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**| RESEARCH ARTICLE**

## **Examining the Effects of Embodied Digital Storytelling on EFL Students' Intercultural Learning**

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**| ABSTRACT**

While digital storytelling (DST) has been widely adopted to support language learning, its potential for fostering intercultural learning remains insufficiently explored. This qualitative study investigates how Chinese university-level English as a Foreign Language (EFL) learners engage with embodied DST to explore intercultural learning and the types of cultural insights they develop through this process. Data were collected through semi-structured interviews with 15 undergraduate students and analysed using an inductive thematic approach. The findings indicate that learners' engagement with embodied DST progressed from reliance on initial instructional scaffolding to more socially mediated and collaborative forms of interaction. In this process, DST functioned as a facilitator of intercultural meaning-making, a catalyst for reflective self-discovery, and a platform for collaborative learning. Furthermore, learners moved beyond the acquisition of factual cultural knowledge toward more critical and reflective understandings. They became increasingly aware of the linguistic, narrative, and technical challenges involved in representing cultural meanings. The study concludes that embodied DST can play multiple roles in promoting intercultural learning when supported by pedagogical designs that encourage engagement and critical reflection with cultural content. Accordingly, it highlights the need for educators to design structured activities that foster students' critical awareness and Intercultural Communicative Competence (ICC) throughout the DST creation process.

**| KEYWORDS**

EFL students, intercultural learning, digital storytelling, intercultural communicative competence

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### **1. Introduction**

Globalization has heightened the importance of English language proficiency alongside intercultural competence, particularly in facilitating communication across cultural boundaries. Intercultural Communicative Competence (ICC) is now widely recognized as a key capability in international contexts (Gruber & Wagner, 2024). However, existing research suggests that language instruction alone has a limited effect on developing ICC, as many learners report insufficient opportunities to engage with cultural perspectives in classroom settings (Nameni, 2022). To address this limitation, scholars have emphasized the need to incorporate authentic intercultural experiences and practice-oriented activities into language education (Omar & Shaalan, 2023). Nevertheless, instructional materials often fall short of these expectations, leaving learners inadequately prepared for intercultural communication in a globalized world. In addition, learners frequently equate intercultural learning with exposure to English-speaking cultures, which constrains their conceptualization of cultural diversity (Tao, 2025).

In the Chinese English as a Foreign Language (EFL) context, intercultural education has increasingly been emphasized in higher education curricula, with a gradual shift from the transmission of target culture knowledge to the cultivation of ICC (Qian, 2024). Despite this policy-level emphasis, classroom practices have not fully aligned with these goals. Many teachers hold ambiguous understandings of culture teaching and tend to prioritize language instruction over intercultural development. Furthermore, limited engagement with cultural theories has hindered the development of coherent pedagogical strategies. These challenges

underscore the need for more dynamic and interactive approaches, including the integration of digital tools that can support meaningful intercultural engagement and real-time communication (Williyan et al., 2024).

Against this backdrop, digital storytelling (DST) has emerged as a promising pedagogical approach for fostering intercultural learning. As Lambert (2013) suggests, learners in the digital age seek opportunities for creative expression, where they can determine both the content and form of their narratives. DST aligns closely with constructivist learning principles by fostering student-centered and collaborative environments in which knowledge, skills, and attitudes are co-constructed through interaction and negotiation. From the perspective of embodied cognition, learning is grounded in learners' sensory, emotional, and experiential engagement with meaning-making processes. In this regard, the multimodal nature of DST, integrating visual, auditory, and narrative elements, enables learners to experience and express stories through embodied forms of representation, rather than relying solely on abstract linguistic input. By creating and sharing personal or cultural narratives, learners engage cognitively and affectively with the content, which enhances language development and deepens intercultural understanding (Grant & Bolin, 2016; Ribeiro, 2016). Culture-based storytelling tasks further encourage learners to draw on their lived experiences, reflect on their cultural identities, and interpret others' perspectives through situated and embodied engagement (Humairoh, 2023). Such processes not only promote critical reflection and empathy but also strengthen the connections between self, others, and context, thereby supporting the development of intercultural competence in a more holistic and experiential manner.

Despite the growing body of research on ICC, much of the literature has focused on Western contexts, with relatively limited attention to Asian educational settings. Existing studies in Asia tend to emphasize the acquisition of cultural knowledge rather than the development of contextually grounded intercultural competence. As a result, there remains a need to examine how intercultural learning can be meaningfully implemented in Chinese EFL classrooms. In particular, the potential of DST as a tool for fostering ICC remains underexplored in this context. To address these gaps, the present study investigates learners' engagement patterns with DST in intercultural learning and examines the cultural reflections that emerge from their storytelling practices. The research questions guiding this study were as follows: RQ1: How do Chinese EFL students engage embodied DST to explore intercultural learning? RQ2: What cultural reflections do students gain from their embodied DST-assisted intercultural learning?

