

Busy Book Media and Vocabulary Mastery: An Experimental Study with Fifth Graders in Rural Area

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Abstract

This study investigates the effectiveness of educational games in enhancing vocabulary mastery and learning engagement among young English as a Foreign Language (EFL) learners in a rural context. The research was conducted at SD Negeri 14 Kabupaten Sorong over a two-week period and involved eight fifth-grade students, selected through purposive sampling. Employing a pre-experimental design with a one-group pre-test and post-test model, the study aimed to determine whether the use of tactile and interactive educational media—specifically Busy Book games—could significantly improve students' English vocabulary acquisition and classroom activeness. Data were gathered using vocabulary tests and structured observation checklists, with results analyzed through SPSS version 20 and descriptive percentage analysis. The vocabulary test scores showed a marked improvement, with the average score rising from 32.50 in the pre-test to 81.25 in the post-test. A paired sample t-test yielded a significance value of 0.000 ($p < 0.05$), indicating a statistically significant difference in students' vocabulary mastery after the intervention. Observation data also demonstrated a high level of student activeness, with 75% of participants categorized as "very active" during the learning sessions. These findings suggest that the Busy Book, as a low-cost and reusable educational game, is highly effective in fostering vocabulary development and classroom engagement in under-resourced learning environments. Although the study's small sample size limits the generalizability of the results, the outcomes offer valuable insights into the practical application of game-based, multisensory learning tools for improving English instruction at the primary level. The study highlights the potential of contextually appropriate, student-centered strategies for supporting equitable language education in rural Indonesian schools.

Keywords: Busy Book; Educational Games; Vocabulary Mastery

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Introduction

Vocabulary development is a crucial part of second or foreign language acquisition, especially during the foundational years of education. A strong vocabulary provides learners with the necessary tools to develop listening, speaking, reading, and writing skills. Without adequate vocabulary, students struggle to comprehend texts and express their ideas effectively, which negatively impacts their overall academic performance (Nation, 2020; Schmitt, 2020). In early education, vocabulary mastery also contributes to children's ability to process information, describe real-world experiences, and engage in meaningful communication (Webb & Nation, 2017). Therefore, it is essential to prioritize vocabulary instruction in early English as a Foreign Language (EFL) classrooms to support both language learning and cognitive development.

In Indonesia, English has become an increasingly prioritized subject in many schools, even at the elementary level. Although it is not officially a compulsory subject in primary education, many schools include English to equip students with basic communication skills for the future. Despite this trend, the national performance in English remains low. According to the EF English Proficiency Index (2023), Indonesia ranks 79th out of 113 countries, categorized under "low proficiency." This ranking reflects a widespread issue in English language instruction, particularly in rural and underdeveloped regions. Furthermore, data from Kemendikbudristek (2021) show that only 28.6% of English teachers in primary schools in Eastern Indonesia have received formal training or certification in English language teaching. This lack of professional development severely affects instructional quality and contributes to students' limited vocabulary acquisition.

The situation is particularly challenging in remote areas such as Sorong Regency, Southwest Papua. Schools in this region often lack adequate learning facilities, instructional media, and teacher support systems. Traditional teaching methods—such as rote memorization and translation—continue to dominate English instruction due to limited access to innovation and resources (Astuti, 2022). Observations at SD Negeri 14 Kabupaten Sorong revealed that fifth-grade students had a very limited vocabulary range and faced difficulties recalling common nouns related to animals, food, and classroom objects. Additionally, student participation in English lessons was low, with many learners appearing passive and disengaged. These findings are consistent with Hidayati et al. (2020), who noted that students in rural schools often perceive English as difficult and uninteresting due to monotonous, teacher-centered instruction.

Another major challenge is the lack of English exposure beyond the classroom. In many rural Indonesian communities, English is rarely used in daily life, and access to supplementary materials such as books, digital media, or English-speaking environments is minimal. As a result, learners have limited opportunities to practice vocabulary in meaningful contexts, which hinders retention and fluency. Moreover, classes are often characterized by one-way instruction, in which students serve as passive recipients rather than active participants in the learning process (Rahmawati & Utami, 2021). These conditions necessitate a shift toward more interactive, student-centered approaches that can stimulate interest, increase motivation, and support vocabulary retention.

