CHAPTER II
LITERATURE REVIEW

This chapter presents a review of related literature and previous studies that support the current research. It discusses the theoretical foundations and relevant concepts of the two main variables involved: AI-Based Digital Storytelling (DST) and speaking skills. The chapter also explains the relationship between the two, highlights relevant previous research, presents the conceptual framework, and formulates the hypotheses that guide this study. Furthermore, since this study involves the use of recount text as the material in the DST implementation, this chapter also briefly explains the concept and function of recount text in the EFL context.

A. Theoretical Review

1. AI-Based Digital Storytelling (DST)

AI-Based Digital Storytelling (DST) is a pedagogical approach that merges technology and narrative to support language learning. AI-Based Digital Storytelling combines multimedia elements such as text, images, voiceovers, music, and video to create compelling stories. According to Somdree and Suppasetseree (2013, in Harmawati et al., 2022), AI-Based Digital Storytelling serves as a powerful educational tool that blends computer-based technologies with the art of storytelling, allowing students to present their personal experiences in a creative manner.

Astuti and Chakim (2023) emphasized that AI-Based Digital Storytelling significantly enhances students' speaking performance by improving pronunciation, vocabulary, fluency, grammar, and comprehension. They found a large effect size (Eta-squared = 0.63), indicating that DST has a powerful impact on learners' speaking abilities. Fitri et al. (2022) and Lustenberger (2023) argued that AI-Based Digital Storytelling supports constructivist learning by engaging students in meaningful, learner-centered tasks that foster collaboration and creativity. AI-Based Digital Storytelling tasks also align with the principles of Task-

Based Language Teaching (TBLT), providing opportunities for learners to actively produce language in context.

Arizah et al. (2021) further assert that AI-Based Digital Storytelling encourages communicative competence by integrating traditional storytelling with digital media. It supports students in expressing their ideas with clarity and confidence and enhances their technology, presentation, and collaboration skills. Similarly, Idayani (2019) found that AI-Based Digital Storytelling motivated students to communicate more naturally and confidently, particularly when projects were implemented in stages with peer and teacher support.

Historically, AI-Based Digital Storytelling began as a grassroots movement in the 1990s through the efforts of the Center for AI-Based Digital Storytelling in Berkeley, California, founded by Joe Lambert and his colleagues. Initially, it was designed as a community-based practice to empower people to share their personal stories. Over time, its application expanded to education, where it became a pedagogical strategy for enhancing engagement, creativity, and communication (Lambert, 2013). Also, Lambert (2013) further introduced the "Seven Elements of AI-Based Digital Storytelling," including point of view, dramatic question, emotional content, voice, soundtrack, economy, and pacing. These elements help ensure that digital stories are not merely multimedia products but meaningful narratives that connect with the audience.

According to Robin (2008), there are three major types of AI-Based Digital Storytelling commonly used in education, namely personal narratives, historical documentaries, and informative or instructional stories. Personal narratives usually highlight learners' individual experiences and perspectives, allowing them to express themselves in a personal and meaningful way. Historical documentaries, on the other hand, focus on retelling past events or figures, helping students to connect language learning with cultural and historical knowledge. Meanwhile, informative or instructional stories are designed to explain concepts or

provide information in a more structured way, making them useful for content-based language learning. These categories show the versatility of AI-Based Digital Storytelling, as it can be adapted to different learning goals while still engaging students in creative expression and oral communication.

In language learning, AI-Based Digital Storytelling provides numerous benefits. First, it enhances student motivation by allowing learners to engage with content in multimodal ways (Sadik, 2008). Second, it fosters collaborative learning, as students often work together in planning, creating, and presenting their stories (Yang & Wu, 2012). Third, AI-Based Digital Storytelling promotes the development of 21st-century skills such as critical thinking, creativity, communication, and digital literacy (Robin, 2016). Finally, DST has been shown to reduce speaking anxiety and increase confidence, as students feel more supported when telling stories with the aid of multimedia (Idayani, 2019; Nair & Yunus, 2021).

Recent advancements in Artificial Intelligence (AI) have expanded the potential of DST in EFL classrooms. AI tools can generate story prompts, visuals, or even narration, which help students overcome difficulties in idea generation and language production. For instance, AI-powered platforms such as ChatGPT can assist learners in structuring narratives, while tools like Canva AI or CapCut AI simplify the production process. This allows students to focus more on oral performance rather than spending excessive time on technical aspects of production. Scholars such as Yunus, Ang, and Hashim (2021) argue that the integration of AI in AI-Based Digital Storytelling aligns with communicative and constructivist approaches, providing scaffolding and autonomy for learners to practice speaking more effectively.

Although numerous studies have confirmed the benefits of AI-Based Digital Storytelling, its implementation in the classroom is not without challenges. Sadik (2008) pointed out that creating a digital story can be time-consuming, especially when students devote more attention to the

technical aspects of production rather than to language use itself. This may reduce the opportunities for oral practice, which should be the main focus of language learning. Another issue is that not all students possess sufficient technological skills, meaning that teachers must provide additional guidance to ensure smooth classroom practice (Yang & Wu, 2012). Moreover, access to technology and multimedia resources is not always evenly distributed, particularly in contexts with limited facilities, which can affect the overall effectiveness of AI-Based Digital Storytelling implementation (Yunus, Ang, & Hashim, 2021).