## **2. Research Background**

### **2.1 DST in Language Education**

Originating in the United States, the pedagogical strategy known as DST has gained significant traction in various European and Asian educational contexts over the past decades, leveraging digital media to enhance storytelling and learning experiences (Wu & Chen, 2020). Unlike conventional narrative practices, DST integrates multimedia elements such as image, text, audio, and video, thereby creating a more dynamic and multifaceted approach to language acquisition (Belda-Medina, 2022). The multimodal nature of DST allows learners to engage with language in diverse ways, catering to different learning preferences and promoting deeper cognitive processing (Kahanurak et al., 2023). Furthermore, DST supports a more learner-centered approach by enabling students to construct and share personalized narratives. This process encourages active participation and enhances communication skills, as learners must organize ideas, structure narratives, and present them to an audience (Raffone, 2022). In this sense, DST not only preserves the motivational and engaging qualities of storytelling but also extends them by incorporating multiliteracy as an essential component of language learning. More broadly, DST has been associated with a range of positive outcomes, including increased learner engagement, improved digital literacy, stronger collaboration, and greater willingness to communicate (Wang & Hu, 2025).

In language education context, DST is widely viewed as an interactive process through which learners construct knowledge and develop competencies with the support of video editing software and other web-based tools (Nishioka, 2016). For example, the collaborative drafting stage in DST has been shown to enhance learners' writing skills by encouraging revision, negotiation, and co-construction of meaning (Tanrikulu, 2021). Such collaborative environments foster dynamic interactions not only among learners but also between learners, digital tools, and teachers. These interactions, particularly peer-to-peer exchanges during story creation, contribute to the development of communicative competence (O'Byrne et al., 2018). At the same time, learners engage in higher-order thinking processes, including critical analysis and creative problem-solving, as they design and refine their digital narratives (Simsek, 2020). Consequently, the synergistic nature of collaboration in DST often leads to more positive learning outcomes than individual work.

Compared with traditional language instruction, which typically focuses on discrete linguistic forms, DST adopts an integrated approach in which language, meaning, and context are closely interconnected. As an inherently multimodal and collaborative practice, DST requires learners to combine diverse media elements while working collectively to construct meaningful narratives (Yu & Wang, 2025). Although existing research has acknowledged the value of DST in language education, relatively less

attention has been paid to its embodied dimension. Therefore, it is important to further examine how embodiment within DST influences EFL learners' development, particularly in relation to their ability to utilize multimodal resources effectively.

## 2.2 Intercultural Learning and Embodied DST

The development of ICC in language education has become a central objective, as it equips learners with the ability to communicate effectively and appropriately across cultural boundaries. Intercultural learning, which involves engaging with diverse cultural perspectives while reflecting on one's own cultural identity, plays a crucial role in fostering this competence (Hastomo et al., 2025). Rather than focusing solely on the acquisition of cultural knowledge, intercultural learning emphasizes the development of attitudes, skills, and critical awareness necessary for meaningful cross-cultural interaction. Research has consistently shown that ICC is best developed through experiential and reflective learning processes that encourage learners to interpret, negotiate, and evaluate cultural meanings (Gruber & Wagner, 2024). This means learners develop ICC more effectively when they actively experience cultural situations and reflect on them critically. Rather than memorizing cultural facts, learners improve ICC by interacting with others, comparing perspectives, resolving misunderstandings, and thinking deeply about how cultural meanings are created and interpreted in communication.

Within this context, DST has emerged as a powerful pedagogical approach, particularly when understood through the lens of embodied cognition. As an embodied, multimodal, and constructivist practice, DST engages learners not only cognitively but also emotionally and sensorially, allowing them to experience meaning through the integration of images, sound, narration, and personal memory. Through the creation of digital narratives, learners make intentional decisions about how to represent cultural meanings, drawing on their perceptions, emotions, and prior experiences. This process promotes reflective thinking and supports the development of intercultural awareness (Stewart & Gachago, 2016). Moreover, in collaborative DST projects, embodied interaction is extended through dialogue and shared meaning-making, as learners negotiate interpretations, exchange perspectives, and co-construct narratives. Such socially and experientially grounded engagement fosters intercultural sensitivity and empathy, enabling learners to more fully appreciate both differences and commonalities across cultures (Hrebacková & Štefl, 2022). When learners participate in meaningful social interaction and experience cultural situations directly, they become more aware of others' feelings, values, and perspectives. As a result, they develop greater empathy and intercultural sensitivity, helping them understand not only cultural differences but also shared human experiences across diverse communities.

Moreover, integrating embodied DST into the EFL curriculum allows intercultural learning to be embedded within authentic communicative practices. It helps learners develop intercultural understanding through real communication tasks rather than isolated cultural instruction. By creating and performing stories with emotional, visual, and physical elements, students use language meaningfully while exploring cultural perspectives, making intercultural learning more engaging, practical, and closely connected to real-life communication experiences. Rather than treating culture as supplementary content, embodied DST positions it at the center of language use, enabling learners to critically engage with multicultural issues and articulate their own cultural identities through multimodal resources (Wang & Hu, 2025). In doing so, DST bridges the gap between language learning and real-world communication, fostering a more holistic understanding of intercultural competence. Despite the growing body of research on DST, limited studies have explored EFL learners' perceptions of its role in intercultural learning, especially in terms of their engagement patterns and cultural reflections throughout the creation process. This study seeks to address this gap by providing a deeper understanding of how learners experience and interpret DST in intercultural contexts.

