

The Role of Digital Storytelling in Enhancing the Speaking Fluency of English as a Foreign Language (EFL) Learners

Raquel Ruby Vera Solorzano*

Student in the Master's Program in Pedagogy of National and Foreign Languages (Specialisation in English) at ULEAM, Eloy Alfaro Laic University of Manabí, Ecuador

<https://orcid.org/0009-0004-4691-9458>

Jhonny Villafuerte-Holguin

Professor in the Master's Program in Pedagogy of National and Foreign Languages (Specialisation in English) at ULEAM, Eloy Alfaro Laic University of Manabí, Ecuador

<https://orcid.org/0000-0001-6053-6307>

***Correspondence email:** *raquel.vera@pg.uleam.edu.ec*

Received: | Accepted: | Available online:

Abstract. This study determines the contribution of Digital Storytelling (DST) to improving speaking fluency in English as a Foreign Language (EFL) among secondary school learners in the canton of Manta, Ecuador, a Latin American context that remains underrepresented in DST research. The study adopts a mixed-methods research approach within a quasi-experimental design. The sample comprised 27 participants: 6 EFL instructors and 21 secondary school learners aged 13 to 17. Data were collected through pre- and post-intervention speaking tests, semi-structured interviews, focus groups, and a Likert-scale questionnaire, and were analyzed using SPSS for quantitative data and Atlas.ti for thematic coding, enabling triangulation. The DST intervention lasted twelve weeks. Qualitative findings identified speaking anxiety, limited vocabulary, and cognitive overload as the principal barriers to oral fluency, while structured storytelling tasks offering collaborative activities, gradual exposure, and iterative rehearsal addressed these barriers effectively. Quantitative results showed that every participant registered a positive fluency gain following the DST intervention, with a statistically significant mean improvement of 0.39 points ($t(20) = -14.201$, $p < .001$, Cohen's $d = 3.09$). It is concluded that Digital Storytelling provides

integrated pedagogical scaffolding that simultaneously addresses the linguistic, cognitive, and affective dimensions of oral production, offering EFL teachers a practical, low-resource tool for fostering speaking fluency.

Keywords: digital storytelling, educational innovation, English as a Foreign Language, secondary school, speaking fluency.

Introduction

English is a key language in international communication, higher education, and the labour market. However, for many secondary school learners who learn it as a Foreign Language (EFL), moving from receptive knowledge to confident oral production remains a persistent challenge. Traditional classroom instruction tends to emphasise grammar accuracy and vocabulary memorisation, leaving learners with limited practice in authentic, spontaneous speaking. The result is predictable: learners may accumulate considerable declarative knowledge of the language while remaining unable to deploy it fluently when conversation demands it.

This tension is especially evident in secondary schools, where institutional cultures often prioritise written accuracy over oral fluency and where speaking anxiety and low motivation are widespread (Öztürk & Gürbüz, 2019). In Ecuador, where the present study was conducted, the gap between written and spoken performance is well documented: many learners reproduce correct grammar on paper but struggle to transfer that competence into real-time speech. Classroom conditions compound the problem, as most instructional time is spent on form-focused tasks that offer little room for low-pressure communicative practice.

This study examines Digital Storytelling (DST) as one possible response to that challenge. DST combines narrative tasks with multimodal tools: video, images, and audio recording, in ways that have been shown to sustain engagement and create meaningful communication contexts (Robin & McNeil, 2019). Unlike purely conversational tasks, DST allows learners to plan, rehearse, and refine their oral production before presenting it to an audience, thereby reducing the cognitive and affective burdens that often suppress spontaneous speech. The study draws on data from a secondary school in Manta, Ecuador, and contributes to the growing literature on Technology-Enhanced Language Learning (TELL) from a Latin American perspective.

Within the field of second language acquisition (SLA), speaking fluency has long been considered one of the most resistant skills to develop in formal EFL settings (Murad et al., 2023). The barrier is not exclusively linguistic: research consistently shows that anxiety, limited rehearsal opportunities, and negative prior classroom experiences interact with language gaps to produce the hesitant, fragmented speech many EFL learners exhibit (Bai & Xian, 2024; Marzban & Karimnia, 2020). TELL approaches, including DST, have been proposed to expand opportunities for practice and increase motivation by connecting language use to personally meaningful tasks (Nguyen & Vo, 2022).

The following research questions guided the study:

RQ1: What are the participants' EFL speaking fluency scores before and after the DST intervention?

RQ2: What is learners' knowledge of and motivation for speaking in EFL using storytelling?

RQ3: What factors, strategies, and impacts on fluency and routines do instructors use to strengthen learners' speaking fluency in EFL classes?

RQ4: What are learners' perceptions of their confidence, motivations, difficulties, and limitations for speaking fluently in EFL?

Literature Review

The literature indicates that DST supports oral performance while simultaneously strengthening motivation and engagement (Hava, 2021; Nair & Yunus, 2021). Murad et al. (2023) showed that the iterative rehearsal embedded in DST tasks promotes fluency by giving learners repeated, low-stakes opportunities to use the language in context, a finding grounded in Vygotsky's (1978) sociocultural account of learning, in which scaffolded interaction is the primary mechanism of language development. Huang (2023) extended this argument by demonstrating that pre-structured narrative tasks reduce the cognitive pressure associated with spontaneous speech, since learners are not obliged to construct meaning and monitor language form simultaneously. Tatlı et al. (2022) found that cognitive load decreases over repeated cycles of storytelling as organisational routines become automatized and attentional resources can be redirected toward lexical precision and prosodic quality. Andujar and Salaberri-Ramiro (2021) confirmed that mobile-assisted DST activities produce fluency gains when learners receive adequate time and technological support for preparation.

DST also addresses motivational dimensions of speaking. Self-Determination Theory (Deci & Ryan, 2020) holds that sustained motivation depends on satisfying three basic psychological needs: autonomy, competence, and relatedness. DST tasks address all three: they give learners control over content and narrative style (autonomy), offer structured feedback that promotes a sense of progress (competence), and unfold in collaborative social contexts (relatedness). Hava (2021) found that learners who completed DST projects reported higher confidence and greater willingness to speak English, partly because creative ownership of the narrative reduced the evaluative threat inherent in conventional oral tasks. Lustenberger (2024) similarly showed that the open narrative format accommodates diverse motivational orientations by allowing learners to embed personally significant content in their stories.

Speaking anxiety warrants particular attention in EFL secondary contexts. Öztürk and Gürbüz (2019) established that it operates through three interrelated mechanisms: communication apprehension, fear of negative evaluation, and performance anxiety. DST has been shown to attenuate each of these by shifting the performance context from spontaneous public speech toward a rehearsed, self-controlled communicative act (Ghosn-Chelala & Al-Chibani, 2018). Dewaele et al. (2019) confirmed that peer and teacher support—both central features of well-implemented DST—are among the strongest predictors of EFL learners' willingness to communicate. Liu and Chu (2020) demonstrated that spontaneous learner preferences for collaborative and technology-mediated speaking formats were reliable predictors of post-intervention oral gains. In anxiety-inclusive pedagogical environments such as those DST tends to produce, learners generate longer and more fluent oral texts than in accuracy-focused classrooms (Marzban & Karimnia, 2020).

Despite this body of encouraging findings, studies examining DST in secondary EFL settings in Latin America remain limited. Most existing research has focused on university populations, and few studies have examined fluency, motivation, and confidence simultaneously within a single secondary school sample. The present study was designed to address this gap by providing empirical evidence from a coastal Ecuadorian secondary school.

