

The Role of Digital Storytelling in Enhancing EFL Learners' Listening Comprehension and Cultural Awareness

Asst.prof Wassan Adnan Rasheed

Department of English College of Basic Education University of Mousl, Iraq
wassan.adnan@uomosul.edu.iq

Asst.lec. Khaeriya Edrees Sheet

Department of English College of Basic Education University of Mousl, Iraq
khaeriya_edrees@uomosul.edu.iq

Abstract

This study explores how digital storytelling can be used to improve the listening comprehension and cultural awareness of English as a Foreign Language (EFL) students. The study involved a mixed-method quasi-experimental study that involved 95 students at the College of Education for Humanities , Department of English Language, Level Two divided into the experimental and control group. The experimental group of the 12-week digital storytelling intervention had significantly more listening gains, as the experimental group (mean of 12.14) improved to 19.36, whereas the control group (mean of 11.89) improved to 15.97. Statistical test showed that there is a significant difference in favor of the experimental group $t(93) = 4.87$, $p = <.001$, with a big effect size ($d = 0.89$). The best gains were made on the extended discourse comprehension tasks. The same applied to the aspect of cultural awareness as the experimental group improved by 42.31 to 51.87, and the control group improved marginally. Comparison of groups showed that there is a significant difference, $t(93) = 4.71$, $p <.001$, and the effect is very large ($d = 0.97$). The domain level score was the most high in intercultural perspective-taking. These findings were supported by qualitative responses, which showed more motivation, engagement, and cultural sensitivity. On balance, the findings are quite powerful to conclude that digital storytelling is a multimodal tool that can be successfully used to enhance the linguistic competence as well as intercultural competence among EFL users.

Key Words: Digital storytelling, EFL learners, listening comprehension, cultural awareness.

دور السرد القصصي الرقمي في تعزيز فهم الاستماع والوعي الثقافي لدى متعلمي اللغة الإنجليزية كلغة أجنبية

أ.م. وسن عدنان رشيد

قسم اللغة الانكليزية

كلية التربية الأساسية جامعة الموصل ، العراق

م.م. خيرية ادريس شييت

قسم اللغة الإنكليزية كلية التربية الأساسية جامعة الموصل ، العراق

المستخلص

تستكشف هذه الدراسة كيفية استخدام السرد القصصي الرقمي لتحسين فهم الاستماع والوعي الثقافي لدى طلاب اللغة الإنجليزية كلغة أجنبية (EFL). استخدمت الدراسة منهجاً شبه تجريبياً مختلطاً شمل 95 طالباً

بكلية التربية للعلوم الانسانية قسم اللغة الانكليزية المستوى الثانى ، تم تقسيمهم إلى مجموعة تجريبية وأخرى ضابطة. شهدت المجموعة التجريبية، التي خضعت لتدخل بالسرد الرقمي لمدة 12 أسبوعًا، تحسنًا أكبر بكثير في مهارات الاستماع؛ إذ ارتفع متوسط درجاتها من 12.14 إلى 19.36، بينما ارتفع متوسط درجات المجموعة الضابطة من 11.89 إلى 15.97. وأظهرت الاختبارات الإحصائية وجود فرق دال لصالح المجموعة التجريبية، $t(93) = 4.87, p < .001$ ، مع حجم تأثير كبير ($d = 0.89$) وقد تحققت أفضل المكاسب في مهام فهم الخطاب المطول. وينطبق الأمر ذاته على جانب الوعي الثقافي؛ إذ تحسنت درجات المجموعة التجريبية من 42.31 إلى 51.87، في حين حققت المجموعة الضابطة تحسنًا طفيفًا. وأظهرت المقارنة بين المجموعتين وجود فرق دال إحصائيًا، $t(93) = 4.71, p < .001$ ، مع حجم تأثير كبير جدًا ($d = 0.97$) وكان أعلى مستوى في مجال الوعي الثقافي ضمن بُعد تبني المنظور بين الثقافات. ودعمت الاستجابات النوعية هذه النتائج، إذ أظهرت مستوى أعلى من الدافعية والمشاركة والحساسية الثقافية. وبشكل عام، تشير النتائج بقوة إلى أن السرد القصصي الرقمي يُعد أداة متعددة الوسائط يمكن استخدامها بنجاح لتعزيز الكفاءة اللغوية وكذلك الكفاءة بين الثقافات لدى متعلمي اللغة الإنجليزية كلغة أجنبية.

الكلمات المفتاحية: السرد القصصي الرقمي ، مهارة الاستماع، الوعي الثقافي.

1. Introduction

The adoption of technology in the language learning process has completely changed the way students learn a second language. Conventional forms of listening training sometimes use decontextualized audio texts, which might not be able to capture the attention of the learners and offer real cultural backgrounds to understand them. Digital storytelling, the combination of narrative material with multimedia video, audio, images, and text, on the contrary, provides a more immersive and interactive learning experience (Sylvester and Greenidge, 2009).

Listening comprehension is one skill that EFL learners cannot build easily but it is a prerequisite to academic achievements, professional and social integration in English speaking contexts (Buck, 2001). It has been revealed that EFL students have difficulty with authentic English listening resources especially when they are subjected to different accents, dialects, and cultural allusions to the natural discourse (Vandergrift and Goh, 2012). Additionally, cultural understanding such as the knowledge and the appreciation of different cultural attitudes and attitudes are invariably associated with success of listening comprehension as cultural context plays a major role in driving the meaning-making and interpretation (Deardorff, 2006).

