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Enhancing Students' English Vocabulary Through The Use Of Storyjumper In Efl Classroom

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Abstract

Vocabulary mastery is one of crucial component of language proficiency which directly influence students' ability in speaking, reading, listening, and writing. However, many EFL students struggle with vocabulary acquisition due to limited exposure, lack of contextual learning, and low engagement. This research aimed to examine the effectiveness of StoryJumper, a digital storyteling platform, in enhancing English vocabulary among eighth grade students in one of Junior high school in Palopo. This research involved 31 students and adopted a pre-experimental one group pre-test and post-test design. During the intervention, students created and narrated their own digital stories using StoryJumper, which encouraged them to use target vocabulary in meaningful context, collaborate with peers, and repeatedly encounter the words in both receptive and productive modes. Data were collected through vocabulary tests administered before and after the treatment. Descriptive statistics showed an increase in the mean score from 58.71 in the pre-test to 76.13 in the post-test, and a paired sample t-test confirmed that the improvement was statistically significant. The findings indicate that StoryJumper not only improved students vocabulary retention but also increased their motivation and engagement in learning. The positive impact is attributed to contextualized learning, repeated exposure, peer collaboration, and the multimodal nature of digital storytelling. This research recommends the future researchers to explore the long term impact of StoryJumper on other language skills such as writing or speaking. In addition, a comparison with other storytelling tools or control groups may yield deeper insights into its effectiveness.

Key words : *StoryJumper, vocabulary enhancement, digital storytelling, EFL teaching*

Abstrak

Penguasaan kosakata merupakan salah satu komponen penting dalam kemampuan berbahasa yang secara langsung memengaruhi keterampilan berbicara, membaca, menyimak, dan menulis siswa. Namun, banyak siswa EFL (English as a Foreign Language) mengalami kesulitan dalam menguasai kosakata karena keterbatasan paparan, kurangnya pembelajaran kontekstual, serta rendahnya keterlibatan dalam proses belajar. Penelitian ini bertujuan untuk meneliti efektivitas penggunaan StoryJumper, sebuah platform digital storytelling, dalam meningkatkan penguasaan kosakata bahasa Inggris pada siswa kelas VIII di salah satu SMP di Kota Palopo. Penelitian ini melibatkan 31 siswa dan menggunakan desain pra-eksperimen dengan satu kelompok pre-test dan post-test. Selama intervensi, siswa membuat dan

menarasikan cerita digital mereka sendiri menggunakan StoryJumper, yang mendorong mereka untuk menggunakan kosakata target dalam konteks yang bermakna, berkolaborasi dengan teman sebaya, serta mengalami pengulangan kata dalam mode reseptif dan produktif. Data dikumpulkan melalui tes kosakata yang diberikan sebelum dan sesudah perlakuan. Hasil statistik deskriptif menunjukkan adanya peningkatan nilai rata-rata dari 58,71 pada pre-test menjadi 76,13 pada post-test, dan uji paired sample t-test mengonfirmasi bahwa peningkatan tersebut signifikan secara statistik. Temuan ini menunjukkan bahwa penggunaan StoryJumper tidak hanya meningkatkan retensi kosakata siswa tetapi juga meningkatkan motivasi dan keterlibatan mereka dalam pembelajaran. Dampak positif tersebut disebabkan oleh pembelajaran yang kontekstual, paparan berulang, kolaborasi antarsiswa, dan sifat multimodal dari digital storytelling. Penelitian ini merekomendasikan agar peneliti selanjutnya menelusuri dampak jangka panjang penggunaan StoryJumper terhadap keterampilan berbahasa lainnya seperti menulis atau berbicara. Selain itu, perbandingan dengan alat storytelling lain atau kelompok kontrol dapat memberikan wawasan yang lebih mendalam mengenai efektivitasnya.