Materials and Methods

The study adopts a modern paradigm and a mixed-methods research approach. The modern paradigm is characterised by the evolutionary processes it proposes in various social, cultural and political spheres, overcoming traditionalism (Kyianytsia, 2021). Following the recommendations of Creswell & Plano Clark (2018), the author first implemented a quantitative process and then used it to frame the qualitative phase to identify ways to improve the participants' EFL speaking fluency.

Participants

The sample comprised 27 participants: 6 EFL instructors and 21 learners aged 13 to 17, all enrolled at a secondary school in the canton of Manta, Ecuador. The instructor group comprised 4 males and 2 females. The learners group comprised 9 males and 12 females. Participation was entirely voluntary; participants retained the right to withdraw at any time without consequence. All data were handled under pseudonyms and stored securely. The risks associated with the study were minimal, consisting mainly of mild discomfort during the oral tasks.

Table 1

Sample Distribution by Role and Gender

Informants	Gender Distribution		Total
	Female	Male	
Instructors	2 (7.40%)	4 (14.83%)	6 (22.22%)
Learners	12 (44.44%)	9 (33.33%)	21 (77.78%)
Total	14 (51.84%)	13 (48.16%)	27 (100%)

Note. Source: research participants' register (2025–2026).

Instruments and Materials

Pre- and Post-Speaking Test. - The instrument assessed participants' speaking fluency following the Cambridge Speaking Tests model for a 3–5-minute oral narrative task. Fluency was operationalised using three metrics: words per minute (WPM), mean length of run (MLR), and number of pauses per minute, rated on a 1–10 scale. Parallel versions were administered before and after the intervention. Three EFL professionals reviewed the instrument and advised reducing the number of prompts to support focused narratives. All narrations were recorded at the school in the presence of EFL teachers.

Likert-Scale Questionnaire. - The 30-item instrument collected learners' perceptions of DST as a pedagogical tool and their motivational orientations during the intervention. Items were organized across five dimensions adapted from the Intrinsic Motivation Inventory (Ryan, 1982): (a) enjoyment/interest (items 1- 6), (b) perceived competence (items 7 - 12), (c) effort and importance (items 13-18), (d) pressure/tension (items 19-24), and (e) autonomy (items 25-30). Response options ranged from "Not at all true" to "Completely true" on a 7-point scale. A panel of experts in EFL instruction, linguistics, and educational administration reviewed the instrument and recommended language adjustments to improve clarity for the secondary school population. The questionnaire was administered at the school using a printed version.

Semi-Structured Interview Guide. - The research team developed the instrument to document the instructional strategies EFL teachers use to promote speaking fluency. It examined three categories: (a)

factors perceived to hinder learners' oral fluency, (b) strategies employed to encourage classroom participation, and (c) approaches used to build a psychologically safe environment for speaking practice. A panel of experts in EFL instruction, psych didactics, and educational administration reviewed the instrument and recommended adjustments to question syntax to improve clarity. Interviews were conducted at the school with all six EFL instructors; total recording time was 120 minutes.

Focus Group Protocol. - The instrument captured learners' confidence and attitudes toward oral communication in EFL, addressing five thematic categories: (a) confidence speaking before an audience, (b) motivation for using English inside and outside the classroom, (c) perceived difficulties in oral production, (d) limitations specific to storytelling tasks, and (e) activities learners identified as confidence-building. The expert panel recommended reducing the original eight categories to five for coherence. Total focus group recording time was 90 minutes.

The study was conducted in seven sequential stages.

Stage 1 – Administrative and ethical authorisation: The research team obtained institutional permission to conduct research at the secondary school in Manta and adhered to the ethical standards of the American Psychological Association and ULEAM.

Stage 2 – Instrument design and expert review: All four data collection instruments were developed and submitted to the expert panels described above.

Stage 3 – Participant recruitment: Teachers, learners, and parents attended an information meeting, after which all parties who agreed to participate signed informed consent forms.

Stage 4 – Pre-test administration: The Speaking Fluency Pre-test was administered to establish a baseline measure of fluency at the start of the process.

Stage 5 – Digital Storytelling (DST) intervention: The intervention lasted 12 weeks with weekly classroom sessions. During the first two weeks, a structured introduction to storytelling and digital storytelling was delivered using a sample lesson sequence described below (Lesson Plans 1 and 2). Subsequent weeks built on these foundations through storyboarding, audio and video recording, multimodal editing, and structured peer feedback sessions. Weekly instructional time totalled 200 minutes distributed across three sessions: 80 minutes, 80 minutes, and 40 minutes.

Stage 6 – Post-test and data collection: The Post-Speaking Test and the Likert questionnaire were administered during weeks 10 and 12. The learner focus group and instructor interviews also took place after the educational intervention.

Stage 7 – Data analysis: Quantitative data were analysed with SPSS using a paired-samples t-test within the quasi-experimental design. Qualitative data from the interviews and focus groups were analysed with Atlas. ti through thematic coding. Integration of both data types enabled triangulation of findings.

Lesson Plan 1

LESSON PLAN 1 — MY STORYTELLING:
From Oral Story to Digital Narrative (Week 1 · Sessions 1 & 2 · 160 minutes)

Course / Level	Details	
Course / Level	EFL Secondary Education — B1/B2 (CEFR)	
Topic	My Storytelling: understanding what a story is, how to tell it orally, and how it becomes a digital story	
Language skill focus	Speaking fluency (primary); listening and digital literacy (secondary)	
Framework	ECRIF: Encounter · Clarify · Remember · Internalize · Fluently Use	
Number of learners	21	
Duration	160 minutes (Session 1: 80 min Session 2: 80 min)	
Materials & technology	Projector/smartboard; short video clip of a model digital story (2–3 min); printed story-element graphic organizer; voice-recording app (e.g., Vocaroo) or smartphones; QR-code access to a shared class folder; peer-feedback cards	
Learning objectives	By the end of the two sessions learners will be able to: (1) explain orally what a story and a digital story are; (2) identify the basic elements of narrative (character, setting, problem, resolution); (3) record a short (60–90 s) unscripted oral story using a digital tool; (4) give and receive structured oral feedback on a peer's story.	
Time	Stage (ECRIF)	Teacher & learner activities

SESSION 1 (80 minutes) — Encounter & Clarify: What is a story? What makes it digital?

0–10 min	ENCOUNTER	Warm-up: 'Two Truths and a Story': Teacher tells three short personal anecdotes (2–3 sentences each), learners vote on which one sounds most like a real story and explain why. Teacher elicits prior knowledge: 'Have you ever told a story in English? How did it feel?': brief open-class share (no correction at this stage). Purpose: activate schema, lower affective filter, and establish a psychologically safe speaking environment from the first minutes.
10–25 min	ENCOUNTER	The teacher plays a 2–3-minute model digital story (learner-produced from a previous year or an open-access EFL example). Learners watch twice: first for enjoyment, second with a simple observation task: 'What do you SEE? What do you HEAR? What makes this different from just talking?' Brief think-pair-share (2 min): partners share one observation each, then report to the class. The teacher introduces key vocabulary on the board: narrative, character, setting, conflict/problem, resolution, voice-over, digital storytelling.
25–45 min	CLARIFY	Mini-lecture with visual support (max 8 slides): What is storytelling? → What is Digital Storytelling (DST)? → Why does DST help us speak better in English?

