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Digital Storytelling for Project-Based English Oral Communication Learning: From Conceptualization to Product Development

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Abstract*:* The integration of digital technology into English language education has created opportunities to enhance students' oral communication skills through more engaging and authentic learning experiences. However, there remains a need for innovative learning resources that effectively integrate technology, storytelling, and Project-Based Learning to support meaningful oral communication. This study aimed to develop a digital storytelling product for Project-Based English oral communication learning through an international collaborative initiative involving Universitas Negeri Yogyakarta, Indonesia, and Walailak University, Thailand. The study adopted a research and development approach using the ADDIE model, encompassing the phases of analysis, design, development, implementation, and evaluation. The development process included needs analysis through focus group discussions, collaborative storyline design, illustration and audio production, digitalization, expert validation, product try-out, implementation at the Indonesian School of Bangkok, and iterative refinement based on stakeholder feedback. The findings indicate that the resulting digital storytelling product integrates pedagogical, visual, and technological features into a coherent multimedia learning resource designed to support English oral communication learning. Expert validation by three validators yielded an overall mean score of 4.53 out of 5.00 (90.6%), placing the product in the "Very Feasible" category. The product try-out involving 30 vocational high school students resulted in a mean score of 4.41 out of 5.00 (88.2%), categorized as "Very Good," particularly in terms of content clarity, usability, and multimedia integration. These preliminary results provided initial evidence of the product's feasibility and usability and informed subsequent product refinement. The product integrates pedagogical, visual, and technological features designed to provide authentic communication opportunities and to facilitate learner engagement, creativity, collaboration, intercultural awareness, and technology-enhanced learning. Rather than demonstrating these as measured learning outcomes, these features represent the intended pedagogical affordances of the developed product. The international collaboration contributed to the development of culturally contextualized content and practical implementation strategies. In conclusion, the developed digital storytelling product represents a contextualized multimedia learning resource for Project-Based English oral communication learning and provides a practical development framework for integrating digital storytelling into English language teaching.

Keywords: Digital Storytelling; English Oral Communication; Project-Based Learning

1. INTRODUCTION

The rapid advancement of digital technology has substantially transformed English language education by creating more interactive, learner-centered, and authentic learning environments (Amir & Rustam, 2025; Asad & Siddiqui, 2025; Memmedova & Ahmedova, 2026; Pambudi & Fajrin, 2026; Kasriyati et al., 2026). The integration of educational technology has shifted English language learning beyond traditional classroom instruction, enabling learners to develop language competencies through meaningful digital experiences. Specifically, technology-enhanced learning has grown in significance for fostering students' digital literacy, creativity, teamwork, and communication skills, all of which are considered critical abilities for learners in the twenty-first century (Kalyani, 2024; Shadiev & Wang, 2022). According to Pratiwi, Kustandi, Kusumawardani, and Rahmadi (2025) and Shen, Shen, and Peng (2023), digital storytelling has emerged as an innovative pedagogical approach that integrates storytelling, multimedia resources, and student-centered learning to facilitate meaningful language-learning experiences.

Digital storytelling integrates narrative, visual images, audio narration, animation, and digital media into a coherent learning resource that enables learners to construct knowledge while communicating ideas creatively (Fathira, Masbiran, Elsara, 2024; Kallinikou & Nicolaidou 2019; Yuniarti & Yulian, 2022). The potential of digital storytelling to improve learners' language proficiency, communication skills, motivation, engagement, and digital competence has been widely acknowledged in English Language Teaching creatively (Moradi & Chen, 2019; Pambudi & Fajrin, 2025; Pratiwi et al., 2025; Shen et al., 2023). Digital storytelling is especially useful for improving English oral communication skills because it encourages students to share personal experiences, negotiate meaning, and communicate ideas in real-world contexts (Andriani et al., 2021).

Developing oral communication skills remains one of the major objectives of English language education. In addition to having linguistic knowledge, learners must exhibit confidence, fluency, interactional competence, and communicative efficacy in real-world situations in order to communicate effectively orally (Dewan & Sharma, 2025; Pambudi & Kaliaskarova, 2023; Sudirman, Sutrisno, Oktafiani, Giyanto & Anggraini, 2025). However, English as a Foreign Language (EFL) learners continue to experience challenges in expressing ideas orally because classroom instruction often emphasizes grammatical accuracy and receptive language skills more than meaningful spoken interaction (Ork, Chin, Ban, & Em, 2024; Shen et al., 2023). As a result, there is a growing demand for creative teaching materials that incorporate digital technology into language learning while fostering real-world communication possibilities.