One promising solution is the use of educational games, which incorporate academic content into playful and engaging activities. Educational games promote multisensory learning and encourage students to interact with content through sight, sound, movement, and touch. For young learners, this aligns with their developmental needs and learning preferences, making vocabulary learning more effective and enjoyable (Putri & Sulastri, 2022). Research shows that game-based learning can improve not only vocabulary mastery but also students' emotional engagement and willingness to participate in classroom activities (Nuraini & Handayani, 2022; Zainab, 2019). Games create a low-anxiety learning environment where students feel safe to experiment with language and learn from mistakes, which is crucial for early learners in EFL contexts.

Among the many types of educational games, Busy Books stand out as a tactile and visual learning medium suitable for young children. Busy Books are non-digital, interactive books made from flannel or felt, featuring vocabulary games such as picture matching, labeling, and puzzles. These materials allow learners to engage through hands-on manipulation, which enhances concentration, fine motor skills, and memory retention (Sari & Pramudibyanto, 2021). Because Busy Books are reusable and affordable, they are especially appropriate for low-resource classrooms where digital media are unavailable. Studies such as Ezki (2023) and Amaris & Rakimahwati (2018) have confirmed that Busy Books improve vocabulary mastery and increase student enthusiasm in early childhood and primary school settings.

However, despite growing interest in game-based learning, most existing studies are conducted in urban or well-supported schools. There is limited research on how tactile educational media like Busy Books perform in rural Indonesian classrooms with minimal access to technology or training. As emphasized by Akmal & Yuniarti (2023), there is a pressing need to develop and evaluate instructional tools that are accessible, low-cost, and adaptable to remote learning environments. Furthermore, few studies have examined the dual effect of such tools on both vocabulary acquisition and classroom activeness, leaving a research gap in understanding their full pedagogical impact in underserved contexts.

This study aims to fill that gap by exploring the use of Busy Book-based educational games to improve English vocabulary mastery and student engagement among fifth-grade learners at SD Negeri 14 Kabupaten Sorong. Using a pre-experimental design with vocabulary tests and classroom observations, the research evaluates how the use of tactile, hands-on learning media influences students' performance and participation. The intervention emphasizes interactive, curriculum-aligned vocabulary tasks delivered through visual and kinesthetic formats. By investigating a game-based learning strategy in a rural, resource-limited setting, this study contributes to the broader discourse on equitable and innovative English language teaching in Indonesia. It provides practical insights for educators, school administrators, and curriculum developers who are seeking alternative instructional models that meet the developmental needs of young EFL learners. Ultimately, this research supports the implementation

of inclusive, engaging, and affordable teaching tools that can improve vocabulary instruction and learner motivation, particularly in marginalized regions where traditional methods have shown limited success.

Literature Review

a. *Vocabulary in English Language Learning*

Vocabulary is a fundamental component of language acquisition and is central to developing the four essential language skills: listening, speaking, reading, and writing. Nation (2020) emphasizes that vocabulary knowledge serves as the foundation for both language comprehension and production. Similarly, Schmitt (2020) notes that learners with larger vocabularies tend to perform better in reading comprehension and oral fluency. For young learners, vocabulary development enables them to describe objects, express ideas, and engage meaningfully in social and academic settings. In English as a Foreign Language (EFL) contexts, particularly in Indonesia, vocabulary instruction often faces challenges due to insufficient learning resources and teacher training. Many schools rely on rote memorization or textbook-based methods, which may be ineffective in engaging students or supporting long-term retention (Sutresno, 2017). These limitations are especially apparent in rural areas, where students' exposure to English is minimal. Therefore, effective and interactive vocabulary teaching strategies are urgently needed.