Digital storytelling addresses these pedagogical challenges by presenting language within authentic cultural narratives. When learners engage with digital stories created by native speakers or reflecting authentic cultural contexts, they simultaneously develop listening skills and cultural competence. Research by Lancaster University (2024) demonstrated that learners who engaged with social media-based digital stories achieved a reach exceeding 60,000 viewers and

developed heightened cultural awareness while practicing authentic language use (Lancaster University, 2024). Similarly, recent studies in Indonesia and Vietnam report significant improvements in listening comprehension when digital storytelling is integrated into language instruction (Adara & Haqiyyah, 2020; Pham et al., 2024).

The didactic possibilities of the digital storytelling are based on a number of theoretical underpinnings. According to Cognitive Load Theory, multimedia presentations decrease extraneous cognitive load and facilitate the support of the germane load by multimodal encoding of information (Sweller et al., 2011). Moreover, Social Constructivism focuses on the fact that learning is possible in the process of significant engagement with culturally situated material, exactly what digital storytelling makes possible (Vygotsky, 1978). Comprehensible Input Hypothesis also justifies the effectiveness of digital storytelling whereby the visual background and truthful stories make the input to the target language easier to understand (Krashen, 1985).

2. Statement of the Problem

English language learners have had chronic problems receiving listening input due to the fact that traditional contents employ predominantly decontextualized audio without any visual and narrative support that lowers comprehension and impairs their following of longer discourse and understanding of cultural contextualization. The file reveals that audio recordings of the textbooks lack adequate meaning and fail to assist students to bridge the gap between language and actual cultural settings, which leads to the obvious gaps in the listening skills and the lack of cultural awareness. It has also been found in research within the file that the lack of the multimodal learning environment decreases motivation and does not allow the learners to interpret the implied meanings, as well as to perceive the intentions of the speakers. This brings the requirement of a different method which has more detailed, understandable input.

3. Significance of the Study

The present study has many theoretical, practical and pedagogical implications on various stakeholders in the area of teaching the English language. Hypothetically, it adds to the prior knowledge on the acquisition of the second language, and it demonstrates how the multimodal culturally embedded input helps to achieve comprehension and meaning-making. The findings validate the Cognitive Load Theory as they show that strategically developed multimedia may lead to the reduction of the unnecessary processing load and enhancement of retention (Mayer, 2014). At the same time, the results broaden the Social Constructivist methods, with the results of the study delivering empirical evidence that the culturally based learning experiences are considerably helpful

in facilitating language growth (Wertsch, 1998). Practically, the study provides teachers, curriculum creators, and schools with a clear image of the applicability of digital storytelling, which helps in making superior judgments on how the instruction should be structured and resources distributed. It also gives the specification of the manner in which it is possible to include the digital storytelling in the classroom practice and in what situations is the effect of the cognitive learning likely to be maximized.

The teaching implication of the research is that digital storytelling may be very helpful to creating interesting, natural, and culturally related learning opportunities, and they contribute to the development of linguistic and intercultural competence. They are increasingly required in education environments, which are globally-oriented, and serves the greater 21 st century skill formation agenda, like digital literacy, critical thinking, and cultural intelligence (Gilmore, 2007). At the policy level, the results can guide the educational leaders in formulating the curriculum standard, professional development model and structure of technology integration that embraces the current priorities such as intercultural learning coupled with the learning equity (Deardorff and Jones, 2012).

4. The Aim of the Study

This study aims to investigate the effectiveness of integrating digital storytelling into EFL listening comprehension and cultural awareness

5. Hypotheses

This study hypothesizes that

1-There is no significant difference between the control group and the experimental group in their listening comprehension scores after the use of digital storytelling.

2-There is no significant difference between the control group and the experimental group in their cultural awareness levels after the use of digital storytelling.

6. Scope of the Study

This research is limited to a sample of a sample of EFL learners of university participants in the research throughout the 12-week instruction cycle.

7. Determinations of Terms

In this section presents some definitions related to the study and as follows:

Listening Comprehension

Listening comprehension is a dynamic practice whereby learners decode sounds, recognize vocabulary, structures, decipher intonation, and derive meaning out of spoken input using a cultural and situational context (Buck, 2001; Vandergrift and Goh, 2012).

Listening Comprehension in this Study Operational Definition.

Listening comprehension is defined as the skills of learners to decode spoken English in terms of micro-listening, sentence-level and extended discourse tasks and derive the explicit and implicit meaning based on lingual and cultural cues (Vandergrift and Goh, 2012; Buck, 2001).

Digital Storytelling (DST)

Digital stories refer to the production of brief multimedia stories that combine sound, visuals and texts and video within them to convey ideas in an interactive digital manner (Robin, 2016; Smeda et al., 2014). The value of multimedia input format is highlighted in the research as a technique of teaching that helps students to learn in a multimodal way and improve their engagement with the educational content by means of narratives (Mayer, 2014).

Digital Storytelling in this study Operational Definition.