		Key message to communicate: DST gives you time to prepare, rehearse, and improve; unlike spontaneous conversation, where everything happens at once. Learners receive a Story Elements Graphic Organizer (SEGO) with five boxes: Who? / Where & When? / What happened? / What was the problem? / How did it end? Teacher models completing the SEGO aloud using a simple personal story, thinking aloud at each step ('I'm thinking about a time when...'). Guided practice: learners complete the SEGO individually for a story they know well (a film, a family story, or a personal memory). The teacher circulates, prompting in English.
45–65 min	REMEMBER	Story relay activity: groups of four. Learner A tells the opening (Who/Where), learner B adds the problem, learner C narrates what happened, and learner D gives the resolution. Each turn is timed (40 seconds), and learners may glance at their SEGO but may not read it word for word. Teacher monitors; notes strong examples and common hesitation points, which will be used for feedback, not for interrupting learners mid-turn. Groups rotate so every learner experiences all four narrative positions.
65–80 min	REMEMBER	Whole-class feedback: teacher highlights two or three strong moments observed ('I heard someone say... That was a great way to start a story because...'). Error correction is done implicitly via reformulation - the teacher models the corrected version without singling out individuals. Closing question (exit ticket, spoken): each learner completes the sentence 'Today I learned that a story needs ___' before leaving.
SESSION 2 (80 minutes) Internalize & Fluently Use: My Story Goes Digital		
0–10 min	INTERNALIZE	Review warm-up: teacher shows 3 incomplete story beginnings on the board; pairs choose one and speak for 30 seconds to continue it. Briefly share in class: two or three pairs volunteer to present their continuation. Teacher recaps key terms from Session 1 using a quick visual quiz (show image → learners name the story element).
10–30 min	INTERNALIZE	Teacher demonstrates the full DST process live: (1) plan on the SEGO; (2) rehearse aloud twice; (3) open the recording app; (4) record a 60–90 second story; (5) listen back and note one thing to improve. Learners follow the same process individually. They plan their own personal story on a new SEGO, then rehearse in a whisper with their partner. Partners give one specific compliment and one suggestion using the <i>peer feedback card</i>: 'I liked the part where you said ___ because ___' / 'Next time you could try ___'. Teacher facilitates, prompting learners who feel stuck: 'Start with: One day I...' or 'Think of a time when something surprised you...'
30–55 min	FLUENTLY USE	First digital recording: learners record their 60–90 second story independently on their device using the voice-recording app.

		They listen to their own recording immediately and complete a brief Self-assessment checklist: Did I pause too much? Did I use the five story elements? Did I speak clearly enough for my partner to understand? Learners record a second version incorporating any self-identified improvements. Both recordings are uploaded to the class shared folder via QR code. This preserves a before-and-after baseline for subsequent lessons.
55–70 min	FLUENTLY USE	Gallery listens: learners listen to two randomly assigned classmates' recordings (played through earphones or a shared device) and complete the peer feedback card. Feedback exchange is conducted orally in pairs; written notes serve only as prompts, not as a written product. Teacher monitors and models constructive feedback language ('I noticed you used a great expression when you said...').
70–80 min	FLUENTLY USE	Reflection circle (whole class, standing): each learner says one sentence 'Before today I thought storytelling was ___, now I think ___'. Teacher previews <i>Week 2</i>: 'Next week we will add images and music to your stories to make them fully digital; bring your phones and think about pictures that could illustrate your story.' Homework: learners choose 3–5 photos or drawings that match their story and practice telling it aloud at home at least twice.

Assessment

Formative in *Session 1*: teacher observation checklist (participation, use of story elements in the relay).

Formative in *Session 2*: self-assessment recording checklist + peer feedback card.

No grade is assigned this week; data serve as a qualitative baseline for the speaking fluency pre-test comparison.

Criteria for success: learner completes both SEGO organizers, produces two voice recordings, and gives oral feedback to at least one peer.

Lesson Plan 2

LESSON PLAN 2 — MY STORYTELLING:

Building the Full Digital Story (Week 2 · Session 3: 80 min + Session 4: 40 min · 120 minutes)

Course / Level	Details
Course / Level	EFL Secondary Education — B1/B2 (CEFR)
Topic	My Storytelling: adding multimodal elements (images, music, text captions) to transform an oral story into a complete digital story
Language skill focus	Speaking fluency (primary); Digital Literacy and Collaborative Communication (secondary)
Framework	ECRIF: Encounter · Clarify · Remember · Internalize · Fluently Use
Number of learners	21
Duration	120 minutes (Session 3: 80 min Session 4: 40 min)
Materials & technology	Smartphones or tablets with a camera; CapCut / iMovie / Canva (free versions) or an offline slideshow tool; learners' Week 1 SEGO and voice

	recordings; storyboard template (6-panel printed sheet); background music playlist (royalty-free); projection screen for presentations; fluency observation rubric (teacher copy)
Learning objectives	By the end of both sessions learners will be able to: (1) sequence images and recorded narration into a coherent digital story of 90–120 seconds; (2) use basic editing techniques (trimming audio, adding an image, inserting a caption) to enhance oral clarity; (3) present their digital story to a small group and respond to one comprehension question; (4) reflect on how preparation and rehearsal affected their speaking fluency.

Time	Stage (ECRIF)	Teacher & Learner activities
SESSION 3 (80 minutes) — Remember & Internalize: From Storyboard to Digital Production		
0–12 min	REMEMBER	Activation 'Story in 6 Images': teacher projects six unordered images from a simple story. Pairs arrange them in order and narrate what is happening aloud (no writing). Each pair has 60 seconds. Debrief: 'What helped you decide the order? What words did you use to link the images?' elicit sequencing language: first, then, suddenly, after that, finally. The teacher distributes the 6-panel storyboard template. Learners retrieve their Week 1 SEGO and home photos. Task: sketch (stick figures or attach a thumbnail) one image per panel and write a one-sentence spoken caption for each; this becomes their recording script.
12–30 min	REMEMBER	Storyboard rehearsal in pairs: Learner A presents their storyboard orally, panel by panel, while Learner B follows along and checks for the five SEGO elements. Feedback using the Peer Feedback Card from Week 1- partners focus specifically on fluency: 'Did they pause between every word or did some sentences flow naturally?' Learners revise their storyboard captions based on peer input. The teacher conducts a brief guided pronunciation check on common hesitation points identified in Week 1 recordings, addressed as a whole-class mini-task rather than as individual corrections.
30–55 min	INTERNALIZE	Digital production phase: learners open their editing app (CapCut/Canva/iMovie) and: (1) import their 3-5 photos in storyboard order; (2) record or import their Week 1 second-take audio and trim it to match the images; (3) add a title card with their name and story title; (4) add one piece of background music at low volume. Teacher circulates, providing technical support and fluency coaching if a learner re-records narration during editing, the teacher prompts: 'Rehearse it once before you press record.' Learners who finish early add captions (key words only, not full sentences) to two panels and experiment with a simple transition. Emphasis throughout: the voice is the story; images and music support it, they do not replace it.
55–70 min	INTERNALIZE	Progress screening: groups of three watch each other's draft videos (sound on, no earphones). Each viewer completes two sentences on