## 3. Methodology

### 3.1 Research Design

This study adopted a qualitative research design to explore Chinese EFL learners' engagement with DST in intercultural learning, the challenges they encountered, and its potential for enhancing technology-integrated language teaching and learning. Given the exploratory nature of the research questions, the study sought to develop an in-depth understanding of learners' experiences rather than measure predefined variables (Creswell & Poth, 2018). A qualitative approach was therefore appropriate for capturing participants' perspectives, interpretations, and meaning-making processes within a specific educational context.

Moreover, intercultural learning in the Chinese EFL context remains relatively underexplored. The qualitative design enabled a nuanced investigation of this complex phenomenon, allowing learners to articulate how they engaged with cultural content and constructed meaning through DST. This approach provided profound and concrete insights into learners' experiences, highlighting how they perceived and negotiated intercultural understanding during the storytelling process.

### 3.2 Participants and Context

Taking into account the heterogeneity of the population, this research involved 45 undergraduate EFL students enrolled in a university elective English course entitled Introduction to Intercultural Communication. The students came from a range of disciplinary backgrounds, including biology, engineering, chemistry, and management, reflecting a diverse academic cohort. All

students were non-English majors and were organized into 15 groups of three members each for the purpose of completing a collaborative DST project. One student from each group was invited to participate in the interview at the end of the course.

The DST project required students to produce a 2-5-minute digital story centered on the theme of multicultural comparison, through which they were expected to demonstrate their understanding, reflection, and critical perspectives on intercultural communication. Embodied activities in this project engage learners through sensory, emotional, and physical experiences that enrich meaning-making. Students may participate in role-plays, simulations, and gesture-based storytelling to enact intercultural scenarios, allowing them to experience cultural differences firsthand. Activities such as emotion mapping, voice modulation, and physical positioning helped learners to express attitudes and perspectives beyond language. In the scripting phase, students act out scenes to refine narrative flow and emotional authenticity. During production, they use facial expressions, movement, and spatial settings to convey meaning visually. These embodied practices connect cognition with action, enabling learners to internalize cultural knowledge more deeply while enhancing creativity and communicative competence. The project was conducted in a 16-week teaching session, where course instruction and embodied DST activity moved on in parallel (Table 1).

**Table 1 Intercultural Learning Framework Integrated with Embodied DST**

Theme	Sub-theme	Weekly Instruction Subject	DST Activity
Self-cultural awareness	Self-awareness	Week 1-2: Introduction to culture and cultural identity	1. DST introduction 2. Examples of intercultural stories
	Self-identity	Week 3-4: Cultural identity and self-representation	3. Brainstorm cultural stories 4. Topic selection
Multicultural awareness	Understanding cultural diversity	Week 5-6: Cultural dimensions (e.g. high vs low context)	5. Draft scriptwriting 6. Search for supporting materials (image, video, audio)
	Respect for differences	Week 7-8: Stereotypes, prejudice, and cultural empathy	7. Create storyboard 8. Peer discussion on cultural representation
Intercultural competence	Cross-cultural communication	Week 9-10: Intercultural communication barriers and strategies	9. Record narration 10. Teacher feedback
	Intercultural interaction skills	Week 11-12: Verbal and nonverbal communication across cultures	11. Add subtitles and key message 12. Edit DST video (audio-visual coherence)
Critical intercultural awareness	Cultural reflection and evaluation	Week 13-14: Cultural adaptation and identity negotiation	13. Peer review and revision 14. Finalize and submit DST
Civic awareness	Global citizenship	Week 15-16: Intercultural communication in global contexts	15. Class presentation 16. Reflection and evaluation

Throughout the project, the instructor provided four structured guidance sessions to support students' understanding of DST concepts, features, production procedures, and relevant technological tools. These sessions were designed to facilitate learners' conceptual understanding of DST, provide hands-on experience, and encourage creative expression. Regarding the learning content, the sub-themes are closely connected to the weekly instructional subjects and together form a progressive framework for developing students' intercultural communicative competence. The project begins with self-awareness and self-identity, helping learners reflect on their cultural backgrounds and understand how identity shapes communication. Building on this foundation, the instruction then moves toward understanding cultural diversity and respect for differences, where students explore cultural dimensions, stereotypes, prejudice, and empathy. These topics encourage learners to recognize cultural similarities and differences from multiple perspectives. In the following stages, students focus on cross-cultural communication and intercultural interaction skills by examining communication barriers, strategies, and verbal as well as nonverbal practices across cultures. These activities strengthen learners' practical communication abilities in intercultural contexts. Finally, the themes of cultural reflection and global citizenship guide students to critically reflect on cultural adaptation, identity negotiation, and intercultural communication in global settings, promoting broader intercultural awareness and responsible global engagement. Upon completion of the DST project, one representative from each group was selected to participate in a semi-structured interview lasting approximately 30 minutes, in order to capture in-depth reflections on their learning experiences.