One instructional approach that complements digital storytelling is Project-Based Learning (PBL). By involving students in real-world projects that call for cooperation, creativity, communication, and problem-solving, PBL encourages active learning (Almulla, 2020; Gabuardi, 2021; Marwa, Hulu, Herlinawati, Muliardi, 2026). Rather than passively receiving knowledge, learners actively construct understanding through meaningful project activities that simulate real-world situations (Kokotsaki, Menzies, & Wiggins, 2016; Machanova, 2025). According to recent research, incorporating digital storytelling into project-based learning increases students' autonomy, creativity, digital competence, and engagement throughout the learning process in addition to improving their oral communication performance (Pratiwi et al., 2025; Setiawan, Masuwd, Maliki, Laily, & Fitriyani, 2023; Shen et al., 2023). Thus, there is significant pedagogical potential for learning oral communication in English when digital storytelling is combined with project-based learning.

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The effectiveness of digital storytelling in enhancing speaking performance, learner motivation, engagement, creativity, and digital literacy has been thoroughly studied in the past (Kallinikou & Nicolaidou, 2019; Pratiwi et al., 2025; Setiawan et al., 2023; Shen et al., 2023; Yuniarti & Yulian, 2022). However, the systematic development of digital storytelling products specifically intended for project-based English oral communication learning has received relatively little attention. Few studies describe how digital storytelling products are conceptualized, designed, produced, and refined into contextualized learning materials; most studies focus on learning results. Despite the growing need for globally relevant and culturally contextualized English learning materials, publications detailing the creation of digital storytelling products through international academic collaboration are still rare.

The development of this digital storytelling product was further motivated by the educational context of the Indonesian School of Bangkok (SIB), Thailand, where Indonesian students learn English in an international environment while maintaining the Indonesian national curriculum. Such a context requires learning resources that are not only linguistically appropriate but also culturally relevant, engaging, and adaptable to authentic communication practices. The implementation of the International Teaching Practicum (PPL Internasional) involving pre-service English teachers from Universitas Negeri Yogyakarta provided an opportunity to collaboratively design contextualized digital learning materials in partnership with Walailak University.

To address these gaps, this study developed a digital storytelling product through an international collaborative initiative involving Universitas Negeri Yogyakarta, Indonesia, and Walailak University, Thailand. The product development process consisted of six stages: conceptualization through Focus Group Discussions (FGDs), storyline development, illustration and audio production, digitalization of storytelling materials, product try-out, and product refinement. The resulting product integrates narrative storytelling, multimedia components, and project-based learning principles into a contextualized digital learning resource designed to support English oral communication learning.

Previous studies on digital storytelling in language education have largely focused on its effects on learners' speaking performance, motivation, engagement, and digital literacy, while giving less attention to how digital storytelling materials are systematically conceptualized, developed, and refined for specific instructional and cultural contexts. Addressing this gap, the present study shifts the focus from evaluating learning outcomes to documenting the development of a contextualized digital storytelling product for Project-Based English oral communication learning. More specifically, this study demonstrates how pedagogical objectives, culturally contextualized storytelling, visual design, audio narration, and project-based communication activities are systematically translated into an integrated digital learning resource through international academic collaboration and implementation in an authentic school context. Therefore, the contribution of this study lies not merely in combining digital storytelling, Project-Based Learning, and international academic collaboration, but in providing a development-oriented account of how these components can be operationalized into a contextualized multimedia resource for English oral communication learning. This study aims to describe the development process of the digital storytelling product and to identify the pedagogical, visual, and technological characteristics of the resulting product. This study addresses the following research questions:

1. How was the digital storytelling product for project-based English oral communication learning conceptualized and developed?
2. What pedagogical, visual, and technological features characterize the resulting digital storytelling product?

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2. METHOD

This study employed a Research and Development (R&D) approach using the ADDIE model, which consists of five phases: Analysis, Design, Development, Implementation, and Evaluation (Branch, 2009). This paper focuses specifically on the Development phase, which was operationalized through six stages: conceptualization, storyline development, illustration and audio production, digitalization, product try-out, and product refinement. Thus, these six stages represent procedures within the Development phase rather than separate phases of ADDIE. The preliminary product was validated by three experts in English language education and educational technology using a validation questionnaire covering pedagogical, linguistic, visual, and technological aspects. Each item was rated using a five-point Likert scale ranging from 1 (very poor) to 5 (very good). The mean scores were interpreted using the following criteria: 4.21–5.00 = Very Feasible, 3.41–4.20 = Feasible, 2.61–3.40 = Moderately Feasible, 1.81–2.60 = Less Feasible, and 1.00–1.80 = Not Feasible. The quantitative ratings were complemented by written comments and suggestions from the validators. These comments were reviewed to identify aspects requiring improvement and were subsequently used to revise the storyline, linguistic clarity, visual presentation, audio components, and instructional directions before the product try-out. The study focuses on documenting the development and validation process and describing the pedagogical, visual, and technological characteristics of the resulting product rather than evaluating its effectiveness on learners' oral communication outcomes.

