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Digital storytelling as a tool to develop english speaking skills: an integrative literature review

Narración digital como herramienta para desarrollar las habilidades de expresión oral en inglés: una revisión integrativa de la literatura

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ABSTRACT

Digital storytelling integrates narrative, images, audio, video, music, and voice recording to create meaningful and technology-supported English-learning experiences. This study aimed to analyze the contribution of digital storytelling to the development of English-speaking skills among English as a Foreign Language learners. An integrative literature review was conducted through a systematic search process based on the identification, screening, eligibility, and inclusion stages established by PRISMA 2020. The literature search covered the period from 2020 to 2026, and 15 publications that met the eligibility criteria were included. The findings were organized into four thematic categories: fluency and pronunciation; vocabulary, linguistic accuracy, and narrative organization; confidence, motivation, and speaking anxiety; and collaboration, creativity, self-regulation, and digital competence. The results indicate that digital storytelling can strengthen English-speaking skills by allowing students to prepare scripts, rehearse pronunciation, record and review their oral production, correct errors, and receive teacher or peer feedback. However, its effectiveness depends on instructional design, access to technology, meaningful topics, sufficient preparation time, and teacher guidance. Challenges related to digital access, editing skills, excessive focus on multimedia design, and unequal participation in collaborative activities were also identified. It is concluded that digital storytelling can contribute to English-language education when implemented as a structured, student-centered strategy that combines oral practice, reflection, creativity, and continuous pedagogical support.

Keywords: digital storytelling; English-speaking skills; EFL learning; oral communication; educational technology.

RESUMEN

La narración digital integra relatos, imágenes, audios, videos, música y grabaciones de voz para crear experiencias significativas de aprendizaje del inglés apoyadas por la tecnología. Este estudio tuvo como objetivo analizar la contribución de la narración digital al desarrollo de las habilidades de expresión oral en estudiantes de inglés como lengua extranjera. Se realizó una revisión integrativa de la literatura mediante una búsqueda sistemática basada en las etapas de identificación, cribado, elegibilidad e inclusión establecidas por PRISMA 2020. La búsqueda abarcó el periodo 2020–2026 y se incluyeron 15 publicaciones que cumplieron los criterios de elegibilidad. Los hallazgos se organizaron en cuatro categorías temáticas: fluidez y pronunciación; vocabulario, precisión lingüística y organización narrativa; confianza, motivación y ansiedad al hablar; y colaboración, creatividad, autorregulación y competencia digital. Los resultados muestran que la narración digital puede fortalecer la expresión oral en inglés al permitir que los estudiantes elaboren guiones, practiquen la pronunciación, graben y revisen sus producciones, corrijan errores y reciban retroalimentación. Su efectividad depende del diseño instruccional, el acceso a la tecnología, la selección de temas significativos, el tiempo de preparación y la orientación docente. También se identificaron desafíos relacionados con el acceso digital, las habilidades de edición, la atención excesiva al diseño multimedia y la participación desigual en actividades colaborativas. Se concluye que la narración digital puede contribuir a la enseñanza del inglés cuando se implementa como una estrategia estructurada y centrada en el estudiante que integra práctica oral, reflexión, creatividad y acompañamiento pedagógico continuo.

Palabras clave: narración digital; expresión oral en inglés; aprendizaje de inglés como lengua extranjera; comunicación oral; tecnología educativa.



1. INTRODUCTION

English speaking skills are essential for academic achievement, professional communication, intercultural interaction, and participation in an increasingly globalized society. However, many English as a Foreign Language learners experience difficulties related to limited vocabulary, pronunciation, grammatical accuracy, fluency, speaking anxiety, and lack of confidence. Traditional language instruction may provide insufficient opportunities for extended oral production because classroom activities are frequently focused on grammar explanations, written exercises, and controlled repetition. Consequently, students may understand English structures but still struggle to communicate their ideas spontaneously and meaningfully.

Digital storytelling has emerged as a student-centered strategy that combines traditional narrative practices with technological resources such as images, written text, voice recordings, music, animation, and video. Through this approach, students plan a story, organize their ideas, write or adapt a script, rehearse their speech, record their voices, edit multimedia elements, and present the final product to an audience. Wu and Chen (2020), in a systematic review of 57 studies, identified linguistic, cognitive, technological, affective, and social outcomes associated with educational digital storytelling. Their findings indicate that digital storytelling can promote language development while supporting creativity, reflection, technological competence, and social interaction.

