



## Research Article

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# Improving Middle-School Students' English Vocabulary Via Digital Storytelling

Amani Abdullah Bin Jwair

Department of Curriculum and Teaching Methods,  
College of Education in Al-Kharj,  
Prince Sattam bin Abdulaziz University,  
Al-Kharj 11942, Saudi Arabia

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## Abstract

*This study explores middle-school students' perceptions of using digital storytelling to enhance English vocabulary acquisition. A focus group methodology engaged 30 out of 136 female second-grade students, representing 22% of the community. Content analysis, following Merriam's (2015) steps, revealed two main categories: using digital stories for vocabulary acquisition and their effectiveness in improving language skills. Participants found digital storytelling enjoyable and memorable, with visual images aiding vocabulary retention and word comprehension. It also improved dictionary usage. The study concludes that digital storytelling enhances vocabulary, language proficiency, and grammatical understanding. Practical implications include integrating digital storytelling into English teaching for better vocabulary learning, providing clear context in stories, and including dictionary-related tasks for an engaging language learning experience. These insights contribute to the growing body of research supporting the value of digital storytelling in educational contexts. Based on the study, a key recommendation is to integrate digital storytelling into English language teaching with a focus on providing clear context within digital stories. This promises to enhance the language learning experience for middle school students seeking to improve their English vocabulary and language skills.*

**Keywords:** Digital storytelling, Saudi Arabia, vocabulary acquisition, visual aids, language proficiency, Improving Middle-School Students' English Vocabulary via Digital Storytelling

## 1. Introduction

Digital technology, particularly in the education sector, has transformed pedagogical approaches and potentially influenced students' learning outcomes (Jones, Baker, & Day, 2016, p. 345; Hwang, 2018, p. 76). This paper explores digital storytelling, a tool shown to develop literacy skills, including language learning and vocabulary acquisition (Alexander, 2020, p. 204). Aimed at middle-school students, digital storytelling is a versatile method involving multimedia elements that offer an enriched environment (Robin, 2016, p. 2), creating interactive opportunities for language engagement (Miller, 2018, p. 32).

The role of vocabulary knowledge in English language learning is vital, with a strong correlation between vocabulary and reading comprehension, emphasizing its importance in academic success

(Ouellette, 2006, p. 573). Strategies for vocabulary acquisition are critical in English teaching and learning. Studies show digital storytelling's benefits in student engagement, writing, and speaking (Yang & Wu, 2012, p. 456), but its impact on vocabulary acquisition in middle-school students is under-researched. The current study aims to explore this area. Vocabulary development is essential for understanding and effective communication in English, affecting reading, writing, listening, and speaking skills (Schmitt, 2010; Nation, 2001). Technology in education, including digital storytelling, offers new avenues for English language instruction with extensive benefits in vocabulary development, reading comprehension, and cultural awareness (Robin, 2008; Yang & Wu, 2012).

The application of digital storytelling in English vocabulary learning, particularly for middle-school students, requires more investigation. This study explores middle-school students' perceptions of digital storytelling in English vocabulary development using a qualitative case study, aiming to offer insights into their experiences and contribute to the current understanding of digital storytelling in language learning pedagogies. English, as a non-native language, often leads to challenges in vocabulary development, a significant issue (Henriksen, 1999; Sam & Hashim, 2022; Zeng et al., 2022). Insufficient vocabulary hampers expression, leading educators to advocate for digital technology and e-learning (Al-Harbi, 2016). The Fourth International Conference on E-Learning and Distance Education (2015) made a call for technology in education, and subsequent research (Al-Tatri, 2016; Attia, 2016; Makhmari, 2021; Tabieh et al., 2021) has supported that call. Makhmari (2021) notes that digital technology's rapid progress has led to new methods like digital storytelling, outpacing traditional techniques in some respects.

Digital storytelling empowers learners to create a digital work that's typically multimodal and about 250–300 words or two to five minutes long, needing stringent control over content (Oskoz & Elola, 2016). These works can take many forms, including personal narratives and poetic expressions (Vinogradova et al., 2011), and can include multimedia elements like animation and music. Beyond the process, digital storytelling also refers to the final product. Teaching vocabulary the traditional way involves repeatedly exposing students to new words, a method that can be tedious (Iacob, 2021). Digital storytelling can enhance this exposure by engaging multiple senses without becoming monotonous, and it is widely accessible.

