

Digital Storytelling in Elementary EFL Classrooms: Students' Multidimensional Engagement and Teachers' Pedagogical Challenges

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Abstract: Digital storytelling has the potential to strengthen English literacy in EFL elementary classrooms by fostering meaningful student engagement. This study explores upper-grade elementary students' perceptions of digital storytelling through cognitive, affective, and behavioral engagement, as well as teachers' pedagogical challenges in its implementation. Using an interpretative phenomenological case study design, the study involved 21 students from Grades 4–6 and three English teachers at a public elementary school in North Bali, Indonesia. Data were collected through semi-structured interviews and analyzed using interpretative phenomenological analysis. The findings indicate that students perceived digital storytelling positively, showing developmental progression from basic linguistic understanding to higher-order engagement, increased motivation, active participation, and emerging learning transfer. Digital storytelling was perceived to support vocabulary learning, comprehension, and collaboration through multimodal learning experiences. However, teachers encountered pedagogical challenges related to content selection, preparation time, learner diversity, technological constraints, and classroom management. Despite these challenges, teachers demonstrated adaptive practices through scaffolding, peer tutoring, collaborative planning, and flexible use of digital resources. The study highlights the importance of teachers' adaptive pedagogy in optimizing digital storytelling for English literacy development.

Keywords: digital storytelling, English language learning, pedagogical challenges, students' perceptions.

1. Introduction

English literacy plays a foundational role in English as a Foreign Language (EFL) learning, particularly at the elementary level, as it underpins students' academic development and future communicative competence (Artieda, 2017; Toprak-Yildiz, 2022). Literacy in EFL contexts extends beyond the mechanical mastery of reading and vocabulary acquisition; rather, it encompasses students' ability to comprehend, interpret, evaluate, and meaningfully use information conveyed through texts (Damaianti et al., 2020; Muijselaar et al., 2017). These skills enable learners to construct meaning, engage critically with content, and apply language knowledge across academic and social contexts (Gustine & Insani, 2019; Novianti, 2020). At the elementary level, literacy development is especially critical because it shapes early learning habits, motivation, and cognitive growth (Schiefele et al., 2016; Toste et al., 2020). During this stage, students begin forming attitudes toward language learning, developing basic inferential thinking, and building the cognitive foundations necessary for more complex language use in later stages (Bleses et al., 2016; Dolean et al., 2021).

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Insufficient literacy development at this level may result in persistent difficulties in comprehension, reduced engagement with learning materials, and limited capacity for higher-order language processing (Suggate et al., 2018; Turunen et al., 2021; Vaknin-Nusbaum et al., 2018). Therefore, strengthening English literacy in elementary EFL classrooms is not merely an instructional objective but a fundamental educational priority that determines learners' long-term academic trajectories and communicative readiness (Hurry et al., 2022; Solari et al., 2022; van der Weijden et al., 2024).

Despite the recognized importance of English literacy in elementary EFL education, many Indonesian classrooms continue to face persistent challenges related to low literacy achievement (Liestari & Muhandis, 2020; Dewani et al., 2024; Azzahra & Apoko, 2024). One major contributing factor is students' low reading interest and engagement, where reading is often perceived as a compulsory academic task rather than a meaningful or enjoyable activity (Pitoyo, 2020; Indrayadi, 2021; Angelica & Afriani, 2024; Oga-Baldwin, 2019). This condition is further exacerbated by instructional practices that remain largely teacher-centred and text-heavy, frequently relying on textbooks and worksheets with teacher-dominated interaction and limited opportunities for interpretation, discussion, or personal response (Zein, 2016; Abdusyukur et al., 2022; Khusnaini, 2019). As a result, students tend to engage superficially with texts, focusing primarily on decoding and word-level processing rather than constructing meaning across sentences and ideas (Manihuruk, 2020; Rahmat, 2021). Moreover, many classrooms still lack instructional strategies that intentionally support deeper cognitive, emotional, and behavioral engagement, which are consistently linked to more effective language learning, highlighting an urgent need for alternative approaches that can revitalize literacy learning through meaningful interaction with English texts (Philp & Duchesne, 2016).