b. *Educational Game in ELT*

Educational games are learning activities designed to combine academic content with elements of play, interactivity, and motivation. They encourage students to learn through doing, foster social interaction, and allow learners to experience success through practice and feedback (Song & Zhang, 2018). According to Prensky (2001), games promote active engagement, problem-solving, and positive emotional experiences, making them ideal for language learning. Research indicates that game-based learning significantly enhances vocabulary retention and learner motivation. Zainab (2019) demonstrated that vocabulary games improved both linguistic outcomes and class participation in a primary EFL classroom. Muqaddimatul Jannah (2020) also found that educational games positively affected student enthusiasm and vocabulary performance. Such findings support the view that games provide both cognitive and affective benefits in the EFL classroom, especially for young learners.

c. *Characteristic of Young Learner*

Young learners—typically aged 6 to 12—possess cognitive and emotional traits that require specific instructional strategies. According to Harmer (2007), children at this stage are curious, imaginative, and responsive to activities that involve physical movement and visual stimuli. Learning methods that incorporate touch, color, games, and stories align well with their developmental needs. Vygotsky's theory of the Zone of Proximal Development (ZPD) and Piaget's stages of cognitive development emphasize the importance of guided interaction and hands-on experiences for young learners. These theories suggest that young children learn best when actively involved in meaningful tasks within a supportive social context. For this reason, instructional tools that combine learning with physical engagement—such as educational games—are particularly beneficial in fostering vocabulary development.

d. *Busy Book as Learning Media*

Busy Books—also known as quiet books—are interactive, tactile-based learning tools typically made from felt or flannel. These books include a variety of hands-on activities such as matching games, puzzles, shape sorting, and vocabulary labeling. They are designed to support early childhood learning by combining visual, tactile, and motor experiences (Mufliharsi, 2017; Trisna, 2021). The use of Busy Books is grounded in constructivist learning theory, which emphasizes the importance of active engagement and experiential learning. Piaget (1951) asserted that children construct knowledge through direct manipulation and exploration of their environment. Vygotsky's (1978) sociocultural theory also supports tools like Busy Books, which facilitate learning through interaction with more knowledgeable peers or adults within the ZPD.

Busy Books serve as multisensory instructional media, allowing children to engage with content through sight, touch, and movement. Indriana (2017) and Daryanto (2013) highlight how such media stimulate fine motor skills, enhance attention span, and promote concept retention. Because they are non-digital and reusable, Busy Books are particularly suitable for under-resourced classrooms in

remote areas. Studies confirm the effectiveness of Busy Books in language and cognitive development. Della Ulfa Amaris and Rakimahwati (2018) found that Busy Book-based instruction significantly improved vocabulary learning and classroom engagement in early childhood education settings. Similarly, Ezki (2023) reported that Busy Book activities enhanced pattern recognition, hand-eye coordination, and word association among primary school students. As educational game media, Busy Books embody the essential components of game-based learning: clear objectives, tactile challenge, feedback, and learner autonomy. These features make them a valuable tool for teaching vocabulary, particularly in contexts where digital resources are limited or impractical. Their use encourages student-centered learning, collaboration, and increased classroom activeness, all of which contribute to successful vocabulary acquisition.

While the benefits of educational games are widely acknowledged in the literature, much of the existing research focuses on digital tools or urban classrooms with adequate facilities. There is a lack of studies examining physical, low-cost educational games such as Busy Books in rural or marginalized EFL contexts, including Indonesia's eastern regions like Sorong. Furthermore, few studies have assessed the dual impact of these tools on both vocabulary mastery and classroom activeness. This study addresses that gap by exploring how Busy Book-based educational games influence vocabulary acquisition and student engagement among fifth-grade learners in a remote Indonesian school. The research offers valuable insights into the practical application of tactile game-based learning in low-resource environments and contributes to a more equitable understanding of effective EFL strategies for young learners.

