



The Implementation of Digital Storytelling Applications to Improve Elementary Students' English-Speaking Skills

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Abstract. English-speaking ability is a crucial communication skill that needs to be developed from an early age to enhance students' competence in the globalized era. However, many elementary school students still struggle to speak English fluently due to the lack of interactive learning media and low self-confidence in expressing ideas. This study aims to analyze the implementation of a digital storytelling application as an innovative learning medium to improve students' English-speaking skills. The research employed a Classroom Action Research (CAR) design integrating both qualitative and quantitative approaches. The study was carried out through four stages: planning, implementation, observation, and reflection. Data were collected through observations, interviews, and pre- and post-speaking tests to measure students' improvement in fluency, pronunciation, vocabulary, and confidence. The findings indicate that the use of digital storytelling significantly enhanced students' speaking performance, motivation, and engagement in learning activities. Furthermore, the interactive features of the application encouraged students to participate actively and creatively in storytelling sessions, creating a more enjoyable and meaningful language learning experience. Therefore, the integration of digital storytelling in English learning is recommended as an effective pedagogical strategy to foster communication competence and learner autonomy among elementary school students.

Keywords: Digital Storytelling; Elementary Students; English Learning; Interactive Learning; Speaking Skills

Abstrak. Kemampuan berbicara bahasa Inggris merupakan keterampilan komunikasi krusial yang perlu dikembangkan sejak dini untuk meningkatkan kompetensi siswa di era globalisasi. Namun, banyak siswa sekolah dasar masih kesulitan berbicara bahasa Inggris dengan lancar karena kurangnya media pembelajaran interaktif dan rendahnya rasa percaya diri dalam mengungkapkan gagasan. Penelitian ini bertujuan untuk menganalisis implementasi aplikasi bercerita digital sebagai media pembelajaran inovatif untuk meningkatkan kemampuan berbicara bahasa Inggris siswa. Penelitian ini menggunakan desain Penelitian Tindakan Kelas (PTK) yang mengintegrasikan pendekatan kualitatif dan kuantitatif. Penelitian ini dilakukan melalui empat tahap: perencanaan, pelaksanaan, observasi, dan refleksi. Data dikumpulkan melalui observasi, wawancara, dan tes pra dan pasca berbicara untuk mengukur peningkatan siswa dalam kelancaran, pengucapan, kosakata, dan kepercayaan diri. Temuan menunjukkan bahwa penggunaan bercerita digital secara signifikan meningkatkan kinerja berbicara, motivasi, dan keterlibatan siswa dalam kegiatan pembelajaran. Lebih lanjut, fitur interaktif aplikasi mendorong siswa untuk berpartisipasi aktif dan kreatif dalam sesi bercerita, menciptakan pengalaman belajar bahasa yang lebih menyenangkan dan bermakna. Oleh karena itu, integrasi penceritaan digital dalam pembelajaran Bahasa Inggris direkomendasikan sebagai strategi pedagogis yang efektif untuk mengembangkan kompetensi komunikasi dan kemandirian belajar siswa sekolah dasar.

Kata Kunci: Keterampilan Berbicara; Pembelajaran Bahasa Inggris; Pembelajaran Interaktif; Penceritaan Digital; Siswa Sekolah Dasar

1. INTRODUCTION

Speaking is the process of creating and sharing meaning and information through the use of verbal and non-verbal symbols in various contexts (Chaney, 2006). Students in an English as a Foreign Language (EFL) environment are encouraged to speak in different contexts and genres and are required to use various conversational techniques and repair strategies (Harmer, 2007). In Indonesia today, the ability to speak English is one of the most important skills in the era of globalization. Mastery of English from an early age, especially at

the elementary school level, can provide long-term benefits for students in developing communication skills and increasing their competitiveness in the future. However, in practice, many elementary school students face difficulties in speaking English. Several factors cause this problem, including non-interactive teaching methods, limited opportunities to practice speaking, and students' lack of confidence in using English orally. One of the innovative language learning approaches that can be implemented to improve students' speaking ability is the use of digital technology, such as digital storytelling applications (Abdul-Ameer, 2014; Kegenhof et al., 2014).

Digital storytelling offers educational benefits beyond vocabulary development because it also supports grammar learning as well as listening and speaking skills (Belda-Medina & Goddard, 2024). Activities such as creating digital stories to demonstrate the use of verb forms or using multimedia tools to explore parts of speech help deepen students' understanding of grammar (Liu et al., 2014). Moreover, digital storytelling combines narrative elements with multimedia technology—such as images, sound, and video—creating a more engaging and interactive learning experience (Hava, 2021). Through this method, students can more actively express their ideas and stories in English, leading to a more effective development of their speaking skills. Harlina and Wardarita (2020) revealed that the use of digital storytelling in language learning can enhance students' learning motivation, improve pronunciation, and increase speaking fluency. Similarly, Hava (2021) found that the implementation of digital storytelling increased students' motivation and satisfaction in learning English through interactive applications.