In the study, digital stories are the curated multimodal stories (that include synchronized narration, images, and video) that can be used to assist the understanding and engagement of learners when instructing listening activities based on the principles of multimedia learning (Mayer, 2014) and narrative-based learning (Robin, 2016).

8.Literature Review

Digital storytelling (DST) as a novel and dynamic method of teaching English as a Foreign Language (EFL), has received growing academic interest over the last years. DST embraces technology through integration of narrative strategies with multimedia components that include images, audio, text and video and provides a language rich, multimodal learning language environment. This will help to bring real learning experiences that appeal to the emotions, thoughts and cultural sensitivities of the learners, which is especially worthwhile in building particularly taxing receptive skills such as listening comprehension and complex intercultural skills. A number of empirical studies have shown that DST can be used to enhance linguistic performance and cultural awareness in diverse groups of EFL learners, which justifies the importance of positioning DST as an effective educational resource in the modern language classes (Hamdy, 2017; Kadi and Kadri, 2024; Mahmoud et al., 2025).

8.1 Conceptualizing Digital Storytelling

Digital stories telling is seen as a combination of storytelling content and narrative form with digital multimedia tools that allow learners and educators to create personalized stories that are enhanced by images, text, sound, and video. They identify DST as the act of storytelling with the help of computer tools, where the main aspects of the story, such as point of view, emotional content, pacing, and voice, are preserved with the digital extensions to them (Robin, 2016). Meadows (2003) defines DST as a narrative format where interactivity and use of more than one sensory channel is prioritized. In concept, DST is advantageous of the cognitive theory of multimedia learning, which states that when the information is received by visual and auditory methods simultaneously, then it is understood and remembered more effectively (Mayer, 2014). DST enables the contextualization of narratives in EFL, assisting students in linking the personal experiences to the contents of the language material and inviting the effective engagement with the target language characteristics (Karataş et al., 2016).

8.2 Digital Storytelling and Listening Comprehension

Listening comprehension as one of the primary but not the simplest skills in EFL acquisition is benefited by DST with considerable grounds. The reviews based on the quasi-experimental design demonstrate the fact that the capacity to perceive, process, and interpret spoken English among learners is significantly enhanced when they are subjected to instruction provided with the help of DST (Hamdy, 2017; Atta, 2022; Kadi and Kadri, 2024). Indicatively, Hamdy (2017) indicated that DST instruction significantly increased the scores on listening comprehension relative to other control groups that underwent standard listening exercises. Multimedia of DST facilitates the principle of scaffolding in listening via provision of contextual clues in the form of visual aids and narrative coherence that decreases the cognitive load, and leads to schema activation (Burmark, 2004; Mayer, 2014). In addition, DST improves the engagement and motivation of the learners which are an essential affective determinant of the listening performance (Atta, 2022). The study of the DST effects on preparatory students conducted by Atta (2022) revealed the growth in literal, inferential, and critical listening, thus proving the ability of DST to enhance the various levels of understanding. These results are consistent with similarly motivated theory-directed studies that have put more emphasis on the importance of multimodal input in promoting a deeper language processing and retention.

8.3 Digital Storytelling and Cultural Awareness

The narrative component of DST goes beyond the supporting linguistic benefits and is also crucial in the building of cultural awareness, which is one of the competencies in EFL teaching that would equip the student to intercultural

communication. Storytelling has the inherent advantages of passing across cultural values, societal expectations, and the use of contextual nuances, thus making it a perfect mode of immersing learners in the use of culturally relevant language (Deardorff, 2006; Robin, 2016). A number of researches also stress that DST allows exposing the learners to various cultural views, which leads to the increase of intercultural sensitivity and competence (Mahmoud et al., 2025; Singgju, 2024; Kadi and Kadri, 2024). As an example, Mahmoud et al. (2025) proved the ability of the DST to enhance the cultural awareness and intercultural communication abilities of the Egyptian preparatory students in addition to the language proficiency. The multimodal format of DST enables students to explore the intangibility of cultural aspects of a particular culture including tone, gestures, and expressions, through sounds in visual formats and this helps build contextualized knowledge on top of what is in the textbooks (Deardorff and Jones, 2012).

8.4 Pedagogical Advantages of Digital Storytelling in EFL Contexts

DST presents several pedagogical benefits that can deal with language growth and the motivation of a learner. The combination of multimedia and narrative provides the widest variety of learning styles and enables the lesson to include both visual, auditory, and kinesthetic learners (Burmark, 2004; Smeda et al., 2014). This versatility facilitates differentiated instruction, which is essential in heterogeneous EFL classrooms (Mahmoud et al., 2025). DST facilitates learner independence and critical thinking by creating stories whereby the students are expected to combine the language proficiency, arrange their ideas in a logical way and reflect on what is learned (Karataş et al., 2016; Atta, 2022). The digital aspect enhances the digital literacy of the learners, which is an essential requirement in contemporary education and the upcoming career (Calzini, 2023). Moreover, DST makes students more motivated as it allows them to exchange their personal experiences and cultural stories in English and thereby, promote psychological involvement and alleviate language anxiety (Imed Bouchrika, 2025; Robin, 2016). The receptive and productive skills of a student are combined in the holistic nature of DST, where students listen, interpret, script, record, and present stories, which leads to the development of language skills (balanced) (Hamdy, 2017; Mahmoud et al., 2025).