### **3.3 Instrument**

Data were collected through semi-structured interviews, which served as the primary research instrument. This format was particularly suitable for capturing learners' experiences, as it combined a set of guiding open-ended questions with the flexibility

to explore emerging themes. While the core questions ensured coverage of key research areas, follow-up and probing questions allowed participants to elaborate on their experiences and provide detailed accounts (Table 2).

**Table 2 Design of the Interview Questions**

Research question (RQ)	Main interview question	Potential probe
RQ1: How do Chinese EFL students engage DST to explore intercultural learning?	Q1. Can you describe your experience of creating a digital story related to intercultural topics? What steps did you take? Q2. How did you collaborate with others during the DST process?	– How did you choose your topic and cultural focus? – What tools or resources did you use during the process? – How did you organize your story? – What roles did you and your peers take in the project? – How did you discuss or negotiate cultural ideas in your group? – Did you encounter any disagreements? How did you resolve them? – Did your understanding of any culture change? How? – Did the project influence how you see your own cultural identity? – Can you give an example of a cultural insight you gained? – Did you find it difficult to express cultural ideas in English? Why? – Were there any problems with visuals, narration, or editing? – What would you improve in future intercultural storytelling projects?
RQ2: What cultural reflections do students gain from their DST-assisted intercultural learning?	Q3. What did you learn about other cultures and your own culture through the DST project?  Q4. What challenges did you face in representing cultural content, and how did they affect your thinking?	– Did you find it difficult to express cultural ideas in English? Why? – Were there any problems with visuals, narration, or editing? – What would you improve in future intercultural storytelling projects?
RQ1& RQ2	Q5. Overall, how do you evaluate the use of digital storytelling for intercultural learning?	– In what ways do you think DST helped or did not help your intercultural understanding? – Would you recommend using DST in similar courses? Why or why not?

Following the completion of the DST project, all participants received a Participant Information Sheet outlining the purpose of the study, the voluntary nature of participation, and measures taken to ensure confidentiality. The interviews were conducted online via Tencent Meeting Room, a platform comparable to Zoom. Each session lasted approximately 30 minutes. To ensure authenticity and depth of expression, participants were allowed to respond in Chinese, enabling them to more accurately convey their experiences. With participants' consent, all interviews were audio-recorded and later transcribed verbatim, including relevant pauses and tonal features. To protect participants' identities, all identifying information was removed and replaced with pseudonyms in the transcripts.

### 3.4 Data Analysis

The interview data were analyzed using inductive thematic analysis, which allows patterns and themes to emerge directly from the data rather than being imposed by pre-existing theoretical frameworks (Braun & Clarke, 2006). This approach was well suited to the exploratory and phenomenological nature of the study, as it enabled the identification of meanings grounded in learners' experiences.

The analysis followed the six-phase framework proposed by Naeem et al. (2023), known for its systematic rigor and flexibility. The process was iterative, allowing the researcher to move back and forth between stages to refine interpretations and ensure analytical depth. The six phases included: (1) transcription, familiarization, and selection of quotations; (2) identification of keywords; (3) development of codes; (4) theme construction; (5) interpretive integration and conceptualization; and (6) development of a conceptual model. To facilitate data management, qualitative analysis software (e.g., NVivo) was used to organize, code, and retrieve data segments efficiently. However, all analytical decisions including coding, theme development, and interpretation remained the responsibility of the researcher, ensuring consistency and coherence throughout the analysis process.

**4. Findings**

The thematic analysis of the interview data yielded four key themes that correspond to the two research questions, illustrating how Chinese EFL learners engaged with embodied DST in intercultural learning and the cultural insights they developed through the project. An overview of these themes is presented in Table 3 and elaborated in the subsequent sections.

**Table 3 Conceptual Framework of the Thematic Analysis**

Themes	Codes	Keywords
Theme 1: Multidimensional Intercultural Learning Scaffolding	Multimodal Digital Skill Development	digital storytelling skills; video editing; software operation; multimodal composition; information integration; technical literacy
	Language Development for Intercultural Communication	pronunciation improvement; oral expression; language accuracy; cross-cultural expression; audience awareness
	Creativity in Cultural Storytelling	creative expression; idea generation; narrative innovation; emotional resonance; audience appeal; cultural representation
	Intercultural Awareness and Cultural Identity Development	intercultural communication; cultural understanding; cultural comparison; cultural confidence; global perspective; cultural awareness
Theme 2: Socially Mediated Intercultural Meaning-Making Experience	Collaborative Knowledge Construction in Cultural Contexts	teamwork; peer collaboration; idea sharing; group discussion; peer feedback; negotiation of cultural meaning; cooperative problem-solving
	Interaction and Intercultural Dissemination Expansion	social media sharing; audience interaction; intercultural communication online; global audience engagement; community building; feedback mechanisms
Theme 3: Frustrations of Intercultural Representation	Technical and Operational Difficulties	unfamiliar software; technical complexity; editing inefficiency; transition problems; production errors
	Narrative and Cultural Representation Challenges	story structure imbalance; unclear narrative focus; shallow cultural content; storytelling coherence; cultural representation difficulty
	Multimodal Integration Constraints	material integration; format inconsistency; audio-visual mismatch; subtitle synchronization; media coordination
Theme 4: Aspirations for Intercultural Storytelling Practice	Need for Intercultural and Technical Skill Training	language improvement; intercultural competence development; technical training; software learning; continuous practice
	Desire for Culturally Rich and Engaging Storytelling	innovative storytelling; engaging content; cultural depth; narrative refinement; culturally authentic representation; audience-centered design