Kata kunci *: StoryJumper*, peningkatan kosakata, *digital storytelling*, pengajaran EFL

Introduction

Vocabulary plays an essential role in English as a Foreign Language (EFL) learning because it directly influences how effectively students can read, write, listen, and speak. Without adequate vocabulary knowledge, communication becomes difficult and comprehension is limited (Nation, 2020; Schmitt, 2023). In Indonesia, particularly in Palopo City, vocabulary mastery remains one of the most persistent challenges for junior high school students. Many learners find it difficult to retain new words and use them appropriately in sentences. Based on classroom observations in several junior high schools in Palopo, most students rely on memorization and translation rather than learning words through real communication. Consequently, their vocabulary knowledge tends to be passive and easily forgotten.

Traditional English instruction in Palopo schools often emphasizes textbook-based and teacher-centered approaches. Vocabulary is typically taught through lists of words, definitions, and bilingual drills. Although this method may help students temporarily recognize certain words, it rarely promotes meaningful understanding or long-term retention (Rahman et al., 2023). Many students express that they find vocabulary learning boring and disconnected from their daily experiences. The lack of contextual exposure, limited access to English media, and minimal opportunities for interactive practice have made vocabulary learning less engaging. These local realities indicate a pressing need for new strategies that make vocabulary learning more dynamic, relevant, and enjoyable for Palopo students.

In recent years, technology-enhanced learning has offered new opportunities for teachers to make English instruction more interactive (R Upa and S Damayanti, 2021; S. Rahayu et al, 2024; R Upa et al, 2024). Among these innovations, digital storytelling (DST) has gained popularity as an effective pedagogical strategy to promote both motivation and vocabulary development (Mayer, 2021; Robin, 2018). DST allows learners to combine text, sound, and images to create personal stories, transforming them from passive learners into active language users. In Palopo classrooms where students have access to basic internet facilities, digital tools such as StoryJumper can be implemented with minimal training. StoryJumper enables learners to create illustrated storybooks online, allowing them to use vocabulary in meaningful contexts while

developing creativity and collaboration skills (Fitriyani, 2022; Alkhodiry & Alzahrani, 2021).

Theoretically, the use of StoryJumper aligns with Mayer's (2021) Cognitive Theory of Multimedia Learning, which suggests that learners process and retain information more effectively when it is presented through both visual and verbal modes. It also reflects Vygotsky's (1978) Constructivist Learning Theory, which emphasizes active knowledge construction through social interaction. In the Palopo EFL context, these theories support the notion that students can better understand and remember new vocabulary when they are encouraged to build their own stories, collaborate with peers, and present their work to the class. The storytelling process not only enriches vocabulary knowledge but also enhances students' confidence and communication skills.

Despite growing interest in technology-based instruction, empirical evidence regarding the use of StoryJumper for vocabulary learning in Palopo's junior high schools remains scarce. Most local English teachers still rely on traditional techniques, and there is little quantitative research evaluating how digital storytelling affects vocabulary acquisition. Therefore, this study focuses on examining whether the use of StoryJumper can effectively improve vocabulary mastery among eighth-grade students in a Palopo junior high school.

This study aims to provide empirical data and practical insights into how StoryJumper can enhance vocabulary learning in the Palopo EFL classroom context. By comparing students' vocabulary performance before and after StoryJumper-based activities, the research seeks to demonstrate how contextual, creative, and technology-supported learning can transform vocabulary instruction for Indonesian junior high school learners.

Vocabulary is widely recognized as a crucial component of second and foreign language acquisition. According to Nation (2020), vocabulary knowledge is essential for learners to comprehend and express ideas effectively. In Indonesian EFL settings, however, students often face difficulties mastering vocabulary because of limited exposure to authentic English and the dominance of teacher-centered instruction. In Palopo, English lessons are typically conducted only a few hours a week, leaving students with very limited opportunities to practice new words beyond the classroom. As Widodo (2020) notes, learners who only memorize word lists rarely develop the ability to use vocabulary communicatively. To overcome this, vocabulary instruction needs to be meaningful, repetitive, and context-based (Laufer & Goldstein, 2022; Schmitt, 2023).