In response to persistent literacy challenges and low student engagement in elementary EFL classrooms, the integration of technology-based instructional media has increasingly been viewed as a pedagogical solution that can shift learning from passive text-centred routines toward more interactive experiences aligned with learners' needs and preferences (Chun et al., 2016; Hasumi, 2024; Sung et al., 2015). One prominent approach is digital storytelling, which combines narrative structures with multimodal resources such as text, audiovisuals and animation to support learner-centred participation and engagement across cognitive, emotional and behavioral dimensions (Hwang et al., 2014; Ong & Aryadoust, 2023; Wu & Chen, 2019). However, successful implementation is not automatic and places substantial pedagogical demands on teachers, particularly in relation to the knowledge and design skills needed to integrate technology meaningfully into instructional planning (Schmid et al., 2021; Shinas & Wen, 2022; Tondeur et al., 2019). Effective use requires deliberate story selection, alignment with curricular objectives, adaptation to learners' linguistic and cognitive levels and extensive preparation to develop or curate multimodal materials while also managing classroom technology constraints that may be unstable or limited (Schmitz et al., 2022; Xie et al., 2023). These challenges are intensified by learner diversity, including differences in proficiency and motivation, as well as unequal access to digital resources, where variation in digital opportunities and skills can shape how effectively students participate in technology-mediated literacy activities.

Recent EFL research has increasingly emphasized digital storytelling as a multimodal pedagogical approach that supports language learning through the integration of textual, visual, and auditory resources. Hidayat et al. (2024) demonstrate that digital storytelling enhances EFL learners' reading comprehension by enabling learners to construct meaning through multimodal digital literacy, where narrative structure and multimedia elements foster deeper engagement with texts. Extending beyond receptive skills, Yuniarti et al. (2022) show that digital storytelling grounded in multimodal elements significantly improves EFL learners' speaking performance by providing meaningful contexts for oral expression and increasing learners' enjoyment through visual and auditory support. Similar evidence is reported by Khotimah and Ningrum (2022), who found digital storytelling to be effective in teaching speaking, although learner responses varied according to gender, suggesting that individual differences may shape learning outcomes. From a pedagogical perspective, Drajadi et al. (2023) highlight the role of digital storytelling in developing Indonesian EFL pre-service teachers' metacognitive awareness and professional competence, arguing that engagement with

multimodal storytelling expands teachers' understanding of meaning-making beyond linguistic modes alone. Complementing these findings, [Chen \(2023\)](#) explores the cognitive and affective dimensions of multimodal digital storytelling and reports that while learners generally experience positive affect and enjoyment, higher-achieving learners tend to benefit more strongly than lower-achieving peers, who may still experience anxiety despite overall positive perceptions.

Existing studies have demonstrated the pedagogical potential of digital storytelling for enhancing language skills and learner engagement in EFL classrooms, particularly through its multimodal affordances and narrative structure. However, much of the current literature has tended to foreground learning outcomes or affective responses from learners, often treating engagement as a general or unidimensional construct. As a result, less attention has been given to how students experience digital storytelling across multiple dimensions of engagement, including cognitive, emotional, and behavioral aspects, especially within elementary and secondary EFL contexts in Indonesia. In addition, while digital storytelling has been widely promoted as an innovative instructional strategy, empirical insights into teachers' lived experiences in implementing this approach remain comparatively limited. The complexities teachers face in aligning digital storytelling with curricular goals, managing classroom dynamics, accommodating learner diversity, and navigating technological constraints are often acknowledged but not systematically examined. In educational contexts where English functions as a foreign language and digital literacy integration is still developing, understanding both learners' multidimensional engagement and teachers' pedagogical challenges becomes essential for informing sustainable instructional practice.