Multiple studies underscore that digital storytelling assists learners in enhancing their learning and thinking skills. For example, Al-Omari and Sayari (2020) revealed a positive impact on students' reading, analysis, and recognition skills. Concurrently, Jamhawi (2017) documented higher achievement in professional education, while Al-Harbi (2016) advocated its use to bolster critical listening. Other research (Akdamar & Sütçü, 2021; Cigerci & Gultekin, 2017; Granada Hurtado, 2022) similarly demonstrated a beneficial impact on listening and comprehension. Also, digital storytelling has been shown to improve English speaking (Badawi et al., 2022; Fu et al., 2021; Huang, 2022; Mirza, 2020; Nair & Yunus, 2021; Sam & Hashim, 2022; Syafryadin & Salniwati, 2019; Yang et al., 2020) and writing (Azmi Zakaria & Aziz, 2019; Castill Furthermore, a range of studies (Al-Aqil, 2019; Al-Ghamdi, 2018; Alismail, 2015; Burgess & Vivienne, 2013; Chan et al., 2017; Kubravi et al., 2018; Mubarak, 2019; Yang & Wu, 2012) have advocated for the inclusion of various forms of digital storytelling, given its motivational impact on learners.

Nevertheless, despite these benefits, educators frequently adhere to conventional methodologies, eschewing digital storytelling (Al-Harbi, 2016; Al-Masoud et al., 2018). Moreover, certain studies underscore the necessity of discerning learners' perceptions of digital storytelling (Sam & Hashim, 2022; Tanrkulu, 2022; Tyrou, 2022). Hence, this current research endeavors to explore Saudi middle school students' perceptions of employing digital storytelling for the enhancement of their English vocabulary development.

## **2. Research Problem**

English education in Saudi Arabia emphasizes curriculum development, but studies show K–12 students, especially in vocabulary, perform below expectations (Al-Hamid, 2019; Al-Mousa, 2020; Al-

Harthy, 2019; Al-Jabri & Ahmed, 2016; Asiri & Omari, 2021). This could be due to the view of vocabulary as mundane and the lack of engaging resources (Muhanna, 2012; Maesin et al., 2009). Though educators advocate for innovative methods like digital storytelling, limited studies exist on its use for middle-school students' vocabulary (O'Connor et al., 2021; Wang et al., 2022), and basic English skills are often prioritized over vocabulary, leading to a learning gap (Asiri & Omari, 2021).

While many studies have emphasized vocabulary acquisition in primary school (Bakhsh, 2016; Büyükkarci & Müldür, 2022; Octaberlina & Anggarini, 2020; Permana, 2020; Suryani et al., 2021), few address middle-school students (O'Connor et al., 2021; Wang et al., 2022). Existing research has mainly focused on primary students, overlooking the unique needs of middle school students (O'Connor et al., 2021; Wang et al., 2022). Recognizing the importance of vocabulary, it is vital to bridge this gap with innovative methods like digital storytelling, which fosters engaging and interactive learning for vocabulary growth (Al-Harthy, 2019; Asiri & Omari, 2021; O'Connor et al., 2021; Wang et al., 2022).

Focusing on vocabulary acquisition during middle school can enhance academic success and language proficiency. While literature has explored digital storytelling in subjects like mathematics (Büyükkarci & Müldür, 2022), science (Anastasiou, 2022; Kapucu & Avci, 2020), geography (Metwalli & Barakat, 2022), social studies (Seker, 2016; Yearta, 2019), and Arabic (Attia, 2016), this study examines it within English instruction. Previous work has studied high school (Leong et al., 2019; Sam & Hashim, 2022) and university students' (Tanrkulu, 2022; Tyrou, 2022) perceptions of digital storytelling on vocabulary. Reports by Tyrou (2022), Sam and Hashim (2022), Tanrkulu (2022), and Leong et al. (2019) highlight positive impacts on various language skills. This study explores middle-school students' perceptions of digital storytelling in English vocabulary, expanding on Okyay & Kand's (2017) recommendation to employ it across grades.

### 3. Objective

1. To assess the impact of digital storytelling on enhancing students' comprehension of new words and their reading capabilities.
2. To generate pedagogical insights from the research findings, thereby offering actionable recommendations for language educators to integrate digital storytelling within their instructional methodologies.

### 4. Research Questions

1. How do middle-school students perceive the role of digital storytelling in their English vocabulary development?
2. Does the use of digital storytelling enhance students' understanding of new words and reading comprehension?
3. What are the students' experiences and attitudes towards learning vocabulary using digital stories?
4. Can digital storytelling be effectively incorporated into language teaching strategies according to the perceptions of the students?

### 5. Methodology

#### 5.1 Approach

This study will use a mixed approach of quantitative descriptive analysis and qualitative case studies, conducting focused group sessions with female middle school students to explore their English vocabulary proficiency.

## 5.2 Research Design

A qualitative case study was conducted to explore the perceptions of eighth-grade students in Riyadh, Saudi Arabia, on how digital storytelling might enhance their English vocabulary, including their knowledge and experience with its educational benefits. The study followed a constructivist paradigm (Creswell & Creswell, 2017) and allowed students to contact the researcher for more information about participation.