**4.1 Students' Engagement Patterns**

The findings suggest that learners perceived their engagement with DST as evolving from reliance on basic intercultural learning scaffolds toward a more socially situated practice of meaning-making, characterized by utilizing DST as a facilitator of intercultural meaning-making, a catalyst for reflective self-discovery, and a platform for collaborative learning. Importantly, these perceptions reflect how learners interpreted and articulated their experiences, rather than merely representing a linear or objectively measured progression.

**Theme 1: Multidimensional Intercultural Learning Scaffolding**

The findings indicate that DST tasks created a structured yet flexible environment in which learners developed intercultural competence in an integrated manner. Across key stages such as topic selection, scriptwriting, multimodal design, and narration, learners engaged deeply with cultural content. During topic selection and research, learners explored cultural themes such as traditions, values, and social practices, which fostered *cultural understanding* and *cultural comparison*. This is reflected in keywords such as *intercultural communication* and *global perspective*. For example, one learner (P11) noted that DST allowed

them to “create innovative and appealing story forms, and gain a profound understanding of the immense potential of digital storytelling in culture dissemination and emotional resonance”. Apparently, the task of deciding on what story to share encouraged reinterpretation and communication of cultural knowledge.

In the scriptwriting stage, learners translated cultural ideas into English narratives, requiring them to consider how to make culturally specific content accessible to a broader audience. This process strengthened *cross-cultural expression* and *audience awareness*. Meanwhile, multimodal design tasks, such as selecting images, music, and video clips, required learners to align visual and auditory elements with cultural meanings, reinforcing *multimodal composition* and *cultural representation*. The narration stage further enhanced *oral expression* and *pronunciation*, as learners repeatedly recorded and refined their voiceovers.

Importantly, these activities were not isolated; rather, they worked together to support holistic development. As one learner (P5) stated, DST creation “helped me to gain a deeper understanding of local culture and strengthen our cultural identity, which is beneficial to our intercultural competence”, suggesting that the creation process also contributed to *cultural identity awareness*. This revealed that the DST process fostered a complex meaning-making process, allowing students to articulate their cultural identities and demonstrate desired internal outcomes (Stork et al., 2022). Overall, DST tasks transformed intercultural learning into an active, creative process in which learners simultaneously developed their linguistic, digital, and cultural competencies through the scaffold of meaningful cultural narratives.

### **Theme 2: Socially Mediated Intercultural Meaning-Making Experience**

The second theme highlights that embodied DST is inherently collaborative, making intercultural learning a socially mediated process. Throughout creative tasks such as brainstorming, script negotiation, and editing, learners worked in groups to co-construct stories. Keywords such as *teamwork*, *peer collaboration*, and *negotiation of cultural meaning* capture this process. For instance, one learner (P7) described that “We continuously sparked intellectual inspiration through constant discussions and exchanges, with numerous creative ideas emerging one after another. It’s impossible to have completed this assignment without group support and cooperation”. This remark illustrates how brainstorming sessions enabled the exchange and refinement of cultural ideas.

During script development, learners needed to agree on how to represent cultural content appropriately, often negotiating different perspectives within the group. This process required them to evaluate the relevance, accuracy, and sensitivity of cultural elements, thereby deepening their intercultural awareness. Peer feedback during editing further supported this process, as learners critiqued each other’s work and suggested improvements in both language use and cultural representation. Moreover, DST creation encouraged learners to consider audiences beyond the classroom. Activities such as preparing videos for presentation or online sharing introduced keywords like *audience interaction* and *global engagement*. Learners began to think about how their stories would be received by viewers from different cultural backgrounds, prompting them to adjust language, tone, and content accordingly. Thus, embodied DST functioned as a socially situated practice where intercultural meanings were not only constructed within groups but also oriented toward broader communicative contexts.

### **4.2 Students’ Cultural Reflections**

Furthermore, the cultural insights learners derived from their DST projects extended beyond the acquisition of factual knowledge. Instead, the analysis reveals a shift toward more reflective and critical perspectives, as learners became increasingly aware of the linguistic, narrative, and technical challenges involved in cultural representation. This critical stance also showcases the role of “reflection” in cultural learning programs (Kohli & Haskollar, 2020), urging EFL students to identify potential areas for further improvement.