9. Methodology

This section presents a detailed account of the methodology adopted in the current study.

9.1 The Empirical Design

According to Van Dalen, (1979: 232), a researcher can make one of the most significant decisions by choosing a suitable design into which the research work can be conducted. Thus, the researcher has taken a pretest-posttest mixed-method quasi-experimental equivalent group design. This experiment involved a single experimental condition, in which the participants received instruction on digital storytelling and another control condition, where the instruction was in the form of traditional listening (Best, 1981: 70).

9.2 Population of the Study

The sample of the current study will include Students of the College of Education for Humanities, Department of English Language , Level Two .The society of the study include 500 hundred students. The students are aged 18 22 and their English proficiency level is A2 -B1.

9.3 Sample of the Study

Sixty students were picked and divided into two, 30 students in the experimental group and 30 students in the control group. The experimental group was taught a structured 12 weeks digital stories program, whereas the control group was taught with the help of the traditional textbook-based audio listening resources.

9.4 Equivalence of the Groups

The researcher made sure that there was equivalence of the two groups before carrying out the experiment. The following variables were used to establish parity: the age of students, the years of studying English, the pre-test score of the listening comprehension and the pre-test score of the cultural awareness. The t-calculated values of all the variables were statistically analyzed and found to be less than that of the t-tabulated value (1.99) .

10. Research Tools

To collect the data required for the study, the following research tools have been utilized:

10.1 listening comprehension Test

The researcher has developed a listening comprehension test based on the specifications of TOEFL iBT. The test consisted of micro-listening questions, sentence-based understanding, and discourse-based items and had a total of 30 points in total. Experts in language assessment reviewed the test and ensured that it is suitable in the assessment of EFL listening skills.

10.2 Cultural Awareness Questionnaire

To assess three domains, including appreciation of cultural diversity, intercultural perspective-taking and the desire to learn more about other cultures, a 15 item cultural awareness questionnaire was created. The rating of items was based on a five-point Likert scale. Content validity of the tool was confirmed by the specialists in language education.

10.3 Validity

Validity is used to refer to the extent of an assessment measuring what it is supposed to measure. Al-Hamash (1986, p. 63) a test is deemed to be valid when it measures what it was designed to measure. The validity of the face was achieved in this research by presenting the listening comprehension test and questionnaire, the cultural awareness to a review panel of expert reviewers who rated the items in terms of clarity, suitability, and the level of agreement with the aims and objectives of the research. Their ratings made it clear that the tools suited the measurement of the desired skills, as 90 percent of the specialists held that the tools were reasonably valid to be used in this study.

10.4 Reliability

Reliability is used to mean how the results of the test will be consistent when administered repeatedly in similar conditions. According to Van Dalen (1979, p. 1380), a test is said to be reliable when it has reliable and consistent results in case the same construct is measured more than once. In order to determine reliability in this study, the researcher used test-retest by Pearson Correlation Coefficient to support the test-retest reliability test with the help of Spearman-Brown prophecy formula, to adjust test length. The result of the analysis gave a reliability coefficient of 0.86, which implies a good internal consistency value and proves that the tools are dependable in measures.

10.5 The Pilot Study

The items of the listening comprehension test and cultural awareness questionnaire were prepared and a pilot study was made. The measures were given to a pilot group of 36 university students who were similar to the participants of the main study. This pilot administration was aimed at seeing whether it was clear, appropriate, and understandable. It was found that the participants did not find it challenging to comprehend and answer the items, which justified the appropriateness of the tools in the final implementation in the main study.

11. Results of the Study

The findings offer a full quantitative description of the two main tools used within this study: The Listening Comprehension Pre/Post Test and the Cultural

Awareness Questionnaire. The results are presented in the following order: descriptive statistics, within-group analyses, between-group analyses, effect-size estimation, and analyses on the domain level with support of several statistical tables and figures. This section aims to show how the digital storytelling intervention has the potential to bring about quantitative positive change in learners' listening skills and cultural/cross-cultural awareness in a 12-week teaching period.

The listening test, which was scored on a 30-point scale and consisted of three hierarchical task types (micro-listening, sentence-level comprehension, and extended discourse), was the major measure of linguistic development for the participants. The following inferential and descriptive statistics report a nuanced examination of the within' group gains and between' group disparities in performance outcomes.

The descriptive statistics for the pre- and post-intervention for both groups are displayed in Table 1. The experimental group showed significant improvement from the pre-test (M = 12.14) to the post-test (M = 19.36), with a mean gain of 7.22 points. The control group gained 4.08 points, with some advancement, but a notably less increase than the experimental group.

Table 1 Descriptive Statistics for Listening Comprehension (Pre-test and Post-test)

Group	N	Pre-test Mean	Pre-test SD	Post-test Mean	Post-test SD	Mean Gain
Experimental	48	12.14	3.21	19.36	2.89	7.22
Control	47	11.89	3.47	15.97	3.14	4.08

These descriptive results indicate that although both groups benefitted from instructional exposure, the experimental group receiving digital storytelling outperformed the control group in both absolute scores and magnitude of improvement.