Unlike previous studies, the main purpose of this research is to identify the use of digital storytelling applications in improving students' English vocabulary at the elementary school level. Furthermore, there are still some limitations in implementing this method, particularly regarding teacher readiness, infrastructure, and the selection of appropriate applications suited to the cognitive development of elementary students. Therefore, this study aims to analyze the implementation of a digital storytelling application in English learning at the elementary level and to measure its impact on students' speaking ability. It also seeks to determine how far the application can improve students' speaking skills and what factors influence its implementation. The findings are expected to provide a positive contribution to the field of education, especially for children learning English speaking skills. Based on the background above, the research questions of this study are as follows:

1. How is the implementation of digital storytelling applications in English learning at the elementary school level?
2. To what extent can digital storytelling applications improve students' English-speaking ability?
3. What are the supporting and inhibiting factors in implementing digital storytelling applications in elementary English learning?

2. LITERATURE REVIEW

Brown (2004) states that speaking is a productive skill that requires active mastery of language, including its structure, pronunciation, and fluency. According to Thornbury (2005) and Brown (2000), pronunciation refers to the ability to produce understandable spoken sounds, including the mastery of intonation, word stress, and word linking. Harmer (2007) adds that pronunciation teaching not only helps learners distinguish sounds but also contributes to the overall improvement of speaking ability.

In terms of grammar, Nunan (2013) explains that speaking and grammar are closely related because learners must understand word order, word forms, and grammatical changes to communicate fluently. Wolfe-Quinter (in Koizumi, 2005) states that fluency is characterized by the ability to speak spontaneously without excessive pauses or hesitation, resulting in natural and coherent speech. Likewise, Harmer (2007) emphasizes that fluency involves the ability to speak at a normal speed without repetition or false starts. Overall, speaking in English requires mastery of various linguistic components such as pronunciation, grammar, fluency, and vocabulary, all of which are interrelated. Understanding sentence structure enables students to speak more naturally and fluently, while sufficient vocabulary helps them express ideas effectively. Williams and Burden (2003) assert that teaching strategies play a significant role in determining the success of language learning, as appropriate strategies help learners achieve optimal speaking performance.

Speaking in English is often a major challenge for EFL learners due to the lack of a supportive environment for oral practice. Effective teaching methods that can enhance speaking skills are those that involve authentic and sustained interaction. Harmer (2007) highlights the importance of giving learners opportunities to speak in various contexts and genres while providing access to conversational repair techniques. In this regard, technology—particularly digital storytelling—can serve as an effective tool to improve speaking skills by providing a structured and meaningful speaking experience. Digital storytelling (DST) is a learning method that combines digital technology with narrative elements to create more

engaging and interactive learning experiences. According to Robin (2008), digital storytelling allows learners to express their ideas and experiences through a combination of text, voice, images, and video. In language learning contexts, DST helps develop communication skills because learners are trained to organize and deliver stories in the target language.

In English learning, digital storytelling offers several benefits, including increased learning motivation, fluency, pronunciation accuracy, and vocabulary enrichment. Previous studies show that students who use digital storytelling are more confident speakers because the method allows them to record and re-record their voices until they are satisfied with the result (Sadik, 2008). The implementation of digital storytelling in English classes typically involves several stages, including story planning, recording, editing, and presenting the story in digital format. A study by Yang and Wu (2012) found that students who used digital storytelling were better at organizing ideas and showed improved speaking ability because they were actively engaged in creative and enjoyable learning. Commonly used digital storytelling applications in language education include Storybird, Book Creator, and Adobe Spark, which allow students to create multimedia-based stories that naturally enhance their speaking competence.

Furthermore, Hafner and Miller (2011) reported that integrating technology in English learning increases student engagement and provides a supportive environment for independent speaking practice. Other studies have also demonstrated the positive impact of DST on language development. For instance, Hung, Hwang, and Huang (2012) discovered that students who learned English through digital storytelling showed significantly higher speaking achievement compared to those using conventional methods. Similarly, Rahimi and Soleymani (2015) found that DST enhances students' learning motivation and confidence in speaking English. Kodriyah et al. (2025) examined the impact of using digital storytelling on students' vocabulary mastery in Indonesia. Their study revealed that the experimental group's post-test scores increased by 30%, compared to only 15% in the control group. Collectively, these findings demonstrate that the use of digital technology in language learning provides a positive effect on speaking proficiency, especially in EFL contexts.

