Digital Storytelling's Impact on ESL Learners' Speaking Skills (2019-2023): A Systematic Review

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Abstract

Over the years, various pedagogical methods and techniques has been put into practice in order to liven up the lessons in an English as Second Language (ESL) classroom. One of the most frequently used tool in the teaching and learning process is digital storytelling (DST). This systematic review focused on analysing and reviewing twenty relevant studies on the impact of DST on ESL learners' speaking skills published from 2019 to 2023. These studies employed different research designs, including quasi-experimental, classroom action research and survey study, and participants who partook were of different language backgrounds, age and competency levels. Among the four language skills, speaking skill was spotlighted. The findings from these articles listed the positive effects and benefits that proved that DST as a practical aid in improving ESL learners' speaking skills. Not only DST enhances learning skills, it motivates and encourages pupils to learn from its fun and meaningful features. Nevertheless, several challenges and limitations were also pointed out such as time constraints and the training needed for teachers. In a nutshell, this review highlights on the cruciality and benefits of using DST as an educational tool in affecting ESL learners' speaking skills. Implications and recommendations for future studies are also discussed.

Keywords: Digital Storytelling, Educational Tool, ESL, Impact, Speaking Skill

Introduction

The key purpose of learning the English language as a second language (ESL) is to be able to communicate effectively anytime, anyplace, anywhere. Hence, this makes speaking skills the most vital skill among the four main language skills, namely listening, speaking, reading and writing. The significance of good speaking skills goes beyond the classroom walls, with effective communication being a vital aspect of language learning and the key to success (Rahman et al., 2022). To achieve effective communication in the target language, it is essential for language learners to be able to deliver messages accurately Hayam (2019) and confidently (Cici, 2022). Having good speaking skills is vital and highly valuable as it provides

job opportunities in tourism, and international trade (Arroba & Acosta, 2021) and the ability to connect and reflect on situations other than the educational setting (Ramalingam et al., 2022).

Nonetheless, factors like stress, lack of confidence and overwhelming conditions hinder English language learning (Hayam, 2019), causing learners' preference to listen than speak (Cici, 2022). Fitri et al (2022) named speaking skill as the most challenging skill as it requires demonstration. As simple as it may sound, speaking is not something that learners can acquire effortlessly through imitation as most learners struggle to come out with sentences on the spot despite being familiar with grammar and having adequate vocabulary knowledge. Amaliah et al (2022) mentioned that speaking skill is even challenging as language learning success is usually evaluated according to the development of communicative competence. Other than achieving the main goal of developing learners' communicative skills in expressing themselves, it is important to consider the other aspects of communicative efficiency. Apart from making themselves fathomable by others, learners should learn to be able to react appropriately according to the circumstances while following social and cultural rules (Natasia & Angelianawati, 2022).

The success of acquiring and learning this language skill as an ESL learner mainly depends on the pedagogical methods and techniques used in the classroom (Ilhomovna, 2021). Across the decades, ESL teachers have been trying out various ways to teach speaking skills yet the methods are always coming back to the traditional techniques like repetition drills and memorisation of common phrases. It is crucial to incorporate innovative and progressive pedagogical electronic skills into teaching and learning practices (Roza & Rustam, 2023). In the current era of technological revolution and globalisation, it is vital to incorporate effective instructional strategies (Yang et al., 2020) and interesting approaches (Badawi et al., 2022) alongside traditional literacy practices. Modern technologies create opportunities for both learners and educators to enhance their knowledge, skills and language instruction as well as promote learner autonomy and speaking proficiency development (Kallinikou & Nicolaidou, 2019). In Malaysian education, educators have integrated various technologies with teaching models to assist student-centred learning and improve learners' speaking abilities (Precintha et al., 2019).

Learners of the new generation seek learning environments that are not time and space-constrained (Nuriyah, 2023). Stories and oral communication have proven by Elenein (2019) in his study that they are effective in facilitating and preparing students for future better learning. Hence, to attain development in ESL learners' speaking skills while accommodating the modern-day learners' learning needs and styles, digital storytelling (DST) is a capable tool that is able to support the learning process. Its employment of technology in language learning makes the process more interactive and engaging, at the same time enabling educators to provide effective feedback (Tatlı et al., 2022). DST has the potential of becoming a growing trend for lessons integrating technology as it is believed to be able to facilitate a variety of language learning processes with great efficiency. Hence, this systematic review paper looks into the impacts of DST on ESL learners' speaking skills throughout the year 2019 to 2023.

This systematic literature review paper aimed to evaluate and sum up the different points of view from different academics on the impact of DST on ESL learners' speaking skills. The review will focus on existing literature and studies regarding this topic which were published between the most recent five years: 2019 to 2023. Different findings on DST's benefits have proven its potential in enhancing the four language skills namely listening, speaking, reading and writing. Yet this paper will make speaking skill the primary focus and address the impact of DST. This review seeks to provide a critical and detailed interpretation of DST in developing speaking skills among ESL learners by answering the following research questions:

RQ1: What are the potential aspects of DST that influence ESL learners' speaking skills?
RQ2: What are the impacts of DST on ESL learners' speaking skills?