The product development involved seven lecturers from Universitas Negeri Yogyakarta and Walailak University, five pre-service English teachers participating in the International Teaching Practicum (PPL Internasional), thirty vocational high school students, and fifteen students from the Indonesian School of Bangkok. The lecturers were involved based on their expertise in English language education and supervised the conceptualization and development of the product, while the pre-service teachers were selected as participants of the international teaching practicum and contributed to the storyline, illustrations, audio narration, and digitalization. Three of the seven lecturers also served as expert validators; thus, the expert validators were not a separate participant group. The three validators were selected based on their complementary areas of expertise: one specialized in English language education and oral communication, one in instructional design and Project-Based Learning, and one in educational technology and multimedia learning. Their expertise enabled the product to be evaluated from pedagogical, linguistic, visual, and technological perspectives. The vocational high school students participated in the preliminary try-out to provide feedback on the clarity and usability of the product, whereas the Indonesian School of Bangkok students used the refined product during Project-Based English oral communication learning. Their involvement provided an authentic context for product development and implementation rather than an experimental evaluation of its effectiveness.

Within the Development phase of the ADDIE model, the product development process was operationalized through six sequential stages, as described below.

Stage 1. Conceptualization

The first stage involved conducting Focus Group Discussions (FGDs) between lecturers from Universitas Negeri Yogyakarta and Walailak University. The discussions aimed to identify learners' needs, determine learning objectives, establish project-based learning activities, and formulate the conceptual framework of the digital storytelling product.

Stage 2. Storyline Development

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Based on the conceptual framework, participants collaboratively designed storylines that reflected authentic communication situations suitable for English oral communication learning. The storylines were developed by considering learners' language proficiency, communicative functions, cultural relevance, and project-based learning principles.

Stage 3. Illustration and Audio Production

After the storylines had been finalized, visual illustrations and audio narration were produced. Illustrations were designed to enhance learners' understanding of the stories, while audio narration provided pronunciation models and contextualized oral communication examples. This stage integrated visual and auditory elements to improve learner engagement.

Stage 4. Digitalization

The completed storylines, illustrations, and audio narration were integrated into digital storytelling materials using appropriate multimedia applications. This process transformed the learning materials into interactive digital products that combined narrative texts, visual media, audio narration, and project-based learning activities.

Stage 5. Product Try-out

The preliminary version of the digital storytelling product was tried out with thirty vocational high school students. The try-out aimed to obtain preliminary feedback on the product's usability, content clarity, multimedia integration, and overall learning experience. The students evaluated the product using a five-point Likert-scale questionnaire covering these four aspects and were also invited to provide comments and suggestions for improvement. The quantitative responses were analyzed using mean scores and percentages, while the qualitative feedback was reviewed to identify specific aspects requiring revision. Feedback obtained during this stage was used as the basis for product revision.

Stage 6. Product Refinement

Based on the try-out results, revisions were made to improve the quality of the digital storytelling product. The refinement focused on enhancing storyline coherence, multimedia quality, instructional clarity, and user experience before the product was utilized by preservice English teachers during their International Teaching Practicum at the Indonesian School of Bangkok, Thailand.

Data were collected throughout the product development process using multiple sources. Documentation was collected during each development stage, including FGD results, storyline drafts, illustrations, audio scripts, and digital product prototypes. Observational notes were recorded during workshops and product development activities. Feedback obtained from the product try-out was also documented to support product refinement.

The collected data were analyzed qualitatively using descriptive analysis. First, data from FGD records, development documentation, observational notes, product drafts, and try-out feedback were organized according to the six development stages. The data were then reviewed and categorized to identify key information related to the development process, product characteristics, feedback, and subsequent revisions. Evidence from different data sources was compared to identify consistent patterns and changes throughout the development process. Finally, the categorized data were interpreted to describe how the product was developed and to identify its pedagogical, visual, and technological characteristics. The findings were organized according to the development stages and the main product characteristics in accordance with the research questions.

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3. FINDINGS AND DISCUSSION

FINDINGS

3.1. Conceptualization and Development of the Digital Storytelling Product

The development of the digital storytelling product followed a systematic and collaborative process involving lecturers and pre-service English teachers from Universitas Negeri Yogyakarta and Walailak University. The conceptualization stage began with a series of Focus Group Discussions (FGDs) to determine the instructional objectives, target learners, learning outcomes, and the integration of Project-Based Learning (PBL) into English oral communication instruction. During these discussions, both institutions agreed that the learning material should promote authentic communication while reflecting the local cultural context of Thailand.

A comprehensive storyboard was created before the production phase based on the conceptual framework. The storyboard served as the instructional blueprint of the product by organizing the sequence of events, narrative descriptions, dialogues, and conversation prompts for every scene. The final storyboard consisted of sixteen interconnected scenes, beginning with the story cover and continuing through various episodes such as A Village by the River, Auey and Mother, Mother's Promise, The Stormy Day, The Golden Goby, and concluding with Love Always Finds You. Each scene contained a narrative description accompanied by dialogue that later became the basis for oral communication practice. The storyboard is presented in Table 1.

