

‘Did a robot write that?’: AI-generated digital storybooks

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‘Did a robot write that?’ asked one young participant in this study. A deceptively simple question that captures the challenges raised by artificial intelligence (AI) in children’s literacy experiences. This article explores how young children and their caregivers engage with AI-generated storybooks through Let’s Story, a feature of the Applaydu app. Developed by Gameloft and Ferrero International in partnership with the University of Oxford’s Learning in Families through Technology project, Let’s Story enables families to co-create storybooks using Microsoft’s generative AI tools. Data were collected through two play tests involving 22 parent–child pairs from the United Kingdom, United States, and France. These sessions examined how the children and their caregivers responded to AI-generated content during shared reading. While the stories supported playful engagement, especially in a child’s home language, concerns emerged about narrative complexity, image-text alignment, and narration. The findings offer timely insights for ELT practitioners and educational technology developers.

Key words: AI, digital, storybooks, shared reading, literacy

Introduction

Young children make sense of their world through play. In this digital age, such play is increasingly mediated through technologies, including those powered by AI. From smart assistants to interactive games, AI is becoming part of children’s everyday experiences. Amidst this technological shift, educators and researchers must grapple with a critical question: what happens when children’s first encounters with

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storybooks are with texts written not by humans, but by algorithms? One child in our study framed this dilemma memorably when they asked, 'Did a robot write that?'

This article takes that question as its starting point. It examines how AI-generated storybooks shape children's experiences of shared reading, engagement, and comprehension, particularly in multilingual and English-language-learning contexts. Specifically, we investigate responses to *Let's Story*, an AI-powered digital storytelling platform embedded within the *Applydu* edutainment app. In the first six months since its launch in late 2024, *Let's Story* has enabled over 2.4 million story sessions across 19 languages. Yet, despite its global reach, little is known about how children experience AI-generated narratives at home or how such stories may influence language development.

This study, conducted during the pre-launch phase of *Let's Story*, involved two play tests with children aged three to nine years and their caregivers. Through these sessions, we sought to understand how families respond to storybooks authored by AI; how children engage with their content and structure; and how parents perceive their value in supporting language learning. The purpose was to engage families in participatory design to maximise the benefit of the app upon launch. While our focus is not on measuring learning outcomes directly, this analysis highlights important pedagogical and ethical considerations for ELT and early childhood education more broadly.

AI-generated texts are increasingly likely to appear in learning environments, both formally through apps and informally through home-based exposure. Understanding how these texts are received, interpreted, and discussed by children and their caregivers offers valuable insights for ELT practitioners, particularly in early years or emergent bilingual settings. The design choices in platforms such as *Let's Story* may shape how children engage with language, process narrative structure, and experience English through digital media. Even though *Let's Story* is currently available in 19 different languages, the probability remains high that many children/families who engage with these texts will do so in a language that is not their native or home language. This further supports the need to better understand the experiences of children and their caregivers in interacting with such AI-powered texts and offers opportunities to better understand how to leverage these experiences in future to support language learning.

By foregrounding the voices of children and families, this study contributes to a growing body of work on AI in education and its potential role in primary ELT. It underscores the value of participatory design, co-created media, and inclusive, multilingual tools that reflect the diverse needs of learners. Ultimately, it calls on educators, developers, and researchers to approach AI-generated storybooks not just as technological novelties, but as instruments of literacy and meaning-making that demand thoughtful scrutiny.

Background

Children, AI, and meaning-making

Children today are growing up surrounded by intelligent technologies, yet their understanding of these tools remains limited. Studies suggest that young children often anthropomorphise AI, perceiving it as a conversational entity or even a social companion (Köken and Dagal 2024). As AI becomes more embedded in home and educational settings, researchers argue that foundational AI literacy must begin in early childhood (Su and Zhong 2022). This study contributes to that agenda by examining children's intuitive reactions to AI-generated content and what those reactions reveal about their engagement, comprehension, and expectations of storytelling.

Ethical design and participatory approaches

The growing ubiquity of digital tools and AI in children's lives has prompted renewed calls for ethical, human-centred technology design (Mathers et al. 2025). Tools that influence how children learn, communicate, and construct meaning should not be developed in isolation from those they serve (Neugnot-Ceroli and Laurenty 2024). Similarly, UNESCO (2022) emphasises that child rights must underpin the governance of AI in education. Participatory and co-design approaches, those that include researchers, parents, technologists, and children in the development process, are essential for ensuring that AI systems align with developmental, linguistic, and cultural needs.

Chubb et al. (2022) emphasise the importance of reflective, child-centred design in AI applications. This aligns with research calling for participatory development practices that involve children and stakeholders in shaping educational tools (Yip et al. 2019; Cortesi et al. 2020). In this spirit, play tests were used throughout the platform's development and form the basis of this study.