2. Method

This study employed an interpretative phenomenological case study design to explore how participants interpret and make meaning of their lived experiences with digital storytelling in English language learning. Interpretative Phenomenological Analysis (IPA) was adopted as the guiding methodological approach, as it is particularly suited to examining individuals' subjective perceptions and sense-making processes within a specific educational context ([Smith, 2019](#); [Alase, 2017](#); [Tomaszewski et al., 2020](#); [Yazan, 2015](#)). In this study, the approach was used to explore elementary students' perceptions of learning English through digital storytelling and to investigate the pedagogical challenges encountered by teachers during its classroom implementation. The participants consisted of 21 elementary students from Grades 4, 5, and 6 at a public primary school in Singaraja City, North Bali. The school was selected as the research site because it provides adequate instructional facilities and technological infrastructure, including access to digital devices and stable internet connectivity, which are essential for implementing technology-based instruction such as digital storytelling. In addition, three English teachers participated in the study. They were purposively selected based on their direct involvement in English instruction that integrated digital storytelling during an eight-week instructional period. This purposeful selection ensured that all participants had sufficient experience with digital storytelling to provide rich and meaningful insights.

Data were collected through semi-structured interviews as the primary research instrument, using two interview protocols developed for students and teachers, because semi-structured formats enable systematic coverage of key topics while still allowing participants to elaborate meanings and experiences in depth ([Castillo-Montoya, 2016](#)). Both interview instruments underwent expert-based content validation to ensure that each item adequately represented the intended constructs, and the resulting coefficient validity score based on Aiken's *V* reflects a rigorous content-validity judgment process commonly used in educational measurement. Before data collection, school authorization and formal ethical clearance were secured to protect children's rights, ensure voluntary participation, and safeguard confidentiality. All interviews were audio-recorded with participants' consent and documented through careful transcript-based procedures to support credibility and responsible handling of interview data ([Robinson, 2024](#); [Reynolds & Lee, 2018](#); [Rowlands, 2021](#)).

Data analysis was conducted using Interpretative Phenomenological Analysis (IPA) to capture how students and teachers interpreted and made meaning of their lived experiences with digital storytelling within a bounded instructional context. Consistent with established IPA practice, the analysis began with iterative transcript immersion (repeated reading) and an idiographic commitment to understanding each participant's account in depth before considering convergences across cases (Boden et al., 2019). Next, initial (largely inductive) coding was conducted by annotating meaning units with detailed analytic comments and reflective notes, supported by memoing to document developing interpretations and analytic decisions (Halpin, 2024). Throughout this phase, reflexive bracketing was used to surface and manage researchers' assumptions so that participants' voices remained foregrounded, while emergent themes were developed through a hermeneutic interpretive process that traced patterns and connections across coded meanings. To strengthen credibility, interpretations were compared through iterative inter-researcher discussions to negotiate differences and reach consensus on thematic structures, and the final themes were organized into a coherent analytic narrative that retained richness and transparency (O'Connor & Joffe, 2020).

3. Findings

The findings are presented in two main sections. The first section reports students' perceptions of digital storytelling in English language learning through cognitive, affective, and behavioral engagement. The second section presents English teachers' pedagogical challenges in implementing digital storytelling in elementary EFL classrooms. The analysis was based on semi-structured interviews with 21 upper-grade elementary students from Grades 4–6 and three English teachers at a public elementary school in North Bali, Indonesia.

3.1 Students' Multidimensional Engagement with Digital Storytelling

Students' responses showed that digital storytelling was perceived positively across cognitive, affective, and behavioral dimensions. As shown in Figure 1, students demonstrated strong engagement in understanding storytelling as a learning activity, recognizing its learning benefits, experiencing emotional motivation, and participating in classroom-based storytelling tasks. However, learning transfer beyond the classroom appeared less consistent, indicating that students' engagement was strongest when digital storytelling was supported by structured classroom interaction and teacher guidance.