More specifically, Nair and Yunus (2021) conducted a systematic review focused on the use of digital storytelling for improving speaking skills. After examining 45 studies from different educational levels, they concluded that digital storytelling provides meaningful opportunities for students to communicate, express personal perspectives, develop confidence, and participate in collaborative language activities. The authors explained that repeated narration, voice recording, peer interaction, and multimedia production can help learners improve their oral communication progressively. Nevertheless, they also emphasized the importance of teacher preparation and appropriate technological support.

Empirical research has reported similar results. Yang et al. (2022) implemented digital storytelling through an eight-week interdisciplinary project that connected English language instruction with computer education. Students worked collaboratively to prepare content,



design multimedia stories, and produce oral narratives in English. The study found that digital storytelling created authentic and meaningful opportunities for improving English speaking and creative thinking. These results suggest that digital storytelling is more effective when learners are not passive recipients of multimedia content but active designers and narrators of their own stories.

Fu et al. (2022) examined the effects of digital storytelling on EFL learners' speaking competence through the use of Toontastic, an application that provides structured support for creating animated stories. The results showed significant progress in fluency and language use. Topic familiarity and the scaffolding provided by the application helped students organize their narratives, practice oral production, and communicate more successfully. However, the researchers did not find a direct significant correlation between general engagement and every dimension of speaking performance. This finding indicates that motivation alone is insufficient; digital storytelling activities must also include clear linguistic objectives and structured guidance.

Huang (2023) investigated the effects of digital storytelling on English speaking proficiency, willingness to communicate, and group cohesion among Taiwanese EFL students. Learners completed digital storytelling tasks that required information searching, script preparation, visual and audio selection, rehearsal, recording, presentation, and oral retelling. The study found significant improvements in speaking proficiency and group cohesion. Although willingness to communicate increased, the difference was not statistically significant. These findings show that digital storytelling can strengthen oral competence and collaborative relationships, but affective outcomes may depend on additional variables such as personality, classroom environment, language level, and previous speaking experiences.

Murad et al. (2023) also found positive effects when investigating digital storytelling among 49 secondary-level EFL students. Their research examined both speaking performance and motivation toward learning English. The results supported digital storytelling as an effective pedagogical tool for developing oral communication and increasing students' motivation. The process of planning, recording, listening to, and revising spoken productions allowed learners to recognize their pronunciation and fluency difficulties before submitting the final version. Digital storytelling therefore functioned as both a speaking activity and a form of self-assessment.



The benefits of digital storytelling are not limited to observable language performance. Bai and Xian (2024) explored its relationship with L2 speaking skills, self-regulated learning, and speaking anxiety in an IELTS preparation course. Their randomized controlled study involved 89 EFL learners and included pre-test, post-test, and follow-up measurements. The findings supported the potential of digital storytelling to improve speaking performance, encourage goal-setting and self-monitoring, and create a less threatening environment for oral participation. The possibility of rehearsing and revising a recording before presenting it may reduce some of the pressure commonly associated with immediate classroom speaking tasks.

Digital storytelling can also connect language learning with students' cultural backgrounds. Mardhiah et al. (2024) examined the integration of Indonesian local folktales into digital storytelling activities with first-year university students. The participants developed digital stories based on culturally familiar narratives and reported positive experiences regarding their speaking development. The findings indicated that familiar cultural content gave learners ideas to discuss, increased their participation, and provided meaningful contexts for vocabulary and oral expression. Thus, digital storytelling can promote English learning without separating students from their local identities and cultural knowledge.

Similarly, Hidayati et al. (2025) integrated Lombok's cultural heritage into digital storytelling activities with EFL university students. Their assessment considered fluency, pronunciation, grammar, vocabulary, and narrative organization. The researchers reported significant improvements across the evaluated speaking dimensions, with fluency presenting the greatest gain. Reflective journals and group discussions also revealed that repeated rehearsal, audience awareness, culturally relevant topics, and opportunities to revise oral production contributed to greater confidence and engagement. These results reinforce the importance of selecting stories that are meaningful to learners rather than using decontextualized speaking topics.

Recent evidence has extended the application of digital storytelling to learners with particular language difficulties. Almulla et al. (2026) compared digital storytelling with conventional printed-story instruction among elementary-level students. The digital storytelling group obtained significantly better results in fluency, comprehension, pronunciation, and overall speaking performance, although the vocabulary difference was not statistically



significant. The authors associated these improvements with visual support, repeated listening, guided retelling, meaningful story contexts, teacher feedback, and structured oral practice. However, they recommended cautious interpretation because the study involved a relatively small sample from one geographical area.