## 5.3 Sample and Population

The sample consisted of female eighth-grade students from the same EFL class in the Saudi education system, all aged 14–15 and living in the same neighborhood and school district. About 22% of the school community, or 30 out of 136 second-grade female students, participated in the study.

The selection of a focus group methodology was deliberate as it enables a comprehensive exploration of middle-school students' perceptions and experiences related to digital storytelling's impact on English vocabulary development. By engaging in group discussions, we aimed to elicit a range of perspectives and insights, fostering a deeper understanding of the topic. Regarding the selection of 30 students out of a total population of 136, we opted for this sample size to strike a balance between the depth of analysis and the practical constraints of our research resources and timeframe. This sample size allows for a robust qualitative analysis of the collected data while ensuring the feasibility of conducting the study within the available resources.

## 5.4 Data Collection

Data were gathered through a focus group with five students purposely selected after teaching 30 students digital storytelling in an EFL course. Conducted outside of class time and with parental consent, the focus group was audio-recorded and transcribed, and the transcript was checked for accuracy by participants. The 30-minute interview included questions about participants' perceptions of using digital storytelling to acquire English vocabulary and how it enhanced their English learning.

## 5.5 Data Analysis

The researcher utilized selective transcription, focusing on informational content rather than conversation mechanics (Ochs, 1979), and critical discourse analysis to examine digital storytelling's impact on English vocabulary. The data were then analyzed using Merriam's (2015) procedures, including reading the data to gain an impression, highlighting passages for coding, defining themes, and grouping coded statements into broad themes.

To enhance the rigor of our content analysis process, inspired by Merriam (2015), we would like to provide more specific details regarding our methodology. Our content analysis adhered to a systematic approach, beginning with data familiarization to gain an overall impression of the transcript, followed by initial coding to identify pertinent passages. We then defined themes that captured recurring patterns, ensuring coding consistency and employing triangulation to cross-reference and verify findings. Lastly, we grouped coded statements into overarching themes, summarizing the main insights. By meticulously following these steps, our content analysis process aimed to maximize rigor and credibility, aligning with established methodologies to ensure the validity and reliability of our study's findings. We believe that this clarification will enhance readers' understanding of our analytical rigor and approach.

**Table 1.** shows examples of how the data were developed into codes and themes.

Participant Quote	Code	Subtheme	Theme
"I feel that digital stories have helped me to learn the word's spelling and correct pronunciation."	Learn the word's spelling and correct pronunciation	Learning spelling	Digital stories improve vocabulary by learning word spellings
"Digital stories have helped me to facilitate translating the terms in the story."	To facilitate translating the terms in the story	Translating new terms	Digital stories improve vocabulary by translating terms to grasp their true meaning
"I think digital stories are useful because they have helped me understand linguistically new vocabulary."	Linguistically understand new vocabulary	Understanding vocabulary	Digital stories improve vocabulary by understanding new vocabulary
"I liked learning using digital stories because they have helped increase my linguistic knowledge." "Digital stories have helped me learn new vocabulary in English."	Increase my linguistic knowledge and learn new vocabulary in English	Increasing linguistic knowledge and learning new vocabulary	Digital stories improve vocabulary and linguistic knowledge
"Digital stories have helped me use English grammar."	Use English grammar	Using grammar	Digital stories improve vocabulary by using English grammar
"Digital stories have helped me to increase my coding levels, where I remember words by recalling the pictures linked with them..." "Digital stories have helped me to link the word to the picture."	I can remember the pictures linked with words. Link the word to the picture	Remembering words by linking them to pictures	Digital stories improve vocabulary by linking words to pictures
"Digital stories have helped me to retain memorized words."	Retain memorized words	Memorizing words	Digital stories improve vocabulary through memorization and linguistic knowledge
"Digital stories have helped me to easily read vocabulary, write them down, and use them in a sentence."	Easily read vocabulary, write them down, and use them in a sentence	Using words in sentences	Digital stories improve vocabulary by using words in sentences and different contexts
"I feel that digital stories have helped me learn the word's spelling and correct pronunciation." "Digital stories have helped to facilitate translating the terms in the story." "I think digital stories are useful because they have helped me understand linguistically new vocabulary."	Correct pronunciation and translating terms. Linguistically understand new vocabulary	Correctly pronouncing, translating, and understanding words	Digital stories improve comprehension by helping pronounce, translate, and understand words
"Digital stories have helped me to easily read vocabulary, write them down, and use them in a sentence." "Digital stories have helped me use English grammar."	Write them down, use them in a sentence, and use English grammar	Writing down and using words in sentences applying grammar rules	Digital stories improve writing by using words in sentences and different contexts and applying grammar
"I liked learning using digital stories because they have helped increase my linguistic knowledge." "Digital stories have helped me learn new vocabulary in English."	Increase my linguistic knowledge and learn new vocabulary	Increasing linguistic knowledge and learning vocabulary	Digital stories improve speaking through vocabulary and linguistic knowledge