Table 1. The Storyboard

Scene	Scene Title	Story Text / Dialogue	Conversation Bubbles
1	Cover	The Golden Goby: A Tale from Thailand	The is no bubble.
2	A Village by the River	Long ago, in a quiet village beside a shining river in Thailand, lived a kind girl named Auey. She loved the river, the flowers, and the little songs of the morning birds.	Auey: "What a beautiful morning!" Mother: "This is our peaceful village by the river." Auey: "I love the river, the flowers, and the birds."
3	Auey and Mother	Auey loved her mother more than anything. They cooked rice together, folded flowers together, and listened to the river at night. Mother always made the world feel gentle and safe.	Auey: "I love being with you, Mother!" Mother: "And I love every moment with you, Auey." Mother: "The river always remembers." Auey: "I will remember too."
4	Mother's Promise	One quiet night, Mother held Auey close and spoke softly beside the river. Auey did not know why the words felt so important, but she kept them deep in her heart.	Mother: "No matter where I am, my love will always find you." Auey: "I love you, Mother."

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5	The Stormy Day	One stormy day, Auey's mother did not come home. The river was quiet, and Auey's heart felt empty. She waited by the water until the rain softened into silence.	Auey: "Mother?"
6	A House Without Warmth	After that day, Auey lived with her father, her stepmother, and two stepsisters. But the house no longer felt like home. Her stepmother gave orders, and Auey learned to hold her sadness quietly.	Stepmother: "Do your work, Auey. Do not be slow."
7	Morning Chores	Every morning, Auey swept the floor, fetched water, cooked rice, and washed clothes by the river. She was tired, but her heart still held a small light.	Auey: "I will be strong today."
8	A Golden Visitor	One afternoon, as Auey cried beside the river, a small golden goby rose from the water. Its scales shone like tiny suns. Auey looked closer and heard a voice she thought she had lost forever.	Auey: "Who are you?" Golden Goby: "Do not be afraid, my child. I am here."
9	The Secret Discovered	From that day on, Auey came to the river in secret. She brought rice crumbs and whispered her worries to the golden goby. But one day, the stepsisters followed her and saw everything.	Auey: "I missed you." Golden Goby: "I know." Stepsister: "So that is her secret."
10	The Golden Scale	The next morning, the golden goby was gone. Auey searched the quiet riverbank until she found a single golden scale. With trembling hands, she buried it beneath the earth.	Auey: "Please stay with me."
11	The Shimmering Tree	By sunrise, a little plant had grown. Soon, it became a beautiful eggplant tree unlike any tree in the village. Its fruit shimmered like morning light, and Auey felt her mother's love near her again.	Auey: "Mother's love is still here."
12	Seeds of Hope	The stepmother grew jealous. That night, the tree was pulled from the ground. In the morning, Auey gathered the fallen seeds	Stepmother: "Why should such beauty belong to Auey?" Auey: "I will not give up."

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		and carried them far away to a peaceful place near the temple.	
13	The Golden Bodhi Tree	Auey planted the seeds with care. Days passed. Then weeks. At last, a great Bodhi tree rose from the earth, its heart-shaped leaves shining like gold in the wind. People came from every village to see it.	Auey: "Grow again. Grow with kindness." Villager/Child: "Look! It shines like gold!"
14	The King's Invitation	Even the young king heard about the golden tree. When he saw Auey caring for it, he did not first notice her simple dress. He noticed her gentle heart. He bowed with respect and spoke kindly to her.	King: "This tree grows because of your kindness." King: "Will you help our kingdom grow the same way?" Auey: "Yes, Your Majesty."
15	Love Always Finds You	Auey went to the palace, but she never forgot the river, the golden goby, or her mother's promise. When the stepfamily came to her, Auey chose strength without cruelty.	Auey: "You hurt me, but I will not let hurt grow inside my heart."Mother's voice: "My love will always find you."

After the storyboard had been finalized, visual illustrations were produced to represent every scene consistently. The illustrations adopted a storybook style with colorful digital artwork depicting Thai landscapes, traditional houses, rivers, temples, local costumes, and recurring characters. These visual elements were intentionally designed to strengthen learners' comprehension by providing contextual support for the storyline while maintaining learners' interest throughout the reading process.

The next development stage involved audio production. Audio narration was recorded for every story page to provide learners with pronunciation models, intonation patterns, and expressive storytelling. The integration of narration transformed the digital storybook from a static reading material into a multimodal learning resource that simultaneously supported listening and speaking activities. Learners were able to read the story while listening to native-like oral models before practicing the dialogues independently or collaboratively.

All multimedia components including the storyline, illustrations, narration, and learning activities were integrated into a digital storybook. The completed product was then tried out to obtain feedback regarding the clarity of the storyline, illustration quality, usability, and learning experience. Suggestions obtained during the try-out were incorporated into the final revision before the product was implemented in the Indonesian School of Bangkok. The development process demonstrates that the product was not merely a digital version of a printed storybook but a systematically designed instructional resource integrating storytelling, multimedia technology, and project-based learning into English oral communication instruction.

