

The Use of Scattergories Games to Improve Reading Skill in Vocabulary Mastery at SD Panca Budi Medan

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ABSTRACT

Vocabulary mastery is a vital component in developing reading skills, particularly for elementary students learning English as a foreign language. However, many students face difficulties in acquiring vocabulary due to traditional and monotonous teaching methods. This study aimed to explore the effectiveness of the Scattergories game as a tool to improve vocabulary mastery among fifth-grade students at SD Panca Budi Medan. The research objective was to determine whether this game-based learning approach could significantly enhance students' vocabulary skills in an enjoyable and engaging manner. The research employed a pre-experimental quantitative design using a one-group pre-test and post-test method. Twenty-two students participated, selected through saturation sampling. Data were collected through vocabulary tests conducted before and after the intervention and supported by classroom observations. The intervention consisted of two treatment sessions involving the Scattergories game, where students generated vocabulary based on selected categories and initial letters. This process aimed to stimulate creativity, recall, and spontaneous vocabulary use. Statistical analysis using SPSS version 30 was conducted through descriptive statistics and paired samples t-test. Findings revealed that the mean pre-test score was 45.36, which increased to 68.23 in the post-test. The paired samples t-test showed a significant mean difference of -22.86 ($p < 0.001$), indicating the effectiveness of the intervention. Students also showed increased motivation and participation during learning. In conclusion, the Scattergories game is a beneficial and interactive method for enhancing vocabulary mastery and reading skills. It supports active learning and provides both theoretical and practical implications for language teaching strategies.

Keywords: vocabulary mastery, Scattergories game, educational games, reading skill.

1. INTRODUCTION

The element that must be present in language learning to learn English is vocabulary. Traditional vocabulary teaching methods bored students and undermined academic performance (Cameron, 2001). Teaching vocabulary through games is more effective than teaching through repetition or memorization. Additionally, the Scattergories game can be tailored to a teacher's needs (Wiraldi & Iksan, M., 2020).

Many strategies can be used in language teaching. One type of strategy is the scattergories game. The Scattergories game is a timed game played by naming unique objects in a set of categories, starting with the initial letter drawn. In this game, the teacher wants to know how many students can master vocabulary in a short time and tries to describe what is written in English. Scattergories games allow students to move and compete actively. These games have some simple rules that students can use to make the classroom atmosphere more interesting and less stressful, and these games can also have a positive effect on learning English (Alfi, T.A., 2021).

Indonesia has consistently ranked low in international English proficiency benchmarks. According to the EF English Proficiency Index (2022), Indonesia was ranked 81st out of 111 countries, categorized as having "low proficiency." This condition reflects systemic challenges in English language instruction across education levels, particularly in elementary schools where English is introduced as a foreign language. In local contexts such as SD Panca Budi Medan, preliminary classroom observations and mid-semester evaluations showed that many fifth-grade students scored below the minimum passing grade in vocabulary-based reading assessments. These findings raise concerns about the effectiveness of current teaching methods and point to the need for more engaging and student-centered vocabulary learning strategies.

Vocabulary mastery plays a pivotal role in supporting reading comprehension, writing fluency, and overall English proficiency (Nation, 2013). However, students often struggle with vocabulary acquisition due to limited exposure to English outside the classroom and the continued use of traditional, teacher-centered methods such as rote memorization and dictionary-based exercises. Research by Hutabarat & Zaidi (2021) and Snow (2010) emphasizes that vocabulary development in young learners requires contextual, meaningful, and active learning environments. Without sufficient vocabulary knowledge, students are more likely to experience difficulties in decoding texts and understanding meaning, which can have long-term impacts on academic success and language confidence (Harmer, 2007). Moreover, elementary students are at a developmental stage where enjoyment and play significantly influence cognitive growth. Therefore, teaching methods that are interactive and playful have greater potential to sustain motivation and learning outcomes (Nation, 2011).