Digital Storytelling

Digital storytelling involves the telling and narration of stories using digital technologies (Roza & Rustam, 2023). Fundamentally, digital storytelling represents a creative teaching and learning process that blends traditional methods with technology, fostering engagement and innovation in the educational context (Tatlı et al., 2022). It can also be considered a mode of oral production that connects technology with textual characteristics (Arroba & Acosta, 2021). Furthermore, it leverages technology to make good use of user-generated content and overcome technological and productivity obstacles, benefiting both users and educators (Amaliah et al., 2022). In essence, digital storytelling involves the retelling of narratives in the storyteller's own expressions (Rahman et al., 2022), integrating a wide range of current technologies and ICT services to enhance speaking abilities (Ramalingam et al., 2022). By the same token, Nair & Yunus (2021) defined digital storytelling as the utilisation of computer-based tools as a medium to tell stories from distinct points of view. DST emphasises on specific topics ranging from personal stories to historical events through the visual expression by individuals around the world and the stories are shareable all over the world.

Just like the traditional storytelling, DST is more student-centred (Dharma & Meo, 2023), which focuses on allowing reader to experience the story. It is an interactive art form that stimulates the audience's imagination by revelling elements and visuals of a story (Hayam, 2019). In the modern context, digital storytelling represents a new way of expressing stories as an art form (Kallinikou & Nicolaidou, 2019), utilising various multimedia tools like animation, computer-based visuals, recorded audios, pictures, and videos (Fitri et al., 2022) to effectively convey information to the audience using one's own voice and words (Robin & McNeil, 2019). Natasia & Angelianawati (2022) shared the same concept of DST where they described it as enhanced storytelling techniques through the use of visual aids to attract learners' interest and spark their imagination in developing oral skills. Likewise, Nuriyah (2023) pointed that DST can be seen as an artistic, creative, and aesthetic work created through intriguing media and technology to assist in story narration.

As a new form of storytelling, it involves the utilisation of computer applications to bring stories to life through 2-to-3-minutes videos where pupils narrate and self-record their stories (Badawi et al., 2022; Cici, 2022; Precintha et al., 2019). It serves as a communication process through which one convey news, information, and feelings through their creations in software programs (Elenein, 2019). Zamzam (2020) interpreted something similar by considering it as

a digital learning source which merged traditional storytelling and multimedia technology. The mixture of digital multimedia creates a more powerful effect on learners as the presentation is more engaging and it summarises the topic in a shorter period of time (Raffone & Monti, 2019).

Digital Storytelling's Impact on Speaking Skill

Digital storytelling has a significant impact on speaking skills, leading to improvements in various aspects of oral communication. One notable effect is the reduction of mistakes made during speech, such as grammar, syntax, vocabulary, and pronunciation errors (Kallinikou & Nicolaidou, 2019). It is not hard for one is able to share ideas and information easily once one is able to use the lingua franca, English effectively. It is of paramount importance to master the global language, especially speaking skills as it can be handy when it comes to social interactions and language learning.

According to Zamzam (2020), the regular usage of gadgets proves on how attached current learners are to the technology. In her journal article, she discussed on the impact of DST as 'improving learners' motivation', 'improving learners' speaking skill in retelling the story', 'enhancing speaking ability in various text genres' and 'increasing the learners' interest'. Digital storytelling solves learners' difficulties by enhancing language practices, boosting confidence among learners, giving proper feedback and pronunciation and providing opportunities for initiating oral communication (Hayam, 2019). It promotes self-awareness, helps learners connect events and concepts, and enables learners to narrate stories using pictures (Hayam, 2019).

Raffone & Monti (2019) on the other hand mentioned that the presentation of DST not only engages learners, but it also stimulates their language skills along with 21st-century skills such as creativity, technological skills, higher-order thinking skills and motivation. Furthermore, the use of digital storytelling enhances speaking skills (Precintha et al., 2019) and motivation (Tatlı et al., 2022) in language learning. Knowledge and collaboration wise are boosted as the learners discuss and look from different perspectives in the DST process. Learners tend to be active participants and motivated because of the dynamism of DST. Fitri et al (2022) too supported the term active participation by elaborating that learners practise to construct their thinking, raise doubts, share their own opinions and create their own version of stories.