Despite the positive findings, digital storytelling presents several pedagogical challenges. Creating a digital story can require considerable time for topic selection, scriptwriting, recording, editing, and presentation. Students may also face limited internet access, inadequate digital devices, insufficient editing skills, unequal participation in group work, or excessive attention to visual design rather than language development. For this reason, the effectiveness of digital storytelling does not depend only on the use of technology. It also requires clearly defined speaking objectives, manageable projects, assessment rubrics, language scaffolding, opportunities for rehearsal, peer and teacher feedback, and an appropriate balance between multimedia production and oral communication.

The teacher therefore maintains a central role in digital storytelling-based instruction. Teachers must help students select appropriate topics, structure coherent narratives, use reliable information, improve scripts, practice pronunciation, distribute group responsibilities, and evaluate the final oral performance. They should also ensure that students do not simply read a memorized script or allow technological elements to replace meaningful speaking. Digital storytelling becomes pedagogically valuable when technology supports the processes of planning, interaction, rehearsal, reflection, and communication.

Overall, research published between 2020 and 2026 indicates that digital storytelling can contribute to English speaking development by improving fluency, pronunciation, language use, comprehension, narrative organization, confidence, motivation, self-regulation, creativity, and collaboration. Nevertheless, the available studies involve different educational levels, technological tools, intervention periods, sample sizes, and assessment methods. Consequently, additional research is necessary to determine which digital storytelling designs produce the strongest and most sustainable improvements in English speaking performance.

Accordingly, this study aims to analyze the influence of digital storytelling on students' English speaking skills, particularly their fluency, pronunciation, vocabulary use, confidence, and oral participation. The guiding research question is:



How does the use of digital storytelling influence the development of English speaking skills among EFL students?

2. THEORETICAL FRAMEWORK

Digital storytelling is a pedagogical strategy that combines oral narration with multimedia resources such as images, audio, video, music, and written text. In English language learning, students create and present stories while organizing ideas, preparing scripts, rehearsing pronunciation, and recording their voices. Chubko et al. (2020) explain that this process can strengthen disciplinary literacy and help EFL learners communicate knowledge through meaningful and technology-supported activities.

Digital storytelling also follows principles of active and competence-based learning because students participate directly in creating a final product. Makarova and Pirozhkova (2020) found that producing individual digital stories increased university students' motivation to learn a foreign language and supported the development of communicative, professional, and digital competencies. Therefore, students are not only practicing English but also developing creativity, autonomy, collaboration, and technological skills.

Speaking development requires continuous practice in pronunciation, fluency, vocabulary, accuracy, and organization of ideas. Ramalingam et al. (2022) reported that digital storytelling can enhance speaking abilities because students have opportunities to plan, rehearse, listen to, and improve their oral productions before presenting them. This repetitive process may help learners recognize errors and communicate with greater confidence.

Similarly, Zhussupova and Shadiev (2023) found that digital storytelling improved fluency, coherence, and cohesion in academic public speaking. The authors emphasize that combining personal or cultural narratives with multimedia elements creates meaningful contexts in which students can express ideas and interact with an audience.

Finally, Puspitasari et al. (2024) demonstrated that integrating traditional stories, digital storytelling, and a genre-based approach supported improvements in vocabulary, pronunciation, accuracy, fluency, and self-confidence. These findings suggest that digital storytelling can be an effective tool for developing English speaking skills when teachers provide clear instructions, linguistic support, opportunities for collaboration, and formative feedback.



Classroom Application

Digital storytelling can be applied in the English classroom by asking students to create a short story using images, text, music, and their own recorded voice through tools such as Canva, PowerPoint, or CapCut. Students prepare a script, practise pronunciation, record the narration, and present the final story, while the teacher provides feedback on fluency, vocabulary, and pronunciation. According to Huang (2023), digital storytelling can improve English-speaking proficiency and collaboration among students.

3. METHODOLOGY

This study was conducted as an integrative literature review with a systematic search process to analyze the influence of digital storytelling on the development of English-speaking skills. This design allowed empirical studies, experimental research, case studies, and systematic reviews to be examined within a common analytical framework. Integrative reviews facilitate the synthesis of different forms of evidence and provide a broader understanding of an educational phenomenon (Lubbe et al., 2020).

A qualitative descriptive-analytical approach was used to organize and interpret the selected publications. The analysis considered speaking fluency, pronunciation, vocabulary, grammatical accuracy, confidence, motivation, speaking anxiety, collaboration, creativity, self-regulated learning, and digital competence.

The literature search covered publications from 2020 to 2026. The final corpus consisted of 15 unique studies related to digital storytelling and the development of English-speaking skills. The methodological structure was adapted from the review model provided.

Information Sources and Search Strategy

The bibliographic search was conducted in Scopus, Web of Science, ScienceDirect, SpringerLink, Taylor & Francis Online, ERIC, and Google Scholar.