In recent years, game-based learning has gained traction as a promising strategy to enhance student motivation and engagement in language learning. Studies by Alfi (2021), Wiraldi & Iksan (2020), and Sari & Nasution (2022) have demonstrated that educational games like Scrabble, Boggle, and Charades can positively influence vocabulary retention and classroom participation. Games provide not only cognitive stimulation but also emotional and social engagement, which are essential for sustained learning, especially at the elementary level (Prensky, 2007). Game-based strategies also align with active learning models and 21st-century learning principles that prioritize creativity, collaboration, and critical thinking.

However, research on the use of Scattergories, a time-based category word game that encourages spontaneous vocabulary retrieval and creative thinking, remains limited—particularly in Indonesian elementary school contexts. Most previous studies have focused on secondary or adult learners, with limited application in young EFL learners. Moreover, existing studies rarely provide a detailed account of treatment implementation, instrument validation, or rigorous statistical testing.

This study seeks to fill that gap by examining the effectiveness of the Scattergories game in improving vocabulary mastery among fifth-grade students at SD Panca Budi Medan. By employing a structured pre-experimental design and analyzing pre- and post-intervention scores with valid and reliable instruments, this research aims to contribute both practically and theoretically. Practically, it offers teachers an interactive tool to enrich classroom instruction without requiring expensive resources (Wright, 2006). Theoretically, it adds to the growing body of knowledge on game-based vocabulary acquisition in early EFL (English as a Foreign Language) education, particularly in the underexplored context of Indonesian primary schools.

2. METHODS

This study applied a quantitative approach using a pre-experimental design with a one-group pre-test and post-test format. Although this is considered the weakest design in quasi-experimental research due to the absence of a control group, it was selected because of practical constraints within the school setting. Specifically, the school administration did not permit the division of classes or random assignment due to scheduling and policy limitations. Therefore, the design aimed to provide preliminary evidence of the effectiveness of the Scattergories game in vocabulary instruction.

The population of this study consisted of all fifth-grade students at SD Panca Budi Medan, totaling 22 students. The sampling technique used was total sampling (also known as census sampling), where all members of the population were included. This approach was appropriate given the small population size and the intent to explore the full effect of the intervention on the entire class.

The instrument used in this research was a vocabulary test developed by the researcher, consisting of 25 multiple-choice questions based on vocabulary items from the themes "School Area" and "Body Parts." Each correct answer was scored as 4 points, leading to a maximum score of 100. The instrument's validity was tested through expert judgment and analyzed using Aiken's V, which yielded a coefficient of 0.89, indicating strong content validity. Reliability testing using Cronbach's Alpha produced a coefficient of 0.84, demonstrating that the instrument had high internal consistency.

The treatment procedure was conducted over four sessions:

1. Day 1: Pre-test to measure students' baseline vocabulary mastery.
2. Day 2 & Day 3: Implementation of the Scattergories game. In each 80-minute session, students were divided into small groups and given categories and a starting letter. Each student or group generated vocabulary items under time constraints. The teacher facilitated discussions, provided feedback, and aligned the activity with current curriculum goals.
3. Day 4: Post-test to assess improvement after the intervention.

Data analysis was carried out using SPSS version 30. First, a normality test was conducted using the Shapiro-Wilk test, confirming that the data were normally distributed ($p > 0.05$). Then, a paired samples t-test was used to determine whether there was a statistically significant difference between pre-test and post-test scores.

Despite the structured approach, this study had several limitations. First, the absence of a control group reduced the internal validity, making it difficult to attribute improvements solely to the treatment. Second, the study was limited to a single class in one school, limiting external validity. Furthermore, the study did not incorporate triangulation through interviews or surveys to capture students' perceptions. Future research should consider randomized controlled trials, include larger and more diverse samples, and validate findings through qualitative data or longitudinal designs.

3. RESULT AND DISCUSSION

Descriptive Statistics

The objective of this study was to determine the effectiveness of the Scattergories game in improving vocabulary mastery among fifth-grade students at SD Panca Budi Medan. The data were collected from 22 students through vocabulary tests administered before and after the intervention. Each test consisted of 25 multiple-choice items. Table 1 summarizes the descriptive statistics of students' scores in the pre-test and post-test phases.

