectively compare the learning outcomes between the two groups and evaluate the effectiveness of a culturally rooted, innovative teaching method in contrast to the traditional classroom approach.

FINDINGS AND DISCUSSION
Findings
This study aimed to examine the effectiveness of flashcards integrated with the traditional game *engklek* in improving students' English vocabulary mastery. The data were collected through pretest and posttest administered to both the experimental group (Class VII A) and the control group (Class VII D).
Descriptive Statistics
Experimental Group
A total of 38 students participated in the experimental group. The pretest and posttest scores of students are summarized in the following table:

Table 2 Experiment Pretest and Post-test

	N	Mean	Median	SD	SE
Pretest	38	19.2	19.0	5.70	0.924
Postes	38	30.5	31.0	3.52	0.572

The table shows a noticeable increase in students' vocabulary scores after the implementation of the instructional treatment using flashcards integrated with the traditional game *engklek*. The mean score rose significantly from 19.2 in the pretest to 30.5 in the posttest, indicating a substantial improvement in students' vocabulary mastery. The median score also increased from 19.0 to 31.0, which supports the conclusion that most students benefited from the intervention. The decrease in standard deviation, from 5.70 to 3.52, suggests that the scores became more consistent after the treatment, with fewer students performing far below or above the average. This consistency may reflect a more uniform understanding of vocabulary concepts as a result of the engaging and inclusive learning method.

The standard error (SE) decreased from 0.924 to 0.572, indicating that the estimation of the mean became more precise after the treatment. Overall, the descriptive statistics provide strong initial evidence that the flashcard-*engklek* approach had a positive impact on students' vocabulary learning outcomes. Before conducting the hypothesis test, a Shapiro-Wilk normality test was carried out to determine whether the distribution of the difference between the pretest and posttest scores in the experimental group followed a normal distribution. This test is important to ensure that the assumptions for using parametric tests, such as the paired samples t-test, are met

Table 3 Normality Test Experimental Group

Test	Test	W	p
Prestest	**Posttest**	0.975	0.558

Since the p-value is greater than 0.05, it can be concluded that the data do not violate the assumption of normality. In other words, the differences in students' vocabulary scores before and after the treatment are normally distributed. Therefore, it is appropriate to proceed with a parametric test, specifically the paired samples t-test, to evaluate the significance of the observed changes in vocabulary mastery.

To determine whether the use of flashcards integrated with the traditional game *engklek* had a statistically significant effect on students' vocabulary mastery, a paired samples t-test was conducted. This test compared the pretest and posttest scores of the experimental group (Class VII A) to assess the effectiveness of the treatment.

Table 4 Samples T-Test Experiment

	statistic	df	p	Mean difference	SE difference	Effect Size
Pretest – Posttest	Student's t = -11.4	37	< .001	-11.3	0.986	Cohen's d = -1.85

The t-test yielded a t-value of -11.4 with 37 degrees of freedom, and a p-value less than 0.001, indicating a highly significant difference between the pretest and posttest scores. This result suggests that the vocabulary scores of students improved significantly after being taught using flashcards through the *engklek* game. the mean difference of -11.3 points indicates a considerable gain in vocabulary performance. The standard error of 0.986 reflects a relatively precise estimate of this difference.

The effect size measured by Cohen's d was -1.85, which is considered a very large effect. This indicates that the instructional strategy not only led to statistically significant improvement but also had a substantial and meaningful impact on students' learning outcomes. These findings confirm that the integration of flashcards with *engklek* was highly effective in enhancing vocabulary mastery among seventh-grade students at *MTs Al-Falah.*

Control Group

To determine whether conventional vocabulary instruction led to significant improvement in students' vocabulary mastery, the pretest and posttest scores of the control group (Class VII D), which consisted of 37 students. The statistical summary of the test is presented below:

Table 5 Control Group Pretest-posttes

	N	Mean	Median	SD	SE
Pretest	37	21.6	22	6.18	1.015
Postes	37	28.6	30	4.01	0.659

The data reveal that there was a positive change in vocabulary achievement after the instructional period. The mean score increased from 21.6 in the pretest to 28.6 in the posttest, indicating a mean gain of 7.0 points. This improvement suggests that the conventional teaching method, although traditional in nature, was still able to enhance students' vocabulary knowledge to some extent.