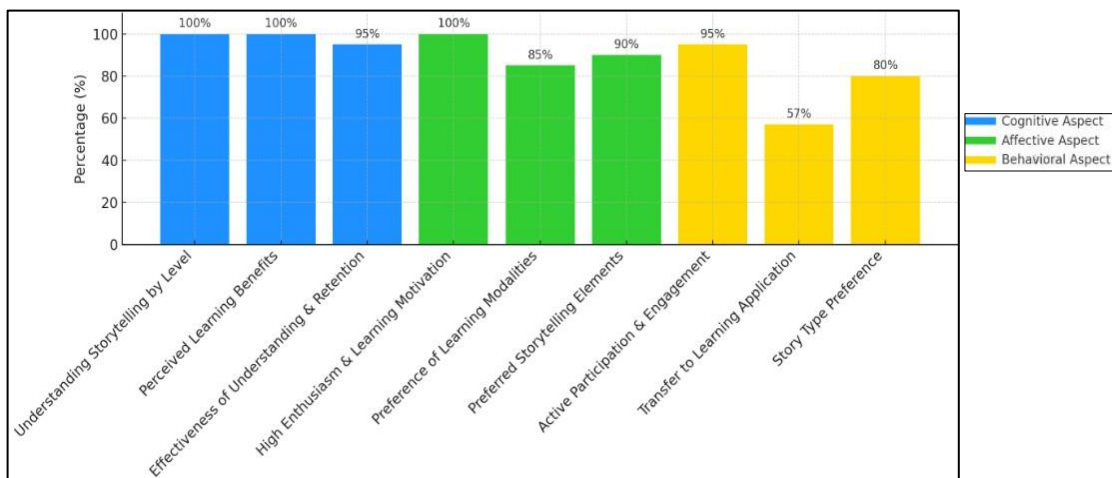


Figure 1. Students' engagement with digital storytelling across cognitive, affective, and behavioral dimensions

Figure 1 provides a visual overview of students' engagement patterns. Cognitive engagement appeared in students' understanding of storytelling, perceived vocabulary gains, and meaning construction through multimodal input. Affective engagement was reflected in students' enjoyment, motivation, and preference

for engaging story delivery. Behavioral engagement appeared in students' participation in group discussions, classroom activities, and, to a lesser extent, transfer of storytelling practices beyond the classroom.

Table 1. Thematic Summary of Students' Multidimensional Engagement with Digital Storytelling

Engagement dimension	Main finding	Representative evidence	Interpretation
Cognitive engagement	Students developed progressively deeper understandings of storytelling as a learning practice.	"Storytelling is someone telling stories in English in front of others with movement and deep feeling."	Older students interpreted storytelling as more than narration; they recognized expression, performance, and audience engagement.
Cognitive engagement	Digital storytelling supported vocabulary learning and comprehension.	"I can instantly understand the meaning of new words from the contexts of stories, so I do not need to use dictionary."	Multimodal stories helped students infer meaning from context rather than relying only on dictionaries.
Cognitive engagement	Visuals, sound, and teacher explanation supported meaning construction.	"I understand better because the story is presented with pictures and sound, so I can imagine the content."	Narrative and multimodal cues made English input more comprehensible and memorable.
Affective engagement	Students experienced enjoyment, motivation, and anticipation.	"I look forward to English class because I know there will be a new story."	Digital storytelling made English learning more emotionally engaging.
Affective engagement	Students valued colorful visuals, clear narration, and teacher mediation.	"The story is interesting. The video is colourful and the teacher retells it clearly and easy to understand."	Story delivery influenced students' interest and comprehension.
Behavioral engagement	Students participated actively in discussion and group work.	"I engage actively in the discussion session because I work with my friends in group, not by myself."	Collaborative storytelling activities reduced individual pressure and encouraged participation.
Behavioral engagement	Older students showed emerging learning transfer beyond the classroom.	"I often write another story after I read one alone in my room."	Transfer was more visible among older students with greater autonomy.

From a cognitive perspective, students demonstrated a developmental progression in how they understood digital storytelling. Younger students tended to define storytelling in direct and concrete terms. A fourth-grade student stated, "*In my opinion, storytelling is telling stories in English.*" This indicates an initial understanding of storytelling as an English-based narration activity. Fifth-grade students began to distinguish storytelling from ordinary reading by referring to voice, expression, and visual support. One student explained, "*Storytelling is not just reading. My teacher uses different voices and expressions, so the story feels alive and easier to understand.*" Sixth-grade students showed a more elaborated interpretation by emphasizing movement, emotion, and audience engagement. As one student stated, "*Storytelling is someone telling stories in English in front of others with movement and deep feeling.*" These responses suggest that students' cognitive engagement became more sophisticated across grade levels, moving from basic recognition toward a more interpretive understanding of storytelling as a multimodal and performative learning practice.