### **Theme 3: Frustrations of Intercultural Representation**

While DST tasks provided rich learning opportunities, they also introduced significant challenges, particularly in representing cultural content accurately and effectively. These challenges emerged across multiple stages, including scriptwriting, multimodal integration, and narration. Keywords such as *cultural representation difficulty*, *story coherence*, *translation inaccuracy*, and *audio-visual mismatch* reflect students’ frustrations. For example, one participant (P15) pointed out the difficulty of “striking a balance between cultural connotation and digital presentation, attracting wider public attention, and inspiring people’s enthusiasm and creativity for cultural interaction”. This reflection not only highlights the challenge of balancing cultural depth with engaging digital presentation, but showcases the linchpin in telling cultural stories.

In the scriptwriting stage, learners struggled to express culturally specific concepts in English, often encountering *linguistic limitations* and *translation inaccuracies*. As one participant (P10) noted, “The story script should also follow official translations, rather than relying directly on machine translation, which is inaccurate and lacks depth”. Honestly, script writing was essential in DST creation and conveying nuanced cultural meanings required more than literal translation. During multimodal production,

learners faced additional difficulties in aligning visual, auditory, and textual elements, as reflected in issues such as *subtitle synchronization* and *format inconsistency*.

Limited technical skills further complicated the creation process, making it challenging for learners to achieve their desired outcomes. However, these frustrations were not purely negative. Instead, they prompted learners to engage in iterative problem-solving, revising scripts, re-recording narration, and adjusting visual elements. In this sense, DST tasks created a productive space where challenges stimulated reflection and deeper engagement with intercultural communication, pushing learners to refine both their language use and cultural representations.

#### **Theme 4: Aspirations for Intercultural Storytelling Practice**

The final theme reflects learners' forward-looking suggestions, which emerged directly from their engagement with DST tasks. Having experienced the full production cycle from planning to final presentation, learners developed a clearer understanding of what constitutes effective intercultural storytelling. Keywords such as *intercultural competence development*, *culturally authentic representation*, *audience-centered design*, and *global dissemination* capture these aspirations.

Many learners emphasized the importance of improving their ability to communicate cultural meanings to international audiences, thereby becoming effective intercultural communicators. They also suggested enhancing the creative and cultural quality of their stories, advocating for *innovative storytelling* and *cultural depth*. These suggestions indicate an increasing awareness of the need to balance authenticity with accessibility in intercultural communication. In addition, some participants highlighted the importance of extending embodied DST beyond classroom contexts. Suggestions from a learner (P2) such as *"actively leverage social media platforms to launch culturally themed discussions and interactive activities, encouraging public participation in online cultural exchange and interaction."* demonstrate an interest in engaging with real audiences and participating in broader intercultural dialogue. At the same time, learners called for greater support, including *technical training* and *language development*, to help them achieve these goals.

Overall, these aspirations suggest that DST tasks not only facilitate intercultural learning but also foster learner agency. By reflecting on their experiences and proposing improvements, learners position themselves as active contributors to the design of more effective and meaningful intercultural learning environments.

## **5. Discussion**

### **5.1 Diverse Engagement Patterns with Embodied DST in Intercultural Learning**

The findings from Theme 1 reveal that DST functions as a facilitator of intercultural meaning-making through embodied activities. Consistent with prior research, creating digital stories enables learners to simultaneously develop multimedia skills, deepen their understanding of content, and engage in reflective self-discovery (Szecsi et al., 2025). In the present study, this reflective process was evident in how learners interpreted and reconstructed cultural meanings through tasks such as topic selection, scriptwriting, and multimodal design. Rather than passively receiving cultural knowledge, learners actively produced and communicated cultural narratives, which fostered deeper cognitive and intercultural engagement.

Moreover, DST operates as a catalyst for creativity and reflective self-discovery. This also aligns with the notion that intercultural competence develops through reflective awareness of both self and others (Deardorff, 2006). As learners engaged with cultural topics, they not only explored unfamiliar perspectives but also re-evaluated their own cultural identities, thereby strengthening intercultural sensitivity and openness. DST tasks functioned as a platform for meaningful dialogue about diversity, echoing findings that socio-culturally grounded projects promote awareness, empathy, and engagement with social issues (Grant & Bolin, 2016).

What matters most in theme 2 is that DST strengthens collaborative learning where intercultural interaction and negotiation occur. Embodied activities such as brainstorming, peer feedback, and group negotiation created opportunities for learners to encounter diverse viewpoints and co-construct cultural meanings. This socially mediated process encouraged learners to critically evaluate how culture is represented and interpreted. In line with previous studies highlighting DST as a tool for enhancing creativity and engagement (Schmoelz, 2018), the findings suggest that the integration of multimodal production and social interaction makes embodied DST a powerful scaffolding for fostering intercultural competence.

### **5.2 Critical Cultural Reflections on Embodied DST in Intercultural Learning**

The frustrations identified in Theme 3 further illuminate the inadequacy in students' linguistic, narrative, and technical skills. Rather than functioning as barriers, these challenges acted as productive tensions that motivated deeper engagement and reflection. As learners evaluated their own work, they identified areas for improvement in language use, cultural representation, and audience engagement.