3. RESEARCH METHODOLOGY

This study employed Classroom Action Research (CAR), consisting of four stages: planning, action, observation, and reflection. This model, developed by Kemmis and McTaggart (1988), describes action research as a continuous spiral process aimed at systematically improving teaching practices. Each cycle includes reflective processes collaboratively conducted between the researcher and classroom practitioners. The CAR

method was used to measure the effectiveness of implementing a digital storytelling application in improving elementary school students' English-speaking skills. The subjects of this study were fifth-grade elementary students who were learning English as a foreign language. The research was conducted at a public elementary school in Banjarmasin that has received an "A" accreditation and has access to digital learning facilities. Fifth graders were selected because they were considered capable of using digital media effectively, as indicated during preliminary classroom observations before the intervention. The instruments used to collect the data was speaking test, observation sheet, and the interview questions. The data obtained from qualitative and quantitative results were then analysed.

4. RESULT AND DISCUSSIONS

The use of the *Storybird* application over two learning cycles demonstrated a clear improvement in students' speaking scores between the pre-implementation and post-implementation stages. The aspects of speaking evaluated in this study included fluency, pronunciation, vocabulary, and accuracy. Before the implementation, students' average scores were as follow:

Table 1 students' average scores

Fluency	58.8
Pronunciation	60.2
Vocabulary	56.5
Accuracy	58.3

Overall, the students' speaking ability was categorized as *fair*, with their main difficulties lying in vocabulary mastery and oral fluency. In the first cycle, students' performance improved, with the total average reaching 66.0. Table 1 presents the detailed results of students' speaking scores in Cycle I. Students' speaking ability rose to the *good* category, with notable improvement in accuracy and fluency, which resulted from their engagement in storytelling activities through appealing digital media. In the second cycle, students' scores continued to increase, reaching a total average of 71.9. In Cycle 2, students' speaking ability improved significantly from an average score of 58.3 (pre-test) to 71.9 (Cycle II).

Table 2 Assessment Aspect

Assessment Aspect	Pre-Test	Post-Test Cycle I	Post-Test Cycle II	Improvement (%)
Fluency	57.8	65.3	72.5	+25.4%
Pronunciation	56.2	64.8	70.7	+25.8%
Vocabulary	59.4	67.1	72.8	+22.5%
Accuracy	60.0	68.3	71.7	+19.5%
Average Score	58.3	66.0	71.9	+23.3%

This finding demonstrates the effectiveness of the digital storytelling application (*Storybird*) in enhancing students' English-speaking skills through story-based and visually supported learning. The improvement between pre-test and post-test results can be observed clearly in Figure 1.

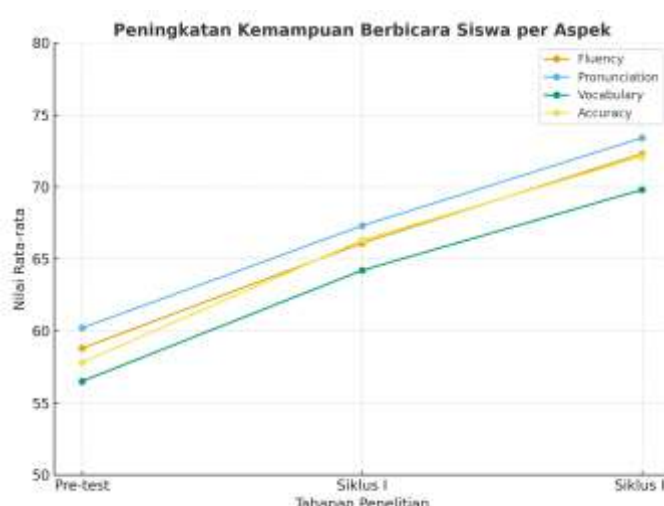


Figure 1 pre-test and post-test results

The success of this classroom action research was determined by the improvement in students' speaking ability after implementing *Storybird*. To measure success, performance indicators and learning achievement criteria (KKTP) were established as benchmarks. According to the indicators jointly determined by the researcher and the English teacher at SDN Kebun Bunga VI Banjarmasin Timur, the minimum mastery criterion (KKM) for English was set at 70. Hence, this study was considered successful if at least 80 percent of students (29 of 36) obtained an average score of ≥ 70 in the final speaking assessment (Cycle II). This benchmark follows Arikunto (2014), who asserts that classroom action research is successful when the majority of learners achieve scores above the school's minimum mastery threshold. Furthermore, under the current curriculum's KKTP, learning success is assessed not only by minimum scores but also by comprehensive indicators that include (1) material complexity, (2) institutional support capacity, and (3) students' initial ability or *intake*. This ensures that

learning outcomes reflect conceptual understanding, competence development, and learner interest rather than rote completion of material.