Students also perceived digital storytelling as helpful for vocabulary learning and comprehension. Rather than learning vocabulary through isolated memorization, students reported that they could understand new words through story context, visual support, audio input, and teacher explanation. One student noted, "*I can instantly understand the meaning of new words from the contexts of stories, so I do not need to use dictionary.*"

Another participant explained, *“I understand better because the story is presented with pictures and sound, so I can imagine the content.”* These responses indicate that digital storytelling supported meaning construction by combining narrative context with multimodal cues. Students also perceived that the multimodal presentation made learning more memorable. A sixth-grade student reflected, *“Storytelling does not tire me out. The way it is presented is interesting, so it stays in my memory and is easier to remember.”* This suggests that digital storytelling reduced cognitive burden and helped students retain vocabulary and story content more effectively.

Affective engagement was strongly evident in students’ responses. Students across grade levels described digital storytelling as enjoyable, interesting, and motivating. The activity appeared to make English learning feel less routine and more emotionally appealing. One student stated, *“I look forward to English class because I know there will be a new story.”* Another student explained, *“It is easier to learn because I feel engaged and enjoy listening to the story.”* These responses show that digital storytelling supported motivation by transforming English learning into a more engaging narrative experience. Students also emphasized the importance of story delivery. One participant said, *“The story is interesting. The video is colourful and the teacher retells it clearly and easy to understand.”* This indicates that students’ affective engagement was shaped not only by story content but also by the quality of visuals, narration, and teacher mediation.

Students’ learning preferences also varied across grade levels. Some students preferred teacher-led narration because it helped them understand the story more clearly. One student remarked, *“If the teacher reads aloud, I understand better.”* Older students, however, demonstrated more flexible learning strategies by combining reading, listening, and viewing. A sixth-grade student explained, *“I read first, then listen to the teacher or watch the video again.”* This suggests that digital storytelling enabled students to engage with English through multiple modes and gradually supported more autonomous learning choices among older learners.

Behaviorally, digital storytelling encouraged classroom participation, peer interaction, and collaborative learning. Students reported that they were more willing to participate when storytelling activities involved group discussion and shared meaning-making. One student stated, *“I engage actively in the discussion session because I work with my friends in group, not by myself.”* This response suggests that collaborative storytelling reduced individual pressure and encouraged students to participate more actively. Participation also appeared to develop progressively across grade levels. Younger students relied more on teacher support and group guidance, while older students showed greater autonomy and collaborative responsibility during storytelling activities.

Learning transfer beyond the classroom was evident but uneven. Younger students generally showed limited independent application and still needed teacher support to extend storytelling beyond classroom tasks. Fifth-grade students began applying storytelling in familiar contexts, such as retelling stories to family members. One student shared, *“I once retold a story to my younger sibling.”* Sixth-grade students showed broader transfer, including independent writing and story creation. A sixth-grade learner explained, *“I often write another story after I read one alone in my room.”* These findings indicate that digital storytelling supported emerging transfer of learning, particularly among older students who had stronger autonomy and greater readiness to extend classroom learning into independent literacy practices.

3.2 Teachers’ Pedagogical Challenges in Implementing Digital Storytelling

Teachers’ accounts showed that digital storytelling was pedagogically valuable but demanding to implement. The challenges were related to story selection and adaptation, preparation time, learner diversity, technological constraints, and classroom management. These challenges indicate that digital storytelling required more than the availability of digital media; its successful implementation depended on teachers’ adaptive planning, contextual sensitivity, and classroom mediation.

Table 2. Teachers' Pedagogical Challenges and Adaptive Responses in Digital Storytelling Implementation