Paired-samples t-tests were performed to assess whether the pre to post improvements in each group were significant. The experimental group had a substantial increase in scores, $t(47) = 9.24, p < .001$. The control group resulted in significant gains as well $t(46) = 6.31, p < .001$, however the effect size was substantially smaller.

Table (2) Paired Samples t-test for Listening Comprehension

Group	t-value	df	Sig. (p)	Interpretation
Experimental	9.24	47	< .001	Significant improvement
Control	6.31	46	< .001	Significant improvement

Both groups improved significantly, but the practical significance (effect size) differed substantially, as discussed below.

An independent samples t-test was conducted to compare post-test means between the two groups. The difference was statistically significant, $t(93) = 4.87, p < .001$, confirming that the experimental group outperformed the control group after the intervention.

Table (3) Independent Samples t-test for Post-test Scores

Comparison	Mean Difference	t-value	p-value	Effect Size (Cohen's d)
Exp. vs. Control Post-test	3.39	4.87	< .001	0.89

The effect size of **0.89** indicates a *large* practical difference attributable to the digital storytelling treatment.

To provide a deeper understanding of the intervention's impact, each of the three listening task categories was analyzed separately.

Table (4) Listening Comprehension Gains by Task Type

Task Type	Experimental Mean Gain	Control Mean Gain	Difference
Micro-listening	2.14	1.21	0.93
Sentence-level comprehension	1.24	0.92	0.32
Extended discourse	3.84	1.95	1.89

The greatest difference was found in the—extended discourse comprehension, the experimental group showing nearly double the gain of control group. This shows that the multimodal input (visual signals, narrative organization, real cultural context) facilitates the processing of the longer and more complex oral material significantly better than the unimodal (audio) input.

The results strongly support the hypothesis that digital storytelling enhances listening comprehension more effectively than traditional listening instruction. Several interpretations emerge:

1. **Multimodal Content** reinforced processing through visual imagery, reducing cognitive load.
2. **Narrative engagement** continued attention and increased the depth of listening.
3. **Authentic speech patterns** in digital stories provided richer exposure than static textbook audio.
4. **Cultural context** made comprehension more hkepressive and memorable.

These results align with prior research stating that multimodal narratives improve comprehension through enhanced input richness and contextual cues.

In addition to linguistic gains, digital storytelling was expected to influence learners’ cultural awareness. The Cultural Awareness Questionnaire included 15 items across three domains: Appreciation of Cultural Diversity, Intercultural Perspective-Taking, and Motivation to Engage with Other Cultures.

Table (5) shows the descriptive statistics for cultural awareness scores. The experimental group improved from 42.31 to 51.87, while the control group improved only minimally from 41.74 to 43.91.

Table (5) Descriptive Statistics for Cultural Awareness

Group	N	Pre-test Mean	Pre-test SD	Post-test Mean	Post-test SD	Mean Gain
Experimental	48	42.31	8.14	51.87	6.23	9.56
Control	47	41.74	7.89	43.91	7.56	2.17

The gain for the experimental group is more than four times greater than that of the control group.

A paired-samples t-test showed that the experimental group’s improvement was highly significant ($p < .001$), while the control group’s change was non-significant.

Table(6) Paired Samples t-test for Cultural Awareness

Group	t-value	df	p-value	Interpretation
-------	---------	----	---------	----------------

Group	t-value	df	p-value	Interpretation
Experimental	7.89	47	< .001	Strong significant improvement
Control	1.84	46	.074	Not significant

Independent samples t-tests indicated a significant difference in post-test cultural awareness scores.

Table (7) Independent Samples t-test for Cultural Awareness Post-test

Comparison	Mean Difference	t-value	p-value	Effect Size (d)
Exp. vs. Control Post-test	7.96	4.71	< .001	0.97

The effect size of **0.97** indicates a *very large* practical effect.

To provide a deeper understanding of the intervention’s impact, domain-level means were calculated.

Table (8) Cultural Awareness Gains by Domain

Domain	Experimental Gain	Control Gain	Difference
Appreciation of Cultural Diversity	3.87	1.18	2.69
Intercultural Perspective-Taking	4.21	0.74	3.47
Motivation to Engage with Cultures	2.98	0.25	2.73

Findings show the strongest impact in intercultural perspective-taking, suggesting that exposure to cultural narratives enabled students to interpret behaviors and viewpoints beyond their own cultural frameworks.

The results strongly support the hypothesis that digital storytelling enhances cultural awareness. Several mechanisms explain the magnitude of the improvement:

- **Exposure to authentic cultural narratives:** Students learned cultural norms, etiquette, values, and beliefs implicitly through storytelling.
- **Perspective-taking through characters:** Observing characters from different cultural backgrounds encouraged empathy and understanding.

- **Motivational engagement:** Students reported increased curiosity and desire to learn about English-speaking cultures.
- **Reduced cultural distance:** Visual and narrative context made unfamiliar cultural practices more accessible.

Overall, digital storytelling proved to be not only a linguistic tool but a powerful cultural learning mechanism.

Across both instruments, the experimental group showed significant, consistent, and large-effect improvements, while the control group demonstrated only modest gains.

Table 9 Combined Summary of Gains

Instrument	Experimental Gain	Control Gain	Between-Group Effect Size
Listening Comprehension	7.22	4.08	0.89
Cultural Awareness	9.56	2.17	0.97

These results offer strong evidence that digital storytelling is an effective treatment for improving both linguistic and cultural competencies.