Methodology

This study employed a quantitative pre-experimental design, using a one-group pre-test and post-test model to measure the effectiveness of Busy Book media in improving vocabulary mastery and classroom activeness among young EFL learners. This design was selected due to the limited number of participants and the classroom-based nature of the intervention. The study was conducted at SD Negeri 14 Kabupaten Sorong, a public elementary school located in a rural area of Southwest Papua. The participants were eight fifth-grade students selected through purposive sampling. Selection was based on initial teacher reports and observations indicating limited vocabulary knowledge and low engagement in English learning. Two primary instruments were used: a vocabulary test and a structured observation checklist. The vocabulary test consisted of 20 items, including multiple-choice and picture-matching questions, focusing on common vocabulary topics such as animals, fruits, and classroom objects. To ensure content validity, the test was reviewed by three English education experts from Universitas Pendidikan Muhammadiyah Sorong. Based on their feedback, revisions were made for clarity, relevance, and age appropriateness.

To measure reliability, a pilot test was administered to 10 fifth-grade students from a neighboring school. The results were analyzed using Cronbach's Alpha, yielding a score of 0.83, indicating high internal consistency and strong reliability for assessing vocabulary mastery. The observation checklist was used to evaluate student activeness during four intervention sessions. It contained five indicators: participation, attentiveness, enthusiasm, cooperation, and focus. Each was rated on a four-point Likert scale. Based on their scores, students were categorized as Very Active (76–100), Active (56–75), Less Active (36–55), or Inactive (≤ 35). To ensure objectivity, two observers—the classroom teacher and a trained research assistant—evaluated the students independently. Prior to the intervention, a short training session was held to align their understanding of the scoring criteria. After the sessions, inter-rater reliability was calculated using Cohen's Kappa, resulting in a coefficient of 0.81, which indicates strong agreement between observers.

The intervention was carried out over two weeks and included four 60-minute sessions. The first session began with a pre-test to assess baseline vocabulary knowledge. The next three sessions incorporated Busy Book activities, including matching words to pictures, solving puzzles, and labeling vocabulary items through tactile interaction. The final session concluded with the post-test, which used the same format and content as the pre-test. Vocabulary test scores were analyzed using SPSS version 20, with a paired sample t-test applied to compare pre-test and post-test means (significance level: $p < 0.05$). Descriptive percentage analysis was used to interpret observation data. Ethical approval was obtained from the school, and informed consent was secured from students' guardians. Participants

were assured that the research would not affect their grades and that confidentiality would be maintained throughout the process.

Result

This section presents the findings from both the vocabulary tests (pre-test and post-test) and classroom observations conducted during the implementation of educational games using Busy Book media. The results are categorized into two key areas: (1) the effect of Busy Book-based educational games on vocabulary mastery, and (2) the level of student activeness during the intervention.

1. Improvement in Vocabulary Mastery

The primary objective of the study was to determine whether the use of Busy Book media as an educational game significantly improved students' English vocabulary mastery. The vocabulary pre-test and post-test results are summarized in Table 1 below:

Table 1. Classification of Pretest and Posttest Scores

No	Classification	Score Range	Pretest Frequency (%)	Posttest Frequency (%)
1	Very Good	80–100	0 (0%)	3 (38%)
2	Good	66–79	0 (0%)	4 (50%)
3	Fair	56–65	1 (12%)	1 (12%)
4	Poor	40–55	5 (63%)	0 (0%)
5	Very Poor	≤39	2 (25%)	0 (0%)
Total			8 (100%)	8 (100%)

The vocabulary test score distribution before and after the implementation of Busy Book educational games reveals a clear and substantial improvement in students' English vocabulary mastery. The classification divides the students' scores into five categories: Very Poor (≤39%), Poor (40–55%), Fair (56–65%), Good (66–79%), and Very Good (80–100%). In the pre-test, the majority of students performed poorly. 63% of students (5 out of 8) were classified as Poor, indicating a limited understanding of the basic vocabulary items tested. These students scored between 40% and 55%, demonstrating difficulty with word recognition, recall, and possibly even basic word-meaning matching tasks. Additionally, 25% of students (2 students) were in the Very Poor category, scoring below 39%. These scores reflect a very minimal grasp of English vocabulary, suggesting that traditional instructional methods had not effectively supported vocabulary development. Only one student (12%) managed to reach the Fair category, scoring between 56% and 65%. Notably, no students reached the Good or Very Good levels before the treatment, highlighting an urgent need for instructional intervention.