		their feedback card: 'I could understand your story because ___' and 'One moment that was hard to follow was ___'. Feedback is shared orally within the group (2 min per learner). Learners make one final edit to address the most common piece of feedback received.
70–80 min	INTERNALIZE	Teacher leads a whole-class discussion: 'How is recording your story different from telling it live? What did you notice about your own voice when you listened back?' Key insight to draw out: rehearsal and listening to yourself are powerful fluency strategies, not just for digital storytelling but for any speaking task. Learners finalize and export their video to the shared class folder before the session ends.
SESSION 4 (40 minutes) — Fluently Use: Story Showcase & Speaking Reflection		
0–5 min	FLUENTLY USE	Warm-up: teacher plays one learner volunteer's finished digital story to the whole class (with permission). Class listens and notes one word or phrase that stood out. Brief appreciation round: three learners share the word/phrase they noted and why, this models the kind of specific, language-focused feedback that follows the showcase.
5–25 min	FLUENTLY USE	Story Showcase — rotating small groups: class divides into groups of five. Each learner plays their digital story on a device while narrating live alongside it (or allows the recorded voice to play). After each story, the group asks the presenter one comprehension question ('Why did you choose that moment?' / 'How did the main character feel?'). Presenters answer the question in real time; this is the key unrehearsed speaking moment of the entire lesson sequence, designed to push fluency beyond the scripted recording. The teacher uses the <i>Fluency Observation Rubric</i> to note prosody, hesitation frequency, and self-repair strategies for each presenter. These notes feed directly into the quantitative post-test data.
25–35 min	FLUENTLY USE	Individual written + spoken reflection (dual mode to accommodate all learners): each learner completes the sentence stems aloud with a partner, then writes them in their notebook: 'Before this unit, when I spoke English I felt ___.' 'After making my digital story, speaking feels ___ because ___.' 'One thing that helped me speak more fluently was ___.' 'Next time I would change ___ about my story.' Three volunteers share their reflection aloud with the class.
35–40 min	FLUENTLY USE	Closing - 'One Word': standing in a circle, each learner says one word in English that describes how they feel about telling their story today. Teacher closes the two-week unit: 'You have now told a story, made it digital, and shared it with an audience. That is exactly what English speakers do in the real world. In the weeks ahead, your stories will get longer and more complex, but the skills you practiced here are the foundation.' Teacher previews the next phase of the 12-week intervention: storyboarding longer narratives, collaborative group stories, and integrating peer feedback into iterative revision cycles.

Assessment

Formative in *Session 3*: teacher circulation checklist (storyboard completion, production engagement, peer feedback quality).

Summative in *Session 4*: Fluency Observation Rubric (4 criteria: pace/fluency, pronunciation clarity, narrative coherence, spontaneous response to question). Score recorded per learner as part of the post-test dataset.

Self-assessment: written reflection notebooks collected at the end of Session 4 and used as a qualitative data source.

Criteria for success: learner exports a complete 90-120 second digital story, presents it to peers, and responds to one spontaneous comprehension question in English.

Results

Results are presented in the order of the research questions stated above. 1. Learners' EFL Speaking Fluency Scores (RQ1). Table 2 presents individual pre-test and post-test scores for all 21 learners.

Table 2

Learners' Speaking Fluency Pre-Test and Post-Test Scores

Learner	Experimental Pre-Test	Experimental Post-Test	Difference
1	9,04	9,25	0,21
2	8,05	8,52	0,47
3	9,25	9,75	0,50
4	6,52	7,04	0,52
5	7,25	7,75	0,50
6	8,12	8,24	0,12
7	9,03	9,52	0,49
8	8,1	8,54	0,44
9	9,25	9,75	0,50
10	8,25	8,51	0,26
11	7,52	8,1	0,58
12	7,03	7,5	0,47
13	8,75	9,04	0,29
14	8,51	9,03	0,52
15	8,74	9,04	0,30
16	7,75	8,08	0,33
17	8,09	8,25	0,16

18	8,05	8,51	0,46
19	7,51	7,75	0,24
20	9,53	10,00	0,47
21	8,75	9,10	0,35
Mean	8.24	8.63	+0.389

Source: Research project participants' fluency in EFL scores.

Descriptive statistics: pre-test: M = 8.24, SD = 0.775 (range: 6.50–9.50); post-test: M = 8.63, SD = 0.773 (range: 7.00–10.00).

Every participant registered progress with individual gains ranging from 0.16 to 0.58 points. It indicates moderate effects attributable to the DST intervention across the full range of initial proficiency levels. The homogeneity of the EFL speaking fluency results is possibly due to the characteristics of the rubric used in the evaluation of each participant's performance.

2. Learners' Knowledge and Motivation for Speaking in EFL Using Storytelling (RQ2)

Data from the 30-item Likert questionnaire, organized across five dimensions, revealed moderately positive perceptions of DST. In the enjoyment dimension (items 1–6), the largest share of responses (23.7%–36.8%) clustered in the 'more or less true' category, indicating moderate engagement, while item 6 (reverse-scored) showed 34.2% of learners disagreeing with the claim that activities were boring, suggesting an overall positive experience. In the perceived competence dimension (items 7–12), responses for items 8–10 leaned positive, with 34.2% reporting a sense of accomplishment on item 8, though item 12 (reverse-scored) received ambivalent responses, reflecting residual self-doubt in a portion of the sample. In the effort dimension (items 13–18), most learners endorsed high effort and task importance. In the pressure/tension dimension (items 19–24), item 19 showed 15.8% of learners in the highest anxiety category, consistent with the qualitative findings on speaking anxiety. The autonomy dimension (items 25–30) showed a mixed pattern, with a meaningful proportion reporting feeling externally obligated, echoing the predominantly extrinsic motivational profile identified in the focus group data.

Table 3

Learners' Perceptions and Motivations Regarding Storytelling Methodology

Items	NAT	NRT	ST	MLT	QT	VT	CT
1. I enjoyed learning English through stories.	2.6%	2.6%	13.2%	36.8%	21.1%	15.8%	7.9%
2. The storytelling activities were fun.	2.6%	10.5%	7.9%	23.7%	26.3%	21.1%	7.9%
3. The stories made the class interesting.	0%	0%	5.3%	31.6%	28.9%	18.4%	15.8%
4. I enjoyed taking part in the storytelling activities.	5.3%	13.2%	21.1%	23.7%	15.8%	13.2%	7.9%

5. As I worked on the stories, I thought about how much I enjoyed it.	10.5%	7.9%	28.9%	15.8%	21.1%	5.3%	10.5%
6. I found the storytelling activities boring. (R)	15.8%	34.2%	7.9%	7.9%	18.4%	13.2%	2.6%
7. I think I am good at working with stories in English.	18.4%	2.6%	15.8%	23.7%	21.1%	7.9%	10.5%
8. I felt like I did a good job on the activities.	2.6%	5.3%	13.2%	13.2%	34.2%	18.4%	13.2%
9. After practicing, I felt more confident in English.	7.9%	2.6%	7.9%	31.6%	23.7%	15.8%	10.5%
10. I felt confident participating in the stories.	7.9%	2.6%	15.8%	23.7%	28.9%	10.5%	10.5%
11. I am satisfied with my performance in these activities.	5.3%	7.9%	18.4%	15.8%	15.8%	18.4%	18.4%
12. I felt like I could not do it right. (R)	13.2%	10.5%	18.4%	28.9%	13.2%	7.9%	7.9%
13. I put a lot of effort into the storytelling activities.	0%	5.3%	10.5%	34.2%	7.9%	21.1%	21.1%
14. I tried to do the best I could.	2.6%	0%	0%	39.5%	18.4%	18.4%	21.1%
15. It was important to me to do it right.	2.6%	5.3%	2.6%	13.5%	28.9%	23.7%	23.7%
16. I put a lot of effort into the activities.	0%	5.3%	2.6%	28.9%	23.7%	31.6%	7.9%
17. I did not put much effort into the stories. (R)	21.1%	18.4%	15.8%	18.4%	13.2%	7.9%	5.3%
18. I focused on doing a good job.	0%	0%	10.5%	26.3%	21.1%	26.3%	15.8%
19. I felt nervous about participating.	10.5%	13.2%	10.5%	23.7%	13.2%	13.2%	15.8%
20. I felt relaxed while I was working. (R)	2.6%	23.7%	18.4%	13.2%	18.4%	15.8%	7.9%
21. I felt pressure when telling my story.	7.9%	7.9%	21.1%	15.8%	23.7%	18.4%	5.3%