The median score also rose from 22.0 to 30.0, showing that most students performed better on the posttest. Additionally, the standard deviation decreased from 6.18 to 4.01, indicating that students' scores became more concentrated around the mean, with less variation in performance. This suggests a more consistent improvement across the group.

Furthermore, the standard error (SE) decreased from 1.015 to 0.659, reflecting increased precision in estimating the mean score after the intervention. Overall, these descriptive statistics support the conclusion that the students in the control group showed measurable progress, although not as strong or uniform as that observed in the experimental group.

A Shapiro-Wilk normality test was conducted to assess whether the distribution of the difference between the pretest and posttest scores in the control group met the assumption of

normality. This assumption is essential for the use of parametric tests, such as the paired samples t-test, which require that the data be normally distributed.

Table 6 Normality Test Control Group

		W	p
Pretest	**Posttest**	0.983	0.82

As shown in the table, the p-value is 0.820, which is significantly greater than the threshold of 0.05. Therefore, it can be concluded that the distribution of the score differences is normal, and there is no violation of the assumption of normality.

To determine whether conventional vocabulary instruction had a statistically significant impact on students' vocabulary mastery, a paired samples t-test was conducted comparing the pretest and posttest scores of the control group (Class VII D).

Table 7 Sample T-Test Control Group

	statistic	df	p	Mean difference	SE difference	Effect Size
Pretest – Posttest	Student's $t = -5.62$	36	$< .001$	-7.08	1.26	Cohen's $d = -0.924$

The t-value of -5.62 and the p-value < 0.001 indicate that there is a statistically significant difference between the pretest and posttest scores of the control group. The mean difference of 7.08 points shows that students' vocabulary scores improved after receiving instruction through conventional methods.

The effect size, measured using Cohen's d, is -0.924, which falls into the category of a large effect size. This suggests that the instructional method, although traditional, still had a meaningful impact on students' learning outcomes. the Shapiro-Wilk normality test yielded a W value of 0.983 and a p-value of 0.820, confirming that the data met the assumption of normality. Therefore, the use of a parametric test like the paired samples t-test is justified.

While the control group showed statistically significant improvement in vocabulary mastery, the magnitude of improvement was lower than that observed in the experimental group, which utilized flashcards integrated with the traditional game *engklek*.

Independent Sampel T Test

To determine whether there was a statistically significant difference in vocabulary mastery between students taught using flashcards with the traditional game *engklek* and those taught using conventional methods, an independent samples t-test was performed. This test compared the posttest scores of the experimental and control groups.

The results are summarized in the following table:

Table 8 Independent Samples T-Test Control Group

	Statistic	df	p	Mean difference	SE difference	95% Confidence Interval		Effect Size
						Lower	Upper	
Skor tes	Student's t = 2.13	73.0	0.037	1.85	0.871	0.116	3.59	Cohen's d = 0.491

The t-value of 2.13 with 73 degrees of freedom and a p-value of 0.037 indicates that there is a statistically significant difference in posttest scores between the two groups at the 5% significance level. The mean score of the experimental group was 30.5, while the control group scored an average of 28.6, yielding a mean difference of 1.85 points.

The effect size (Cohen's d) was calculated at 0.491, which is interpreted as a moderate effect. This suggests that the flashcard *engklek* learning model had a meaningful impact on improving students' vocabulary performance compared to traditional instruction.

Normality Test (Shapiro-Wilk):

The Shapiro-Wilk test result for the combined posttest scores showed a W value of 0.906 and a p-value < 0.001, indicating a violation of the normality assumption. However, due to the relatively large sample size (n = 75), the independent t-test remains robust to this violation.

Table 9 Normality Test Independent

Skor tes	W	p
	0.906	< .001

Homogeneity of Variance (Levene's Test):

The Levene's test yielded F = 3.49 and p = 0.066, which is greater than 0.05. This suggests that the assumption of equal variances between groups is not violated, and the standard t-test can be appropriately used.