In the Indonesian EFL context, these challenges become even more apparent, as not all schools are equally equipped with technological infrastructure. Therefore, teachers need to adapt the use of AI-Based Digital Storytelling according to the classroom conditions and make sure that the focus remains on language skills development. The integration of Artificial Intelligence can partly address these challenges by offering quicker access to story prompts, automated feedback, and multimedia support. However, its application must still be directed towards supporting oral communication rather than producing sophisticated digital products. Hence, while AI-Based Digital Storytelling holds great potential for improving students' speaking proficiency, its success largely depends on the teacher's ability to manage the classroom, select appropriate media, and align the technology with language learning objectives.

In conclusion, AI-Based Digital Storytelling represents an innovative instructional approach that combines narrative and technology to enhance student engagement and language learning. It provides opportunities for learners to practice speaking in meaningful contexts while fostering creativity, collaboration, and motivation. The integration of artificial intelligence further expands its potential by offering scaffolding and reducing technical burdens, allowing students to focus more on oral performance. Nevertheless, its effectiveness still depends on how teachers implement it and ensure that the main focus remains on language development rather than solely on digital production. Given these strengths

and limitations, AI-Based Digital Storytelling holds significant promise as a medium for supporting the improvement of EFL learners' speaking skills.

2. Speaking Skills

Speaking is one of the most complex and essential skills in second language acquisition. Leong and Seyedah (2017, in Harmawati et al., 2022) define speaking as a productive skill requiring the articulation of thoughts into spoken words in real time. Richard (2008, in Fitri et al., 2022) highlights that speaking involves rapid processing of language, grammar, vocabulary, and meaning, often under pressure. Astuti and Chakim (2023) explain that speaking is not only a cognitive task but also a social and affective one. Learners often struggle due to anxiety, limited exposure, and lack of confidence. In EFL settings, these barriers are intensified by the lack of authentic communicative opportunities.

Idayani (2019) highlight that speaking involves both linguistic (e.g., grammar, vocabulary, pronunciation) and sociolinguistic competencies (e.g., knowing when, why, and how to speak appropriately in context). According to Zuhriyah (2017, in Astuti & Chakim, 2023), speaking is an interactive process that requires both the speaker and listener to co-construct meaning.

3. The Relationship between DST and Speaking Skills

A growing body of research confirms the strong correlation between AI-Based Digital Storytelling and improved speaking performance. AI-Based Digital Storytelling provides students with authentic, meaningful opportunities to plan, practice, and present spoken language. According to Astuti and Chakim (2023), students who engaged in AI-Based Digital Storytelling projects demonstrated statistically significant improvements in speaking proficiency compared to those in control groups. Their findings showed that AI-Based Digital Storytelling enhances fluency, accuracy, and overall communicative competence.

Speaking is widely recognized as one of the most complex skills to acquire in second language learning. Unlike receptive skills such as listening and reading, speaking demands real-time production that combines accuracy, fluency, and coherence simultaneously (Richards, 2008; Leong & Ahmadi, 2017). It requires the integration of multiple components: vocabulary, grammar, pronunciation, and pragmatic competence, while also considering the social and cultural context of communication. According to Brown (2004), speaking is an interactive process involving not only linguistic knowledge but also the ability to construct meaning collaboratively with listeners. These multifaceted demands often make speaking the most challenging skill for EFL learners.

The challenges of speaking have been widely discussed in the literature. Students frequently struggle with anxiety, lack of confidence, and fear of negative evaluation from peers or teachers, which hinder their ability to speak fluently (Horwitz, 2016; Zhang, 2020). Moreover, EFL learners often have limited opportunities for authentic interaction in English, making it difficult for them to practice beyond the classroom (Zarei & Navidinia, 2024). A further issue is that traditional teaching practices in many contexts focus more heavily on grammar and writing skills, leaving speaking as an underdeveloped skill (Maya & Halim, 2021; Fitri et al., 2022). This imbalance has created what Ur (1996) called a "speaking gap," where students can perform written exercises but cannot effectively use the language in oral communication.

Lustenberger (2023) found that AI-Based Digital Storytelling tasks scaffold language development by allowing students to recycle previously learned language in creative and engaging contexts. AI-Based Digital Storytelling fosters a low-anxiety environment where students feel safe to experiment with language, improving their confidence and participation.

In the Indonesian classroom context, these problems are also apparent. During the researcher's teaching internship (PPL) at SMK Al-Mahrusiyah Kediri, several issues were identified in relation to students'

speaking proficiency. Many students exhibited hesitation and reluctance to participate in oral activities due to a lack of confidence and speaking anxiety, which is consistent with findings by Harmawati et al. (2022) that anxiety remains a significant barrier to oral communication among EFL learners. Students also tended to rely on code-switching between English and Bahasa Indonesia, which disrupted fluency. Furthermore, limited vocabulary knowledge restricted their ability to sustain ideas, leading to frequent pauses and repetitions. These challenges reflect common issues identified in previous studies, where EFL students demonstrated poor fluency, inadequate vocabulary mastery, and difficulty in organizing ideas when asked to perform speaking tasks (Astuti & Chakim, 2023; Idayani, 2019). Such classroom realities highlight the urgent need for more engaging, student-centered approaches to speaking instruction.