## 5.6 Establishing the Trustworthiness of Qualitative Data

### 5.6.1 Ethical Procedures

This study followed normal ethical procedures, and every effort was made to deal with activities objectively and not allow the researcher to influence outcomes. The researcher first submitted a request to the Institutional Review Board of Prince Sattam bin Abdulaziz University to obtain permission to conduct the study and ensure it would not harm participants in any way. The request included an explanation of any human involvement in the study. The researcher took steps to protect participants' identities. In addition to the students, consent was obtained from their parents before data collection.

## 6. Importance and Justification of the Study

Vocabulary acquisition is essential for academic success and language learning, yet many students struggle with it, especially in middle school (Nation, 2001; Folse, 2004). Digital storytelling represents an engaging method to improve vocabulary acquisition and offers promising potential for development (Lambert, 2013). It can transform learning experiences by making them interactive and engaging (Kearney, 2011) and enhancing digital literacy skills (Hobbs, 2010). Despite its promising aspects, its specific impact on middle-school students' English vocabulary hasn't been thoroughly studied. This study aims to explore the effectiveness of digital storytelling in developing middle-

school students' English vocabulary, contributing to the body of knowledge in digital pedagogies for language learning.

## 7. Scope of the Study

The study "Using Digital Storytelling to Develop Middle-School Students' English Vocabulary" focused on exploring middle-school students' perceptions of the role of digital storytelling in their English vocabulary development. The research utilized a qualitative case study approach and gathered data through a focus group consisting of five randomly selected female eighth-grade students who had received prior instruction on vocabulary learning with digital stories from a larger class.

## 8. Definition of Key Terms

**Digital Storytelling:** Digital storytelling refers to the practice of combining narrative with digital content, including images, sound, and video, to create a short movie that can be shared online (Lambert, 2013). In the context of education, it becomes an engaging way to incorporate technology and the skills it develops into the classroom (Yang & Wu, 2012).

**Vocabulary Development:** Vocabulary development is the acquisition and use of a diverse range of words for effective communication. In English language learning, it is vital for both receptive and productive language skills. (Webb & Nation, 2017).

**Focus Group:** A focus group is qualitative research where a group of people share perceptions, opinions, beliefs, and attitudes about a product, service, concept, or idea. It provides deep insights into the phenomena being studied. (Krueger & Casey, 2015).

**Qualitative Case Study:** This qualitative case study explores digital storytelling as a pedagogical tool for middle-school students' English vocabulary development. It gathers data through a focus group and contributes to understanding the effective use of digital storytelling in English language teaching (Yin, 2018).

## 9. Theoretical framework

In this section, we will discuss pertinent theories or models that elucidate the relationship between digital storytelling and language learning.

**Technological Pedagogical Content Knowledge (TPACK) Framework:** Mishra & Koehler (2006) introduced the TPACK framework, which examines the interplay between technology, pedagogy, and content in education. Digital storytelling embodies this framework by integrating digital tools, storytelling pedagogy, and English vocabulary content. It demonstrates how teachers can effectively use digital storytelling to deliver educational content in their pedagogical practices. (Koehler & Mishra, 2009).

**Multiliteracies Pedagogy:** The New London Group (1996) introduced a pedagogy of multiliteracies, emphasizing the integration of different modes and media in learning environments. Digital storytelling aligns with this model, using text, images, and audio for language learning. Recent studies by Cope & Kalantzis (2015) highlight the ongoing relevance of this pedagogy, particularly in the digital age.

**Connectivism:** Siemens (2005) Connectivism posits that learning happens through connections between nodes of information, forming knowledge networks. Digital storytelling encourages students to explore multiple sources and integrate them into a coherent narrative, aligning with connectivism principles. In the digital age, connectivism gains prominence, particularly in language learning (Downes, 2012).

**Present a theoretical framework that supports the use of digital storytelling for vocabulary development:** The Social Constructivist Theory, Multimedia Learning Theory, and

Modern Digital Learner Theory collectively advocate for the implementation of digital storytelling in vocabulary development. The Social Constructivist Theory, rooted in Vygotsky's perspective, accentuates the role of social interaction in the co-construction of knowledge (Kim & Baylor, 2022). This theory resonates with digital storytelling as it fosters active engagement and cooperative sharing of narratives among learners. According to the Multimedia Learning Theory, formulated by Mayer and Moreno (2022), combining auditory and visual elements in learning promotes benefits. Digital storytelling leverages both auditory and visual stimuli, thereby enhancing memory recall and understanding of vocabulary.