In most Palopo junior high schools, vocabulary is taught using conventional techniques such as copying word lists, translating sentences, or repeating definitions after the teacher. While these methods are easy to apply, they fail to motivate students or help them retain words for long periods (Yunus & Hashim, 2021; Rahman et al., 2023). Classroom observations indicate that many students can recall individual words during tests but cannot use them in meaningful sentences when writing or speaking. Lin and Lan (2019) suggest that effective vocabulary teaching should be multimodal and contextual—students must see, hear, and use words in authentic situations. This is particularly important in Palopo, where exposure to English is limited, and students need stimulating methods to make vocabulary learning enjoyable.

Digital storytelling (DST) has emerged as a creative and learner-centered technique that combines multimedia elements such as text, pictures, and narration to help students construct their own stories (Robin, 2018; Mayer, 2021). In the EFL classroom, DST transforms vocabulary learning into a process of discovery and

expression rather than memorization. When students write and narrate their stories, they actively use new words, reinforcing both comprehension and recall. Studies conducted in other Indonesian regions have shown that digital storytelling increases motivation and helps students remember vocabulary longer (Fitriyani, 2022; Handayani, 2022). In the context of Palopo, DST has the potential to address students' low engagement levels by making learning both visual and interactive.

The implementation of StoryJumper in EFL classrooms can be explained through two major theoretical lenses. First, Mayer's (2021) Cognitive Theory of Multimedia Learning posits that learners understand and remember information more effectively when it is presented through both verbal and visual channels. Second, Vygotsky's (1978) Constructivist Learning Theory highlights the importance of active participation and social collaboration in learning. StoryJumper provides a practical platform where students in Palopo can plan, write, illustrate, and share their stories while practicing target vocabulary. According to Rachmawati and Astuti (2021), this type of activity helps students integrate new vocabulary with their own ideas and emotions, making learning more memorable and personal.

A growing number of studies indicate that StoryJumper can enhance both receptive and productive vocabulary knowledge. For instance, Handayani (2022) found that junior high school students who used StoryJumper demonstrated improved vocabulary retention and greater enthusiasm during learning activities. Similarly, Fitriyani (2022) reported that students became more creative and confident in using new words in context. In another study, Syahruddin et al. (2021) found that StoryJumper-based tasks promoted collaboration and peer learning, creating a supportive environment for vocabulary acquisition. However, few studies have been conducted specifically in Palopo, where educational settings, resources, and student engagement levels differ from those in larger urban areas. This study, therefore, aims to fill that gap by providing quantitative evidence of StoryJumper's effectiveness in the Palopo EFL context.

Based on the reviewed literature, it highlights that while vocabulary plays a crucial role in language learning, traditional teaching methods used in Palopo junior high schools remain largely ineffective in promoting vocabulary retention and use. Digital storytelling, particularly through StoryJumper, offers an engaging and practical solution for addressing these challenges. Yet, limited research has explored its application in the Palopo setting. Thus, this study focuses on evaluating how StoryJumper can enhance vocabulary learning among eighth-grade students in a Palopo junior high school, aiming to contribute both theoretical and practical insights to EFL teaching in local Indonesian contexts.

Method

This study employed a quantitative pre-experimental design, specifically a one-group pre-test and post-test design, to examine the effectiveness of using StoryJumper in improving students' vocabulary mastery. This design was selected because it allows the researcher to measure changes in students' performance before and after a specific instructional intervention, thus providing empirical evidence of learning improvement (Creswell & Creswell, 2020). The study was conducted at a public junior high school in Palopo. English is taught as a compulsory subject in this school. However, based on informal discussions with English teachers, vocabulary instruction in the school primarily relied on traditional methods such as translation, drilling, and textbook exercises. Students were often less motivated to learn new words because the activities

lacked creativity and contextual relevance. The school is located in an urban area with moderate access to technology; it has a computer laboratory and internet facilities that allowed the implementation of StoryJumper based activities during classroom sessions. These contextual characteristics made the site suitable for investigating how digital storytelling can be integrated into EFL instruction in a local Indonesian setting.