22. I felt anxious during the activity.	10.5%	13.2%	7.9%	34.2%	10.5%	15.8%	7.9%
23. I did not feel nervous during the activity. (R)	10.5%	26.3%	18.4%	13.2%	15.8%	10.5%	5.3%
24. I felt calm while participating. (R)	5.3%	10.5%	13.2%	36.8%	15.8%	7.9%	10.5%
25. I felt like I had a chance to participate.	13.2%	7.9%	7.9%	21.1%	21.1%	13.2%	15.8%
26. I participated because I wanted to.	13.2%	5.3%	18.4%	21.1%	15.8%	10.5%	15.8%
27. I felt like I had to do it even though I did not want to. (R)	15.8%	7.9%	23.7%	21.1%	13.2%	7.9%	10.5%
28. I felt it was my decision to participate.	7.9%	10.5%	10.5%	28.9%	13.2%	13.2%	15.8%
29. I participated because I had no other choice. (R)	13.2%	15.8%	21.1%	10.5%	13.2%	15.8%	10.5%
30. I felt like I was doing what I wanted to do.	7.9%	2.6%	15.8%	36.8%	15.8%	10.5%	10.5%

N=21.

Note: NAT=Not at all true, NRT= No true, ST=Strongly true, *MLT=More or Less True*, QT=quite true, VT=Very true, CT=Completely true”

Source: project registers (2026).

3. Factors, Strategies, and Routines Instructors Use to Strengthen EFL Speaking Fluency (RQ3)

Table 4 presents information collected through deeper interviews with instructors.

Table 4

Factors, Strategies, and Routines that Instructors Use to Strengthen Learners' Speaking Fluency

Evidence	Impact on learners' fluency	Routines and didactic tools
Category 1. Factors affecting learners' fluency in EFL speaking		
P1: "Learners speak slowly because they fear classmates will make fun of them."	High.	Social anxiety.
P2: "Learners fear being judged or laughed at because of their errors when speaking in English."	High.	Social anxiety.
P3: "The classroom environment affects learners' speaking participation."	High.	Learning environment.
	Medium.	Personality.

Evidence	Impact on learners' fluency	Routines and didactic tools
P4: "Learners feel ashamed and think they cannot speak fluently." P5: "The fear of making mistakes creates anxiety in learners." P6: "The lack of practice and previous bad experiences affect learners' confidence."	High. High.	Social anxiety. Experiential factor.
Category 2. Strategies used to encourage learners to speak in EFL class		
P1: "I integrate motivation and collaboration in my rubric to build confidence in my learners." P2: "I let them speak without interrupting for mistake corrections, so learners do not feel afraid." P3: "I encourage learners to use gestures, maintain eye contact, and speak clearly to the audience." P4: "I build speaking confidence by teaching learners about body language, hesitation, and voice strength." P5: "If learners can speak without stopping too many times, it shows they feel confidence and speaking fluency." P6: "Participation frequency and body expression show whether learners are confident to speak."	High. Medium. High. High. Medium. Medium.	Supportive feedback. Supportive feedback. Communication techniques. Fluency record / filming. Fluency record / observation Active participation
Category 3. Strategies to create a safe learning environment for speaking practice		
P1: "Learners do not feel comfortable unless they read the story." P2: "Learners feel nervous at the beginning; fluency increases with permanent practice." P3: "Learners reach better fluency and confidence when they prepare beforehand." P4: "Some learners speak slowly because it is not their native language." P5: "Fluency level depends on personality and previous practice." P6: "Confidence for speaking fluently increases with practice."	High. High. Medium. Medium. Medium. Medium. High.	Text support. Permanent practice. Preparation. Supportive feedback. Supportive feedback. Permanent practice.

Note. P1–P6 refer to the six EFL instructors. Source: semi-structured interviews.

Category 1. The most frequently reported barrier to EFL fluency was speaking anxiety, defined by Öztürk and Gürbüz (2019) as a multidimensional construct encompassing communication apprehension, fear of negative evaluation, and performance anxiety. Five of the six teachers identified social anxiety specifically, describing how fear of peer ridicule, shame about errors, and avoidance of participation interacted to suppress learners' oral output. Dewaele et al. (2019) confirmed that affective factors tied to peer evaluation are among the strongest inhibitors of willingness to communicate in secondary EFL settings. Marzban and Karimnia (2020) noted that negative prior experiences, explicitly cited by P6, compound anxiety over time, establishing cycles of avoidance that progressively erode fluency. These findings collectively suggest that effective instruction must address the social and emotional climate of the classroom before linguistic strategies can take hold.

Category 2. Teacher-reported strategies for encouraging speaking centered on two practices: allowing learners to speak without immediate interruption for error correction and using fluency-focused assessment tools such as participation rubrics and video recordings. These approaches reflect what Marzban and Karimnia (2020) called an anxiety-inclusive pedagogical orientation, in which learners produce longer and more fluent texts when they are not constantly monitored for accuracy. The role of filming deserves particular attention: Lustenberger (2024) found that reviewing one's own recorded speech functions as a powerful self-monitoring strategy, heightening awareness of prosodic features and gradually reducing unnecessary pausing.

Category 3. All six teachers highlighted the importance of preparation and sustained practice as conditions for fluency development. This consensus reflects Skehan's (2018) meta-analytic finding that pre-task planning is one of the most reliable facilitators of both fluency and complexity in L2 oral production: learners who organize their ideas and rehearse their delivery in advance speak with notably greater continuity and fewer disruptive pauses. P1's observation that learners feel more at ease reading from a prepared text before attempting unscripted speech illustrates the scaffolded progression central to DST design, in which structured support is gradually withdrawn as learner confidence grows (Vygotsky, 1978).

4. Learners' Perceptions of Confidence, Motivations, Difficulties, and Limitations (RQ4)

Table 5 presents the focus group data organized across five thematic categories.

Table 5

Learners' Perceptions of their Confidence, Motivations, Difficulties, and Limitations for Speaking Fluently in EFL

Evidence	Level / Type
Category I. Learners' confidence to speak in EFL before an audience	
P1: "I feel normal when speaking." P2: "I feel nervous because people are watching me." P3: "I do not have problems speaking." P4: "I do not feel confident; I just try." P5: "I feel nervous because others are better than me." P6: "Sometimes I freeze due to lack of vocabulary." P7: "I struggle to find words." P8: "I can defend myself with what I know." P9: "I overthink grammar and lose confidence." P10: "Sometimes confident, sometimes not." P11: "My confidence is 5–6 out of 10." P12: "My confidence is very low; I feel pressure." P13: "I am afraid of being judged."	High. Low. High. Low. Low. Low. Medium. High. Medium. Medium. Medium. Low. Low.
Category II. Learners' motivation for speaking in EFL inside/outside the classroom	
P1: "I love English class since I began to study it. I simply like English." P2: "To travel abroad; I need English a lot." P3: "For getting better job opportunities in the future." P4: "I just like English."	Intrinsic – High. Extrinsic – High. Extrinsic – Medium. Intrinsic – High.