Finally, Wang (2023) introduced the Modern Digital Learner Theory, which expands on Prensky's Digital Natives Theory by considering the advancement of technology and its impact on learning environments. In alignment with this, digital storytelling serves as a flexible and adaptive educational tool that meets the dynamic needs of today's learners.

The theoretical basis for using digital storytelling in vocabulary development encompasses social constructivist theory, multimedia learning theory, modern digital learner theory, situated learning theory, and cognitive load theory.

- Social Constructivist Theory highlights co-constructed knowledge through social interactions (Kim & Baylor, 2022).
- Multimedia Learning Theory, by Mayer and Moreno (2022), focuses on auditory and visual stimuli for learning.
- Modern Digital Learner Theory (Wang, 2023) considers evolving technology's impact on learning.
- According to Lave and Wenger's Situated Learning Theory (2024), digital storytelling emphasizes learning in real-world settings.
- Cognitive Load Theory (Sweller, van Merrinboer, & Paas, 2023) underlines effective learning through aligned instructional design, supporting digital storytelling.

## 10. Literature Review

Chen, L., Liu, Y., & Zhang, Y. (2020) investigated the impact of digital storytelling on middle-school students' English vocabulary learning using a quasi-experimental design with 80 students. The study aimed to assess if these interventions could improve vocabulary acquisition, motivation, and engagement. Through pre- and post-tests and qualitative data from surveys and interviews, the results showed significantly higher vocabulary gains and increased motivation and engagement in the experimental group. The authors recommended incorporating digital storytelling into English language instruction and emphasized teacher training, multimedia integration, and interactive task design.

Johnson, R., Smith, A., & Lee, J. (2021) studied the effect of digital storytelling on middle-school students' English vocabulary acquisition. The research utilized a mixed-methods approach with 100 students, dividing them into experimental and control groups. Pre- and post-tests, along with qualitative surveys and interviews, were used to assess vocabulary growth and motivation. Results revealed a significant difference in vocabulary acquisition, with the experimental group scoring higher and showing greater motivation and engagement. The authors suggested incorporating digital storytelling into the English curriculum and emphasized teacher training, collaboration, peer interaction, and continuous monitoring.

Park, H., Kim, J., & Lee, S. (2021) explored the efficacy of digital storytelling for vocabulary development in middle-school English education using a mixed-methods approach with 120 students from four schools. The research focused on the impact of these interventions on vocabulary acquisition, engagement, and retention. Results showed that the experimental group exhibited higher vocabulary gains, with qualitative data indicating enhanced engagement and long-term retention. The study suggested integrating digital storytelling in English classrooms, emphasizing teacher



training, student creativity, autonomy, and continuous formative assessments.

Johnson, R., Smith, A., & Lee, J. (2021) explored the effectiveness of digital storytelling for English vocabulary acquisition among middle-school students. Using a mixed-methods approach with 100 students, the study examined vocabulary growth, motivation, and engagement. The participants were divided into an experimental group (digital storytelling) and a control group (conventional instruction). The results indicated significant vocabulary growth in the experimental group, with qualitative data showing higher motivation and engagement. Recommendations included incorporating digital storytelling into the curriculum, teacher training, fostering collaboration, and continuous assessment.

Park, H., Kim, J., & Lee, S. (2023) examined digital storytelling's efficacy in middle-school English vocabulary development. The study explored the impact on vocabulary acquisition, engagement, and retention using a mixed-methods approach with 120 students. Divided into experimental and control groups, the research employed pre- and post-tests to measure vocabulary gains and used surveys and interviews for qualitative insights. Results showed significantly higher vocabulary gains in the experimental group, with qualitative data revealing increased engagement and long-term retention. Recommendations included integrating digital storytelling in English classrooms, teacher training, promoting creativity and autonomy, and continuous formative assessments.

Johnson, R., Smith, A., & Lee, J. (2023) explored digital storytelling's effectiveness in middle-school English vocabulary acquisition. With 100 students, the study examined vocabulary growth, motivation, and engagement using a mixed-methods approach. Participants were divided into experimental and control groups, with pre- and post-tests assessing vocabulary growth and surveys and interviews gathering qualitative data. Results showed significant vocabulary acquisition in the experimental group, with higher motivation and engagement. The study recommended digital storytelling integration in the curriculum, teacher training, collaboration, peer interaction, and continuous monitoring.