Searches were performed using combinations of terms related to digital storytelling, English-language learning, and speaking skills through the Boolean operators AND and OR.

The general search equation was:

(“digital storytelling” OR “digital stories” OR “multimedia storytelling”) AND (“English speaking skills” OR “speaking competence” OR “oral communication” OR “speaking proficiency”) AND (“EFL students” OR “English language learners”)



Additional searches included specific learning outcomes:

(“digital storytelling”) AND (“fluency” OR “pronunciation” OR “vocabulary” OR “speaking anxiety” OR “self-regulated learning” OR “willingness to communicate”)

The references were organized in a Microsoft Excel matrix. Duplicate records were identified by comparing authorship, title, publication year, journal, and DOI.

Eligibility Criteria

Studies were included when they:

1. Were published between 2020 and 2026.
2. Examined digital storytelling in English-language education.
3. Evaluated speaking skills or related variables.
4. Included EFL students or English-language learners.
5. Presented sufficient methodological information.
6. Had a DOI or verifiable academic identifier.

Duplicate publications and studies focused exclusively on reading, writing, or technological development without examining oral communication were excluded.

Evidence Classification and Synthesis

The selected publications were classified into two categories:

1. Primary empirical studies, including experimental research, educational interventions, and case studies.
2. Secondary evidence, including systematic reviews of digital storytelling and speaking development.

The evidence was analyzed through thematic categorization. Thematic analysis allows recurrent patterns to be identified, organized, and interpreted as meaningful categories (Braun & Clarke, 2021).

The findings were organized into four categories:

1. Speaking fluency and pronunciation.
2. Vocabulary, grammar, and organization of ideas.
3. Confidence, motivation, and speaking anxiety.
4. Collaboration, creativity, self-regulation, and digital competence.

A statistical meta-analysis was not conducted because the selected studies differed in participants, educational levels, intervention duration, digital tools, research



designs, and assessment procedures. Therefore, the evidence was synthesized descriptively and thematically.

Publication Selection Process

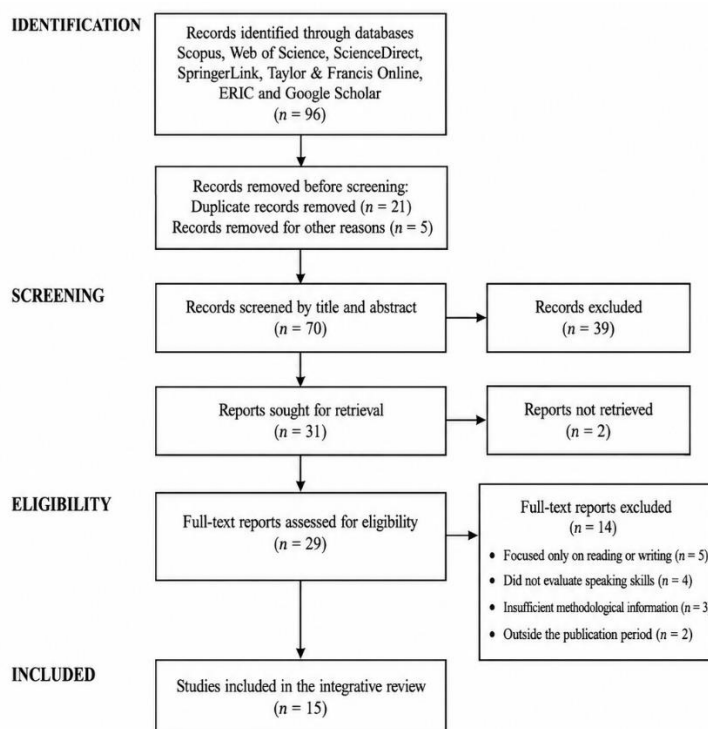
The publication-selection process followed the identification, screening, eligibility, and inclusion stages established by the PRISMA 2020 statement (Page et al., 2021).

The database search identified 96 records. After removing 21 duplicate records and 5 records for other reasons, 70 publications remained for title and abstract screening. During this stage, 39 records were excluded because they did not sufficiently address digital storytelling, English-language learning, or speaking skills.

Of the 31 reports sought for retrieval, 2 could not be accessed. Therefore, 29 full-text publications were assessed for eligibility. Fourteen publications were excluded because they focused only on reading or writing, did not evaluate English-speaking skills, lacked sufficient methodological information, or were outside the established publication period. Consequently, 15 studies published between 2020 and 2026 were included in the final integrative review.