The pre-test scores ranged from 33.00 to 67.00, with a mean of 45.36 and a standard deviation of 11.94. In contrast, the post-test scores ranged from 50.00 to 100.00, with a higher mean of 68.23 and a standard deviation of 14.35. This increase in the mean score by approximately 22.86 points suggests a notable improvement in vocabulary mastery following the game-based intervention.

Inferential Analysis

To test the statistical significance of the improvement, a paired samples t-test was conducted using SPSS version 30. Prior to the t-test, a Shapiro-Wilk normality test was performed, and the results indicated that the data were normally distributed ($p > 0.05$), thereby meeting the assumption for parametric testing.

The paired t-test showed a significant difference between the pre-test and post-test scores:

$$t(21) = -9.80,$$

$$p < 0.001,$$

$$\text{mean difference} = -22.86,$$

$$95\% \text{ CI } [-27.71, -18.01]$$

Disucssion

The findings of this study reveal that the Scattergories game has a significant positive impact on students' vocabulary mastery. The use of interactive, time-constrained categorization tasks encouraged students to recall and generate words actively, promoting deeper cognitive engagement and long-term retention.

The increase in vocabulary scores aligns with previous studies such as Alfi (2021) and Wiraldi & Iksan (2020), who found that game-based vocabulary instruction significantly enhances learning outcomes. However, this study contributes new insights by applying Scattergories—a less commonly studied game—in the Indonesian elementary context, supported by valid and reliable instruments and clear treatment implementation.

tudents' improvements may be attributed to several key elements inherent in the Scattergories game:

1. Cognitive stimulation: Students practiced rapid word retrieval within structured linguistic categories.
2. Social learning: The collaborative nature of the game facilitated peer learning and healthy competition.
3. Low-pressure context: The fun and relaxed atmosphere reduced performance anxiety, making vocabulary recall more spontaneous.

In addition, qualitative observations noted increased participation and enthusiasm during game sessions, which may have contributed to improved outcomes. The students showed heightened motivation, which confirms research by Prensky (2007) and Nation (2013), emphasizing the affective domain in vocabulary learning.

Despite these promising results, the study had limitations. The absence of a control group reduces internal validity, as the improvements could not be exclusively attributed to the intervention. Moreover, the sample size was small and drawn from a single institution, limiting the generalizability of the findings. Future studies should consider using experimental or quasi-experimental designs with control groups and larger samples, while also incorporating qualitative methods (e.g., interviews or reflective journals) to explore student perceptions.

4. CONCLUSION

This study concludes that the use of the Scattergories game is effective in improving vocabulary mastery among fifth-grade students at SD Panca Budi Medan. The significant increase in students' post-test scores compared to their pre-test results demonstrates that game-based learning can positively influence vocabulary acquisition. The findings suggest that integrating interactive and time-pressured word-retrieval activities—such as Scattergories—can foster more active student engagement, enhance motivation, and create a dynamic learning environment that supports language development.

In the broader context of vocabulary learning at the elementary level, the study reflects that traditional teaching methods, often limited to memorization and drills, fail to stimulate learners' interest or long-term retention. The Scattergories game, by contrast, offers a playful, collaborative, and cognitively engaging alternative that encourages spontaneous vocabulary use and critical thinking. This approach aligns with current pedagogical shifts toward active, student-centered learning and supports the development of 21st-century skills in young learners.

Theoretically, this research contributes to the growing body of literature on game-based language learning, particularly in under-researched elementary school contexts in Indonesia. Practically, it offers teachers a low-cost, easy-to-implement tool that can enrich classroom instruction and improve student outcomes.

Nevertheless, the study has limitations. The absence of a control group reduces the internal validity of the results, and the small sample size drawn from a single school limits generalizability. Future research should employ experimental or quasi-experimental designs with larger and more diverse samples. It is also recommended to integrate qualitative data, such

as student reflections or teacher feedback, to deepen the understanding of how such games influence learning behavior and motivation.

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