Learners are in charge of creating their own stories and telling the stories without guidance; thus, Nair & Yunus (2021) described DST as 'suitable for learners of all age groups and levels'. Learners' speaking abilities get better from the constant storytelling practices as they link both the content and context of stories. Essentially, digital storytelling contributes to academic success and overall improvement in learning (Yang et al., 2020). By focusing on oral expressions, DST plays a vital role in developing communicative competence (Arroba & Acosta, 2021). Moreover, digital storytelling has the power to engage audiences, stir their emotions, and widen perceptions by conveying a culture's customs, history, and values (Amaliah et al., 2022; Roza & Rustam, 2023). Learners become more confident and are introduced to new vocabulary and pronunciation (Cici, 2022; Nuriyah, 2023). Learners are introduced to wonders, stimulated by the unknown and imaginations, and encouraged to be active, interactive, confident, and fluent in speaking tasks (Amaliah et al., 2022). The use of

digital storytelling improves learners' communication skills, confidence in using the language, and presentation abilities (Rahman et al., 2022).

In addition, digital storytelling makes learning English fun, arousing interest, excitement, motivation, and enjoyment among learners (Natasia & Angelianawati, 2022; Nuriyah, 2023). It effectively develops speaking skills and enhances learners' motivation in language learning (Cici, 2022; Roza & Rustam, 2023). From the increased speaking capability, pupils feel more confident in speaking and improving (Dharma & Meo, 2023; Fitri et al., 2022). It motivates learners to actively participate in language learning and enhance their oral production (Badawi et al., 2022; Elenein, 2019).

Method

This systematic review adopted the method of preferred reporting items for systematic Reviews and meta-analyses (PRISMA). It was chosen because it is aimed to provide readers a clear explanation of the impacts of DST, specifically in terms of ESL learners' speaking skills. This goal can be realised from the four stages of PRISMA, namely the identification phase, screening phase, inclusion phase and data analysis. The stages and processes of the systematic review are documented in Figure 1 below.
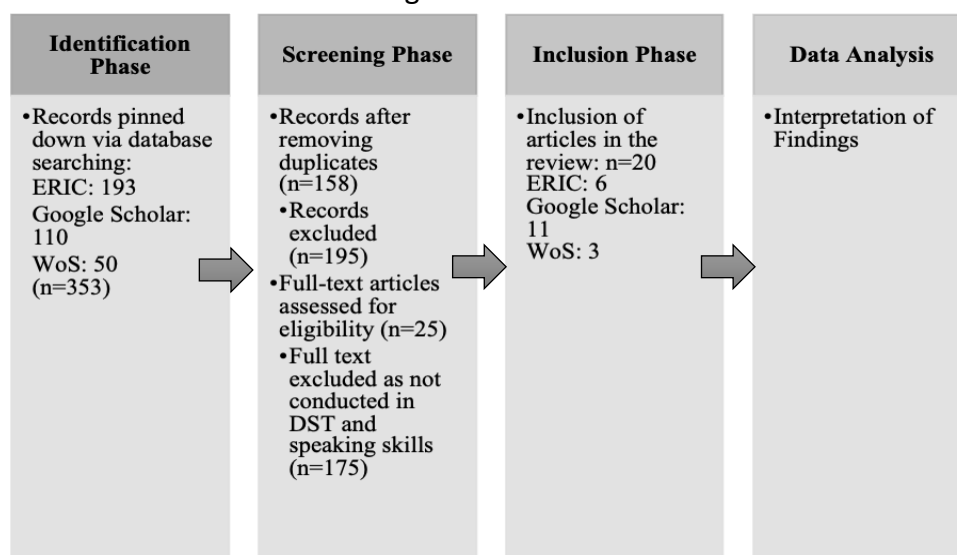

Figure 1. Flow diagram of the systematic review using the PRISMA method, adapted from (Page et al., 2021)

Phase 1: Identification Phase

During the identification phase, three databases were utilised for the suitability of this research as well as to increase efficiency. As reported in Figure 1, the databases were Educational Resources Information Centre (ERIC), Google Scholar and Web of Science (WoS). The researcher typed in the key terms, namely digital storytelling, educational tool, ESL, impact and speaking skill in each database. Table 1 below exhibits the search strategy where search strings were used in this study for each database.

Table 1
Utilisation of search strings as database search strategy.

Database	Search Strings
ERIC	Digital storytelling and speaking skill
Google Scholar	Speaking Skills, Communication Skills, Impact, Oral Language, Conversation Skills, English as Second Language, ESL, Digital Storytelling, DST, E-Storybook, Electronic Storybooks, Educational Tool
WoS	TS = (("Speaking Skills *" OR "Communication Skills" OR "Impact" OR "Oral Language" OR "Conversation Skills" OR "English as Second Language" OR "ESL") AND ("Digital Storytelling *" OR "DST" OR "E-Storybook" OR "Electronic Storybooks" OR "Educational Tool"))

Phase 2: Screening Phase

The systematic review moved on to the screening phase where the first task was to exclude duplicate articles that were repeated in more than one database. Based on the first screening step, 195 articles were eliminated, leaving 158 articles qualified for further screening. The 158 articles were then screened by their title, abstract, and keywords and 175 articles were excluded due to the failure of criteria fulfilment. After the first two levels of screening, only 25 articles remained.