Figure 1

PRISMA 2020 Flow Diagram of the Publication-Selection Process



Note. The selection process followed the identification, screening, eligibility, and inclusion stages established by PRISMA 2020. A total of 96 records were identified through seven academic information sources. After removing 26 duplicate or otherwise ineligible records, 70 publications were screened. Thirty-nine records were excluded, leaving 31 reports sought for retrieval. Two reports could not be accessed; therefore, 29 full-text publications were evaluated. Fourteen publications did not meet the eligibility criteria. Finally, 15 studies published between 2020 and 2026 were included.

Data Extraction

A standardized matrix was used to extract the following information:

- Author and publication year.
- Type of publication.
- Educational context.
- Participants or analyzed sample.
- Digital storytelling strategy.
- Technological resource.
- Speaking skills evaluated.
- Main findings.
- Reported limitations.
- DOI.
- Contribution to English-speaking development.

Methodological Quality Assessment

Eight descriptive criteria were used:

- C1: Clarity of objectives.
- C2: Adequacy of the theoretical foundation.
- C3: Methodological transparency.
- C4: Appropriateness of the research design.
- C5: Description of participants or evidence.
- C6: Clarity of the analysis.
- C7: Correspondence between findings and conclusions.
- C8: Acknowledgment of limitations.

Each criterion was scored as follows:



- 0: Criterion not met.
- 1: Criterion partially met.
- 2: Criterion fully met.

The maximum score was 16 points. Studies obtaining 80% or more were classified as having high descriptive reporting quality, those obtaining between 60% and 79% as moderate quality, and those obtaining less than 60% as low quality.

Table 1

Descriptive Reporting-Quality Assessment of the Included Publications

Study	Type of publication	Criteria met	Score	Descriptive reporting quality
Wu and Chen (2020)	Systematic review	8/8	16/16	High reporting quality
Chubko et al. (2020)	Empirical educational study	7/8	14/16	High reporting quality
Makarova and Pirozhkova (2020)	Experimental study	7/8	14/16	High reporting quality
Nair and Yunus (2021)	Systematic review	8/8	16/16	High reporting quality
Fu et al. (2022)	Empirical intervention study	8/8	16/16	High reporting quality
Yang et al. (2022)	Interdisciplinary empirical study	7/8	14/16	High reporting quality
Ramalingam et al. (2022)	Empirical educational study	7/8	14/16	High reporting quality
Huang (2023)	Empirical intervention study	8/8	16/16	High reporting quality
Murad et al. (2023)	Empirical educational study	7/8	14/16	High reporting quality
Zhussupova and Shadiev (2023)	Case study	7/8	14/16	High reporting quality
Bai and Xian (2024)	Experimental study	8/8	16/16	High reporting quality
Mardhiah et al. (2024)	Empirical educational study	7/8	14/16	High reporting quality
Puspitasari et al. (2024)	Empirical educational study	7/8	14/16	High reporting quality
Hidayati et al. (2025)	Empirical intervention study	7/8	14/16	High reporting quality
Almulla et al. (2026)	Empirical intervention study	8/8	16/16	High reporting quality

Note. C1 = clarity of objectives; C2 = adequacy of the theoretical foundation; C3 = methodological transparency; C4 = appropriateness of the research design; C5 = description of participants, sample, or analyzed evidence; C6 = clarity of the analysis; C7 = correspondence between findings and conclusions; and C8 = acknowledgment of limitations. The column “Criteria met” represents the number of criteria considered fully achieved.

The descriptive assessment showed that the 15 publications obtained scores ranging from 14 to 16 points, equivalent to 87.5%–100%. Six publications obtained the maximum score of 16 points: Wu and Chen (2020), Nair and Yunus (2021), Fu et al. (2022), Huang (2023), Bai



and Xian (2024), and Almulla et al. (2026). These studies presented clear objectives, appropriate methodological designs, detailed descriptions of the participants or reviewed evidence, coherent analyses, and conclusions supported by their results.

The remaining nine publications obtained 14 out of 16 points, equivalent to 87.5%. Although these studies were also classified as having high reporting quality, one criterion was considered partially fulfilled, generally because the limitations, analytical procedure, or methodological details were not reported with the same level of depth.

These scores represent a descriptive comparison of reporting quality and should not be interpreted as a formal risk-of-bias assessment or as evidence that all studies have the same methodological strength.

4. RESULTS

The thematic synthesis identified four main categories related to the use of digital storytelling for developing English-speaking skills: improvement of fluency and pronunciation; vocabulary, accuracy, and narrative organization; confidence, motivation, and speaking anxiety; and collaboration, creativity, self-regulation, and digital competence.