Pedagogical challenge	Teachers' concern	Representative evidence	Adaptive response
Story selection and adaptation	Stories needed to align with learning objectives, students' cognitive levels, and classroom needs.	"To select the story, the content should align with the learning objectives."	Teachers adapted stories linguistically, cognitively, and pedagogically.
Contextual relevance	Stories had to be age-appropriate and familiar to students.	"We use animals around us, for example animals in Bali Zoo, so the context feels familiar."	Teachers localized content to increase relevance and engagement.
Preparation time	Digital storytelling required more planning than conventional instruction.	"First, we align it with the learning objectives. Then we match it with the material, and the media must suit the students' characters."	Teachers used collaborative planning and teacher forums.
Learner diversity	Students differed in proficiency, prior English exposure, comprehension, and learning styles.	"Students' understanding is different. Sometimes I ask students with good understanding to help those with lower ability."	Teachers used peer tutoring, differentiated vocabulary, role play, group work, and scaffolding.
Technological constraints	Internet instability and technical problems disrupted implementation.	"Sometimes the Wi-Fi is unstable, so I don't rely on streaming. I prefer downloading the videos beforehand."	Teachers prepared offline materials and manual storytelling alternatives.
Classroom management	Multimedia-based activities required careful attention and behavior management.	"I start with classroom agreements, then use rewards like applause or verbal praise."	Teachers used classroom rules, rewards, praise, ice-breaking, and movement activities.

The first challenge concerned story selection and adaptation. Teachers emphasized that digital storytelling required careful alignment between story content, learning objectives, students' developmental levels, and local context. One teacher explained, *"To select the story, the content should align with the learning objectives."* Another teacher highlighted the need to consider students' age and contextual familiarity: *"The fifth graders may not prefer simple animal stories like first graders. We use animals around us, for example animals in Bali Zoo, so the context feels familiar."* These responses show that story selection was not merely a matter of choosing entertaining digital materials. Teachers had to ensure that stories were linguistically accessible, cognitively appropriate, culturally familiar, and relevant to the curriculum. In some cases, teachers involved students in story selection to increase motivation. One teacher stated, *"Sometimes, I involve students in selecting the stories. I often ask them whether they like the story or not."*

The second challenge was preparation time. Teachers reported that digital storytelling required more intensive preparation than conventional English instruction. Preparation involved selecting suitable stories, adapting language, preparing or curating digital media, aligning materials with learning objectives, and anticipating students' needs. One teacher described the role of collaborative planning: *"Here, especially for English, we have a forum. Since there are more teachers handling English, we usually decide together what would be appropriate and what the learning objectives are."* Another teacher explained, *"First, we align it with the learning objectives. Then we match it with the material, and the media must suit the students' characters."* These responses indicate that digital storytelling required pedagogical design, not simply technological preparation. Teachers needed to ensure that digital media supported English learning meaningfully rather than functioning only as classroom entertainment.

Learner diversity emerged as a particularly complex challenge. Teachers had to respond to students' different levels of English proficiency, prior exposure, comprehension ability, motivation, and learning styles. One teacher explained, *"It is quite challenging because students' understanding is different. Sometimes I ask*

students with good understanding to help those with lower ability.” Another teacher noted, *“Students who have learned English since grade one find it easier, while others struggle, so I adjust the vocabulary based on their level.”* These responses show that digital storytelling needed to be differentiated to enable meaningful participation for all learners. Teachers used peer tutoring, vocabulary adjustment, role play, group work, examples, and visual support to facilitate comprehension. One teacher explained, *“For new vocabulary, I don’t tell the meaning right away. I try to trigger their thinking by giving examples or connecting it to their surroundings.”* This indicates that teachers used storytelling as a scaffolded learning process rather than a one-way presentation of digital content.

Technological constraints also influenced implementation. Although the school had relatively adequate facilities, teachers still encountered occasional problems such as unstable internet connection and power disruption. One teacher reported, *“There are no major obstacles because the equipment and internet are already available.”* However, another teacher stated, *“Sometimes the Wi-Fi is unstable, so I don’t rely on streaming. I prefer downloading the videos beforehand.”* Teachers responded to these constraints by preparing offline materials and backup strategies. As one teacher explained, *“If there is any disruption, I switch immediately to manual storytelling using expressions.”* These findings show that teachers needed technological preparedness and instructional flexibility to maintain continuity when digital tools did not function as expected.