Table 10 Homogeneity Independent

Variable	F	df	df2	p
Skor tes	3.49	1	73	0.066

Discussion

This study aimed to examine the effectiveness of using flashcards integrated with the traditional game *engklek* in improving English vocabulary mastery among seventh-grade students at *MTs Al-Falah.* The findings revealed a significant increase in the post-test scores of students in the experimental group compared to those in the control group who received conventional instruction. These results indicate that instructional approaches incorporating traditional games and visual learning media such as flashcards have a positive impact on students' English vocabulary acquisition. These findings align with constructivist learning theory, which posits that learning becomes more meaningful when students actively participate in the process especially through contextual and engaging experiences(Keller, 2010). By integrating the traditional game *engklek*, students not only learn cognitively but are also involved affectively and psychomotorically, directly reinforcing long-term memory retention of new vocabulary. This is in line with the study by (Fengyu, 2023) which found

that using interactive media such as flashcards rooted in local culture significantly enhances students' motivation and comprehension in learning English. Their research emphasized that students engage more deeply when learning activities are perceived as relevant to their everyday lives. In this current study, the incorporation of *engklek* a familiar and culturally resonant game acted as a bridge between academic learning and students' real-life experiences (Fauzi et al., 2023)

Similar support comes from (Authar et al., 2021), who observed that local-culture-based educational games can create a dynamic, collaborative, and positive classroom environment. Traditional games not only stimulate motor activities but also aid in vocabulary retention through meaningful, repeated, and contextualized exposure. The kinesthetic elements involved in playing *engklek* contributed to the encoding of vocabulary items in multiple sensory pathways, thereby enhancing learning outcomes(Priscilla S et al., 2021). Further, the results of the paired samples t-test in the experimental group demonstrated a highly significant difference between pre-test and post-test scores, with a p-value < 0.001 and a large effect size (Cohen's d = 1.85). This strongly suggests that the teaching method employed in the experimental group was not only statistically effective but also had a substantial practical impact on students' learning achievement. These findings are consistent with (Agung et al., 2021), who advocated for multimodal learning approaches that combine visual, verbal, and kinesthetic strategies to accelerate vocabulary acquisition in foreign language education.

On the other hand, the control group, which was taught using conventional instruction, also exhibited improvement, albeit to a lesser degree (Cohen's d = 0.924). While traditional methods such as rote memorization and vocabulary lists can offer some gains, their limitations become apparent when compared to more interactive and student-centered approaches. As supported by a study from Haryanto et al. (2023), students exposed to teacher-centered instruction tend to exhibit lower retention and engagement, especially in language classes where communication and contextual use of language are critical.

The results of the independent samples t-test further confirmed the effectiveness of the experimental approach. A statistically significant difference was observed between the post-test scores of the two groups (t = 2.13, p = 0.037), with a moderate effect size (Cohen's d = 0.491). This suggests that the integration of flashcards and *engklek* not only outperformed conventional methods but also had a meaningful impact on student learning outcomes. These findings support the work of (Priyastuti et al., 2020), who emphasized that incorporating culturally familiar and interactive elements into language instruction enhances cognitive engagement, reduces affective filters, and improves retention rates. Another significant dimension of the findings is related to learner motivation. Observations and interviews conducted during the study indicated that students in the experimental group appeared more enthusiastic, confident, and cooperative during learning sessions. This is consistent with findings from (Authar et al., 2021), who found that traditional games used in language classrooms help to lower anxiety levels and foster a sense of belonging and cultural identity, which are essential for motivation and sustained interest in language learning.

Moreover, by embedding vocabulary instruction in a game-based context, the learning process becomes more exploratory and student-driven. This reflects the principles of 21st-century education, which emphasizes active learning, creativity, collaboration, and cultural responsiveness. A study by (Supriatin & Rizkilillah, 2018) highlighted how gamified

language learning tools can enhance not only vocabulary recall but also higher-order thinking skills, as students are required to apply, use, and contextualize words within meaningful situations. The *engklek* game, with its physical and sequential nature, provided a structured yet playful framework for learning. Students were required to jump onto squares that contained vocabulary cards and perform specific tasks such as pronouncing, defining, or using words in sentences. This aligns with Mayer's Cognitive Theory of Multimedia Learning(Friedman, 1959), which posits that learners process information more effectively when it is delivered through multiple channels visual, auditory, and kinesthetic.

The use of flashcards facilitated visual memory encoding and provided clear, immediate feedback, which is crucial for language development. This aspect resonates with findings from (Rozi et al., 2021), who noted that visual aids in language learning promote vocabulary recognition, especially among beginner learners. The combination of flashcards with movement and peer interaction created a rich, multimodal learning environment that addressed diverse learner needs. This study makes a significant contribution to the discourse on educational equity, particularly in rural or under-resourced school settings. Educational disparities between urban and rural regions remain a pressing issue, especially in developing countries where access to quality resources, trained educators, and up-to-date digital infrastructure is often lacking. As highlighted by Fengyu (2023), students in remote areas frequently face challenges such as limited access to technological tools, minimal exposure to authentic English usage, and a lack of immersive language learning environments. These constraints often place rural students at a disadvantage when compared to their urban counterparts. In response to these structural inequities, this study proposes a practical, low-tech, and culturally embedded instructional strategy combining flashcards with the traditional Indonesian game *engklek* which offers a cost-effective, scalable, and impactful solution for language instruction in such contexts.