Participants

The participants of this study were 31 eighth-grade students from one class at the selected junior high school in Palopo. They were chosen using a purposive sampling technique, as the researcher intended to work with a class that had moderate English proficiency and was accessible for the duration of the study. The class consisted of 16 female and 15 male students, aged 13 to 14 years old. Students with regular attendance and active classroom participation were included, while those who missed more than one session of the intervention were excluded from the analysis. Before data collection, the researcher obtained permission from the school principal and English teacher, and informed consent was secured from the students and their parents. Participants were informed about the research purpose, procedures, and their right to withdraw at any time.

Data Collection

Data were collected through two main instruments: a vocabulary test (administered as both pretest and post-test) and an observation checklist used during classroom activities. Vocabulary test consisted of 25 multiple-choice items adapted from the eighth-grade English curriculum topics. The items assessed both receptive and productive vocabulary related to common themes such as daily activities, descriptive texts, and short narratives. The test was validated by two English teachers and one language education expert to ensure content and face validity. A pilot test was also conducted with a small group of students outside the study sample to check item clarity and reliability (Cronbach's $\alpha = 0.82$). meanwhile classroom observation was conducted throughout the treatment to assess students' engagement, collaboration, and creative use of vocabulary while using StoryJumper. The checklist included indicators such as participation level, vocabulary usage in stories, confidence during storytelling, and peer interaction.

The study lasted for four weeks, consisting of six meetings. The procedure included: 1) Week 1: Administration of the pretest and introduction to StoryJumper. 2) Weeks 2–3: Implementation of StoryJumper-based activities. Students worked in pairs to create digital storybooks using target vocabulary. The researcher and teacher guided them through brainstorming, drafting, editing, and publishing their stories.3) Week 4: Presentation of students' stories and administration of the post-test. During the sessions, students used the school's computer lab, and each pair shared one device. The teacher provided vocabulary lists and model sentences to help students incorporate new words naturally into their stories. Challenges such as limited internet speed and students' unfamiliarity with the platform were addressed through group assistance and short training sessions at the beginning.

Data Analysis

Data analysis involved both descriptive and inferential statistical procedures, conducted using SPSS version 25. Descriptive statistics (mean, standard deviation, and percentage increase) were used to summarize students' vocabulary scores from the

pretest and post-test. To determine whether the improvement was statistically significant, a paired-sample t-test was applied with a significance level of $p < 0.05$. This test was appropriate because it compared the same participants' performance before and after the intervention. Additionally, qualitative observations from the classroom were analyzed descriptively to complement the statistical findings. Students' engagement, collaboration, and attitudes toward StoryJumper were coded thematically based on observation notes. This triangulation between test data and observation helped strengthen the validity of the findings (Miles, Huberman, & Saldaña, 2020).

Finding and Discussion

This section presents the results of the study that examined the effectiveness of StoryJumper in improving eighth-grade students' English vocabulary mastery at a public junior high school in Palopo. The findings are organized according to the research objectives and based on data collected through vocabulary tests (pretest and post-test) and classroom observations. Quantitative data show a clear improvement in students' vocabulary performance after the intervention, while qualitative observations provide additional insight into students' engagement and attitudes during StoryJumper based activities.

Descriptive Statistics of Vocabulary Scores

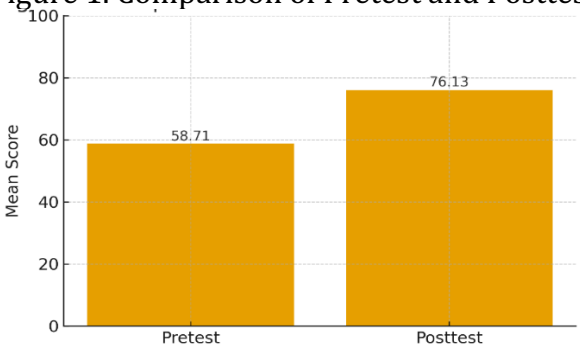
The descriptive statistical results indicate that students' vocabulary scores improved substantially after the implementation of StoryJumper. Table 1 summarizes the pretest and posttest scores of all 31 participants.