Phase 3: Inclusion Phase

The remaining articles were screened by the inclusion and exclusion criteria as shown in Table 2. This phase is critical in ensuring the collected data were highly reliable.

Table 2
Inclusion and exclusion criteria

Inclusion Criteria	Exclusion Criteria
Studies carried out between 2019 and 2023 (5 years timespan)	Studies carried out before 2019
Journal articles	Conference paper, book chapters, reports, review articles
Language used in text is English	Language used in text is not English
Studies focus on the usage of digital storytelling	Studies do not focus on the usage of digital storytelling
Studies related to impact on ESL learners' speaking skills or any other skills that include speaking	Studies related to impact on ESL learners' other non-speaking skills such as listening, reading, writing, grammar and vocabulary

The papers chosen were selected only if they were published within the latest 5 years, which is between 2019 to 2023. Studies carried out before 2019 were eliminated. Journal articles were selected over conference papers, book chapters, reports and review articles. The language used for the text was English, texts in other languages were not given thought. Lastly, the studies selected were related to the usage of digital storytelling and its impact on ESL learners' speaking skills or any other skills that include speaking. Studies that state otherwise were not considered. After the meticulous selection process according to the inclusion and exclusion criteria, only 20 potential articles were chosen for their suitability for this systematic review.

Phase 4: Data Analysis

In the last phase of this systematic review, all the finalised articles were then analysed to identify the answers to the following research questions:
(1) What are the potential aspects of DST that influence ESL learners' speaking skills?
(2) What are the impacts of DST on ESL learners' speaking skills?

This paper reviewed the articles and interpreted the potential aspects of DST and its impacts on ESL learners' speaking skills. Findings from the articles were summarised, presented and discussed in the following chapter using the qualitative analysis method which was content analysis. Any limitations, implications and recommendations for future research were included in the chapter that follows which is 'Discussion'.

Results

The findings from the articles will be reviewed, tabulated and discussed in-depth in this chapter. After careful selection of the articles according to the inclusion and exclusion criteria, 9 articles were chosen to be suitable in this systematic review. The best and most appropriate papers that describe DST in influencing learners' speaking skills were summarised and tabulated in Table 3 below.

Table 3

Findings from the selected articles

No.	Authors	Database	Aim of the study	Participants	Findings
1	Elenein (2019)	ERIC	To identify the effect of implementing digital storytelling in developing oral communication skills for fifth-year pupils in primary schools.	Two groups of 60 primary fifth pupils at Ibn Sina primary school: 30 pupils each in the experimental group and control group.	Digital storytelling positively impacted and motivated the development of pupils' oral communication skills and performance.
2	Raffone & Monti (2019)	ERIC	To understand the potential of DST in enhancing ESL students' engagement with their studies together with the development of digital skills.	24 Bachelor's students (23 females and 1 male) in their 2nd year of the course English Language and Linguistics of the Undergraduate's Degree in Comparative Languages and Literatures.	DST is significant and effective support in stimulating pupils' engagement and motivation. It encourages pupil-centred and collaborative learning, and the development of technology skills.
3	Kallinikou & Nicolaidou (2019)	Google Scholar	To examine the relation between adults' engagement in digital storytelling and their speaking skills and motivation when learning a foreign language.	Two groups of 20 Russians (28 male and 12 female) who were programmers who lived in Cyprus and knew English as a foreign language.	DST contributed as a helpful intervention tool to the improvement of adults' speaking skills where fewer mistakes were made during speech. There is also an increase in interest in oral production.
4	Hayam (2019)	Google Scholar	To identify the reasons adult learners are unable to speak English as a foreign language (EFL) in the Kingdom of Saudi Arabia.	English-major female students with four years of training in English at a selected university in Saudi Arabia, ranging from 18-22 years old.	Digital storytelling strategy provides many vocabularies and motivates cooperative work which enables the proper use of grammar and new vocabularies. Through mastering stress, tone and intonation, learners' speaking skills and self-esteem can be improved.
5	Precintha et al. (2019)	Google Scholar	To find out the use of digital storytelling in enhancing pupils' speaking skills in	20 Form four high-intermediate pupils studying in a suburban secondary school in	Pupils' speaking skills showed an improvement and their perspectives