Evidence	Level / Type
P5: "I study English just to pass the subject." P6: "I love electronic games; they motivate me to learn English." P7: "My teacher motivates me very much." P8: "I feel forced to learn; I am not really interested." P9: "I want to understand movies." P10: "To speak with foreigners." P11: "Because it is important." P12: "I do not feel motivated to speak foreign languages." P13: "I like learning languages."	Extrinsic – Low. Extrinsic – Medium. Extrinsic – High. Extrinsic – Low. Extrinsic – High. Extrinsic – High. Extrinsic – High. Intrinsic – Low. Extrinsic – High.
Category III. Difficulties speaking in English as a foreign language	
P1: "Lack of vocabulary." P2: "Pronunciation is difficult." P3: "Fear of making mistakes." P4: "I cannot connect ideas." P5: "I think in Spanish first." P6: "I forget words." P7: "I feel nervous." P8: "Grammar is difficult." P9: "I do not know how to start." P10: "I speak slowly." P11: "I feel embarrassed to speak in front of an audience." P12: "I do not understand everything." P13: "I am afraid of speaking."	Linguistic – High. Linguistic – Medium. Affective – High. Cognitive – Medium. Linguistic – Medium. Cognitive – Medium. Affective – Medium. Cognitive – Medium. Cognitive – Medium. Linguistic – Medium. Affective – High. Cognitive – Medium. Affective – High.
Category IV. Limitations causing low speaking fluency in storytelling	
P1: "Vocabulary is my biggest problem." P2: "Pronunciation is difficult for me." P3: "I am afraid of making mistakes." P4: "I do not know enough words to express my ideas." P5: "I get nervous when speaking." P6: "I forget words when talking." P7: "Grammar is difficult for me." P8: "I do not know how to start a story." P9: "I think in Spanish first." P10: "I speak slowly because I am unsure of my English." P11: "I feel embarrassed when I make mistakes." P12: "I do not understand everything in English." P13: "I am afraid of being judged."	Vocabulary. Pronunciation. Affective. Vocabulary. Affective. Cognitive. Cognitive. Cognitive. Cognitive. Affective. Affective. Cognitive. Affective.
Category V. Activities that might increase speaking fluency when using storytelling	
P1: "Group work helps me feel more comfortable." P2: "I prefer telling anecdotes instead of stories." P3: "Listening as practice helps me feel more confident." P4: "Roleplays make me feel more relaxed." P5: "Games help me participate more." P6: "Talking with classmates is easier."	Collaborative work. Speech format. Listening. Roleplays. Games. Partner work.

Evidence	Level / Type
P7: "Practice conversations help me."	Partner work.
P8: "Working in pairs makes me feel better."	Partner work.
P9: "Watching videos helps me understand better."	Visual
P10: "Activities with technology are more interesting."	Digital learning
P11: "Free speaking helps me improve."	Speech format.
P12: "Group presentations help me feel supported."	Collaborative work.
P13: "Interactive activities make me less nervous."	Collaborative work.

Note. P1–P13 refer to the 13 learner focus group participants. Source: learner focus group.

Category I. Eight of the twenty-one learners described their public-speaking confidence as low or medium; only one participant reported no difficulties. These patterns are consistent with Öztürk and Gürbüz (2019), who found that fear of peer evaluation is the principal driver of speaking anxiety among secondary EFL learners. Ghosn-Chelala and Al-Chibani (2018) linked this pattern to repeated experiences of communicative failure in classrooms that offer insufficient affective support.

Category II. Nine of the twenty-one learners cited external reasons: travel, employment prospects, passing grades, teacher influence, or media comprehension, as their primary motivation for studying English, while only three reported genuinely intrinsic reasons. This predominantly extrinsic profile is characteristic of secondary EFL classrooms in Latin American contexts, where English is often experienced as a school subject rather than a personally meaningful tool for communication (Cabrera-Solano, 2019). Learners with the lowest motivational levels were those who either perceived learning as externally imposed or could not connect the language to any personally relevant goal, a finding that underscores the potential value of DST's capacity to generate tasks with personal communicative meaning (Abdel-Hack & Helwa, 2023; Lustenberger, 2024).

Category III. Cognitive difficulties—inability to connect ideas, L1 interference from Spanish, word retrieval failures under pressure, and difficulty initiating speech—were the most frequently reported barriers, appearing in five responses. Affective difficulties (nervousness, embarrassment, fear) accounted for four responses, and purely linguistic difficulties for three. This distribution confirms that the barriers to oral fluency in this population are not exclusively linguistic; cognitive overload and emotional inhibition are equally implicated (Bai & Xian, 2024).

Category IV. Within the specific context of storytelling tasks, affective and cognitive limitations each accounted for 5 responses, while structural or grammatical difficulties were primary for only 2 participants. This distribution reinforces the argument that the core contribution of DST is not simply to provide more speaking practice but to create conditions—structured preparation, gradual exposure, collaborative support—that sufficiently lower the affective and cognitive burden for learners to speak more freely (Huang, 2023; Murad et al., 2023).

Category V. Activities identified as most confidence-building clustered into two groups: collaborative tasks (group work, pair work, peer conversation, group presentations—five responses) and interactive or technology-mediated tasks (gamification, digital tools, interactive activities—four responses). These spontaneously expressed preferences map directly onto the defining features of effective DST. Liu and Chu (2020) demonstrated that these same preferences reliably predicted post-intervention gains in oral performance among secondary EFL learners.

Relationship between quantitative data and qualitative information.

Table 6

Quantitative data and qualitative information relationship.

Dimensions	Quantitative Data		Categories	Qualitative information		Trends
Learners' fluency improvement	0,389	Moderated	Motivation	Moderate engagement, Positive experience, Sence of accomplishment,	A low part of learners feel obligated, extrinsic motivation	Learners achieved a moderate improvement in speaking fluency. Learners have moderate engagement toward DST. Teachers recommend using rubrics and videos recordings for correction.
Enjoyment dimension	23,7% 36,8%	Moderated				
Perceived competence dimension	34,2%	Moderated	Authonomy	High effort and importance of tasks, All teachers identified social anxiety in learners.	Perceived learning as externally imposed or could not connect the language to any personally relevant goal	Strategy: learners to speak without immediate correction. Use fluency-focused assessment. Use rubrics
Effort dimension (speak Anxiety)	15,8%	Low				
Autonomy (External obligation)	35%	Moderated				

Hypothesis Evaluation

The Shapiro-Wilk normality test returned $p = 0.678$ for the pre-test distribution and $p = 0.858$ for the post-test distribution, indicating that both sets of scores were normally distributed and that parametric testing was appropriate. A paired-samples t-test at the 95% confidence level yielded $t(20) = -14.201$, $p < .001$, with a mean difference of $M = -0.393$ and Cohen's $d = 3.09$, indicating a large effect size. Post-test scores were systematically higher than pre-test scores across the sample. Based on these results:

H_{o1} = There are no significant changes in learners' speaking fluency after DST practice. **[Rejected]**

H_{a1} = There are significant changes in learners' speaking fluency after DST practice. **[Accepted]**

Discussion

The following sections examine the quantitative and qualitative findings in relation to the theoretical and empirical literature, organised around the four principal themes that emerged from the data.

Fluency Gains and the Role of Iterative Rehearsal

The uniform direction of a moderated improvement in EFL speaking fluency across all 21 participants of the research, who moved from 6.50 to 7.00, is consistent with Murad et al. (2023), who found that iterative rehearsal built into DST tasks encourages learners to revisit and refine their language use, reducing hesitation and strengthening speech continuity. The results suggest that DST functions as an

equitable intervention rather than one that primarily benefits learners who are already approaching fluency.

Huang (2023) showed that structured storytelling tasks reduce the cognitive burden of spontaneous speech by providing a prepared narrative scaffold; learners are no longer obliged to construct meaning and monitor language form simultaneously. Teacher interview data in the present study echoed this finding: instructors consistently observed that learners who had rehearsed their stories in advance spoke with greater continuity than in conventional conversational tasks. Bai and Xian (2024) reported a parallel pattern in an IELTS preparation context, where DST engagement correlated with reductions in self-regulation difficulties and language anxiety.