The complexity of DST tasks exposed gaps in learners' knowledge and skills, particularly in areas such as cultural representation and narrative skills. These gaps, however, became catalysts for intercultural learning, prompting learners to engage in iterative problem-solving and refinement. This aligns with the view that creative and intercultural learning is often stimulated by constraints, as challenges encourage innovation and critical thinking (Hrebacková & Stefl, 2022). Therefore, the findings suggest that the demanding nature of embodied DST is not a drawback but a key factor in promoting reflective and transformative intercultural learning.

The aspirations from Theme 4 highlight that learners' reflections are driven by an emerging sense of agency and ownership over their intercultural learning experiences. This growing sense of agency is closely linked to the reflective self-discovery fostered by DST (Szecsi et al., 2025). Moreover, learners' enthusiasm for sharing their digital stories on social media and engaging with broader audiences reflects an embodied extension of learning beyond the classroom, where meaning-making is situated in real-world, sensory, and social experiences. From an embodied cognition perspective, such participation allows learners to connect their narratives with authentic contexts, emotions, and audience responses, thereby deepening intercultural understanding. At the same time, their calls for stronger technical support reveal an awareness of the embodied and multimodal complexity of DST tasks. Rather than indicating dependence, this awareness demonstrates learners' active engagement in shaping their learning conditions and optimizing their creative processes.

Overall, these findings suggest that embodied DST not only enhances intercultural competence but also strengthens learner agency. By integrating cognitive, emotional, and experiential dimensions, DST positions learners as reflective and proactive communicators who can critically engage with both cultural content and the embodied processes through which meaning is constructed and shared.

## 6. Conclusion

This study explored how Chinese EFL learners engaged with embodied DST for intercultural learning and what cultural reflections they developed through the process. The findings show that learners' engagement evolved from reliance on initial scaffolding to more active, collaborative meaning-making. Through tasks such as topic selection, scriptwriting, and multimodal production, learners became increasingly strategic in negotiating ideas, coordinating group work, and refining cultural representations for an audience. Their participation was not only task-driven but also communicatively purposeful, reflecting a shift toward audience awareness and intercultural mediation. In terms of cultural reflections, learners moved beyond acquiring factual knowledge to developing more critical and reflective perspectives. They demonstrated growing awareness of cultural identity, sensitivity to cultural representation, and recognition of the limitations of language and media in conveying nuanced meanings. Importantly, challenges encountered during the process prompted deeper reflection and contributed to more thoughtful intercultural expression.

These findings suggest several implications for language teaching. First, embodied DST can be effectively incorporated into language curricula as a project-based learning approach that promotes intercultural competence through active participation, emotional engagement, and creative expression. By combining storytelling with multimodal and embodied activities, learners are encouraged to connect language use with personal experience and cultural reflection. Second, teachers should provide systematic scaffolding throughout the DST process, including technical training on digital tools, guidance on intercultural analysis, and support for multimodal meaning-making such as visual, auditory, and narrative design. Such scaffolding can help learners manage the complexity of DST tasks while developing confidence in intercultural communication. Finally, collaborative learning tasks and authentic communicative contexts should be emphasized, as they encourage learners to negotiate meanings, exchange perspectives, and engage in real-world intercultural interactions, thereby increasing motivation and extending learning beyond traditional classroom settings..