Digital storybooks and generative AI

Digital storybooks blend traditional storytelling with multimedia interactivity, offering opportunities for engagement that go beyond printed text (Rahiem 2021). Authoring such books for young children is typically a slow and creative process. Generative AI, however, allows content creators to produce stories rapidly and at scale, raising fundamental questions about quality, appropriateness, and the nature of authorship. Just because a machine can produce a story does not mean it should. Especially where early literacy is concerned.

The AI behind platforms like *Let's Story* is trained on vast corpora of written text, shaping the language, structure, and tone of its outputs. As Chang et al. (2023) found, large language models (LLMs) frequently draw from culturally dominant texts such as *Harry Potter*, *Lord of the Rings*, and *1984*, among others. These training influences shape narrative style and vocabulary in ways that may not be developmentally or culturally appropriate for young children. Careful prompt engineering and post-editing are therefore needed to ensure that AI-generated stories serve rather than hinder children's early reading experiences.

Gamified, interactive approaches to reading have the potential to engage young readers, but they must also consider children's developmental needs and ethical design principles (Chubb et al. 2022). Inspired by childhood experiences with 'choose your own adventure' books, *Let's Story* was designed to promote agency by allowing children to select from story elements: three plot options, ten settings, ten characters, and three themes. These selections are used to generate unique narratives, resulting in over

40,000 English-language stories, many of which have been translated into the child's home language.

Joint media engagement

In this study, joint media engagement refers to any collaborative engagement between a child and caregiver whilst using the digital platform. To support meaningful dialogue during shared reading, *Let's Story* includes a series of embedded discussion questions, referred to as parent prompts (PP). These prompts appear at key narrative junctures (beginning, middle, and end) and are designed to promote skills needed for reading development such as vocabulary building, connecting to background knowledge, and encouraging creative engagement (Ratner et al. 2024). Figure 1 is an example.

There is substantial evidence to support joint media engagement as a valuable learning opportunity for young children. A recent multi-level meta-analysis found that children learn more from their digital engagement when it is shared with a parent or caregiver. However, parents do not always know how to facilitate high-quality interactions (Mathers et al. 2025). As such, the PP were included to guide parents and to support high-quality joint media engagement.

Linguistic diversity

With increasing globalisation and migration, multilingualism has become a defining feature of many learning environments. Vast numbers of children now grow up in settings where the societal language differs from their home language. Maintaining home language use is critical not only for cultural identity but also for long-term educational success (Murphy 2018).

One of the central aims of *Let's Story* was to make storybooks available in as many languages as possible, thereby affirming linguistic diversity as a strength. This multilingual capacity allows children to engage with stories in English or their home language and supports early literacy development in culturally relevant ways. Currently available in 19 languages, the platform continues to expand its language offerings to better serve diverse learners around the world. The screenshot in Figure 2 shows the languages available.

Despite this diversity of languages, however, it remains likely that many children around the world will engage in platforms such as *Let's Story* in a

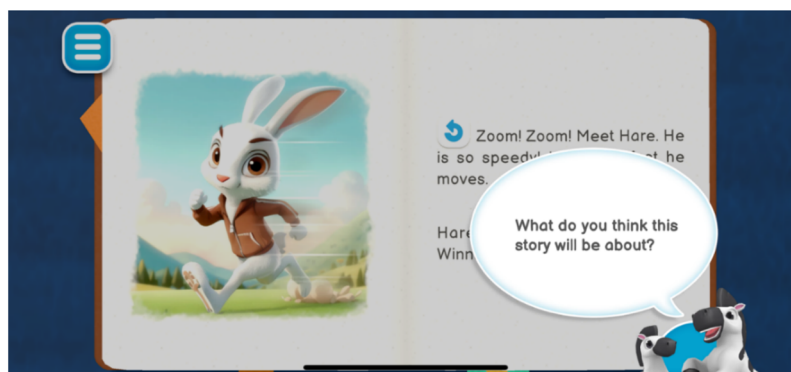


FIGURE 1
Screenshot of *Let's Story*
showing the parent prompt



FIGURE 2
Screenshot of the *Let's Story*
language selection screen

language that is less well known to them. Many children are likely to engage in *Let's Story* via English, a global lingua franca, if their home language is not one of the nineteen current languages. As such, it is vital that we have an evidence-based understanding of how engaging in such platforms, in different languages, and especially lesser known languages, can support further language development. An important first step in this agenda is understanding how children and their families perceive these texts.

Methodology

This qualitative study was conducted during the design and testing phase of *Let's Story*. It sought to understand how children and caregivers respond to AI-authored stories in a shared reading context. This research would then inform the necessary improvements to the app prior to launch. We used a mixed-methods design that combined observation, parent–child interaction, and post-session reflection across two structured play tests. The aim was to examine perceived story quality, engagement, usability, and educational potential.