Classroom management was another important challenge. Digital storytelling increased students’ enthusiasm, but it also required deliberate attention management to prevent distraction and maintain learning focus. Teachers used classroom agreements, rewards, verbal praise, and ice-breaking activities to regulate participation and attention. One teacher stated, *“I start with classroom agreements, then use rewards like applause or verbal praise.”* Another teacher added, *“If students look unfocused, I do ice-breaking activities like singing or light movement.”* These strategies show that digital storytelling required active classroom orchestration. Teachers needed to balance students’ excitement with task focus so that multimodal storytelling supported learning rather than distracting students from instructional goals.

The findings show that digital storytelling created meaningful engagement for students while requiring substantial adaptive work from teachers. Students experienced digital storytelling as cognitively supportive, emotionally motivating, and behaviorally engaging, especially when stories were multimodal, contextualized, and mediated through collaboration. Teachers, however, had to manage a complex instructional process involving story selection, preparation, differentiation, technology readiness, and classroom management. The success of digital storytelling therefore depended not only on the presence of digital media but also on teachers’ capacity to transform multimodal stories into purposeful EFL literacy learning experiences.

4. Discussion

The findings of this study demonstrate that digital storytelling functioned as a meaningful pedagogical strategy for supporting elementary EFL learners’ engagement and learning, while simultaneously revealing substantial instructional challenges for teachers. From the students’ perspective, digital storytelling was perceived as cognitively supportive, emotionally engaging, and behaviorally activating, confirming its potential to address persistent literacy and engagement problems commonly reported in Indonesian elementary EFL classrooms (Liestari & Muhandis, 2020; Muthia & Pratiwi, 2024; Dewani et al., 2025). The students’ descriptions indicate that storytelling facilitated comprehension by embedding language input within narrative contexts supported by visual and auditory cues, a process that aligns with research showing that multimodal input strengthens meaning construction and reading comprehension in young EFL learners (Hidayat et al., 2024; Wu & Chen, 2019; Chun et al., 2016). The developmental progression observed across grade levels further suggests that digital storytelling accommodates learners’ cognitive growth, supporting increasingly sophisticated interpretations of language and narrative as students mature (Muijselaar et al., 2017; Toprak-Yildiz, 2022).

In terms of language development, students consistently associated digital storytelling with vocabulary learning and improved comprehension, particularly through contextualized exposure rather than isolated memorization. This perception aligns with longitudinal and developmental research indicating that early vocabulary knowledge is a strong predictor of later literacy achievement and reading comprehension (Blases et al., 2016; Suggate et al., 2018; Manihuruk, 2020). By encountering vocabulary repeatedly within meaningful stories, students were able to infer meaning, recognize pronunciation, and retain words more effectively, reducing reliance on dictionary-based strategies that often dominate traditional EFL classrooms (Rahmat et al., 2021). These findings support previous evidence that narrative-based and multimodal learning environments are particularly effective for young learners whose literacy development depends heavily on contextual and experiential input (Dolean et al., 2021; Solari et al., 2022).

Affective engagement emerged as a central feature of students' experiences with digital storytelling. Students' expressions of enjoyment, anticipation, and sustained motivation suggest that storytelling helped reposition English learning from a compulsory academic task to a meaningful and enjoyable activity. This finding resonates with extensive research demonstrating strong reciprocal relationships between motivation, engagement, and literacy development in elementary learners (Schiefele et al., 2016; Vaknin-Nusbaum et al., 2017; Toste et al., 2020). The shift observed among older students, from simple enjoyment toward reflective engagement, further supports the view that affective engagement evolves developmentally and contributes to deeper learning processes (Oga-Baldwin, 2019; Philp & Duchesne, 2016). In contexts where low reading interest has been repeatedly identified as a major barrier to literacy development, digital storytelling appears to offer a promising pathway for re-engaging learners emotionally and cognitively (Pitoyo, 2020; Angelica & Afriani, 2024).