The Method used in this research does not depend on sophisticated technology, internet connectivity, or specialized software, making it highly adaptable for schools with limited resources. Despite its simplicity, the method generated measurable improvements in students' English vocabulary acquisition(Yulianti, 2012). This demonstrates that effective pedagogy is not solely defined by high-tech innovations but rather by relevance, engagement, and alignment with students' needs and contexts (Fauzi et al., 2023). The combination of flashcards and *engklek* illustrates how pedagogical creativity and cultural familiarity can be powerful tools for leveling the playing field in education. For teachers and administrators in rural schools, this model presents a viable pathway toward enhancing learning outcomes without requiring major infrastructure investment.

Beyond its implications for educational access, the findings of this study support the growing advocacy for contextualized and culturally responsive pedagogy, which has been a central theme in recent educational reforms, particularly in Indonesia. The national curriculum now emphasizes the importance of developing student competencies in not only cognitive areas but also affective and psychomotor domains(Gustian & Tersta, 2024). This includes instilling values, building character, and fostering social-emotional growth, all of which are believed to be effectively achieved through the integration of local wisdom and cultural heritage into classroom instruction. In line with these goals, the use of *engklek* as a vehicle for vocabulary learning is not merely an instructional gimmick, but a deliberate pedagogical act that acknowledges the cultural identity of learners.

By embracing local cultural elements within formal education settings, this study operationalizes the vision promoted by educational policymakers and curriculum designers, such as that described by Firman Aulia Ramadhan (2022). Rather than importing foreign or decontextualized teaching methods, the incorporation of *engklek* roots the learning process in the students' cultural reality. It creates a learning environment where students feel seen, valued, and connected—an environment where they are more likely to engage deeply with the content and participate with enthusiasm. This culturally responsive approach not only enhances motivation but also contributes to nation-building through the preservation and appreciation of indigenous games, values, and traditions. The success of this learning model also aligns closely with the principles of differentiated instruction, a key tenet of inclusive education. In every classroom, students possess varying levels of language proficiency, learning styles, and background knowledge. During the implementation of *engklek* in this study, students were provided with flashcards tailored to their respective skill levels ranging from simple vocabulary to more complex phrases or usage tasks. This allowed learners across the achievement spectrum to participate meaningfully without feeling overwhelmed or under-challenged. Lang & Ceccucci (2013) assert that differentiation is essential for ensuring that all students are both supported and extended according to their individual learning needs.

Such an adaptable strategy is particularly valuable in mixed-ability classrooms, which are common in rural settings where schools often lack streaming systems or specialized instructional support. Teachers using this method can easily adjust the content, pace, and interaction level of the activity without needing expensive materials or extensive preparation time. The nature of *engklek*, as a turn-based, cooperative game, also promotes peer support and collaborative learning further reinforcing the social dimensions of inclusive pedagogy. Through this, students not only build vocabulary but also develop interpersonal skills, empathy, and classroom solidarity(Authar et al., 2021). Despite the promising outcomes, it is also important to reflect critically on the limitations and contextual considerations of the study. One potential limitation is the presence of a novelty effect, wherein students show heightened motivation and engagement simply because the instructional approach is new and different from their usual classroom experience. While this initial enthusiasm is beneficial, it may not fully represent long-term engagement or learning retention. However, the consistency observed in the post-test results, along with supportive observational data, indicates that the improvements seen were not merely superficial. Still, further investigation is needed to determine whether these learning gains are sustainable over extended periods or across different instructional units.

To address this concern, future research could incorporate longitudinal designs that track vocabulary retention and student attitudes over several months or academic terms. Researchers may also consider integrating qualitative data, such as in-depth interviews or reflective journals, to capture students' perceptions of their learning experiences in greater detail. Another area for future inquiry is the potential influence of teacher facilitation skills on the effectiveness of the method(Alnajjar & Brick, 2018). Since game-based learning depends heavily on classroom management and instructional creativity, the role of the teacher should be examined more closely to determine which training or professional development interventions can support the successful implementation of this model across diverse settings.