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3.2 Pedagogical, Visual, and Technological Features of the Digital Storytelling Product

Three main qualities of the final digital storytelling product are pedagogical, visual, and technological. These features were all purposefully created to promote project-based English oral communication learning.

Pedagogical Features

Figure 1: *Cover and Sample Page of the Digital Storytelling Product*

In terms of pedagogy, the product incorporates Project-Based Learning into each learning phase. The product encourages students to actively participate through storytelling, conversation practice, group discussion, and project completion rather than having them read the story passively. Learners must interpret meaning, express opinions, and practice oral communication in contextualized scenarios as a result of the storyline's authentic conversational exchanges.

The selected story, *The Golden Goby: A Tale from Thailand*, also introduces learners to cultural values such as kindness, gratitude, perseverance, honesty, and family relationships. As a result, the product promotes character education and multicultural understanding in addition to language growth. Since the product was created with Indonesian students studying in Thailand in mind, integrating local cultural narratives increases contextual relevance while creating authentic communication opportunities. The storyboard clearly has conversation bubbles and dialogue prompts, indicating that each scenario was intended to encourage spoken participation rather than serving only as reading materials.

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Visual features

Figure 2: *Sample Pages Illustrating the Visual Design of the Digital Storytelling Product*

Visually, the product employs high-quality digital illustrations that maintain consistency across all story pages. The characters remain visually recognizable throughout the story, enabling learners to follow the narrative more easily. Background illustrations depicting rivers, villages, forests, temples, and traditional Thai environments further strengthen contextual understanding.

The cover page effectively represents the overall theme by presenting the main character together with the golden goby in a traditional Thai riverside setting, immediately introducing learners to the cultural atmosphere of the story. The layout combines illustrations and written text harmoniously, allowing learners to process verbal and visual information simultaneously. According to multimedia learning theory, combining relevant visual representations with textual information facilitates comprehension and reduces cognitive load during learning. Therefore, the visual design contributes significantly to learners' understanding of the storyline while maintaining motivation and engagement.

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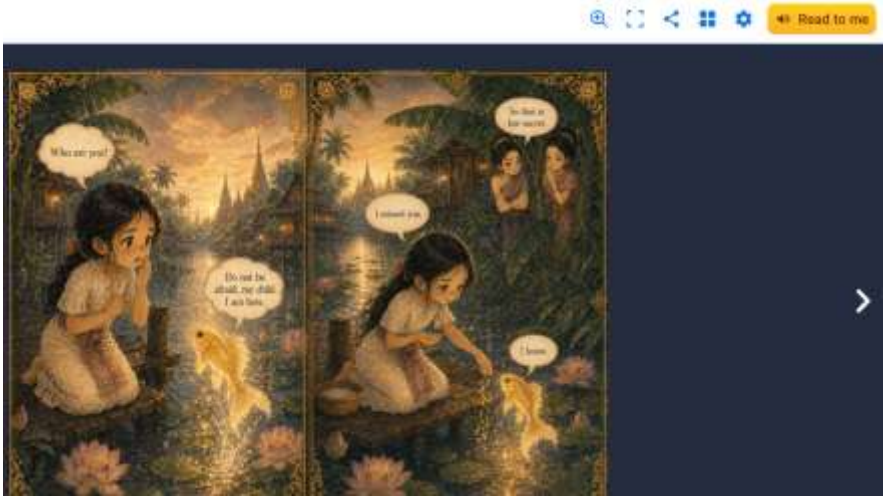
Technological Features

Figure 3: *Integration of Audio Narration and Multimedia Elements in the Digital Storytelling Product*



One of the most distinctive characteristics of the product is its integration of multimedia technology. The digital storytelling product features synchronized audio narration for each story page, in contrast to traditional printed storybooks. As they follow the written text and images, this feature enables students to hear correct pronunciation, stress, rhythm, and intonation.

Multiple language abilities are simultaneously supported by the multimodal integration of text, visuals, and storytelling. Students improve their speaking skills by repeating dialogues and narrating the story, their listening comprehension by following the narration, and their reading comprehension by studying the written text. Compared to text-only teaching resources, such multimodal engagement produces richer learning experiences.

Moreover, the digital format enables flexible learning across different learning environments. Students can revisit the narration repeatedly, independently practice pronunciation, and participate in collaborative storytelling activities both inside and outside the classroom. These technological affordances demonstrate how digital storytelling extends learning opportunities beyond conventional classroom instruction.

DISCUSSION

The findings indicate that the digital storytelling product was developed through a systematic process integrating pedagogical planning, multimedia design, and contextualized learning principles. The six development stages provided a structured framework for producing a learning resource that combines storytelling, technology, and Project-Based Learning (PBL). This finding supports previous studies emphasizing that effective digital storytelling should be grounded in sound instructional design rather than focusing solely on technological innovation (Pratiwi et al., 2025; Tsymbalysta et al., 2026). However, the present study extends this perspective by showing how instructional design can be operationalized through a sequence of interconnected development stages, from collaborative conceptualization to product refinement. This is important because it positions digital storytelling development as a pedagogically driven process rather than merely a process of converting narrative content into a digital format.