After the treatment using Busy Book-based educational games, the post-test results displayed a dramatic improvement across all classification categories. The most striking outcome is that no students remained in the Poor or Very Poor categories, meaning all learners scored above 55% following the intervention. This complete elimination of low-performing scores provides strong evidence that the game-based strategy had a universally positive impact on vocabulary mastery. Moreover, 50% of students (4 out of 8) advanced into the Good category (66–79%), while 38% (3 students) reached the Very Good category (80–100%). This represents a significant upward shift, particularly given that no students had achieved these classifications prior to the treatment. These students demonstrated a strong command of the target vocabulary, including accurate recall, understanding of meaning, and word-application skills. One student (12%) remained in the Fair category, suggesting modest improvement, possibly due to individual learning pace, prior exposure, or learning preferences.

Overall, 88% of students (7 out of 8) moved into the top two performance categories (Good and Very Good), confirming not only the effectiveness of the Busy Book as an instructional medium but also its scalability across diverse student ability levels. This result highlights the tool's capacity to

accommodate varying learning speeds and styles, as the activities are tactile, visual, and highly interactive characteristics that align well with young learners' cognitive and developmental stages. The transition from 88% of students being in the Poor and Very Poor categories during the pre-test to 0% in those same categories in the post-test represents a profound shift in classroom performance. It suggests that the use of educational games such as the Busy Book promotes not just memorization but deeper learning and sustained vocabulary retention. The increase in student scores can be attributed to several key features of the Busy Book, including its use of color, texture, and physical interaction, which cater to the sensory and kinesthetic learning preferences of children. These multisensory features help reinforce memory, improve attention, and increase motivation factors crucial to the success of vocabulary learning. The following chart highlights the improvement between pretest and posttest scores, making the shift toward higher performance levels more visually evident after the use of Busy Book media:

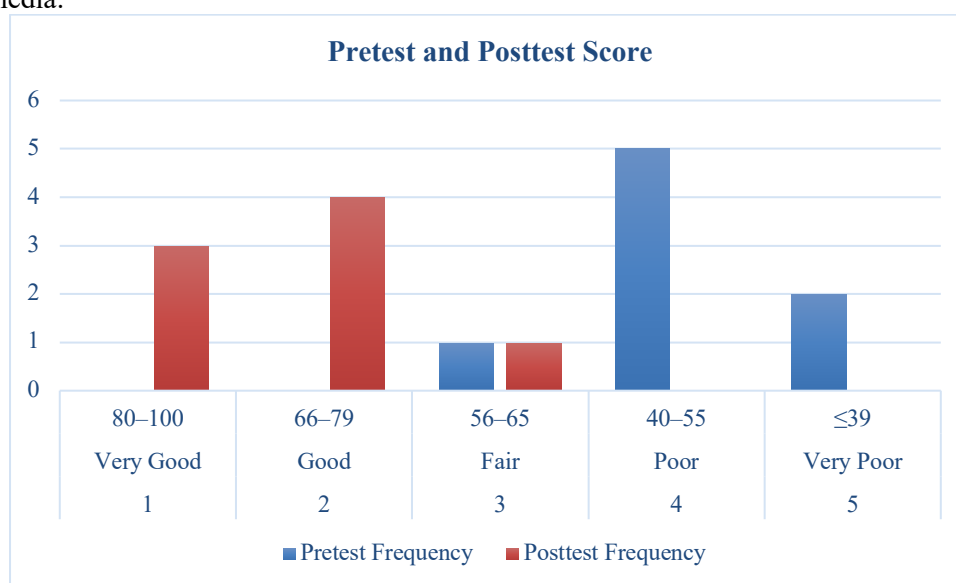


Figure 1. Pretest and Posttest Score

To determine the statistical significance of this difference, a paired sample t-test was conducted using SPSS 20. The results are presented in Table 2:

Table 2. Paired Samples t-Test Result

Test	Mean	Standard Deviation	t	Sig.2 (tailed)
Pre-test	32.50	4.63	-	-
Post-test	81.25	5.59	-29.09	.000

The t-test results revealed a t-value of -29.09 and a significance value (p-value) of 0.000, which is lower than the conventional threshold of 0.05. This indicates that the difference between the pre-test and post-test scores is statistically significant. Therefore, it can be concluded that the use of Busy Book media had a positive and significant effect on improving the vocabulary mastery of fifth-grade students at SD Negeri 14 Kabupaten Sorong.