Overall, the findings confirmed that implementing digital storytelling:

1. Improved students' speaking performance in fluency, pronunciation, vocabulary, accuracy, and confidence.
2. Increased students' motivation and active engagement in English learning.
3. Created a communicative, collaborative, and enjoyable classroom environment that helped students understand language use in context.

Based on the established success criteria (≥ 70 for 80 percent of students), this research was declared successful, as 86 percent of students reached the targeted proficiency level by the end of Cycle II.

Based on the results from interviews with the English teacher and several students, supported by classroom observations, revealed a number of supporting and challenging factors that influenced the implementation of digital storytelling using *Storybird* in English learning at the elementary level. The first major supporting factor was students' motivation and enthusiasm. Learners showed great interest in using *Storybird* because of its visually engaging interface and the opportunity to create their own digital stories. The teacher observed that students became more focused, active, and eager to participate in class activities. They were more involved in discussions, worked cooperatively in groups, and demonstrated greater willingness to speak English—even when pronunciation or grammar errors occurred. This finding is consistent with Hava (2021), who stated that digital storytelling enhances students' motivation and participation by integrating visual, narrative, and technological elements that sustain attention.

Another supporting factor was active teacher involvement throughout the process. The teacher served not only as an instructor but also as a facilitator, guide, and motivator. The teacher helped students navigate the application, select story themes, and provided feedback on their work. This collaborative practice between teacher and researcher reflects the principles of Participatory Action Research (PAR) (Wishnubrata & Damara, 2023), in which teachers are directly involved in every stage of the learning cycle to solve classroom challenges reflectively and sustainably. A further supporting factor was the availability of technology and school infrastructure. The research site offered stable internet access and sufficient computers for group use. Teachers and students were already familiar with digital tools, which facilitated smooth integration of *Storybird*. Technological readiness was crucial, as Belda-Medina and

Goddard (2024) emphasize that successful digital storytelling depends heavily on adequate infrastructure and digital literacy among teachers and students.

Despite the success, several challenges were identified. The most prominent was limited instructional time for English lessons. The short duration of each session made it difficult to complete all phases of the storytelling project—from planning and composing to oral presentation. The teacher noted that students needed additional time to practice pronunciation and upload their stories to the platform, supporting Creswell's (2014) observation that project-based learning in primary education often faces time constraints. Another inhibiting factor was students limited English proficiency. Some students struggled to select appropriate vocabulary or form grammatically correct sentences. Others were anxious about making mistakes when speaking in front of their peers, which affected their fluency and confidence. These linguistic limitations echo Brown's (2004) view that limited language competence is a primary obstacle to developing oral communication among beginning learners. Variations in digital literacy also posed difficulties. While most students were comfortable using technology, a few required guidance in managing *Storybird* features such as image insertion, text formatting, and saving projects. Occasional internet disruptions further interrupted classroom flow. Overall, the success of implementing digital storytelling in elementary English learning depended on both internal and external factors. Internal factors included students' motivation, confidence, and collaboration skills, while external factors involved teacher facilitation, technological infrastructure, and effective time management. When these supporting factors are optimized and the barriers minimized, digital storytelling can become an innovative and effective instructional medium to enhance English-speaking skills while fostering creativity and digital literacy among young learners.

The results of this research indicate that implementing digital storytelling applications in English learning has a significant positive impact on students' speaking ability. The increase in test scores demonstrates measurable improvement in fluency, pronunciation, vocabulary, and confidence. These findings are consistent with Hava (2021) and Rahimi & Soleymani (2015), who reported that digital storytelling fosters students' creativity, motivation, and language performance. Moreover, the *Storybird* application provided students with an authentic context for communication, allowing them to use English meaningfully while developing digital literacy skills. From a pedagogical perspective, the success of this method aligns with the constructivist learning theory, which emphasizes active student engagement and knowledge construction through meaningful experiences. Digital storytelling encourages students to become producers of language rather than passive recipients of instruction. In

conclusion, this study confirms that digital storytelling is an effective and enjoyable learning medium that can enhance English-speaking skills and foster 21st-century learning competencies such as creativity, collaboration, communication, and critical thinking.

5. CONCLUSION

The findings of this study indicate that the implementation of the digital storytelling application *Storybird* effectively improved the English-speaking ability of fifth-grade students at SDN Kebun Bunga VI, Banjarmasin. The students showed significant progress in fluency, pronunciation, vocabulary, and accuracy after participating in two learning cycles. The use of *Storybird* not only enhanced students' speaking performance but also increased their enthusiasm and motivation to learn English. Learning activities became more interactive and enjoyable, as students could express creativity and collaborate with peers while practicing oral communication.

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