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The integration of Project-Based Learning represents one of the main strengths of the developed product. Rather than functioning solely as a digital storybook, the product encourages learners to participate in storytelling, dialogue practice, collaboration, and communication-oriented tasks. This finding is consistent with previous research suggesting that PBL promotes authentic learning, learner engagement, collaboration, creativity, and communication skills (Almulla, 2020; Fallas Gabuardi, 2021; Kokotsaki, Menzies, & Wiggins, 2016). While these previous studies primarily establish the pedagogical benefits of PBL, the present study illustrates how PBL principles can be embedded within the design of a digital storytelling resource for oral communication. In this sense, the contribution lies in translating PBL principles into concrete product features, such as contextualized dialogues, collaborative storytelling, and communication-oriented activities. These features provide opportunities for active oral language use, although the extent to which they improve learners' speaking performance requires further empirical investigation.

Another important finding concerns the integration of pedagogical, visual, and technological features within a single instructional resource. The combination of contextualized dialogues, consistent visual illustrations, and synchronized audio narration is designed to provide learners with opportunities to engage with written, visual, and spoken language within the same learning resource. This finding aligns with previous studies highlighting that digital storytelling becomes more effective when visual, textual, and auditory elements are meaningfully integrated to facilitate language learning (Kallinikou & Nicolaidou, 2019; Moradi & Chen, 2019; Shen et al., 2023). The present study adds a development-oriented perspective by demonstrating how these multimodal elements can be deliberately aligned with oral communication objectives rather than being included primarily as technological enhancements. The significance of this integration lies in the functional relationship among the modes: illustrations provide contextual support, audio narration offers oral language models, and dialogue prompts create opportunities for speaking practice. Thus, multimodality becomes part of the instructional design for oral communication rather than simply an attractive feature of the digital product.

The findings reinforce the growing role of educational technology in transforming English language learning from teacher-centered instruction into interactive, learner-centered experiences. In the present product, technology functions as an enabling component that connects narrative, visual, audio, and communication activities within a single learning environment. This perspective is consistent with Amir and Rustam (2025), Asad and Siddiqui (2025), Memmedova and Ahmedova (2026), and Pambudi and Fajrin (2026), who argued that effective educational technology should enrich learning experiences through meaningful interaction rather than simply digitizing conventional instructional materials. The present study extends this argument by illustrating what such integration may look like at the product-development level. Instead of adding technology after the instructional content has been designed, multimedia elements were incorporated as part of the pedagogical structure of the resource. This suggests that the educational value of technology in digital storytelling depends not simply on its presence, but on how closely technological features are aligned with communicative purposes.

Another important implication of this study concerns the opportunities the product provides for practicing twenty-first-century competencies through the integration of digital storytelling and Project-Based Learning. The design encourages students to communicate ideas, work collaboratively, engage with contextual problems, and use digital resources as part of project-based activities. These characteristics suggest potential opportunities for supporting digital literacy, creativity, critical thinking, communication, and teamwork rather than demonstrating measurable improvement in these competencies. This interpretation is

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consistent with studies highlighting the potential of technology-enhanced learning environments to support twenty-first-century skills (Kalyani, 2024; Shadiev & Wang, 2022). Likewise, Pambudi and Fajrin (2025) emphasized that digital learning resources should facilitate not only language proficiency but also learners' ability to communicate effectively and participate actively in technology-rich educational environments. Accordingly, the significance of the present product lies in incorporating these opportunities into its instructional design; future empirical research is needed to determine the extent to which these affordances result in actual learner development.

The cultural dimension embedded within the digital storytelling product also deserves attention. By adopting *The Golden Goby: A Tale from Thailand* as the central narrative, the product contextualizes English learning within the social and cultural setting in which the material was intended to be used. The incorporation of Thai cultural settings, values, and authentic situations provides opportunities for learners to encounter English through culturally contextualized content and to reflect on cultural meanings through the story. Previous studies have suggested that contextualized digital storytelling can promote learner engagement and meaningful communication by connecting language learning with authentic cultural experiences (Shen et al., 2023; Yuniarti & Yulian, 2022). Furthermore, Pambudi and Fajrin (2023) emphasized that contextualized communicative learning materials can prepare learners to use English in diverse intercultural settings. The present study extends these discussions by showing that cultural contextualization can be incorporated from the initial stages of product development rather than added as supplementary content after the learning resource has been produced. This is particularly relevant to the international context of the study, in which Indonesian learners encounter English within a Thai cultural environment. Therefore, culture functions not merely as the background of the story but as an organizing element in the design of contextualized oral communication activities.