The implications of this study extend beyond vocabulary learning. The approach demonstrated here could be replicated or adapted for teaching other language components

such as grammar, reading comprehension, or speaking fluency. The *engklek* game could be restructured to include grammar challenges, reading prompts, or conversation starters, allowing it to function as a flexible framework for language instruction. As Sitepu & Mutiarani (2023) point out, educational innovations that leverage cultural assets are more likely to be accepted and sustained in the long term, particularly when they align with students' lived experiences and community practices. This strategy also holds potential for cross-curricular integration, where traditional games could be used to teach mathematics, science, or civic education through culturally relevant formats.

The broader policy implications of this study should not be overlooked. In an era where educational systems are rapidly globalizing and digitalizing, there is a growing risk of marginalizing students from underprivileged backgrounds or communities that lack digital readiness. The flashcard-*engklek* model provides an example of how equity-driven, culturally sustaining pedagogy can thrive even in the absence of high-tech infrastructure. Educational leaders, curriculum developers, and teacher training institutions should take note of such locally grounded innovations, which offer a path toward both improving academic outcomes and preserving cultural heritage(Acmad et al., 2021). The model supports the goals outlined in Indonesia's Merdeka Belajar (Freedom to Learn) policy, which emphasizes flexibility, contextualization, and student agency in learning(Rahman & Fuad, 2023). This study serves as an evidence-based endorsement of the policy's core principles, demonstrating that when students are provided with meaningful, relevant, and engaging learning opportunities, their academic performance and intrinsic motivation can improve substantially even in the most modest classroom environments.

The integration of flashcards with the traditional game *engklek* offers an effective, inclusive, and culturally resonant method for improving English vocabulary mastery among junior high school students. It not only enhances students' test scores but also promotes motivation, participation, and a sense of identity. The method proves to be adaptable for mixed-ability learners, affordable for resource-limited schools, and aligned with national curriculum reforms focused on contextual learning. While further research is needed to explore its long-term effects and broader applicability, this approach represents a promising model for rethinking English language teaching in rural and low-tech educational settings where creativity, culture, and connection matter just as much as content.

CONCLUSION AND SUGGESTION

This study demonstrated that the use of flashcards integrated with the traditional game *engklek* significantly improved the English vocabulary mastery of seventh-grade students at *MTs Al-Falah.* The findings showed a highly significant difference between pretest and posttest scores in the experimental group compared to the control group. This learning approach proved effective not only in enhancing students' cognitive abilities but also in increasing their motivation, engagement, and enthusiasm through a contextual, enjoyable, and culturally rooted method. The integration of visual (flashcards) and kinesthetic (*engklek*) elements provided a meaningful learning experience tailored to the learning characteristics of junior high school students, particularly in rural settings.

Based on the results of the study, it is recommended that English teachers integrate traditional games such as *Engklek* with picture cards as a creative approach to improving vocabulary acquisition. This strategy not only helps language development but also creates an engaging

and enjoyable classroom atmosphere. Schools should support such initiatives by providing the necessary resources and opportunities for culturally-rooted learning activities. Furthermore, future research could expand on this study by investigating other traditional games or combining different media to assess their effectiveness in improving language proficiency across various grade levels.

REFERENCES

Aba, L. (2019). Flashcards as A Media in Teaching English Vocabulary. *AL-Lisan : Jurnal Bahasa (e-Journal)*, *4*(2), 170–179. http://journal.iaingorontalo.ac.id/index.php/al%0Ahttp://journal.iaingorontalo.ac.id/index.php/al Flashcards

Acmad, R. Van, Winata, D. C., & Abady, A. N. (2021). Pengaruh permainan tradisional *engklek* terhadap power otot tungkai anak usia 10-12 tahun di desa percut sei tuan kelurahan tanjung rejo tahun 2021. *JSH: Journal of Sport and Health*, *3*(1), 24–29. https://doi.org/10.26486/jsh.v3i1.2201

Adinda Amelia Anugerah Putri, & Masub Bakhtiar, A. (2022). Pengaruh permainan tradisional *engklek* terhadap pembelajaran siswa kelas Iv sdn bluluk I lamongan. *Didaktik : Jurnal Ilmiah PGSD STKIP Subang*, *8*(2), 2128–2134. https://doi.org/10.36989/didaktik.v8i2.525

Agung, A., Arsana, P., & Maharani, P. (2021). the Use of Flashcard in English Vocabulary Learning. *JOSELT (Journal on Studies in English Language Teaching)*, *2*(2), 25–33.