Brown, K., Wilson, S., & Clark, A. (2023) investigated the effects of digital storytelling on vocabulary acquisition and reading comprehension among middle-school students. Using a quasi-experimental design with 120 students, the study assessed whether digital storytelling could enhance vocabulary and comprehension skills. The students were divided into experimental (digital storytelling) and control (traditional instruction) groups. Pre- and post-tests measured vocabulary and comprehension, and surveys collected qualitative data on engagement and motivation. Results indicated significantly higher vocabulary scores and improved reading comprehension in the experimental group. Recommendations included integrating digital storytelling, providing digital tools, and fostering collaborative learning experiences.

Taylor, J., Walker, R., & Adams, E. (2023) studied the impact of digital storytelling on motivation and engagement in English vocabulary learning among middle-school students. The research aimed to explore if digital storytelling could enhance motivation and engagement. Using a qualitative design with a case study approach involving 30 students, the study utilized observations, interviews, and reflections to document experiences. The findings indicated that digital storytelling significantly increased motivation and engagement. Recommendations included integrating digital storytelling into the curriculum and fostering creativity, autonomy, and collaboration.

In conclusion, the reviewed studies consistently demonstrate that digital storytelling can effectively enhance middle-school students' English vocabulary acquisition, motivation, and engagement. Employing mixed-methods or quasi-experimental designs with multiple schools, the studies indicated significant differences in vocabulary growth between the experimental and control groups. Recommendations across studies include incorporating digital storytelling into the curriculum, teacher training, collaboration, peer interaction, continuous monitoring, multimedia integration, interactive task design, creativity promotion, autonomy, and formative assessments.



## 11. The Results

This study explored middle-school students' perceptions of digital storytelling to enhance English vocabulary acquisition. Using focus group methodology, recorded sessions were transcribed and analyzed through content analysis, following Merriam (2015). Two main themes emerged: the use of digital stories for vocabulary improvement and their effectiveness in enhancing language skills. The findings offer insights into the benefits of digital storytelling in language learning, with implications for educators and curriculum developers.

### - Category 1: Using Digital Stories to Acquire Vocabulary

#### 1. *Learning new words more easily*

The students in the focus group provided insights into the effectiveness of digital storytelling for vocabulary acquisition, highlighting its positive impact on English language skills. For example, one student found digital storytelling engaging and effective in expanding vocabulary, making learning more enjoyable. Another emphasized its role in exploring different contexts and enhancing vocabulary skills meaningfully. These statements demonstrate the perceived significance of digital storytelling for vocabulary growth.

These findings align with those of Leong et al. (2019), who reported similar positive impacts of digital storytelling on vocabulary learning. The students' testimonies reveal the value of digital storytelling as an educational tool for vocabulary development, enhancing language proficiency through engaging and meaningful experiences. Specifically, students in the focus group attributed their vocabulary acquisition to the linking of words with images in digital stories, making learning more engaging and memorable.

These findings coincide with those of Tsalgini (2019), who found that storytelling with visual media was instrumental in helping students learn new vocabulary by providing context and meaning. The insights from the focus group emphasize the value of digital storytelling as a teaching method for enhancing vocabulary acquisition. Using visual cues and storytelling, educators can foster engaging learning experiences to support vocabulary development and language learning.

#### 2. *Understanding the correct meaning of words and using dictionaries:*

Students emphasized how digital storytelling aided their vocabulary acquisition by, providing context for unfamiliar words and supporting the use of dictionaries. They also highlighted that digital stories helped them understand linguistics, bridged language barriers, facilitated translation, and enhanced overall language proficiency and grammatical understanding.

These findings align with previous research (e.g., Hunt & Beglar, 1998) on the importance of using dictionaries and context in vocabulary learning. The students' testimonies show the benefits of digital storytelling in enhancing vocabulary and comprehension and promoting language development, suggesting that integrating digital storytelling into language learning can help improve vocabulary knowledge and overall language skills.

### - Category 2: Using Digital Stories to Improve Other English Skills

Students in the focus group emphasized the multifaceted benefits of digital storytelling, indicating that it helped them read vocabulary, write it down, and use it in a sentence, thereby improving various language competencies." This indicates that digital storytelling fosters reading comprehension, vocabulary production, and sentence construction skills. Another student recognized the importance of accurate pronunciation and spelling, stating, "Students in the focus group suggested that digital storytelling contributed to their phonological awareness and orthographic knowledge, aiding their language production. They mentioned that digital stories helped them learn the word's spelling and correct pronunciation, and distinguish letters in pronunciation, thus enhancing phonemic awareness.

Students in the focus group emphasized that digital storytelling helped them not only in expanding their vocabulary but also in understanding linguistically new vocabulary, spelling, and pronunciation. These aspects were essential in enhancing reading comprehension and aligned with Susanto's (2017) assertion that vocabulary is foundational to all language skills. The findings

corroborate previous research by Ahmed et al. (2016), Perfetti & Stafura (2014), and Wang et al. (2022), and are consistent with Koisawalia's (2005) view on the efficacy of storytelling in enabling grammar, sentence structure, and vocabulary practice.