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## References

- [1]Belda-Medina, J. (2022). Promoting inclusiveness, creativity and critical thinking through digital storytelling among EFL teacher candidates. *International Journal of Inclusive Education*, 26(2), 109-123.
- [2]Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp0630a>
- [3]Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: choosing among five approaches*. Sage Publications.
- [4]Dearnorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education*, 10(3), 241-266. <https://doi.org/10.1177/1028315306287002>
- [5]Grant, N. S., & Bolin, B. L. (2016). Digital storytelling: A method for engaging students and increasing cultural competency. *Journal of Effective Teaching*, 16(3), 44-61.
- [6]Gruber, A., & Wagner, M. (2024). Fostering interdisciplinary intercultural citizenship with virtual reality in a world language virtual exchange project. *Intercultural Communication Education*, 7(1), 1304. <https://doi.org/10.29140/ice.v7n1.1304>
- [7]Hastomo, T., Widiati, U., Ivone, F. M., Zen, E. L., Hasbi, M., & Khulel, B. (2025). AI-powered conversational agents and intercultural learning: Insights from Indonesian EFL students. *Intercultural Communication Education*, 8(1), 103217-103217.
- [8]Hrebacková, M., & Stefl, M. (2022). Challenging intercultural discomforts: Intercultural communicative competence through digital storytelling. *Training. Language and Culture*, 6(3), 78-88. <https://doi.org/10.22363/2521-442X-2022-6-3-78-88>
- [9]Humairoh, M. F. N. (2023). Building undergraduate students' cultural identity through digital storytelling. *Communication Teacher*, 37(3), 235-245. <https://doi.org/10.1080/17404622.2022.2127820>
- [10]Kahanurak, S., Dibyamandala, D. & Mangkhang, C. (2023). Digital Storytelling and Intercultural Communicative Competence through English as a Foreign Language for Multilingual Learners. *Journal of Curriculum and Teaching*, 12(1), 14-14.
- [11]Kohli B. T., & Haskollar, E. (2020). Variables impacting intercultural competence: A systematic literature review. *Journal of Intercultural Communication Research*, 49(4), 346-371. <https://doi.org/10.1080/17475759.2020.1771751>
- [12]Liu, C.-C., Yang, C.-Y., & Chao, P.-Y. (2019). A longitudinal analysis of student participation in a digital collaborative storytelling activity. *Educational Technology Research and Development*, 67(4), 907-929.
- [13]Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A step-by-step process of thematic analysis to develop a conceptual model in qualitative research. *International Journal of Qualitative Methods*, 22(3), 1-18. <https://doi.org/10.1177/16094069231205789>
- [14]Nameni, A. (2022). An investigation into Iranian employee's intercultural communicative competence: Does learning English as a Foreign Language help? *Journal of Intercultural Communication Research*, 51(4), 361-382. <https://doi.org/10.108/17475759.2021.2006752>
- [15]Nishioka, H. (2016). Analysing language development in a collaborative digital storytelling project: Sociocultural perspectives. *System*, 62, 39-52. <https://doi.org/10.1016/j.system.2016.07.001>
- [16]O'Byrne, W. I., Houser, K., Stone, R., & White, M. (2018). Digital storytelling in early childhood: Student illustrations shaping social interactions. *Frontiers in Psychology*, 1800. <https://doi.org/10.3389/fpsyg.2018.01800>
- [17]Omar, A., & Shaalan, I. E.-N. A. W. (2023). Intercultural competence in EFL learning: Implications for sustainable development. *World Journal of English Language*, 13(8), 335-347. <https://doi.org/10.5430/wjel.v13n8p335>
- [18]Qian, L. (2024). Chinese EFL university teachers' perceptions of culture teaching and their pedagogical practices. *Language and Intercultural Communication*, 24(6), 679-692.
- [19]Raffone, A. (2022). Gamifying English Language Learning through Interactive Storytelling and MALL Technologies. *Language Teaching Research*, pp. 136216882211102-136216882211102.
- [20]Ribeiro, S. P. M. (2016). Developing intercultural awareness using digital storytelling. *Language and Intercultural Communication*, 16(1), 69-82. <https://doi.org/10.1080/14708477.2015.1113752>
- [21]Schmoelz, A. (2018). Enabling co-creativity through digital storytelling in education. *Thinking Skills and Creativity*, 28, 1-13. <https://dx.doi.org/10.1016/j.tsc.2018.02.002>
- [22]Simsek, M. R. (2020). Towards emancipatory L2 instruction: Exploring significant learning outcomes from collaborative digital storytelling. *International Journal of Educational Methodology*, 6(3), 555-569. <https://doi.org/10.12973/ijem.6.3.555>
- [23]Stewart, K., & Gachago, D. (2016). Being human today: A digital storytelling pedagogy for transcontinental border crossing. *British Journal of Educational Technology*, 47(3), 528-542. <https://doi.org/10.1111/bjet.12450>
- [24]Stork, M., Halpern, C., Levicky Townley, C., & Atha, M. L. (2022). Exploring the use of digital storytelling tools to support literacy. *Journal of Literacy Innovation*, 7(2).
- [25]Szecsi, T., Rivera, M., & Szende, T. (2025). Digital storytelling: meaning-making of cultures and intercultural competence in a collaborative online international learning project. *American Journal of Qualitative Research*, 9(2), 236-256. <https://doi.org/10.29333/ajqr/16283>
- [26]Tanrikulu, F. (2021). Students' perceptions about the effects of collaborative digital storytelling on writing skills. *Computer Assisted Language Learning*, 1-16. <https://doi.org/10.1080/09588221.2020.1774611>

- [27]Tao, G. (2025). Philosophical Dimensions of English Education: Facilitating International Cultural Exchanges and Consensus on Values in the Modern Era. *Cultura: International Journal of Philosophy of Culture and Axiology*, 22(1), 363-380. <https://culturajournal.com/submissions/index.php/ijpca/article/view/569>
- [28]Wang, A. Y., & Hu, W. C. (2025). Fostering intercultural competence through digital storytelling: a critical approach in EFL education in Taiwan. *Language, Culture and Curriculum*, 38(4), 559-582.
- [29]Williyan, A., Fitriati, S. W., Pratama, H., & Sakhiyya, Z. (2024). AI as co-creator: Exploring Indonesian EFL teachers' collaboration with AI in content development. *Teaching English with Technology*, (2), 5-21. <https://doi.org/10.56297/vaca6841/LRDX3699/RZOH5366>
- [30]Wu, J., & Chen, D. T. V. (2020). A systematic review of educational digital storytelling. *Computers & Education*, 147, 1-16. <https://doi.org/10.1016/j.compedu.2019.103786>
- [31]Yu, B., & Wang, W. (2025). Using digital storytelling to promote language learning, digital skills and digital collaboration among English pre-service teachers. *System*, 129, 103577. <https://doi.org/10.1016/j.system.2024.103577>