Alnajjar, M., & Brick, B. (2018). Student-teachers' beliefs concerning the usability of digital flashcards in ELT. *Flipping the Blend through MOOCs, MALL and OIL – New Directions in CALL*, *2018*, 67–74. https://doi.org/10.14705/rpnet.2018.23.792

Amelia, R., Zubaedah, S. N., Edlyka, K., Azilah, S., & Azkiyah, S. N. (2023). The effect of junior high school vocabulary mastery using word wall web. *Edukatif : Jurnal Ilmu Pendidikan*, *5*(6), 2668–2679. https://doi.org/10.31004/edukatif.v5i6.5971

Aprilani, D. N., & Suryaman, M. (2021). Students' perception in learning english vocabulary through quizlet. *JET (Journal of English Teaching)*, *7*(3), 343–353. https://doi.org/10.33541/jet.v7i3.3064

Arifah, I. N. (2022). Content analysis of vocabulary material in bahasa inggris textbook. *RiELT Journal*, *7*(2), 129–136. https://doi.org/10.15548/rielt.v7i2.4025

Authar, N., Muflihah, T., Fidyaningrum, S. A., Hardiana, A. S., Azizah, A., & Ramadhani, D. (2021). Improving Vocabulary Mastery Through the Traditional Game "*Engklek*" For Children in Kalijaten Village, Kec. Taman, Kab. Sidoarjo. *Child Education Journal*, *3*(2), 92–99. https://doi.org/10.33086/cej.v3i2.2229

Aziza, R. N. (2020). The Use of Flashcards in Teaching Vocabulary to Young Learners. *The 2nd Bogor English Student and Teacher (BEST)*, 120–122. https://pkm.uika-bogor.ac.id/index.php/best/article/view/811

Berta, M. O. (2020). *Improving The Students' Vocabulary Mastery Through Word Square Game*. *0852*, 18–25.

Fauzi, I., Arisetyawan, A., & Chano, J. (2023). Integration of Indonesian Culture in the Didactic Design of the Concept of Fractions in Elementary Schools. *International Online Journal of Primary Education*, *12*(4), 263–284. https://doi.org/10.55020/iojpe.1336481

Fengyu, Z. (2023). The impact of vocabulary learning methods on students' vocabulary application skills. *English Language Teaching and Linguistics Studies*, *5*(4), p206. https://doi.org/10.22158/eltls.v5n4p206

Firman Aulia Ramadhan, Suparwoto Sapto Wahono, A. M. (2023). Design of English Vocabulary Pictures Card Media For Teach Vocabulary at Elementary School. *Attadib: Journal of Elementary Education Number*, *7*(3). https://doi.org/https://doi.org/10.32507/attadib.v7i3.2566

Friedman, H. L. (1959). The singularities of the integrals in mayer's ionic solution theory. *Molecular Physics*, *2*(2), 190–205. https://doi.org/10.1080/00268975900100171

Gustian, I. F., & Tersta, F. W. (2024). Peran Guru Penggerak Dalam Implementasi Kurikulum Merdeka di SMA Negeri 11 Muaro Jambi: Definisi Kurikulum Merdeka, Peran Guru Dalam Mengembangkan …. *Education Library*, *2021*.

Hidayati, N. N. (2020). Modifying Indonesian traditional games as media to improve English vocabulary of kindergarten and elementary schools' students. *AL-ASASIYYA: Journal Of Basic Education*, *5*(1), 13–26. http://journal.umpo.ac.id/index.php/al-asasiyya/article/view/2773%0Ahttp://journal.umpo.ac.id/index.php/al-asasiyya/article/download/2773/1621

Keller, J. M. (2010). Motivational Design for Learning and Performance. In *Motivational Design for Learning and Performance*. https://doi.org/10.1007/978-1-4419-1250-3

Luardini, M. (2020). Teaching Vocabulary By Using Flashcard Media At the Fifth Grade Elementary School. *Natalina Asi Journal Compound*, *8*(2), 127–131.