Tatlı et al. (2022) showed that cognitive load associated with storytelling decreases progressively as learners internalise organisational routines and direct more attention toward lexical accuracy and prosodic quality. Although cognitive load was not directly measured in this study, teacher observations that learner presentations became less laboured and more natural as the intervention progressed are consistent with that account.

Andujar and Salaberri-Ramiro (2021) demonstrated comparable gains in mobile-assisted DST contexts, reinforcing the point that the conditions surrounding it—adequate preparation time, technological support, staged rehearsal—matter as much as the activity itself.

Confidence, Anxiety, and the Affective Dimensions of Oral Production

The qualitative data show that affective barriers dominated learners' experience before and during the intervention. Across all five focus group categories, participants described emotional inhibitors—fear of judgment, embarrassment after errors, anxiety in front of peers—alongside cognitive and linguistic ones. Öztürk and Gürbüz (2019) established that speaking anxiety in secondary EFL learners operates through communicative apprehension, fear of negative evaluation, and test anxiety—all three of which were discernible in learner responses. The finding that most participants rated their public-speaking confidence as low or medium aligns with the self-reinforcing anxiety spiral that Ghosn-Chelala and Al-Chibani (2018) linked to repeated communicative failures in low-support environments.

DST's confidence-building trajectory appears to interrupt this cycle by transferring a degree of control to the learner. Because learners decide what story to tell, how to tell it, and when to record, the communicative act is transformed from an unpredictable performance into a planned creative product (Ghosn-Chelala & Al-Chibani, 2018). Participants in Category V of the focus group independently identified low-pressure group formats as the contexts in which they felt most confident—a convergence that validates the collaborative structure embedded in DST. Dewaele et al. (2019) confirmed that perceived peer and teacher support are among the strongest predictors of EFL learners' willingness to communicate, lending theoretical grounding to this pattern.

Learner Motivational Profiles and Pedagogical Implications

The motivational profiles captured in Category II of the focus group spanned a wide spectrum from learners with deeply intrinsic orientations to those who described learning English as a matter of reluctant compliance with external expectations. This heterogeneity is characteristic of secondary EFL classrooms in Latin American contexts (Cabrera-Solano, 2019) and poses a challenge for any single pedagogical approach. Yet the fact that even learners with low or extrinsic motivation reported finding DST's recording and editing phases engaging suggests that the task's multimodal and creative dimensions created entry points that cut across motivational differences. Abdel-Hack and Helwa (2023) found a comparable pattern

in an Egyptian secondary context, where DST drew in learners who had previously shown minimal interest in oral activities by offering them genuine authorship over the learning product.

The activity preferences expressed in Category V- group work, pair work, games, digital tools, conversational practice, free speaking—align directly with the defining design features of effective DST. That learners spontaneously named these formats without prompting strengthens the ecological validity as a pedagogical choice for this population. Liu and Chu (2020) similarly found that secondary EFL learners' spontaneous preferences for collaborative and technology-mediated speaking tasks predicted post-intervention gains in oral performance.

Teacher Strategies and Learning Environments

The six teachers described instructional repertoires oriented toward error tolerance, structured preparation, and graduated public exposure. Several explicitly normalized errors as legitimate features of language learning rather than marks of failure—a stance aligned with the anxiety-inclusive pedagogical culture advocated by Marzban and Karimnia (2020). Two teachers emphasized the value of pre-performance preparation: storyboarding, mirror practice, and partner rehearsal before any public or recorded delivery was required. This orientation is consistent with Skehan's (2018) finding that pre-task planning is among the most reliable facilitators of L2 oral fluency, and with the structural logic of DST itself (Vygotsky, 1978).

Teacher interview evidence further reinforced the link between confidence and fluency. Multiple instructors framed confidence not as a fixed personality trait but as something that instruction can deliberately cultivate, illustrating that systematic attention to confidence-building, combined with iterative DST rehearsal, appears to drive the uniform improvement pattern across the sample.

Actionable Principles

The study's converging findings suggest three actionable principles for practitioners. First, DST should be treated as a curriculum-embedded practice rather than an isolated project; the gains documented here emerged over 12 weeks of repeated engagement, and sustained implementation across a full semester is likely to produce larger and more durable effects. Second, the instructional conditions surrounding DST matter as much as the format itself: teachers who normalise errors, build in explicit preparation phases, and scaffold public performance through graduated exposure appear to maximise its confidence-building potential (Skehan, 2018; Vygotsky, 1978). Third, allowing learners to choose personally meaningful story content is not a pedagogical luxury but a mechanism through which DST accommodates diverse motivational orientations and converts externally assigned tasks into intrinsically engaging ones (Deci & Ryan, 2020; Hava, 2021).

Conclusions

This study set out to determine how Digital Storytelling Practice contributed to enhancing English speaking fluency among secondary school learners who took part in the research. The evidence gathered across quantitative and qualitative strands consistently supports a moderated contribution. The pre-test to post-test data showed improvement across all 21 learners, with a mean gain of 0.389 points, which reached statistical significance at $p < .001$.

The qualitative findings reveal a learner population whose speaking difficulties are simultaneously linguistic and affective. Participants lacked vocabulary and struggled to organise ideas in real time; they were also burdened by anxiety about peer judgment, embarrassment after errors, and low confidence stemming from limited prior speaking experience. The structured rehearsal built into DST gave learners

the preparation time needed to manage cognitive demands, while the collaborative and creative dimensions of the task gradually reduced the fear of public exposure.

The study concludes that DST serves as an integrated pedagogical scaffold that addresses the linguistic, cognitive, and affective dimensions of EFL speaking development within a single-task format. Its capacity to reduce anxiety, provide rehearsal opportunities, and generate authentic communicative purposes simultaneously makes it a well-suited tool for secondary learners with modest speaking experience, heterogeneous motivational profiles, and heightened sensitivity to social evaluation.

Limitations and Suggestions for Future Research

Several methodological constraints deserve acknowledgement. The sample—21 learners and 6 teachers at a single secondary school in coastal Ecuador—limits both the statistical power of the quantitative analysis and the transferability of qualitative themes to other contexts. However, results can be considered for future studies using randomised control designs with larger, geographically diverse samples, which would allow firmer causal attribution of fluency gains to DST rather than to maturation, teacher effects, or other contextual factors.

The 12-week intervention window was sufficient to detect initial gains, but it does not permit conclusions about whether improvements are maintained over time. Longitudinal designs that track learners over a full academic year would provide important evidence about consolidation and transfer. Finally, the fluency metrics employed—while appropriate for a classroom investigation—do not capture the full complexity of spoken fluency as psycholinguists define it; future studies should incorporate acoustic measures such as articulation rate, mean length of run, and filled pause frequency to determine precisely which dimensions of oral performance DST most reliably affects and for which learner profiles. Future research should build on this foundation by examining longer intervention periods, comparing DST with other technology-mediated oral tasks, and incorporating acoustic fluency measures to identify the specific mechanisms by which DST drives improvement. The authors hope this research will contribute to the improvement of EFL instruction in Ecuador and across Latin America

Acknowledgements

The authors wish to thank the learners, instructors, and administrative staff of the participating secondary school in Manta, Ecuador, for their cooperation and commitment throughout the study. Gratitude is also extended to the expert panel members for their invaluable feedback on the research instruments, and to the Research Group: *Innovaciones Educativas para el Desarrollo Sostenible of the ULEAM* in Manta, Ecuador.

Conflict of Interest

None.