			English and pupils' perspectives on implementing digital storytelling to enhance their speaking skills.	Pahang, Malaysia (12 boys and 8 girls).	towards digital storytelling were positive.
6	Yang et al. (2020)	ERIC	To investigate the effectiveness of digital storytelling on English as foreign language learners' speaking and creative thinking.	54 seventh-grade pupils ranging from 14 to 15 years, from two randomly selected classes.	DST offers authentic and significant learning opportunities which foster learners' development in becoming proficient English speakers and creative thinkers.
7	Zamzam (2020)	Google Scholar	To find out the impact of digital storytelling in improving speaking skills.	40 students (20 from B02 and 20 from B04) of International Class B02 at Cimmunication Science Department Tadulako University.	The group that were exposed to digital storytelling were more active in speaking activities and their test scores in speaking significantly improved. Pupils were able to recall the story, discuss, comment and answer questions. Pupils were able to write their own script to retell the whole story through video recording with much enthusiasm.
8	Arroba & Acosta (2021)	ERIC	To determine the effectiveness of authentic digital storytelling as an alternative strategy to enhance speaking in universities' EFL classes.	Two groups of sixteen teachers and fifty EFL learners respectively. The first group consisted of six male and ten female EFL teachers with 2 to 8 years of teaching experience in higher education while the second group were fifty second-year undergraduate EFL students (twenty-three male and twenty-seven female Ecuadorians).	Authentic digital storytelling effectively enhance learners' speaking skills.
9	Fu et al. (2021)	Google Scholar	To propose DST as a solution to students' limited opportunities in developing learners' engagement and speaking competence.	100 freshmen in a technological university in southern Taiwan.	Learners made significant progress in their communication capabilities and speaking competence in terms of fluency and language use.
10	Natasia & Angelianawati (2022)	ERIC	To explore the learners' perspectives of employing storytelling techniques in enhancing their speaking.	74 eighth-grade pupils (29 males and 45 females) from SMPN 143 North Jakarta.	Participants perceived the use of storytelling techniques positively where some gave good remarks like motivating, useful, beneficial, easy to use and interesting.
11	Tatlı et al. (2022)	ERIC	To explore the effect of digital storytelling in an online EFL lesson on speaking and vocabulary acquisition with regard to cognitive load effect.	33 (14 males, 19 females) freshman Finance students enrolled in English 1 course at CEFR A1 level at the Vocational school of a Turkish state university.	Learners showed better achievement in vocabulary and improved English-speaking skills in terms of spoken grammar, vocabulary use, fluency, clarity and pronunciation. Digital storytelling too

					showed positive impact on vocabulary use, error correction, sentence formation, pronunciation and self-study.
12	Amaliah et al. (2022)	Google Scholar	To investigate the effectiveness of digital storytelling in improving learners' English speaking skills and learners' perceptions on the use of digital storytelling in improving their English speaking skills.	27 students from Class X Computer and Network Engineering of SMKN 1 Wajo.	There was significant improvement in the learners' tests which proved the potential and effectiveness of digital storytelling in enhancing the learners' speaking skills as well as confidence in speaking.
13	Fitri et al. (2022)	Google Scholar	To examine ESL students' perspectives towards the usage of digital storytelling-based task.	34 undergraduate students who are taking Public Speaking course at University Sultan Zainal Abidin Malaysia.	Students gave positive responses towards DST-based task. The findings stated that DST-based task inspires, improves students' motivation and provides collaboration opportunities for them, which enhance their interpersonal relationships.
14	Cici (2022)	Google Scholar	To find out if digital storytelling affect students' speaking skills significantly through VlogNow (VN).	60 third graders in SMP Negeri 6 Siak Hulu in class IX^1 (experimental class) and IX^2 (control class). It was 30 pupils from each class.	The increase in the mean score proved that digital storytelling through VlogNow has a significant effect on learners' speaking skills hence suitable to be used as a media for speaking development.
15	Ramalingam et al. (2022)	Google Scholar	To promote speaking abilities of children using digital storytelling as a pedagogical approach in speaking classes in national primary schools.	Thirteen second standard Tamil students aged 7 to 8 years old (who were regular attendees) in a national primary school in Pasir Gudang district, Johor.	Digital storytelling is effective in stimulating the improvements in learners' fluency, comprehension and vocabulary aspects of the speaking skills.
16	Badawi et al. (2022)	WoS	To examine he effect of digital storytelling strategy on enhancing primary school students' English speaking skills.	60 EFL students in El Fardous Private School, aged around 12 to 13 years old. The participants were divided into two groups: 30 pupils in the experimental group and 30 pupils in the control group.	After exposing to different storytelling activities, pupils' oral performance improved in terms of fluency, vocabulary learning and comprehension skills.
17	Rahman et al. (2022)	WoS	(1) To investigate the use of digital storytelling in the e-Poster Presentation assessment in learning English at the preparatory level for diploma studies as well as learners'	Twenty-seven Pre-diploma students from Universiti Teknologi Mara (UiTM) Pulau Pinang campus who are low-proficient in English.	Creating digital storytelling videos and conducting e-Poster presentations enhanced learners speaking performance, confidence and presentation skills. DST for the e-Poster Presentation too gained favourable perceptions from learners.