Participants

Two play tests were conducted with a total of twenty-two participants (eleven parent–child pairs). Play Test A, held in Paris in January 2024, included five French-speaking families with children aged five to nine years. Play Test B, conducted remotely in June 2024, involved six English-speaking families in the United Kingdom and United States with children aged three to eight years. Across both tests, children selected narrative elements within *Let's Story*, generating unique digital storybooks which were then read aloud by an AI narrator in their home language. Informed consent was obtained, and all sessions were recorded and transcribed.

Procedure and data collection

In both tests, participants engaged in a shared reading session guided by an independent researcher. Children selected a plot, setting, character, and theme, and then read or listened to the story generated by the AI. The screenshots in Figure 3 demonstrate the selection process:

During reading, children and caregivers were encouraged to think aloud and respond to embedded prompts designed to support comprehension and discussion. In Play Test A, sessions were conducted in-person; in Play

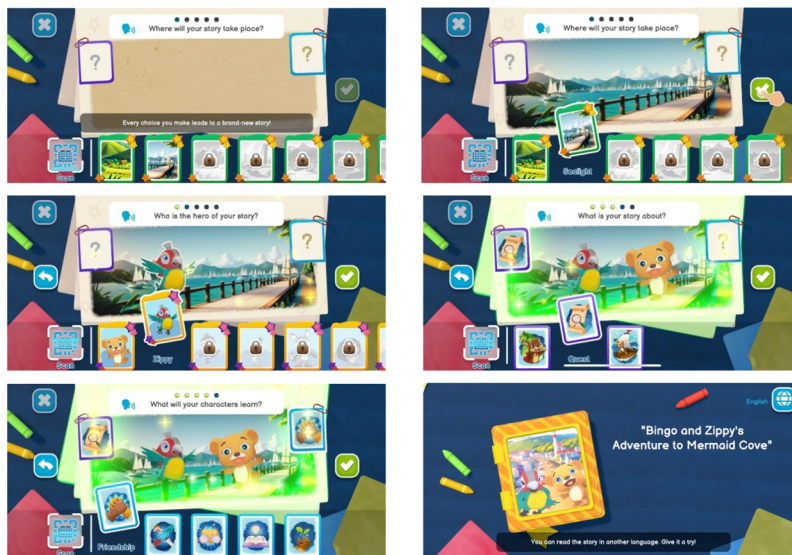


FIGURE 3
Screenshot of the story
element selection process

Test B, they were facilitated online via screen sharing and guided tutorials. Observational field notes, verbal interactions, and post-play reflections formed the basis of the qualitative dataset.

Results

Play Test A: playful
engagement and
linguistic friction

Participants in Play Test A consistently praised the integration of play with reading. Parents described feeling reassured when digital screen time was framed as educational rather than purely recreational. As Parent Participant 5 explained: 'It's quite complete. There's the reading side and the recreation side. It's similar to what we try to do at home, so it's a mixture of work and play.'

However, concerns quickly surfaced regarding the AI-generated stories themselves. Several parents found the stories too long or cognitively demanding for the intended age group. Narratives were described as dense, overly complex, and difficult to recall. There was also dissatisfaction with the AI voiceover, which was frequently referred to as 'robotic', 'flat', or lacking in expression. One child aptly captured the issue, asking: 'Did a robot write that?' A comment that struck at the heart of the study's premise.

Parents also questioned the quality of the French-language texts, with some suspecting the stories were translated from English rather than generated natively in French. Parent Participant 3 expressed concern about translation accuracy and fluency, observing that the stories 'don't sound like something originally written in French'.

Visual content was another area of critique. Children fixated on illustrations, often noticing that images did not correspond well to the story text. This disjunction was particularly problematic in a shared reading context, where image-text interplay is vital to comprehension (Evans and Saint-Aubin 2005).

Play Test B: improvements and persistent gaps

Following Play Test A, updates were made that included refinements to story prompts, image-text alignment, and the addition of PP. Play Test B provided an opportunity to assess how these changes were received. Parents responded positively to the embedded prompts, which supported richer parent-child interaction. These guided questions were seen as helpful in scaffolding comprehension and sustaining engagement.

Despite these improvements, notable limitations remained. Parents described the stories as lacking dramatic arc, humour, or narrative charm. They were often compared unfavourably to the human-authored books they are familiar with. This diminished their perceived educational and entertainment value. Several children were unable to summarise what had happened in their stories, suggesting challenges with narrative coherence and retention.

Image accuracy also remained a recurring problem. In multiple cases, illustrations failed to represent central plot points or included mismatched objects. Additionally, issues of accent surfaced. UK families found the American-accented AI narration off-putting, while American families described the same narration as 'too British'. This highlighted a growing need for improved narration.