Most empirical studies reported positive outcomes because digital storytelling allowed students to prepare scripts, rehearse, record their voices, review their performance, and improve their final oral production. However, the effectiveness of the strategy depended on teacher guidance, access to technology, appropriate feedback, meaningful topics, and sufficient time for planning and editing.

Table 2
Primary Empirical Studies on Digital Storytelling and English-Speaking Skills

Study	Context or participants	Digital storytelling strategy	Speaking-related outcome	Main contribution
Chubko et al. (2020)	EFL students	Creation of digital narratives combining language and disciplinary content	Oral communication and disciplinary literacy	Digital storytelling helped students communicate academic knowledge through meaningful multimedia activities.
Makarova and Pirozhkova (2020)	Foreign-language university students	Individual creation and presentation of digital stories	Communicative competence and motivation	The strategy increased motivation and supported



Study	Context or participants	Digital storytelling strategy	Speaking-related outcome	Main contribution
				communicative, professional, and digital competencies.
Fu et al. (2022)	EFL learners	Animated digital storytelling through Toontastic	Fluency and language use	Students improved speaking competence through structured narration, rehearsal, and multimedia support.
Yang et al. (2022)	Students in an interdisciplinary English and technology project	Collaborative planning and production of digital stories	English speaking and creative thinking	Digital storytelling created meaningful opportunities for oral communication and creativity.
Ramalingam et al. (2022)	Primary-school students in Malaysia	Planning, recording, and presenting digital stories	Pronunciation, fluency, and speaking confidence	Repeated recording and revision helped students recognize errors and improve oral production.
Huang (2023)	Taiwanese EFL students	Script preparation, rehearsal, recording, presentation, and oral retelling	Speaking proficiency and group cohesion	Significant improvements were reported in speaking proficiency and collaborative interaction.
Murad et al. (2023)	Secondary-level EFL students	Digital story creation with voice recording and multimedia elements	Speaking performance and motivation	The activity improved speaking skills and encouraged students to participate more actively.
Zhussupova and Shadiev (2023)	Culturally diverse multilingual classroom	Digital storytelling for academic presentations	Fluency, coherence, and cohesion	Students improved academic public-speaking performance and narrative organization.
Bai and Xian (2024)	IELTS preparation students	Digital storytelling activities with rehearsal and self-monitoring	L2 speaking, self-regulation, and anxiety	The strategy strengthened speaking performance and self-regulation while helping reduce speaking anxiety.
Mardhiah et al. (2024)	First-year Indonesian EFL university students	Digital stories based on local folktales	Vocabulary, participation, and oral expression	Culturally familiar stories provided meaningful content and increased students' confidence and participation.



Study	Context or participants	Digital storytelling strategy	Speaking-related outcome	Main contribution
Puspitasari et al. (2024)	EFL students	Traditional story-based digital storytelling integrated with a genre-based approach	Vocabulary, pronunciation, fluency, and accuracy	Students improved multiple speaking dimensions and demonstrated greater confidence.
Hidayati et al. (2025)	EFL university students	Digital storytelling based on Lombok’s cultural heritage	Fluency, pronunciation, grammar, vocabulary, and narrative organization	Improvements were found across speaking dimensions, particularly in fluency and confidence.
Almulla et al. (2026)	Elementary students with English-language difficulties	Digital storytelling compared with printed-story instruction	Fluency, comprehension, pronunciation, and overall speaking	The digital storytelling group obtained better results in most speaking dimensions.

Note. This table includes primary empirical studies that directly examined the implementation of digital storytelling in English-language education. The comparison focuses on the educational context, strategy, speaking-related outcomes, and principal contribution of each study.

Table 3
Secondary Publications Used for Theoretical and Contextual Support

Study	Type of publication	Main focus	Contribution to the review
Wu and Chen (2020)	Systematic review	Educational uses and outcomes of digital storytelling	Identified linguistic, cognitive, technological, affective, and social benefits of digital storytelling in education.
Nair and Yunus (2021)	Systematic review	Digital storytelling for improving speaking skills	Reported that digital storytelling can improve oral communication, confidence, participation, collaboration, and meaningful language use.

Note. These publications were used as secondary evidence to contextualize and interpret the empirical findings. They were not treated as direct classroom interventions within the final synthesis.