Table 1
Summary of Students' Vocabulary Scores

		Mean	N	Std. Deviation
Pair 1	pre-test	58.71	31	8.45
	post test	76.13	31	7.89

As shown in Table 1, the students' mean vocabulary score increased from **58.71** in the pretest to **76.13** in the posttest, representing a gain of **17.42 points**. The decrease in standard deviation suggests that students' performance became more consistent after the treatment. Figure 1 further illustrates the comparison between the pretest and posttest mean scores.

Figure 1. Comparison of Pretest and Posttest Mean Scores



The figure shows a clear upward trend, indicating that all students achieved higher scores after the intervention. No student scored lower on the post-test than on the pretest, suggesting a consistent positive effect of StoryJumper on vocabulary mastery.

Inferential Statistics (Paired Sample t-Test)

To determine whether the improvement in students' vocabulary scores was statistically significant, a paired-sample t-test was conducted using SPSS version 25. The results are displayed in Table 2.

Table 2

Results of Paired-Sample t-Test

Mean Difference	t-value	df	Si.(2-tailed)
17.42	11.763	30	-18.734

The p-value of **0.000 < 0.05** indicates a statistically significant difference between the pretest and posttest scores. This result confirms that the use of StoryJumper had a measurable positive effect on students' vocabulary achievement. While individual improvement levels varied slightly, all participants demonstrated progress in vocabulary mastery after the four-week intervention.

Observational Findings on Student Engagement

In addition to the test results, classroom observations were conducted throughout the treatment period to document students' engagement and learning behaviors during StoryJumper activities. Four main indicators were observed: participation, vocabulary usage, collaboration, and creativity.

Dealing with **participation**, most students showed high levels of participation during the sessions. They appeared more active and attentive when designing their storybooks compared to traditional vocabulary lessons. Several students volunteered to share their stories in front of the class. For the **vocabulary use**, students frequently used the target vocabulary in their digital stories, both in written text and oral narration. Some students asked clarifying questions to ensure correct word use, showing increased awareness of meaning and form. Because students worked in pairs, they often discussed word choices, sentence structures, and illustrations. This peer interaction encouraged them to learn from one another, particularly those with stronger English skills supporting their peers and by those activities, so their **collaboration** was built. Many students expressed enthusiasm while illustrating their stories. By the end of the project, several students who were initially shy became more confident in using English. One student commented informally, *"It's easier to remember the words when I use them in my story."* It means that their **creativity and confidence** were also built.

Overall, the results of this study demonstrate a notable improvement in students' vocabulary mastery after the implementation of StoryJumper in the EFL classroom. The quantitative analysis revealed that the mean vocabulary score increased by 17.42 points, rising from 58.71 on the pretest to 76.13 on the posttest. Statistical analysis using the paired-sample t-test confirmed that this difference was significant ($p = 0.000 < 0.05$), indicating that the use of StoryJumper had a measurable positive effect on students'

vocabulary performance. In addition to the test results, classroom observations supported these findings by showing that students became more engaged, creative, and confident in using English vocabulary during digital storytelling activities. Although a few learners initially faced challenges related to navigating the digital platform, no negative or non-significant outcomes were identified. Taken together, these findings suggest that StoryJumper effectively enhanced both the cognitive and affective aspects of vocabulary learning among junior high school students in Palopo.

The findings of this study clearly demonstrate that the use of StoryJumper significantly improved the vocabulary mastery of eighth-grade students in a junior high school in Palopo. The increase of the mean score from 58.71 to 76.13, confirmed by the paired-sample t-test ($p = 0.000 < 0.05$), indicates that digital storytelling is an effective approach to enhancing vocabulary acquisition in an EFL context. This result suggests that StoryJumper not only supports students in remembering new words but also helps them understand their meaning and use within communicative situations. The improvement can be attributed to the contextual and multimodal nature of the activities, where students were exposed to words repeatedly while creating and narrating their own stories. The process allowed students to move beyond rote memorization and engage with vocabulary meaningfully, which contributed to long-term retention and better practical usage.