Discussion

AI as author: narrative efficiency vs narrative depth

Generative AI has been trained on some of the world's most iconic texts. Yet, according to participants in this study, its capacity to emulate the narrative nuance and emotional resonance of human storytelling remains limited. While *Let's Story* succeeded in generating stories efficiently and at scale, its outputs were often described as uninspired or overcomplicated. These limitations raise significant concerns for early language and literacy development, where engagement and familiarity play critical roles.

Despite their structural adequacy, the stories lacked traditional story tropes. Storytelling devices such as humour and dialogue were frequently absent, features that we know support inferencing and vocabulary growth in young readers. As such, we argue that AI-generated storybooks should not, in their current form, replace human-authored texts in early education settings. Instead, they may serve best as supplementary materials in a diversified digital library.

Co-design and iterative development

The participatory development model underpinning *Let's Story* contributed meaningfully to platform improvements. Embedding educators, researchers, and families in the design cycle helped identify key usability concerns and led to enhancements that made stories more accessible. The integration of PP was particularly well received. These prompts facilitated richer discussions, supported comprehension, and were viewed as a positive addition to the reading experience.

However, further refinement is needed. The continued misalignment between text and images demonstrates the limitations of current generative visual tools when used in early literacy contexts. Developers must consider how multimodal coherence affects comprehension, especially when stories are read by pre- or early-literate children who rely heavily on illustrations.

Language, culture, and identity

Language emerged as a central theme across both play tests. Families valued the availability of home language options, which were perceived as enhancing inclusion and relevance. Yet, AI narration remained a source of tension. The accent mismatch (British vs U.S. English) introduced a subtle barrier to immersion. This indicates that linguistic and cultural localisation may be as important in AI-generated content as the stories themselves.

As AI tools become more widespread in children's digital environments, understanding how children interpret not just the words, but the *voice* of the story, will be crucial. The question 'Did a robot write that?' was more than a passing observation. It was a sign that children are attuned to the differences between human and machine language, even if they cannot yet articulate them technically. These perceptions are likely to have an impact on how effective such texts can be in supporting further language and literacy development.

Pedagogical implications for primary ELT and teacher education

The insights from this small-scale study have particular relevance for ELT in early childhood and primary settings. While *Let's Story* was not designed exclusively for ELT, its multilingual capacity and creative engagement affordances offer considerable potential in under-resourced primary EFL contexts. For example, teachers might use AI-generated books as a scaffold for co-creating classroom stories around shared themes, supporting vocabulary development, narrative construction, and oral language practice. In multilingual classrooms, the platform could enable plurilingual approaches by leveraging students' home languages alongside English to affirm linguistic identities while developing English proficiency. Moreover, the tool may have value in teacher training by exposing student teachers to AI-generated texts that can inspire productive discussions about quality, bias, and pedagogy. However, such use must be accompanied by critical digital literacy training, as student teachers need to understand the limitations of AI-authored content and the importance of guided, developmentally appropriate usage. As an extension, families could be invited to contribute to classroom projects by co-creating stories with children at home and then sharing them at school. These strategies suggest a promising, if cautious, pathway for embedding generative AI tools into language-rich pedagogical environments.

Conclusion

This study set out to explore a child's deceptively simple yet deeply insightful question: 'Did a robot write that?' In doing so, it uncovered critical implications for how young children and their caregivers' experience AI-generated storybooks. The findings show platforms like *Let's Story* can promote playful engagement and offer multilingual access to stories at scale. However, key issues remain around story quality, image-text alignment, cultural localisation, and narrative voice.

Since its launch in September 2024, *Let's Story* has facilitated over 2.4 million story sessions. This scale is unprecedented for research in early AI-mediated literacy, offering both opportunity and responsibility. The findings suggest that AI-generated storybooks may serve a supplementary role in supporting early reading, particularly when made available in a child's home language and enhanced with prompts that encourage dialogue. However, the limitations in

narrative charm, voice expressivity, and multimodal cohesion reaffirm the necessity of retaining human-authored texts in any Early Years curriculum. When imagining best-practice support of early literacy through digital platforms, there are lessons to be learned from collaborations such as this multi-organisation approach. Co-developing an e-book app with researchers and parents in this way offers valuable insights to developers (Ratner et al. 2024).

For ELT practitioners and educational designers, these results highlight the need for critical evaluation of AI-authored content. It is not enough for stories to be linguistically accurate or grammatically correct. They must be developmentally appropriate, engaging, and pedagogically sound. The integration of child–computer and parent–child interaction design principles hold promise, particularly in enhancing comprehension and oral language development.

To conclude, this article argues that educational AI must be held to a higher standard than technological novelty. As children become more exposed to generative tools, we must ensure that these systems are not only functional but also meaningful. The child’s question, ‘Did a robot write that?’ is more than a curiosity. It is an invitation to rethink the future of digital storytelling through the eyes of our youngest readers.

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