Table 4
Thematic Synthesis of the Main Findings



Thematic category	Studies supporting the category	Main findings
Fluency and pronunciation	Fu et al. (2022); Ramalingam et al. (2022); Huang (2023); Zhussupova and Shadiev (2023); Puspitasari et al. (2024); Hidayati et al. (2025); Almulla et al. (2026)	Rehearsal, recording, listening, and revision helped students improve fluency, pronunciation, and oral delivery.
Vocabulary, accuracy, and narrative organization	Fu et al. (2022); Huang (2023); Mardhiah et al. (2024); Puspitasari et al. (2024); Hidayati et al. (2025)	Scriptwriting and story organization supported vocabulary use, grammatical accuracy, coherence, and sequencing of ideas.
Confidence, motivation, and speaking anxiety	Makarova and Pirozhkova (2020); Ramalingam et al. (2022); Murad et al. (2023); Bai and Xian (2024); Mardhiah et al. (2024); Hidayati et al. (2025)	Students showed greater motivation and confidence because they could rehearse and correct their recordings before presenting.
Collaboration, creativity, and digital competence	Chubko et al. (2020); Makarova and Pirozhkova (2020); Yang et al. (2022); Huang (2023); Zhussupova and Shadiev (2023)	Collaborative story production promoted creativity, teamwork, technological skills, and meaningful communication.
Pedagogical and technological conditions	Wu and Chen (2020); Nair and Yunus (2021); Fu et al. (2022); Bai and Xian (2024)	Positive outcomes depended on teacher guidance, clear speaking objectives, technological access, feedback, and sufficient preparation time.

Note. The categories were not mutually exclusive because several studies examined more than one linguistic, affective, collaborative, or technological variable.

Summary of the Results

The review showed that digital storytelling had a generally positive influence on English-speaking development. The strongest evidence was related to improvements in fluency, pronunciation, vocabulary, confidence, motivation, narrative organization, and collaboration. The studies also showed that the strategy was more effective when students prepared a script, rehearsed their narration, recorded their voices, listened to their performance, corrected errors, and received teacher or peer feedback. Nevertheless, positive outcomes were not produced by technology alone. They depended on appropriate instructional design, teacher support, meaningful topics, accessible digital tools, and clear assessment criteria.

5. DISCUSSION

The findings of this integrative review suggest that digital storytelling can strengthen the development of English-speaking skills, although its effects are not automatic or identical in every educational context. The empirical evidence indicates that positive outcomes depend



on how the strategy is designed, the opportunities provided for rehearsal and revision, the technological resources available, the characteristics of the learners, and the degree of teacher guidance. Studies conducted with primary, secondary, university, IELTS, and multilingual students reported improvements in fluency, pronunciation, vocabulary, oral confidence, motivation, collaboration, and narrative organization; however, the magnitude and type of improvement varied across the studies.

The comparison among the primary empirical studies shows that rehearsal and repeated recording were central elements. Fu et al. (2022) reported improvements in fluency and language use when students created animated digital stories through Toontastic. Similarly, Ramalingam et al. (2022) found that planning, recording, listening, and revising helped learners recognize errors and improve their oral production. Huang (2023) also identified positive effects on speaking proficiency and group cohesion through activities involving script preparation, rehearsal, recording, presentation, and oral retelling. These findings indicate that digital storytelling is most useful when students actively revise their spoken production rather than simply create a multimedia product.

The evidence also suggests that digital storytelling can support vocabulary, grammatical accuracy, coherence, and narrative organization. Mardhiah et al. (2024) found that local folktales provided meaningful content for vocabulary use and oral expression. Puspitasari et al. (2024) similarly reported improvements in vocabulary, pronunciation, accuracy, fluency, and confidence when traditional stories were integrated with a genre-based approach. Hidayati et al. (2025) identified progress in fluency, pronunciation, grammar, vocabulary, and narrative organization through digital stories based on Lombok's cultural heritage. These results show that culturally familiar topics can help students organize their ideas and communicate more confidently.

Confidence, motivation, and speaking anxiety were also relevant outcomes. Makarova and Pirozhkova (2020) found that creating digital stories increased motivation and supported communicative and digital competencies. Murad et al. (2023) reported improvements in speaking performance and motivation, while Bai and Xian (2024) found that digital storytelling supported speaking development and self-regulation while helping students manage speaking anxiety. The possibility of rehearsing and correcting a recording before presenting it may reduce the pressure associated with immediate oral participation.



Collaboration and creativity were especially evident in studies where digital storytelling was implemented through group projects. Yang et al. (2022) found that collaborative digital storytelling created meaningful opportunities for speaking and creative thinking. Huang (2023) also reported improvements in group cohesion, while Zhussupova and Shadiev (2023) showed that digital storytelling supported fluency, coherence, and academic public-speaking skills in a culturally diverse classroom. These findings suggest that digital storytelling can develop not only linguistic competence but also teamwork, creativity, and digital literacy.