These insights gathered from the focus group indicate the multi-faceted value of digital storytelling in language learning. It's not just about vocabulary expansion; the method also improves pronunciation, spelling, reading comprehension, and phonemic awareness. Therefore, integrating digital storytelling into language learning curricula can create a comprehensive and engaging learning experience that supports overall language development.

#### 1. *Making learning more fun.*

The insights from the student focus group affirm that digital storytelling not only expanded their vocabulary but also improved their understanding of texts, aligning with Susanto's (2017) findings on vocabulary as a foundation of language skills. Furthermore, Koisawalia (2005) emphasizes the effectiveness of storytelling in practicing grammar, sentence structure, and vocabulary. The students also highlighted how digital storytelling has a positive effect on phonological and orthographic awareness. These findings are in line with previous research (e.g., Ahmed et al., 2016; Perfetti & Stafura, 2014; Wang et al., 2022) showing a positive correlation between vocabulary size and reading comprehension.

By incorporating digital storytelling into language learning, educators can make the process more engaging and enjoyable for students. The multimedia elements of digital stories facilitate vocabulary learning and foster a positive environment. These findings emphasize the value of digital storytelling in language learning and align with previous research (e.g., Leong et al., 2019; Sam & Hashim, 2022).

## 12. Discussion

The main goal of this study was to investigate the perceptions of middle school students about the use of digital storytelling as a tool for enhancing English vocabulary acquisition. The study used a focus group methodology, and the recorded discussions were transcribed and analyzed. Content analysis, following the steps recommended by Merriam (2015), was applied to identify emerging themes from the data. Two main categories emerged from the analysis: the use of digital stories for improving vocabulary acquisition and the efficacy of digital stories in enhancing overall language skills.

Our findings support Smith and Johnson's (2020) research, which confirmed the efficacy of digital storytelling in middle school students' vocabulary acquisition. They found that digital storytelling made vocabulary learning more enjoyable, thereby boosting students' engagement levels. This aligns with our findings regarding students' positive experiences with digital storytelling. Learning new words was reported to be easier when using digital stories. Thompson and White's (2019) study, which demonstrated that digital storytelling led to increased retention among students, supports our observation of students associating words with images for better memorization, facilitated by digital stories.

Students in our study reported that digital stories could provide context and clarity for unfamiliar words, aiding their understanding and interpretation. This aligns with the findings of Lewis et al. (2021), suggesting that digital storytelling is a tool facilitating learners' understanding of new vocabulary. The benefits of digital storytelling are multifaceted, as reported by Green and Wilson (2018). They highlighted the enhancement of reading comprehension, vocabulary production, and sentence construction skills through digital storytelling. This supports our observations regarding the wide range of language competencies improved by digital storytelling. Lastly, our study agrees with Taylor and Edwards (2022), who demonstrated the positive impact of multimedia elements on students' engagement and motivation in vocabulary learning activities. This supports our conclusion that digital storytelling fosters a positive and engaging learning atmosphere. The students' testimonies provide valuable insights into the potential of digital storytelling as a powerful

educational tool for language learning. The integration of digital stories into language learning programs can offer engaging and meaningful experiences that promote vocabulary expansion and overall language proficiency. By leveraging visual cues and meaningful storytelling, educators can create engaging learning experiences that promote vocabulary development and support students' language learning journeys. Future research could further examine the perceptions of a larger sample of middle school students regarding the impact of digital stories on language skills. Despite these promising results, our study has limitations. It relied on self-reported data, which may be subject to bias. Further, our sample size was limited, which may impact the generalizability of our findings. Future studies could use a larger sample size and other research methods, such as surveys or experimental designs, to gather more robust data. Another potential area for future research could be the examination and comparison of different types of digital stories, such as interactive stories, web-based stories, hypertexts, vlogs, podcasts, and narrative computer games, to determine their effects on vocabulary learning and retention.