2. Observation of Student Activeness

In addition to assessing vocabulary improvement, the study also aimed to evaluate the level of student activeness during the learning process. Activeness was measured using a structured observation checklist during each of the four treatment sessions. Indicators of activeness included participation in learning activities, willingness to answer questions, enthusiasm in using the Busy Book, cooperation with peers, and concentration on tasks.

Table 3. Observation Result of Student Activeness

No	Classification	Score Range	Frequency	Percentage (%)
1	Very Active	76–100	6	75
2	Active	56-75	3	25
3	Less Active	36-55	0	0
4	Inactive	≤35	0	0
Total			8	100

From the results above, 75% of the students were categorized as “very active,” while the remaining 25% were considered “active.” No students were classified as “less active” or “inactive.” This finding suggests that the implementation of Busy Book-based educational games was highly effective in promoting classroom engagement and active participation among the students. Qualitative notes recorded during classroom observations further support these findings. During the first session, several students showed immediate interest in the Busy Book due to its colorful, tactile features. By the second session, students demonstrated increased enthusiasm in identifying and matching vocabulary items to images. In the third and fourth sessions, students became more confident in using English words aloud, especially during peer-based activities involving object labeling and puzzle solving. Some students who were initially hesitant began to actively raise their hands and assist peers during group tasks, indicating a positive shift in learning behavior.

The multisensory nature of the Busy Book media appeared to contribute significantly to this increased engagement. The tactile element encouraged hands-on interaction, while the visual elements helped reinforce vocabulary recognition. The element of play through puzzles, matching games, and movement allowed students to learn in a relaxed and enjoyable environment, which is essential for young learners who often associate learning with affective responses. Additionally, the game format fostered a sense of curiosity and motivation. Students reported that the learning activities “felt like playing, not studying,” and they expressed a desire to use the Busy Book again in future lessons. This enjoyment translated into improved focus and time-on-task, both of which are indicators of increased activeness and motivation.

The findings from the vocabulary test demonstrate a statistically significant improvement in students’ vocabulary mastery following the integration of educational games using Busy Book media. The mean vocabulary score increased by 48.75 points, supported by a t-test significance value of 0.000. Moreover, the observation data revealed high levels of student activeness, with all students participating actively and 75% falling into the “very active” category. These outcomes suggest that the Busy Book is not only an effective vocabulary learning tool but also a powerful medium for fostering student engagement in the EFL classroom.

Discussion

The implementation of educational games using Busy Book media has proven to be an effective pedagogical strategy for improving vocabulary mastery and enhancing student engagement among young EFL learners in a rural Indonesian setting. Beyond numerical gains, the success of this approach can be better understood by interpreting it through the lenses of learning theory, pedagogical practice, and contextual relevance. In low-resource environments like Sorong Regency, conventional language instruction often relies heavily on memorization and textbook exercises, which limit student involvement and inhibit active language use. The use of tactile, game-based media in this study breaks that pattern and introduces an alternative, student-centered model that is both accessible and impactful. In doing so, the study highlights the need for inclusive teaching innovations that align with the realities of rural classrooms while still delivering quality learning outcomes.

The results of this research support and extend prior studies that have examined the benefits of multisensory instruction. Kurniawati and Mahmud (2020) found that visual and tactile stimuli enhance vocabulary retention in children by activating multiple cognitive pathways. The current study confirms their findings by demonstrating that students who interacted with colorful, hands-on materials—such

as puzzles and image-word matching games—were able to recall and apply vocabulary more confidently. What distinguishes this study, however, is its application in a marginalized educational setting, where instructional materials are scarce and exposure to English is minimal. By showing that multisensory materials are effective even in such environments, the study expands the relevance of prior research and validates its applicability beyond well-resourced, urban contexts.