Behaviorally, digital storytelling encouraged active participation, peer interaction, and collaborative learning, reflecting broader shifts away from teacher-dominated classroom interaction patterns that characterize many Indonesian EFL settings (Zein, 2016; Khusnaini, 2019; Abdusyukur et al., 2022). Students' gradual movement from teacher-dependent participation toward more autonomous and collaborative engagement mirrors findings that socially mediated learning activities support both language development and learner agency (Gustine & Insani, 2019; Novianti et al., 2020). However, learning transfer beyond the classroom was uneven, particularly among younger students, suggesting that while engagement was high, independent application of learning requires explicit instructional support. This finding aligns with research indicating that transfer of literacy skills is not automatic and depends on sustained scaffolding and structured opportunities for application (Van der Weijden et al., 2024; Hurry et al., 2021). Alongside these positive student outcomes, the study highlights significant pedagogical challenges faced by teachers, reinforcing the view that digital storytelling is pedagogically demanding rather than inherently facilitative. Teachers' difficulties in selecting and adapting story content underscore longstanding tensions between curriculum alignment, learner appropriateness, and contextual relevance in EFL instruction (Zein, 2016; Damaianti et al., 2020). The need to localize stories to students' cultural and cognitive contexts mirrors findings that meaningful literacy learning is closely tied to learners' lived experiences and sociocultural realities (Artieda, 2017; Gustine & Insani, 2019). However, such adaptation requires considerable pedagogical expertise and time investment, highlighting structural constraints faced by teachers.

Time-intensive preparation and technological demands further complicated implementation, supporting evidence that technology-enhanced instruction often increases rather than reduces teachers' workload, particularly when institutional support is limited (Schmid et al., 2020; Xie et al., 2021; Hasumi & Chiu, 2024). While teachers demonstrated adaptive strategies such as collaborative planning and backup storytelling modes, these practices relied heavily on individual initiative rather than systemic support. Learner diversity added another layer of complexity, as teachers had to balance differing proficiency levels, learning styles, and prior exposure to English, challenges well documented in Indonesian elementary classrooms (Zein, 2016; Indrayadi, 2021). Teachers' use of peer tutoring, differentiation, and multimodal scaffolding reflects pedagogical responsiveness but also reveals the extent to which successful digital storytelling depends on

teacher competence rather than technology alone (Shinas & Wen, 2022; Tondeur et al., 2019). The technology and classroom management challenges illustrate the contextual fragility of digital storytelling implementation. Variations in infrastructure, connectivity, and access influenced teachers' experiences, echoing broader concerns about unequal digital readiness in educational settings (Schmitz et al., 2021; Xie et al., 2021). Managing attention, behavior, and engagement during multimedia-rich activities required more deliberate classroom orchestration, reinforcing the argument that technology amplifies pedagogical complexity rather than simplifying it (Siddiq & Scherer, 2016; Wu & Chen, 2019).

5. Conclusion

This study examined elementary students' perceptions of digital storytelling in English language learning through a multidimensional engagement lens and explored the pedagogical challenges encountered by EFL teachers in implementing this strategy. The findings demonstrate that digital storytelling functioned as a meaningful instructional approach that supported students' cognitive understanding, emotional engagement, and behavioral participation in English learning. Students perceived storytelling as facilitating comprehension and vocabulary development through contextualized narratives and multimodal input, fostering positive learning experiences that extended beyond surface enjoyment to sustained motivation and active classroom involvement. Developmental differences across grade levels further indicated that digital storytelling accommodates learners' cognitive growth, with older students demonstrating greater autonomy, reflective engagement, and emerging transfer of learning beyond classroom contexts. At the same time, the study revealed that the pedagogical value of digital storytelling is inseparable from the challenges faced by teachers. Teachers encountered multifaceted obstacles related to content selection and adaptation, time-intensive preparation, learner diversity, technological constraints, and classroom management. These challenges highlighted that digital storytelling is not a plug-and-play solution but a pedagogically demanding practice that requires careful curricular alignment, contextual sensitivity, and adaptive instructional strategies. Teachers' use of scaffolding, differentiation, collaborative planning, and contingency strategies underscored their central role as mediators who shape how digital storytelling translates into meaningful learning experiences.

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7. Declaration of AI Use

The authors used Grammarly during the preparation of this manuscript to support language editing, including grammar checking, punctuation correction, sentence clarity, and readability improvement. The tool was used only for editorial assistance and did not contribute to the research design, data collection, data analysis, interpretation of findings, or formulation of conclusions. The authors reviewed and approved all language revisions and remain fully responsible for the accuracy, originality, and scholarly integrity of the final manuscript.

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