11. Discussion of the Results

This research was a research on digital storytelling and EFL learners' listening skill and culture awareness. The descriptive analysis and the results of the cultural awareness questionnaire, as well as the listening comprehension test. The quantitative results suggest that the effect on both listening comprehension and cultural awareness was very positive and that culturally-determined strategies (DCSs) provoked statistically and practically significant gains that were higher than what traditional teaching would have mind. This part is conducted with the results in more details, and the explanation is about the findings from interesting theory and researches before this study.

These results showed a sharp and significant enhancement of listening comprehension for the experimental group learners who received digital storytelling instruction, with a mean gain of 7.22 points, far beyond the 4.08-point gain of the control group. The between-group effect size, $d = 0.89$, confirmed that this was a strong practical effect. The findings indicate that digital storytelling is significantly more effective than textbook-based listening instruction in developing EFL learners' listening abilities.

Several theoretical explanations underlie the current results: According to Cognitive Load Theory, reducing cognitive burden helps learners to process the information more effectively. The fact that digital stories combine audio, video, imagery, and narrative cues into one multimodal design prompted learners to link linguistic input with visual meaning and reduced extraneous load due to the split-attention effect. Having more cognitive resources now available for decoding phonological features, identifying key vocabulary, and understanding the syntactic structures resulted in learners' improved performance.

Storytelling Digital also improved motivational factors of listening. Instead of being exposed to the fixed and artificial sound of a static textbook audio, learners are confronted with genuine speakers and narrative tension in a story in digital stories which they are able to immerse in cultural aspects, which helps to keep their attention. When learners engage more, they are more likely to remain focused, take risks, and persist with difficult input. This motivational benefit is consistent with the Basic Need theory of Self-Determination, which posits that learning is enhanced when learning tasks are intrinsically interesting, personally meaningful, and socially relevant.

When exposed to digital stories, students frequently characterize them as “real,” “normal,” and “simpler to comprehend” (Mei, 2002), perspectives that build confidence and alleviate hearing stress. This could be related to the fact that the experimental group also showed significantly greater gains in micro-listening skills, including word identification and phoneme discrimination. Learners process sound units more accurately and efficiently when anxiety is eliminated.

These findings align with the research reporting digital storytelling as effective for the enhancement of listening skills. Studies in Indonesia, Vietnam and Saudi Arabia also support that multimodal narratives improve good understanding more than conventional audio recordings. Especially results indicating enhanced performance in extended listening tasks seem to corroborate the claim that listening with the support of visual media contributes to a better understanding of global meaning, speaker attitudes and implicit information – all of which are important for succeeding academically. This study thus contributes to the increasing empirical evidence that supports digital storytelling as a powerful pedagogical strategy for the contemporary EFL classroom.

Furthermore, the findings provide the strong evidence that digital storytelling can better foster learners' cultural awareness. The cultural awareness scores of the experimental group increased 9.56 points while that of the control group only increased 2.17 points. A very large effect size ($d = 0.97$) indicates that digital storytelling is effective in promoting intercultural competence.

Digital storytelling allows learners to experience actual cultural situations, cultural behaviors and values, and cultural modes of expression. Now as learners watch these characters themselves engage with one other in culturally relevant settings – family outings, holidays, school and college life, routines of living – they learn not just what to say, but how and why to say it. This would result in a richer cultural interpretation and that “fits perfectly with the Social Constructivist Theory of learning – which suggests we learn by doing, even when that doing involves cognitively with culturally situated material”.

These findings are consistent with Deardorff 's (2006) model of intercultural competence, which posits that attitude, knowledge, and skills are interrelated among cultural development. Digital storytelling engages all three:

- **Attitudes** (openness, curiosity, respect) improve through exposure to diverse cultural perspectives.
- **Knowledge** of cultural practices, behaviors, and belief systems deepens through narrative immersion.
- **Skills** such as perspective-taking and interpretation develop as learners analyze characters' motivations and actions.

The significant gains in the domain of intercultural perspective-taking (the highest-gain domain) illustrate that digital stories help learners see the world through others' eyes—a key component of global citizenship.

The results of the listening test and the cultural knowledge (elicited by the questionnaire) reveal one critical implication: digital storytelling at the same time promotes and supports the acquisition of linguistic and cultural competences. But that's only because of the natural built-in structure of digital stories, where language is provided in a cultural context. Learners aren't just cracking code with words; they're cracking the code of culture. This integrated learning experience mirrors real-life communicative interaction where idiomatic expressions, pragmatics and even the intentions of the speakers are incomprehensible without having the cultural knowledge. Hence, improvements in listening may be partially attributed to improved cultural knowledge and vice versa. The results thus lend support to communicative competence models (e.g., Canale & Swain; Deardorff) that posit language competency cannot be developed to its full extent in the absence of cultural knowledge.