Additionally, this study affirms and strengthens the conclusions of Putri and Sulastrri (2022), who argue that educational games can reduce learner anxiety, increase intrinsic motivation, and promote greater classroom participation. Students in this study, who had previously shown low levels of engagement, began to voluntarily interact with English vocabulary during Busy Book activities. This suggests that game-based learning not only improves academic performance but also supports the socio-emotional development of learners. The safe, playful learning environment created by the Busy Book allowed students to explore language without fear of making mistakes—a critical factor in second language acquisition. In line with Krashen's Affective Filter Hypothesis, reducing anxiety and increasing motivation contribute to more successful language learning, particularly for young or beginner learners.

The findings also align with Nuraini and Handayani (2022) and Ramadani and Yusuf (2021), who emphasized the importance of constructivist and collaborative learning approaches in EFL education. This study observed that when students worked in pairs or small groups using the Busy Book, they demonstrated improved problem-solving skills, peer support, and spontaneous language use. These peer interactions provided scaffolding opportunities—central to Vygotsky's Zone of Proximal Development (ZPD)—where learners could achieve more with guidance and cooperation than independently. The study thus adds to the body of literature that advocates for integrating tactile, social, and cognitive elements into vocabulary instruction for young learners.

The effectiveness of the intervention is also deeply tied to the context in which it was conducted. Sorong Regency represents one of many rural and underserved areas in Indonesia where teachers often lack formal training in English education, and classrooms are not equipped with modern technological tools. In such settings, the availability of affordable and reusable materials is critical. The Busy Book media, being low-tech and hand-made, offers a sustainable alternative to expensive commercial resources or digital tools. The present study echoes the concerns of Rahmawati and Utami (2021) and Akmal and Yuniarti (2023), who emphasized the need for localized, accessible media that empower teachers to innovate within their means. This study confirms that significant learning gains are possible even when advanced infrastructure is lacking—provided that pedagogical tools are creative, developmentally appropriate, and contextually relevant.

Equally important is the alignment of this intervention with national curriculum reforms. Indonesia's Merdeka Belajar (Freedom to Learn) policy encourages learner autonomy, contextualized content, and interactive methods in classrooms. The Busy Book approach used in this study fully embodies these principles. Students were given the freedom to explore vocabulary at their own pace, and the materials used were grounded in familiar, real-life themes. This resonates with the findings of Sari and Pramudibyanto (2021), who found that contextually relevant content increases student motivation and strengthens connections between language and meaning. The shift from teacher-centered instruction to a more exploratory, student-led learning model also marks a positive step toward achieving the goals of the Merdeka Belajar framework, especially in early-grade language education.

Despite the encouraging results, this study has several limitations that must be acknowledged to provide a balanced interpretation. The most significant limitation is the small sample size ($n = 8$), which restricts the generalizability of the findings. While the consistent patterns observed offer strong internal validity, larger and more diverse sample groups are needed in future studies to confirm the broad applicability of Busy Book media in different educational settings. Another limitation lies in the study design itself. The one-group pre-test and post-test model lacks a control group, which limits the ability to attribute gains solely to the intervention. External variables—such as increased teacher attention, peer influence, or even novelty effects—may have contributed to the observed improvements. To address this, future research should adopt quasi-experimental or experimental designs with randomization and control groups to produce more rigorous evidence.

Another area for further investigation is the long-term retention of vocabulary learned through tactile, game-based methods. This study focused on short-term outcomes measured immediately after

the intervention. While these results are promising, it remains unclear whether the vocabulary gains are retained over time. Longitudinal studies could help determine the durability of learning and the conditions that support or hinder vocabulary retention. Additionally, studies could examine whether repeated exposure to Busy Book activities over several months leads to cumulative improvements in vocabulary size and usage in other language contexts, such as writing or conversation.

Beyond vocabulary acquisition, Busy Book media also holds potential for developing other essential language skills. Studies like Lestari and Wijayanti (2023) have shown that similar tactile tools can be adapted to enhance grammar awareness, narrative writing, and oral fluency. Incorporating sentence-building components, sequencing tasks, or storytelling activities into the Busy Book format could offer a more holistic approach to language learning. Future studies could explore how such adaptations affect different aspects of language proficiency, especially in integrated skills instruction.