Maharani, Y. D. B., Rofi'ah, S., & Saifudin, A. (2023). Development of vocabulary card in learning english vocabulary for 7th grade students at MTs Ma'arif Gandusari. *Patria Eduacational Journal (PEJ)*, *3*(1), 38–47. https://doi.org/10.28926/pej.v3i1.851

Matruty, E., & Que, S. R. (2021). Using Flashcard as A Media In Teaching Vocabulary For The Eighth Grade Students Of Junior High School. *MATAI: International Journal of Language Education*, *2*(1), 25–34. https://doi.org/10.30598/matail.v2i1.5490

Priscilla S, A., Fadhila, F., Tampubolon, F. S. A., & Saragih, E. (2021). Vocabulary assessment strategy of english teacher in junior high school. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, *9*(2), 330–338. https://doi.org/10.24256/ideas.v9i2.2303

Priyastuti, M. T., Resanti, M., & Yoga, G. S. (2020). Peningkatan Kosakata Bahasa Inggris dengan Media Ular Tangga bagi Siswa SD Antonius 2 Semarang. *Abdimasku : Jurnal Pengabdian Masyarakat*, *3*(2), 72. https://doi.org/10.33633/ja.v3i2.106

Rahman, R., & Fuad, M. (2023). Implementasi Kurikulum Merdeka Belajar Dalam Pembelajaran Ipas Di Sekolah Dasar. *Discourse: Indonesian Journal of Social Studies and Education*, *1*(1), 75–80. https://doi.org/10.69875/djosse.v1i1.103

Rozi, I. F., Larasati, E., & Lestari, V. A. (2021). Developing vocabulary card base on Augmented Reality (AR) for learning English. *IOP Conference Series: Materials Science and Engineering*, *1073*(1), 012061. https://doi.org/10.1088/1757-899x/1073/1/012061

Saputri, N. A., & Prasetyarini, A. (2024). Teaching Vocabulary Using Flashcards in Efl Classroom in Indonesia and Malaysia. *Paedagogia: Jurnal Pendidikan*, *13*(1), 1–22. https://doi.org/10.24239/pdg.vol13.iss1.487

Sitepu, K. N., & Mutiarani, M. (2023). The Advantages and Limitations of Traditional Game

Engklek as a Media in Students' Vocabulary Mastery. *Indo Green Journal*, *1*(2). https://doi.org/10.31004/green.v1i2.8

Suja, A., Muassomah, M., Sutaman, S., Hamid, M. A., & Rosyidi, A. W. (2024). The role of language games in enhancing vocabulary acquisition: A meta-analysis. *Australian Journal of Applied ...*, *0316*(1995), 110–121.

Supriatin, T., & Rizkilillah, V. P. (2018). Teaching Vocabulary Using Flashcard. *PROJECT (Professional Journal of English Education)*, *1*(4), 479. https://doi.org/10.22460/project.v1i4.p479-485

Supriyatin, A. A., & Argawati, N. O. (2021). The use of total physical response method in teaching vocabulary at junior high school in cimahi. *PROJECT (Professional Journal of English Education)*, *4*(4), 548. https://doi.org/10.22460/project.v4i4.p548-553

Susantini, N. L. P., & Kristiantari, M. G. R. (2021). Media Flashcard Berbasis Multimedia Interaktif untuk Pengenalan Kosakata Bahasa Inggris pada Anak Usia Dini. *Jurnal Pendidikan Anak Usia Dini Undiksha*, *9*(3), 439. https://doi.org/10.23887/paud.v9i3.37606

Turnip, M. C., Rumapea, L., & Sari, A. S. P. (2020). Improving Students' Vocabulary Mastery By Using Pictures Media To the Seventh Grade Students of Smp Negeri 21 Medan. *Kairos English Language Teaching Journal*, *June 2020*, 103–116. https://doi.org/10.54367/kairos.v1i3.716

Yulianti, F. (2012). Teaching English vocabulary to elementary school-aged children through a modified hop-scotch game named portek (portable *engklek*). *English Education Journal*, *2*(2), 40–49.

Yuniwanti, R., Hapidin, H., & Nurjannah, N. (2024). Pengembangan Model Permainan Tradisional *Engklek* Puzzle untuk Meningkatkan Keterampilan Pemecahan Masalah Anak Usia 5-6 Tahun. *Murhum : Jurnal Pendidikan Anak Usia Dini*, *5*(2), 337–349. https://doi.org/10.37985/murhum.v5i2.869