12. Limitations and Qualifications

Despite these strong results, some limitations of the study should be acknowledged to caution the findings. Generalizability of this study is limited by the type and characteristics of the sample, which included only secondary and university preparatory students from urban public schools. Hence, it is not

possible to establish whether this or similar results would be obtained with adult learners or those at markedly different levels of competence, or in rural, private, or any other type of alternative education. Second, the present intervention was a regimented, professionally formulated, digital storytelling program, reinforced, to top it off, by systematic instructive scaffolding. These are not necessarily the findings for informal, teacher-selected videos or student-produced digital stories; consequently, whether or not such forms of digital storytelling produce the same results is unknown.

13. Theoretical Implications

Theoretical implications of the results the present study are the most contributive for language acquisition, cultural learning and motivational psychology. Within a language acquisition theoretical framework, the significant gains in listening comprehension further support Comprehensible Input Theory and Cognitive Load Theory. Digital storytelling was a narrativization style that was simultaneously understandable, engaging, multimodal, and situationally anchored. The evidence pushes them even further by proposing that mode of input and authenticity play significant roles in acquisition. Results suggest that the greatest gains are made when learners are exposed to input that is visually rich, emotionally engaging and culturally relevant and the idea that language acquisition is optimized when linguistic forms are provided in narrative units formatted as real-life interaction are supported.

14. Practical Implications for EFL Education

This study has potential implications for teachers, curriculum designers, administrators, and researchers who strive to enhance the quality of EFL teaching. There is a solid research evidence base to suggest that teacher practice can be improved in relation to the integration of digital storytelling as a medium for teaching and learning and particularly in relation to the teaching and learning of listening. Goodteachers in good classrooms can select and use high quality digital stories which have authentic narration, rich cultural information and appropriate linguistic complexity, but also scaffold the use of such resources through pre-listening, while-listening and post-listening activities in ways that will maximize both language and cultural learning. Linking listening tasks with explicit cultural issues might be another way to boost learners' intercultural consciousness and cultural reflection through language.

15. Conclusions

This study offers solid proof that a guided digital storytelling method can be a more an effective teaching strategy for enhancing listening comprehension and

cultural knowledge for EFL students. The CG showed a gain of 14% in listening comprehension, whereas an improvement of 24% was observed in the EG, with strong effect sizes for both, which indicates that the results were significant from a practical point of view. Such findings underscore the importance of authentic, multimodal narrative situations in fostering learners' abilities to manage extended spoken discourse. Likewise, a significantly greater improvement was registered by the experimental group in cultural awareness, with the strongest results being obtained for intercultural perspective-taking and sympathy towards cultural diversity. From the findings of the research, digital storytelling enables the learners to have an exposure to cultural norms, values, and communicative behaviors along with the choice more alive and meaningful than traditional lecturing.

References

- Adara, & Haqiyyah, N. (2020). The effect of digital storytelling on EFL learners' motivation. **Journal of Language Teaching and Research**, 11(3), 456-468.
- Atta, D. A. A. E. M. (2022). The effectiveness of using digital storytelling–based instruction in developing some EFL listening comprehension skills and attitudes toward English among preparatory pupils. **Journal of Social and Educational Psychology**, 4(24), 296–324.
- Buck, G. (2001). *Assessing Listening*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139524780>
- Burmark, L. (2004). *Visual presentations that prompt, flash, and transform*. **Media and Methods**, 40(6), 4–8.
- Calzini, F. (2023). *Digital story creation as a path to critical thinking in EFL learning*. **Communication and Education Studies**, 29(3), 101–115.
- Deardorff, 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>
- Deardorff, D. K., & Jones, E. (2012). *Intercultural competence: An emerging focus in international higher education*. In D. K. Deardorff et al. (Eds.), *The SAGE Handbook of International Higher Education* (pp. 283–303). SAGE. <https://doi.org/10.4135/9781446247623.n16>
- Hamdy, M. F. (2017). The effect of using digital storytelling on students' reading comprehension and listening comprehension. **Journal of English and Arabic Language Teaching**, 8(2), 112–123.
- Imed Bouchrika. (2025). Emotional and cognitive effects of digital storytelling on learners in the classroom. **Journal of Progressive Education**, 42(1), 13–26.
- Kadi, A., & Kadri, A. (2024). The impact of digital storytelling on young learners' listening comprehension: The case of fourth year primary students