			perspectives towards this learning approach.		
18	Dharma & Meo (2023)	Google Scholar	To explore whether Digital Storytelling – based on Dayaknese folklore boost students' participation in speaking ability.	22 third-semester students of the English Language Education Study Program of STKIP Persada Khatilistiwa Sintang.	Digital Storytelling – based on Dayaknese folklore helps to improve students' English speaking ability as digital storytelling technique stimulated students to be more energetic in speaking.
19	Roza & Rustam (2023)	Google Scholar	To explore the effectiveness of digital storytelling in enhancing academic public speaking skills in multilingual classrooms.	60 pre-service teachers who were 19-20 years old learners of different nationalities.	Digital storytelling enhanced learners' public speaking performances and their cultural skills. It fostered a collaborative environment too where learners could actively participate and share thoughts.
20	Nuriyah (2023)	WoS	To increase the English language proficiency of 12th grade learners through digital storytelling activities based on Flipped Classroom Model.	12th grade students in Al Farhan High School.	Using flipped classroom model to enhance English as Second Language (ESL) learners' speaking skills is significant through digital storytelling.

There are three main themes identified from these articles namely, technology-based tasks, motivation enhancement collaboration and communication competence development. These themes were pinpointed and elaborated with the hope to answer the two research questions from this study.

RQ1: What are the potential aspects of DST that influence ESL learners' speaking skills?
The twenty articles listed several potential aspects of DST that significantly influence ESL learners' speaking skills as well as contribute to their oral proficiency improvement. These aspects of DST affect language learning positively and provide valuable opportunities for development (Hayam, 2019). The process of digital storytelling involves three phases: preparation, production, and presentation (Amaliah et al., 2022). Learners create a concept map, storyboards, and script for narration during the preparation phase. In the production phase, they select audio, illustrations, and multimedia elements to enhance their storytelling. PowerPoint presentation is another option for video product as long as the slides, sound effects and music are arranged and timed properly. The final product, usually a short film of two to four minutes, can be played in the classroom or uploaded to a website (Amaliah et al., 2022).

In this case, web-based software programs play a significant role in digital storytelling and contribute to the enhancement of speaking skills (Arroba & Acosta, 2021; Roza & Rustam, 2023; Tatlı et al., 2022; Yang et al., 2020). These programs integrate audio, video, and text to provide learners with interactive and immersive speaking experiences. Through incorporating mobile applications and gamified evaluations with rewards, digital storytelling can be used as a pedagogical approach to motivate learners' active participation and encourage independent learning (Ramalingam et al., 2022). The fun and interactive story-making process also allows learners to express their thoughts aloud in front of an audience (Rahman et al., 2022). Regarding the interactivity aspect of DST, Raffone & Monti (2019) mentioned that it provides

collaboration opportunities among learners, which encourages better interaction, better cooperation, the value of group work, a sense of responsibility, motivation and enhanced engagement. In the study by Raffone & Monti (2019), learners were requested to collaborate in self-selected groups, do research on topics of their preference which they find crucial to their life and present a digital story to the whole class. Learners showed more enthusiasm and effort in practising their academics which highlighted the theme of 'motivation enhancement collaboration'.

This was similar to the findings in the research by Fu et al. (2021) where they discussed the interesting materials, features and animation tools as the aspects of DST in sparking learners' imagination and willingness to speak out. With DST as a great medium and tool, they were more enthusiastic and motivated to express themselves and provide comments towards peers (Fu et al., 2021; Zamzam, 2020), which indirectly enhances collaboration among friends and strengthens interpersonal relationships (Fitri et al., 2022). Precintha et al (2019) in the same way commented that digital storytelling provides an online medium and a safe platform for learners to express themselves. It offers opportunities for learners to speak and engage in meaningful communication, fostering their speaking skills and confidence (Elenein, 2019). Immediate feedback is undeniably a crucial aspect of digital storytelling that helps learners avoid repeating the same mistakes during speaking (Kallinikou & Nicolaidou, 2019). It allows learners to receive timely guidance, corrections, and suggestions, enabling them to refine their speaking skills effectively.

The usefulness and ease of use associated with digital storytelling make it a suitable and accessible tool for improving and encouraging speaking performance (Natasia & Angelianawati, 2022). It offers moral messages, cultural, contextual, linguistic, historical, and social knowledge, enriching learners' understanding and contributing to their character growth (Nuriyah, 2023). Additionally, elements such as point of view, dramatic questions, emotional content, personalisation of stories through the use of voice, soundtracks, and effective presentation techniques significantly impact learners' speaking skills (Cici, 2022). Digital storytelling enables the integration of multiple modes of expression, including language, symbols, and visual means, providing learners with diverse opportunities to enhance their speaking skills (Badawi et al., 2022).