Funding

This research was conducted within the framework of the research project *Innovaciones pedagógicas e internacionalización de la formación de docentes para el desarrollo humano y sostenible* at Universidad Laica Eloy Alfaro de Manabí. No external funding was received.

References

- Abdel-Hack, E. M., & Helwa, H. S. A. (2023). Using digital storytelling and webquests as creative teaching strategies to develop EFL learners' speaking skills and self-expression. *English Language Teaching*, 16(1), 1–13. <https://doi.org/10.5539/elt.v16n1p1>
- Andujar, A., & Salaberri-Ramiro, M. S. (2021). Exploring chat-based communication in the EFL class: Computer and mobile environments. *Computer Assisted Language Learning*, 34(4), 434–461. <https://doi.org/10.1080/09588221.2019.1614069>
- Bai, Y., & Xian, H. (2024). Exploring the interplay of digital storytelling, L2 speaking skills, self-regulation, and anxiety in an IELTS preparation course. *Humanities and Social Sciences Communications*, 11, Article 1584. <https://doi.org/10.1057/s41599-024-04109-8>
- Budi Waluyo, Nafis Mahmud Khan,(2026) Exploring translanguaging behaviors in digital storytelling: A mixed-methods study in Thai higher education, *Social Sciences & Humanities Open*, Volume 13, 102655. <https://doi.org/10.1016/j.ssaho.2026.102655>
- Cabrera-Solano, P. (2019). Using digital storytelling as a meaningful context for grammar instruction in higher education. *International Journal of Learning, Teaching and Educational Research*, 18(12), 72–91. <https://doi.org/10.26803/ijlter.18.12.5>
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE.
- Deci, E. L., & Ryan, R. M. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, Article 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Dewaele, J.-M., Chen, X., Padilla, A. M., & Lake, J. (2019). The flowering of positive psychology in foreign language teaching and acquisition research. *Frontiers in Psychology*, 10, Article 2128. <https://doi.org/10.3389/fpsyg.2019.02128>
- Gedik, T. A. (2026). Literacy enhances lexical variation, not quantity, in adult oral production. *Journal of Cultural Cognitive Science*, 10, 31–47. <https://doi.org/10.1007/s41809-025-00189-3>
- Ghosn-Chelala, M., & Al-Chibani, W. (2018). Digital storytelling: Support and scaffolding EFL remedial writing learners' learning. *International Journal of Education and Development Using Information and Communication Technology*, 14(2), 98–115.
- Hava, K. (2021). Exploring the role of digital storytelling in learner motivation and satisfaction in EFL education. *Computer Assisted Language Learning*, 34(7), 958–978. <https://doi.org/10.1080/09588221.2019.1650071>
- Huang, H.-T. D. (2023). Examining the effect of digital storytelling on English speaking proficiency, willingness to communicate, and group cohesion. *TESOL Quarterly*, 57(2), 536–563. <https://doi.org/10.1002/tesq.3147>
- Kyianytsia, L. L. (2021). The modernization theory paradigm and its discontents: Reviewing the contribution and failings of the modernization theory to social and political research. *Ukrainian Policymaker*, 8, 41–50. <https://doi.org/10.29202/up/8/5>

- Liang, J.-C., & Hwang, G.-J. (2023). A robot-based digital storytelling approach to enhancing EFL learners' multimodal storytelling ability and narrative engagement. *Computers & Education*, 201, Article 104827. <https://doi.org/10.1016/j.compedu.2023.104827>
- Liu, J., & Chu, Y. (2022). Effects of collaborative digital storytelling on EFL learners' oral proficiency and willingness to communicate. *Computer Assisted Language Learning*, 35(9), 2587–2607. <https://doi.org/10.1080/09588221.2020.1799903>
- Lustenberger, A. (2024). Promoting speaking in the young learner classroom through task-based digital storytelling via online technology: A case study. *Journal of China Computer-Assisted Language Learning*, 4(1), 6–41. <https://doi.org/10.1515/jccall-2023-0004>
- Marzban, A., & Karimnia, A. (2020). The effect of digital storytelling on EFL learners' vocabulary retention and speaking ability. *International Journal of Applied Linguistics and English Literature*, 9(3), 41–48. <https://doi.org/10.7575/aiac.ijalel.v.9n.3p.41>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2020). *Qualitative data analysis: A methods sourcebook* (4th ed.). SAGE.
- Murad, T., Assadi, J., & Badarni, H. (2023). The effect of digital storytelling on EFL learners' speaking improvement and learners' perceptions. *Journal of Language Teaching and Research*, 14(2), 348–355. <https://doi.org/10.17507/jltr.1402.17>
- Nair, V., & Yunus, M. M. (2021). A systematic review of digital storytelling in improving speaking skills. *Sustainability*, 13(17), Article 9829. <https://doi.org/10.3390/su13179829>
- Nguyen, L. T., & Vo, T. T. H. (2022). Technology-enhanced task-based language teaching and EFL learners' speaking performance. *Computer Assisted Language Learning*, 35(9), 2592–2617. <https://doi.org/10.1080/09588221.2021.1884042>
- Öztürk, G., & Gürbüz, N. (2019). The impact of gender on foreign language speaking anxiety. *Journal of Language and Linguistic Studies*, 15(1), 80–99. <https://doi.org/10.17263/jlls.547814>
- Plonsky, L., & Oswald, F. L. (2019). How big is 'big'? Interpreting effect sizes in second language research. *Language Learning*, 69(S1), 141–174. <https://doi.org/10.1111/lang.12365>
- Ramos-Núñez, M. F., Sánchez-Rivas, E., & Ruiz-Viruel, S. (2026). Artificial intelligence in story-based learning: Effects on students' perceived creativity and idea satisfaction in secondary education. *Frontiers in Education*, 11, Article 1800189. <https://doi.org/10.3389/educ.2026.1800189>
- Robin, B. R., & McNeil, S. G. (2019). Digital storytelling. In R. Hobbs & P. Mihailidis (Eds.), *The international encyclopedia of media literacy* (pp. 1–8). Wiley-Blackwell. <https://doi.org/10.1002/9781118978238.ieml0056>
- Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Psychology*, 43(3), 450–461. <https://doi.org/10.1037/0022-3514.43.3.450>
- Skehan, P. (2018). The role of planning in L2 oral performance: A meta-analytic re-assessment of planning conditions and their effects. In Z. Wen & M. J. Ahmadian (Eds.), *Researching L2 task performance and pedagogy* (pp. 17–34). John Benjamins.

- Tatlı, Z., Saylan, E., & Kokoç, M. (2022). Digital storytelling in an online EFL course: Influences on speaking, vocabulary, and cognitive load. *Participatory Educational Research*, 9(6), 89–112. <https://doi.org/10.17275/per.22.123.9.6>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Waluyo, B., & Khan, N. M. (2026). Exploring translanguaging behaviors in digital storytelling: A mixed-methods study in Thai higher education. *Social Sciences & Humanities Open*, 13, Article 102655. <https://doi.org/10.1016/j.ssaho.2026.102655>
- Yang, Y. T. C., Chen, Y.-C., & Hung, H.-T. (2022). Digital storytelling as an interdisciplinary project to improve learners' English speaking and creative thinking. *Computer Assisted Language Learning*, 35(4), 840–862. <https://doi.org/10.1080/09588221.2020.1750431>
- Zhussupova, R., & Shadiev, R. (2023). Digital storytelling to facilitate academic public speaking skills: Case study in a culturally diverse multilingual classroom. *Journal of Computers in Education*, 10, 499–526. <https://doi.org/10.1007/s40692-023-00259-x>