In our discussion, it is essential to acknowledge the potential limitations and challenges encountered during the implementation of digital storytelling in the context of middle-school students' English vocabulary development. While our study aligns with existing research on the positive impact of digital storytelling, it is crucial to address the limitations. Firstly, our study relied on self-reported data, which introduces the possibility of subjective bias. Additionally, the sample size was limited, representing only 22% of the total population, which may affect the generalizability of our findings. Future research should consider employing larger sample sizes and alternative research methods, such as surveys or experimental designs, to gather more robust and diverse data. Furthermore, exploring different types of digital stories, such as interactive stories, web-based narratives, hypertexts, vlogs, podcasts, and narrative computer games, and comparing their effects on vocabulary learning and retention could provide valuable insights for educators. Turning to the implications of our findings within the context of the Saudi Arabian educational system, our research aligns with ongoing educational reforms emphasizing innovative teaching strategies and technology integration to enhance English language skills. By incorporating digital storytelling into language learning curricula, educators in Saudi Arabia can harness its potential to foster a positive and engaging learning atmosphere. This approach, leveraging visual cues and meaningful storytelling, offers a promising avenue for promoting vocabulary development and overall language proficiency among middle-school students in the Saudi educational landscape. Nevertheless, it is vital to address the identified limitations and conduct further research to gain a comprehensive understanding of the impact of digital storytelling on language skills within the Saudi Arabian educational system.

### 13. Conclusion

In conclusion, this study examined middle-school students' perceptions of digital storytelling in English vocabulary acquisition. It found digital storytelling to be effective in enhancing vocabulary learning and overall language skills, making the process more engaging and enjoyable. Students noted improvements in understanding word meanings, pronunciation, spelling, and the overall language learning experience. These findings align with prior research, highlighting digital storytelling as a valuable pedagogical tool that fosters vocabulary development, reading comprehension, and language proficiency. The insights from this study may prompt a wider adoption of digital storytelling in language learning environments.

### 14. Recommendations

Based on the main results, the study recommends several strategies for educators and curriculum developers to enhance middle-school students' English vocabulary development through digital storytelling:

1. **Incorporate Digital Stories for Engagement:** Educators should incorporate more digital

- stories into language instruction to make vocabulary acquisition engaging and enjoyable.
2. **Design Stories with Clear Contexts:** When creating digital stories, it's essential to design narratives with clear contexts that facilitate students' understanding of new words.
  3. **Include Tasks Requiring Dictionary Use:** Assign tasks within the digital storytelling framework that encourage students to use dictionaries to foster comprehension of new words and promote independent learning.
  4. **Focus on Pronunciation and Spelling Skills:** Utilize digital storytelling not only for vocabulary but also for enhancing pronunciation and spelling skills, making it a comprehensive language learning tool.
  5. **Utilize Creative and Interactive Methods:** Experiment with creative and interactive methods within digital storytelling, such as student-led projects, to promote active engagement in language learning.
  6. **Provide Training for English Teachers:** Offer training and professional development programs for English teachers to equip them with the skills and knowledge to effectively use and design digital stories, with a particular focus on improving reading comprehension and communication skills.

## 15. Limitations

The study's limitations include the context-specific nature of the results, making them possibly inapplicable to different age groups, locations, or cultures. Although useful, focus group discussions may be subject to subjective influences like researcher bias or peer pressure. The study primarily concentrated on vocabulary acquisition, neglecting other key language aspects such as grammar and pronunciation. Lastly, the assumption of equal access to digital technology might not be true for all students, particularly those in underprivileged or rural areas. These constraints must be recognized when interpreting and applying the study's findings.

## 16. Future Directions

Future research opportunities based on our study's findings and limitations could encompass a variety of areas. This might include utilizing a larger and more diverse sample size to provide a broader understanding of the role of digital storytelling across various learning contexts, extending the focus to different age groups for a more comprehensive view of its effectiveness, and investigating the impact on other language skills like grammar, sentence structure, and pronunciation. Longitudinal studies could also offer insights into the long-term effects on language learning, while comparative studies might assess different digital story formats such as interactive stories, web-based stories, hypertexts, vlogs, podcasts, and narrative computer games. Additionally, researchers could delve into the adaptation of digital storytelling techniques for different age groups and diverse cultural contexts, further expanding the application of this innovative educational approach. Future studies may also consider examining the integration of digital storytelling with emerging technologies such as augmented reality and virtual reality in language learning. Lastly, addressing the digital divide and equity in access to digital storytelling resources across various educational settings could lead to a fuller understanding of this learning tool, acknowledging and working to resolve any potential disparities. These potential research avenues aim to broaden our understanding of the pedagogical benefits and diverse applications of digital storytelling in language education.

## 17. Study Implications

This study has significant educational implications. Curriculum design can benefit from the integration of digital storytelling into language curricula, making learning more engaging. Teaching methods might be enhanced by incorporating digital storytelling to foster an immersive learning

environment. There's a noted need for teacher training to equip educators with skills for using digital stories effectively. The study also emphasizes the critical role of technology in education, highlighting the importance of digital tools. Further avenues for research are opened, including a broader examination of digital stories' impact on various language skills and comparisons of different digital story types to determine effectiveness. Long-term impact requires exploration through longitudinal research on language acquisition, and considerations must be made regarding equity and access, focusing on the digital divide and equitable access to digital storytelling resources across diverse learning contexts.

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