What's more, Fu et al. (2021) added on the five story components as another aspect of DST which influence ESL learners' speaking skills. The step-by-step story development, coupled with the incorporation of stories based on local wisdom as spotlighted by Dharma & Meo (2023), would not only increase the familiarity of learners with the newly gained knowledge but also positively influence ESL learners where they were spotted to be more energetic in speaking. Learners would be stimulated to explore new information with openness and courage (Fitri et al., 2022).

RQ2: What are the impacts of DST on ESL learners' speaking skills?
To answer the second question, all articles demonstrated the positive impacts of DST on ESL learners' speaking skills. It was mutually agreed that DST brings about numerous positive outcomes that improve learners' engagement, motivation, confidence, acquisition, scores and speaking skills (Raffone & Monti, 2019; Zamzam, 2020). DST promotes 'technology-based tasks' such as creating, editing, innovating, and recording videos or stories, emphasised its

role as a technological aid in enhancing language learning especially when it comes to speaking. This can also be related to the theme 'communication competence development' where learners were able to write a script and tell a story with more confidence and improvement (Zamzam, 2020).

Engaging in digital storytelling improves speaking skills significantly and arouses learners' interest in language learning (Arroba & Acosta, 2021; Badawi et al., 2022; Precintha et al., 2019; Tatlı et al., 2022). Digital storytelling excites learners to narrate stories and provides them with a platform to properly convey their characters and themes of the stories, thoughts and opinions properly with great accuracy, fluency, and confidence (Hayam, 2019). Without a doubt, learners' active participation in the creation and narration of stories not only enhances their speaking abilities but also fosters their creativity and digital skills (Cici, 2022). Equivalently, Elenein (2019); Roza & Rustam (2023) advocated that digital storytelling significantly contributes to the improvement of learners' oral communicative skills and performance. By actively engaging in the process of storytelling, learners are pushed to produce and process the language more actively and deeply, leading to enhanced speaking skills (Yang et al., 2020).

Digital storytelling also encourages low-proficient learners to make mistakes for self-improvement and development (Rahman et al., 2022). Learners are motivated to take risks and learn from their mistakes, leading to continuous growth in their speaking skills. Furthermore, digital storytelling improves speaking performance by broadening learners' knowledge, making them comprehensible to others, and increasing their productivity in speaking (Natasia & Angelianawati, 2022). Learners' focus and attitudes towards speaking tasks are also positively influenced by digital storytelling (Nuriyah, 2023). In the same way, the impact of digital storytelling on speaking skills is also evident from the improvement in learners' speaking aspects like pronunciation, grammar, fluency, vocabulary, and comprehension (Amaliah et al., 2022). Learners become comfortable with narrating stories in front of an audience, demonstrating their progress and confidence. This leads us to another notable impact of digital storytelling which is the increase in overall motivation, including interest, importance, usefulness, and self-efficacy (Kallinikou & Nicolaidou, 2019). Learners become enlightened about the importance of speaking and understanding the language, leading to a positive attitude towards the usefulness of communication skills in daily life. As a result, learners become more confident in their ability to speak and understand the language (Ramalingam et al., 2022).

Fu et al (2021) mentioned that there was an obvious improvement in learners' fluency and language use where learners were able to organise their ideas, develop their stories' structures with better plot twists, self-reflect, build their different aspects of learning engagement like intellectual, emotional, behavioural and social as well as having more intonation and better phonological skills. Fitri et al (2022) attested to the statement by declaring the impacts of DST in improving learners' capability to communicate, construct valuable feedback to each other and express thoughts and feelings. This resembled Dharma & Meo (2023) who called out DST in developing pronunciation and enhancing the ability to articulate communication, feelings and thoughts. It is undeniable that DST prompts the shy and lost learners to speak up with higher enthusiasm and confidence.

Discussion

The use of DST has gradually become a growing trend in the education field, particularly in an ESL classroom. Notwithstanding DST's pros, there are limitations that needed to be pointed out for its effective implementation. Firstly, the appropriateness of resources on learning outcomes ought to be considered. According to Raffone & Monti (2019), if the resources used in DST are not suitable, the effect might be the opposite of what is intended, leading to the failure of achieving learning outcomes. It is vital to make sure that the resources used in DST is fitted to realise the desired learning outcomes. Another related limitation is the need for separate digital storytelling as an intervention tool. While digital storytelling can be a valuable approach, scaffolding and creating interactive learning environments could be taken into consideration to maximize its impact (Badawi et al., 2022; Kallinikou & Nicolaidou, 2019). Collaborative speech production, rather than individual efforts, can further enhance the effectiveness of digital storytelling (Kallinikou & Nicolaidou, 2019). Personalisation of the learning experience is another suggestion to consider so that learners can achieve successful language learning at their own pace (Badawi et al., 2022).