The results of this study are consistent with prior research on digital storytelling and vocabulary learning. Similar to the findings of Fitriyani (2022) and Handayani (2022), students in this study showed significant improvement in vocabulary retention and motivation after using StoryJumper. The positive results also align with the conclusions of Yunus and Hashim (2021), who found that digital tools increase student engagement and promote active learning in EFL classrooms. Moreover, the current findings support Mayer's (2021) Cognitive Theory of Multimedia Learning, which emphasizes that students learn more effectively when they combine visual and verbal representations. The improvement observed among Palopo students also reflects the constructivist principles suggested by Vygotsky (1978), where social interaction and collaboration enhance the construction of new knowledge. However, this study expands on previous research by providing empirical evidence from a local Indonesian context, where technological resources and classroom dynamics may differ from those in urban or international settings.

Theoretically, the findings contribute to the growing body of knowledge on digital storytelling in EFL education. They reaffirm the importance of multimodal input and learner-centered instruction in promoting vocabulary acquisition. The study demonstrates that digital storytelling tools like StoryJumper can operationalize theoretical principles of multimedia learning and constructivism in real classroom settings. Practically, the results have meaningful implications for English teachers in Palopo and similar regions. Teachers can integrate StoryJumper or similar platforms into their lessons to make vocabulary learning more interactive, contextual, and engaging. The tool also encourages students to collaborate, think creatively, and take ownership of their learning. For schools with limited resources, StoryJumper represents a low-cost and user-friendly alternative to traditional materials, as it can be accessed online and used for various English learning projects.

While the study produced encouraging results, several limitations should be acknowledged. First, the research used a **pre-experimental one-group pretest–posttest design**, which limits the ability to establish causal relationships due to the absence of a control group. The improvement observed may have been influenced by

other external factors such as students' exposure to English outside the classroom or teacher guidance. Second, the sample size was relatively small (31 students) and drawn from only one school in Palopo, which restricts the generalizability of the findings to other settings. Third, the intervention period was relatively short (four weeks), so the study did not examine the long-term retention of vocabulary. Finally, while the observation data added qualitative depth, they were collected by a single observer, which might introduce a degree of subjectivity. Recognizing these limitations provides transparency and helps contextualize the findings within their practical scope.

Future research should consider employing a quasi-experimental or randomized controlled design with a larger sample size and control group to provide stronger evidence of causality. Longitudinal studies are also recommended to examine the long-term effects of StoryJumper on vocabulary retention and other language skills such as writing and speaking. Researchers might explore how different genres of digital stories or levels of teacher guidance affect student learning outcomes. In terms of pedagogical practice, English teachers in Palopo and similar EFL contexts are encouraged to adopt StoryJumper as a supplementary tool for vocabulary instruction. Training sessions for teachers could also be organized to enhance their confidence in integrating digital storytelling into their lessons. Policymakers and school administrators should support such initiatives by improving access to technology and promoting innovative teaching practices that foster both language and digital literacy.

Conclusion

In the conclusion section, the author should provide a concise summary of the main findings in relation to the research objectives or questions. This summary should highlight the core insights gained from the study without repeating the entire results. The author should then restate the significance of the study, explaining how the findings contribute to existing knowledge, theory, or practice within the relevant field. It is important to emphasize how the research addressed the identified gaps in the literature and why the study matters. The author may also mention any practical or theoretical implications derived from the results, particularly how the findings could inform policy, educational practices, or professional applications. If any unexpected outcomes emerged, they should be briefly acknowledged, especially if they open up new directions for inquiry. In addition, the author should acknowledge key limitations that may affect the interpretation or generalizability of the findings, while avoiding excessive detail. Finally, the paragraph should end with one or two forward-looking statements that recommend areas for future research, whether to validate the findings in other contexts, explore unresolved questions, or test new variables. The conclusion should maintain a balanced and reflective tone—assertive in presenting contributions, but cautious in drawing claims beyond the study's scope. No new data or references should be introduced at this stage. The overall goal is to leave the reader with a clear understanding of what was learned, why it matters, and what should happen next.

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