The developed product addresses one of the major challenges in English oral communication instruction by providing structured opportunities for learners to practice speaking through authentic dialogue, storytelling, and collaborative project activities. Previous studies have reported that many EFL learners experience difficulties in oral communication because classroom instruction often prioritizes grammatical accuracy over meaningful interaction (Dewan & Sharma, 2025; Ork et al., 2024; Sudirman et al., 2025). Rather than claiming to resolve these difficulties empirically, the present study responds to this pedagogical challenge at the design level by integrating dialogue-based storytelling, synchronized audio narration, and project-based speaking activities into a single resource. This design is significant because oral communication is treated not as an additional exercise following the story but as an integral purpose of the digital storytelling experience.

Taken together, these findings offer a development-oriented contribution to the digital storytelling literature. Whereas much previous research has concentrated on whether digital storytelling improves particular learning outcomes, the present study focuses on how a contextualized digital storytelling resource for English oral communication can be systematically constructed. The contribution therefore lies not simply in combining digital storytelling, Project-Based Learning, multimedia technology, and cultural content, but in demonstrating how these components can be operationalized and aligned throughout the development process. International academic collaboration further enabled pedagogical, technological, and cultural considerations to be incorporated into the development of the resource. The study consequently provides a practical development framework that may inform educators and researchers designing contextualized, technology-enhanced resources for English oral communication, while the effectiveness of such resources remains an important area for subsequent empirical investigation.

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4. CONCLUSION

This study developed a digital storytelling product for Project-Based English oral communication learning through a systematic development process involving conceptualization, storyline development, illustration and audio production, digitalization, product try-out, and refinement. The resulting product integrates pedagogical, visual, and technological features into a coherent multimedia learning resource designed to support authentic English oral communication while providing opportunities for learner engagement, creativity, collaboration, and intercultural awareness.

Beyond presenting a digital learning resource, this study contributes to the field of English language education by providing a practical framework for developing digital storytelling products through international academic collaboration. The integration of Project-Based Learning, multimedia storytelling, and contextualized cultural content demonstrates how educational technology can be systematically designed to support meaningful oral communication learning in diverse educational settings. This contribution extends previous studies that primarily emphasized learning outcomes by documenting the complete product development process and highlighting the instructional characteristics of the resulting product.

This study has several limitations. It focused primarily on the development process and characteristics of the digital storytelling product rather than empirically evaluating its effectiveness on learner outcomes. Although the expert validation and preliminary product try-out provided initial evidence regarding the feasibility and usability of the developed product, these results should not be interpreted as evidence of its effectiveness in improving learners' oral communication skills or other learning outcomes. In addition, the product was developed and implemented within a specific educational and cultural context, which may limit the generalizability of the findings to other learning settings. Future research is therefore recommended to investigate the effectiveness of the developed digital storytelling product in improving learners' oral communication skills, speaking confidence, intercultural competence, and other twenty-first-century skills across different educational contexts. Such studies will provide further empirical evidence regarding the educational impact and wider applicability of the product.

REFERENCES

Almulla, M. A. (2020). The effectiveness of the project-based learning (PBL) approach as a way to engage students in learning. *SAGE Open, 10*(3), 2158244020938702. https://doi.org/10.1177/2158244020938702

Andriani, R., Putri, A., & Kasriyati, D. (2021). Using video subscribe to improve students' speaking ability. *ELT-Lectura, 8*(1), 24–32.

Amir, H. S., & Rustam, U. (2025). The role of technology in English language learning in the digital era. *Lingeduca: Journal of Language and Education Studies, 4*(1), 1–8. https://doi.org/10.70177/lingeduca.v4i1.2048

Asad, S., & Siddiqui, M. A. (2025). Transforming English language learning through digital communication: A study of tools, platforms, and pedagogical shifts. *International Journal of Science and Research, 14*(9), 1328–1330. https://doi.org/10.21275/SR25910144433

Branch, R. M. (2009). *Instructional design: The ADDIE approach*. Springer.

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Dewan, M. S., & Sharma, B. D. (2025). Enhancing oral communication in English as a second language. *Journal of Tikapur Multiple Campus, 8*, 18–41. https://doi.org/10.3126/jotmc.v8i8.75949

Fallas Gabuardi, V. M. (2021). Project-based learning: Boosting 21st century skills. *Revista Estudios*, (43), 340–419. https://doi.org/10.15517/re.v0i43.49335

Fathira, V., Masbiran, G., & Elsara, W. (2024). Enhancing digital literacy through the role of YouTube in English phonology class: Students' perception. *ELT-Lectura: Studies and Perspective in English Language Teaching, 11*(1). https://doi.org/10.31849/elt-lectura.v11i1.18469

Kallinikou, E., & Nicolaidou, I. (2019). Digital storytelling to enhance adults' speaking skills in learning foreign languages: A case study. *Multimodal Technologies and Interaction, 3*(3), 59. https://doi.org/10.3390/mti3030059

Kalyani, L. K. (2024). The role of technology in education: Enhancing learning outcomes and 21st century skills. *International Journal of Scientific Research in Modern Science and Technology, 3*(4), 5–10. https://doi.org/10.59828/ijsrmst.v3i4.199

Kasriyati, D., Andriani, R., & Syahdan, S. (2026). Perceived Usefulness and Learning Motivation: Evaluating Low-Barrier Augmented Reality in Foreign Language Acquisition. *Jurnal Pendidikan Progresif*, *16*(1), 596-609.