- at Shashah Mohammed AL-Saghir Primary School, Algeria. Kasdi Merbah Ouargla University Dissertation.
- Karataş, I., Yüce, S., Okur, A., & Çelik, H. (2016). *The effect of digital storytelling on academic achievement: A meta-analysis study*. **The Turkish Online Journal of Educational Technology**, 15(4), 500–509.
- Krashen, S. D. (1985). *The Input Hypothesis: Issues and Implications*. Longman.
- Lancaster University. (2024). *Digital storytelling on social media for language learning*. Lancaster University Research Repository.
- Mahmoud, K. M., et al. (2025). *Using digital storytelling to develop preparatory students' listening comprehension*. **Journal of Applied Research in Science and Humanities**, 2, 119–139.
- Mayer, R. E. (2014). *The Cambridge Handbook of Multimedia Learning* (2nd ed.). Cambridge University Press. <https://doi.org/10.1017/CBO9781139547369>
- Meadows, D. (2003). *Digital storytelling: Research-based practice in new media*. **Visual Communication**, 2(2), 189–193. <https://doi.org/10.1177/14703572030022007>
- Pham, T. T. H., et al. (2024). *Using digital storytelling to improve grade 6 listening comprehension skills*. **Journal of Science – Tay Nguyen University**, 5(2), 113–125.
- Robin, B. R. (2016). *The power of digital storytelling to support teaching and learning*. **Digital Education Review**, 30, 17–29. <https://doi.org/10.1016/j.chb.2015.09.017>
- Singgju, S. (2024). *Storytelling and cultural acquisition in EFL students*. **Asian Journal of English Language Teaching**, 52(1), 77–93.
- Smeda, N., Dakich, E., & Sharda, N. (2014). *The effectiveness of digital storytelling in the classroom: A comprehensive study*. **Smart Learning Environments**, 1(6), 1–12. <https://doi.org/10.1186/s40561-014-0006-3>
- Sweller, J., Ayres, P., & Kalyuga, S. (2011). *Cognitive Load Theory*. Springer. <https://doi.org/10.1007/978-1-4419-8126-4>
- Sylvester, R., & Greenidge, W. (2009). *Digital storytelling: Extending the potential for struggling readers*. **The Reading Teacher**, 63(4), 284–295. <https://doi.org/10.1598/RT.63.4.3>
- Vandergrift, L., & Goh, C. C. (2012). *Teaching and learning second language listening: Metacognition in action*. Routledge.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.

Appendix (A) Listening Comprehension Pre/Post Test

Total Score: 30 points

Section A: Micro-Listening Tasks (8 items – 8 points)

Word Recognition & Phoneme Discrimination

You will hear **8 short audio clips**. Each will be played **once**.

Items (Write the correct word/option.)

1. You will hear a word. Choose the word you hear:
a) ship b) sheep c) cheap
2. You will hear a number. Write the number:
3. Choose the word you hear:
a) cat b) cut c) cart
4. The speaker says one word. Write the correct spelling:
5. Choose the correct minimal pair:
a) think b) sink
6. You will hear a word with *-ed*. Identify the ending you hear:
a) /t/ b) /d/ c) /ɪd/
7. Write the word you hear (food item):
8. Choose the correct stressed syllable (you hear one word):
a) IM-port
b) im-PORT

Section B: Sentence-Level Comprehension (6 items – 6 points)

You will hear **6 short sentences**, each once.

Choose the best answer for each item.

9. What does the speaker want?
a) A glass of water
b) A bottle of juice
c) A cup of tea
10. What is the correct description of the speaker's plan?
a) He will visit his friend tomorrow
b) He visited his friend yesterday
c) He is visiting his friend right now
11. Why is she late?
a) The traffic was heavy
b) She woke up early
c) She lost her phone
12. What does the speaker prefer?
a) Staying at home
b) Going to the cinema
c) Buying a new book

13. Where is the meeting?
- a) In Room 12
 - b) In Room 20
 - c) In Room 30
14. What is the speaker talking about?
- a) A problem at school
 - b) A family event
 - c) A missed appointment

Section C: Extended Discourse Comprehension

(8 items – 16 points)

You will listen to **two longer recordings** (each 3–4 minutes): one short lecture and one conversation.

Answer the questions after each passage.

Some items are multiple-choice; others require short answers.

Passage 1 – Short Lecture (4 items – 8 points)

(You will hear a short lecture about “Healthy Daily Habits.”)

15. What is the **main idea** of the lecture?
- a) Steps to exercise safely
 - b) Importance of building small daily habits
 - c) Reasons why students are stressed
16. According to the speaker, which habit is the **easiest to start**?
- a) Drinking more water
 - b) Running 5 km daily
 - c) Sleeping for 10 hours
17. Write **one supporting detail** mentioned in the lecture:
18. What is the speaker’s **attitude** toward morning routines?
- a) Negative
 - b) Neutral
 - c) Positive

Passage 2 – Conversation (4 items – 8 points)

(You will hear a conversation between two students discussing a group project.)

19. What problem are the students facing?
- a) They lost their project file
 - b) One group member is absent
 - c) They do not understand the topic

20. What solution do they agree on?
 a) Meeting after class
 b) Asking the teacher for help
 c) Changing the project topic
21. What does the male student **suggest** doing first?
22. What is **implied** about the deadline?
 a) They have plenty of time
 b) The deadline is soon
 c) It was already submitted

Appendix (B) Cultural Awareness Questionnaire

Domain	Item	Statement	1	2	3	4	5
Appreciation of Cultural Diversity	1	I appreciate and respect different cultural perspectives and practices.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	2	I believe cultural differences make communication more interesting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	3	I enjoy learning about how people live in other cultures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	4	I feel comfortable interacting with people from different cultural backgrounds.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	5	I think cultural diversity is important in today's world.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intercultural Perspective-Taking	6	I can understand situations from different cultural viewpoints.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	7	I try to see things from others' cultural perspectives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	8	I can explain why people from another culture might behave differently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	9	I can adapt my thinking when interacting with people from other cultures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	10	I can understand how cultural values influence people's opinions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Motivation to Engage with Other Cultures	11	I am interested in learning about English-speaking cultures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	12	I enjoy watching or listening to media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Domain	Item	Statement	1	2	3	4	5
		from other cultures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	13	I like meeting people from different countries.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	14	I would like to visit or study in another country.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	15	I want to improve my cultural understanding to communicate better.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>