The comparison between empirical and secondary evidence is also important. The primary studies provided direct information about students' speaking outcomes, while the systematic reviews offered broader support for interpreting the findings. Wu and Chen (2020) identified linguistic, cognitive, technological, affective, and social benefits associated with educational digital storytelling. Nair and Yunus (2021) similarly concluded that digital storytelling can promote oral communication, participation, confidence, collaboration, and meaningful language use. However, these reviews also emphasize that positive results depend on teacher preparation, instructional planning, and appropriate technological support.

Some findings were consistent, whereas others were more variable. Most studies agreed that digital storytelling improved fluency, confidence, engagement, or oral participation. Nevertheless, not every speaking dimension improved equally. Fu et al. (2022), for example, found stronger progress in fluency and language use than in all dimensions of engagement. Almulla et al. (2026) reported better outcomes in fluency, comprehension, pronunciation, and overall speaking performance, but not a statistically significant advantage in vocabulary. These differences may be explained by variations in educational level, intervention duration, digital tools, sample size, story topic, teacher feedback, and assessment instruments.

The educational context also influenced the results. Primary-school students required more structured support, visual resources, and guided practice, while university and IELTS learners were more frequently involved in self-regulation, independent rehearsal, and academic speaking tasks. Cultural storytelling also appeared to increase relevance and participation because students could connect English-language production with familiar traditions and experiences.

Despite its benefits, digital storytelling presents pedagogical and technological challenges. Students may have limited access to devices or internet connectivity, insufficient



editing skills, difficulty organizing group work, or excessive concern with visual design instead of oral language development. The process may also require considerable time for scriptwriting, recording, editing, and presentation. Therefore, teachers should define clear speaking objectives, provide models and rubrics, limit the technical complexity of the task, monitor group participation, and offer feedback on pronunciation, fluency, vocabulary, grammar, and narrative coherence.

The methodological limitations of the evidence must also be considered. The corpus included systematic reviews, experimental studies, educational interventions, and case studies conducted with different participants, technological resources, intervention periods, and assessment methods. This diversity prevented direct statistical comparison. Some studies were conducted in specific institutions or cultural settings, which limits the generalization of their findings.

The review process also presents limitations. Study identification, selection, data extraction, thematic analysis, and quality assessment were conducted by one reviewer. No inter-rater agreement coefficient was calculated, and the review was not prospectively registered. Consequently, selection bias, subjective interpretation, and unintentional omissions cannot be completely excluded.

Overall, digital storytelling appears most educationally valuable when it functions as a structured speaking-learning strategy rather than as a simple multimedia activity. Its contribution depends on script preparation, repeated rehearsal, voice recording, self-assessment, teacher feedback, meaningful topics, and opportunities to present the final story to an audience. Future research should conduct longer interventions, include larger and more diverse samples, compare conventional speaking instruction with digital storytelling, and examine the long-term effects on fluency, pronunciation, vocabulary, confidence, and self-regulated learning.

6. CONCLUSIONS

This integrative review analyzed the contribution of digital storytelling to the development of English-speaking skills. The literature search covered publications from 2020 to 2026, and 15 unique studies were included in the final corpus. The evidence was organized into four principal dimensions: fluency and pronunciation; vocabulary, accuracy, and narrative



organization; confidence, motivation, and speaking anxiety; and collaboration, creativity, self-regulation, and digital competence.

The reviewed evidence indicates that digital storytelling can strengthen English-speaking development by allowing students to plan scripts, organize ideas, rehearse pronunciation, record their voices, listen to their performance, correct errors, and present a final multimedia story. The most consistent benefits were observed in fluency, pronunciation, oral confidence, motivation, participation, narrative organization, and collaboration.

However, the effectiveness of digital storytelling depended on instructional design, teacher guidance, access to technology, meaningful content, appropriate feedback, and sufficient preparation time. The findings did not show that every speaking dimension improved equally in all educational contexts. Differences were associated with learners' educational level, intervention duration, digital tools, assessment procedures, and cultural background.

The evidence also showed that digital storytelling should not be understood only as the use of images, music, or video. Its educational value lies in the process of planning, speaking, recording, reviewing, correcting, and communicating a meaningful story. The teacher remains essential for guiding script development, correcting language, supporting pronunciation, providing feedback, and ensuring that technological elements do not replace oral practice.

The conclusions are limited by the methodological diversity of the 15 publications, the inclusion of primary and secondary evidence, the participation of one reviewer, and the absence of prospective protocol registration. Future studies should use larger samples, longer interventions, comparable assessment instruments, and direct comparisons between traditional speaking instruction and digital storytelling.

Digital storytelling can therefore be considered an innovative and student-centered strategy for English-language education. When it is appropriately designed and supported, it can improve speaking competence while also promoting creativity, collaboration, confidence, autonomy, and digital literacy.

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