Kokotsaki, D., Menzies, V., & Wiggins, A. (2016). Project-based learning: A review of the literature. *Improving Schools, 19*(3), 267–277. https://doi.org/10.1177/1365480216659733

Machanova, J. (2025). Project-based learning in primary schools: A path to active learning. *Cherkasy University Bulletin: Pedagogical Sciences*, (1), 192–198. https://doi.org/10.31651/2524-2660-2025-1-192-198

Marwa, M., Hulu, J. H., Herlinawati, H., & Muliardi, M. (2026). Technology-integrated PjBL, learning engagement, and English achievement: A correlational study in an Indonesian high school. *ELT-Lectura: Studies and Perspective in English Language Teaching, 13*(1). https://doi.org/10.31849/z0x84170

Memmedova, M., & Ahmedova, L. (2026). Digital technologies in English language teaching: Transformative potential, pedagogical frameworks, and implementation challenges. *EuroGlobal Journal of Linguistics and Language Education, 3*(2), 123–132. https://doi.org/10.69760/egjlle.2602016

Moradi, H., & Chen, H. (2019). Digital storytelling in language education. *Behavioral Sciences, 9*(12), 147. https://doi.org/10.3390/bs9120147

Ork, Y., Chin, P., Ban, T., & Em, S. (2024). Factors causing students' challenges in learning English speaking skills: A review of empirical works. *Cambodian Journal of Educational and Social Sciences, 1*(1), 26–36. https://doi.org/10.69496/cjess.v1i1.6

Pambudi, H. A., & Fajrin, H. O. (2024). A school literacy program and parental role in enhancing students' literacy. *Jurnal Akuntabilitas Manajemen Pendidikan, 12*(1), 115–125. https://doi.org/10.21831/jamp.v12i1.72864

Pambudi, H. A., & Fajrin, H. O. (2026). Curriculum reform and language pedagogy: Rethinking policy and practice in Indonesia. *Jurnal Pembangunan Pendidikan: Fondasi dan Aplikasi, 13*(2), 45–54. https://doi.org/10.21831/jppfa.v13i2.91132

Pambudi, H. A., & Kaliaskarova, A. (2023). The foundation of English learning to equip vocational students in higher education to face industrial era 4.0. *Jurnal Pendidikan Teknologi dan Kejuruan, 29*(2), 230–239. https://doi.org/10.21831/jptk.v29i2.66994

Pratiwi, O., Kustandi, C., Kusumawardani, D., & Rahmadi, I. F. (2026). Revisiting digital storytelling as a pedagogical strategy in educational technology: A systematic literature

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review of recent evidence. *Jurnal Paedagogy, 13*(1), 349–361. https://doi.org/10.33394/jp.v13i1.18995

Setiawan, D., Masuwd, M. A., Maliki, N., Laily, I. F., & Fitriyani, Y. (2023). Impact of digital storytelling for developing oral communication skills, digital literacy, and learning motivation among pre-service elementary teachers. *International Journal of Educational Qualitative Quantitative Research, 2*(2), 34–42. https://doi.org/10.58418/ijeqqr.v2i2.118

Shadiev, R., & Wang, X. (2022). A review of research on technology-supported language learning and 21st century skills. *Frontiers in Psychology, 13*, 897689. https://doi.org/10.3389/fpsyg.2022.897689

Shen, X., Shen, X., & Peng, J. E. (2024). Digital storytelling: A literacy-building tool to promote willingness to communicate in a second language. *RELC Journal, 55*(3), 819–826. https://doi.org/10.1177/00336882231157461

Sudirman, S., Sutrisno, S. B., Oktafiani, S., Giyanto, G., & Anggraini, D. (2025). Fluent & fearless: Developing real-life English communication competence. *JOLADU: Journal of Language Education, 4*(2), 51–55. https://doi.org/10.58738/joladu.v4i2.1338

Tsymbalysta, O., Kryvenko, O., & Dubinina, O. (2026). Digital storytelling as a tool for language learning. *Humanities Science Current Issues, 95*(3), 249–255. https://doi.org/10.24919/2308-4863/95-3-32

Yuniarti, Y., & Yulian, R. (2022). Digital story telling based on multimodal elements on EFL learners' speaking performance. *JPI (Jurnal Pendidikan Indonesia), 11*(2), 308–316. https://doi.org/10.23887/jpi-undiksha.v11i2.40217

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