From a practical perspective, this study provides actionable insights for educators working in resource-limited settings. First, the findings suggest that teachers can create their own tactile media using locally available materials such as felt, cardboard, and printed visuals. This reduces dependency on costly commercial resources and encourages teacher creativity. Second, teacher professional development programs should include training on how to design and use game-based, multisensory media to support diverse learning needs. Such training would be especially beneficial for teachers in rural or remote areas, where innovation is often constrained by lack of exposure and limited resources. Third, curriculum planners and school leaders should actively support the integration of tactile media into classroom instruction by allocating time, space, and support for materials development.

This study also has broader implications for equity in education. In many countries, including Indonesia, the quality of education remains uneven between urban and rural schools. Introducing scalable, low-cost innovations like Busy Books can help close this gap by providing effective learning tools that do not depend on high technology or expensive imports. When designed thoughtfully, such tools can deliver both academic and emotional benefits—helping children feel more capable, confident, and included in the learning process. The participatory nature of Busy Book activities also aligns with global trends in inclusive education, where all learners—regardless of background or ability—are given meaningful opportunities to succeed.

The findings of this study reaffirm the importance of multisensory, game-based instruction in young learners' language development. By integrating Busy Book media into vocabulary lessons, the research demonstrated measurable gains in vocabulary mastery and classroom engagement, even within the constraints of a rural educational context. The study contributes to existing literature by applying proven pedagogical strategies in a new and challenging setting, thus extending their relevance and validating their effectiveness across diverse environments. Most importantly, it highlights the transformative power of simple, well-designed learning tools that respond to the real needs of students and teachers. Moving forward, educational stakeholders should recognize the value of tactile, student-centered instruction and invest in training, resources, and policies that support innovation at the classroom level—especially in areas where it is needed most.

Conclusion

This study investigated the effectiveness of using Busy Book-based educational games to enhance English vocabulary mastery and classroom activeness among fifth-grade students at SD Negeri 14 Kabupaten Sorong. Implementing a pre-experimental one-group pre-test and post-test design, the study revealed significant improvements in both students' vocabulary performance and their engagement during learning sessions. Prior to the intervention, most students fell into the "Poor" and "Very Poor" categories, reflecting a minimal grasp of basic English vocabulary. After the use of Busy Book media, a majority of students advanced to "Good" and "Very Good" categories, demonstrating substantial progress in vocabulary retention, recognition, and usage. Additionally, observation data indicated a remarkable increase in student activeness, with all learners participating in classroom tasks and 75% classified as "very active." The multisensory and hands-on nature of the Busy Book proved to be particularly effective for young learners, supporting their developmental needs while also promoting curiosity, motivation, and peer collaboration. These findings confirm that tactile, game-based learning tools such as Busy Books are not only enjoyable but also pedagogically sound, especially for primary English education in under-resourced and remote areas like Sorong Regency.

This study contributes to the growing body of evidence advocating for innovative, low-cost, and child-centered learning strategies in the EFL classroom. It highlights the potential of Busy Book media to address both linguistic and affective learning challenges by making vocabulary instruction more interactive and accessible. Moreover, the research aligns with national educational reforms such as the Merdeka Belajar curriculum, which emphasizes contextual and student-centered learning approaches. Despite the promising outcomes, the study is limited by its small sample size and the absence of a control group. Future research should explore the long-term retention effects of Busy Book-based instruction and expand the application of this media to other language domains such as grammar, writing, and speaking. Additionally, further investigation in varied educational contexts—urban, rural, and inclusive classrooms—would strengthen the generalizability of these findings. The integration of Busy Book educational games into English vocabulary instruction offers a powerful, practical, and scalable solution to enhance learning outcomes in primary schools, especially in regions with limited digital infrastructure. It supports not only vocabulary development but also learner engagement, making it a valuable pedagogical tool for EFL teachers seeking to create dynamic and effective learning environments for young learners.

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