In addition, Zamzam (2020) highlighted the monotonous explanations by teachers during the implementation of DST. This may cause disengagement and a lack of interest in learning. In order to cope with that, learners should be given more chance to practise and speak English frequently and independently to ensure their familiarity with English. Furthermore, a lack of practice and motivation can hinder learners' proficiency level and confidence, underscoring the need for engaging and interesting ways and strategies to provide ample speaking opportunities (Amaliah et al., 2022; Cici, 2022; Hayam, 2019). Cici (2022) too suggested having a close bond between teachers and learners to ensure a less tense environment, hence motivating learners to speak.

Moreover, the limited number of studies on the use of digital storytelling in the English language classroom is a noteworthy limitation. Additionally, addressing issues related to digital literacy and technology, such as financial burden and inadequate training, is crucial to ensure effective implementation (Rahman et al., 2022). To facilitate digital storytelling interventions, there is a need to explore various inexpensive and viable web tools (Precintha et al., 2019). Teachers too need to possess expertise in several areas, including preparing digital content, subject expertise, taking precautions, following up on learner participation, and dealing with possible technological equipment challenges (Nuriyah, 2023). Correspondingly, the expertise required for digital storytelling implementation poses another limitation - insufficient teacher training and limited class hours due to rigid curricula further (Yang et al., 2020). Arroba & Acosta (2021) identified teachers lacking the necessary resources to help students become aware of their mistakes and improve their speaking production effectively. Recognising the importance and purpose of developing oral skills should be a priority to address this limitation. Yang et al (2020) recommended the exploration of interdisciplinary digital storytelling projects and the evaluation of the demonstrated creativity in future research. Tatlı et al (2022) on the other hand advised considering both face-to-face and online digital storytelling approaches to help address technical and methodological difficulties for future implementation.

Evaluation and assessment pose challenges in digital storytelling too. It becomes difficult to evaluate learners' body language and other non-verbal expressions in digital

contexts (Ramalingam et al., 2022). It can be hard too if the studies involve a limited number of participants and instruments. Future studies should aim to include larger participant samples and employ a combination of methods to obtain a more comprehensive understanding (Natasia & Angelianawati, 2022). Engaging parents and incorporating their guidance can help ensure effective implementation, especially in home-based learning perspectives. The future may witness the adoption of technologies like virtual reality (VR), augmented reality (AR), and extended reality (XR) to overcome these limitations.

Fu et al (2021) noted that the gap between the experimental and control group would influence the interpretation of results, causing inequivalence in their test scores, hence making the findings invalid. To address with that, DST could develop the variety and complexity of vocabulary, accuracy and sophistication of grammar and clarity of pronunciation. This can enhance the effectiveness of DST in improving language proficiency and learning outcomes which would be suitable for learners of different levels as all different needs were met. Future research could explore more on the effectiveness of DST in improving academic performance and the use of appropriate resources while focusing on developing language proficiency among learners.

Conclusion

In a nutshell, DST is a meaningful yet effective support in language learning. It brings nothing but positive impacts to ESL learners in a way that fosters engagement and motivation while responding to today's educational needs. The studies by Elenein (2019); Kallinikou & Nicolaidou (2019); Precintha et al (2019); Rahman et al (2022); Roza & Rustam (2023) too highlight the increased motivation and development in speaking skills resulting from the implementation of digital storytelling. Learners exhibited greater enthusiasm and engagement, leading to improved oral communicative skills and performance in terms of fluency, grammar, pronunciation, vocabulary and comprehension (Arroba & Acosta, 2021; Cici, 2022; Nuriyah, 2023; Tatlı et al., 2022). Learners are more likely to develop their learning and technological skills with the presence of this perfect technological aid. This is essential in the present time where technology is constantly advancing and is part and parcel of everyone's life. Hence, integrating DST in learning not only will develop their technological skills, but also their social skills through collaboration and interaction with peers during the implementation of DST (Hayam, 2019). It prepares learners to be more ready and prepared for real life.

Additionally, DST can be student-centred where learners are given the opportunity to practise speaking English independently and fluently. The personalised aspect of DST too makes the learning experience fun, engaging and effective in improving learners' creative thinking, with or without the integration of higher-order thinking into classroom instruction (Yang et al., 2020; Badawi et al., 2022). Practice makes perfect. The more frequently the learners practise, the more familiar and confident they are in using the language. DST is without a doubt an effective tool in education to speak to every learner by attending to today's educational needs which are favoured by learners with positive remarks (Natasia & Angelianawati, 2022). In their study, Amaliah et al (2022) too confirmed the learners' positive impressions of digital storytelling's effectiveness and engagement. DST has once again proven its potential as an effective methodology to have a positive impact on expanding learning

opportunities by improving students' engagement and acquisition of language skills (Ramalingam et al., 2022).

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