Another observation during the internship was the teacher-centered orientation of classroom practices. The teacher dominated much of the classroom interaction, while students remained passive recipients of knowledge. This situation echoes Littlewood's (2004) observation that many Asian classrooms are still dominated by teacher talk, giving learners insufficient opportunities to practice communicative English. In the case of SMK Al-Mahrusiyah, the lack of meaningful speaking practice opportunities further compounded the students' reluctance to use English actively, resulting in limited progress in oral communication skills.

Within the Indonesian national curriculum (Kurikulum Merdeka), speaking skills in grade 10 are structured to support students in both transactional and interpersonal communication. Students are expected to be able to introduce themselves, interact in daily conversations, express feelings and opinions, and deliver short monologues such as descriptive and recount texts (Ministry of Education, Culture, Research, and Technology, 2021). Among these, recount text plays a particularly significant role in speaking activities. Recount texts enable students to retell personal or historical experiences in a structured sequence, emphasizing the use of the past tense, time connectors, and logical sequencing of events (Knapp &

Watkins, 2005). They also encourage learners to develop narrative skills, personalize language use, and practice both fluency and accuracy. This genre thus provides a practical medium for integrating grammar, vocabulary, and pronunciation in communicative practice, making it highly suitable for classroom-based speaking tasks.

Arizah et al. (2021) and Idayani (2019) highlight the positive emotional and motivational impact of DST. It encourages learners to express personal experiences, develop narratives, and collaborate in small groups—key factors that contribute to increased confidence and improved speaking outcomes.

In conclusion, speaking remains a major challenge for EFL learners both globally and locally. General problems such as anxiety, lack of fluency, and limited vocabulary are compounded in the classroom by passive learning environments and insufficient practice opportunities. At SMK Al-Mahrusiyah Kediri, these challenges were directly observed during the researcher's internship, demonstrating the practical relevance of addressing speaking problems through innovative approaches. By aligning these issues with the curriculum's emphasis on recount texts and communicative skills in grade 10, this study underscores the importance of designing interventions—such as AI-Based Digital Storytelling—that both address learners' real needs and meet curricular objectives. AI-Based Digital Storytelling integrates language, technology, and storytelling to provide a holistic approach to improving speaking skills. It aligns with communicative and task-based teaching principles, making it particularly effective in modern EFL classrooms, including those in technologically limited environments.

4. Recount Text

a. Definition of Recount Text

Recount text is a genre of text that retells past events or experiences, typically in chronological order. In the EFL context,

recount texts are often used to enhance learners' ability to organize spoken or written ideas based on personal experiences. According to Knapp and Watkins (2005), recounts are useful for building students' narrative and descriptive abilities as they learn to sequence events logically and use appropriate past tense structures.

The use of recount text in AI-Based Digital Storytelling allows students to reflect on personal or historical experiences while practicing speaking in a more meaningful way. Since the structure of recounts usually involves an orientation, a sequence of events, and a reorientation or conclusion, they provide a clear framework for students to follow when preparing their digital stories. This makes recount texts particularly suitable for AI-Based Digital Storytelling activities aimed at improving speaking fluency, vocabulary, and confidence.

b. Types of Recount Text

1) Personal Recount: talks about the writer's own personal experiences. This type usually includes details about memorable moments, such as a holiday, a funny event, or a school activity. For example, someone might write about their trip to the beach or a birthday celebration. The purpose is to share personal feelings and moments with others.
2) Factual Recount: based on actual events and presents information accurately. It is often used in news reports, police reports, or historical accounts. The content is factual rather than imaginative. For instance, a student might write a factual recount about a school field trip or an earthquake event.
3) Imaginative Recount: It describes fictional events as if they really happened. This type allows the writer to use their imagination while still following the structure of a recount text. An example would be a story about meeting a dinosaur or traveling to the moon.

4) Historical Recount: retells events from history. It focuses on significant historical moments and is often used in textbooks or educational contexts. This type is important for sharing knowledge about the past, such as the story of a country's independence or a famous battle.

c. Generic Structure of Recount Text

a) Orientation: where the writer introduces the background information, including who was involved, what happened, when it occurred, and where it took place.
b) Events: which presents the events in chronological order.
c) Re-orientation: It provides a closing statement, often including the writer's personal comment or conclusion about the event.

B. Previous Study

Research on AI-Based Digital Storytelling (DST) in EFL classrooms has consistently highlighted its potential to enhance speaking proficiency. At the secondary level, Astuti and Chakim (2023) demonstrated that DST not only improved students' speaking fluency but also increased their motivation to participate in classroom activities. Similarly, Idayani (2019) confirmed that narrative-based storytelling tasks helped learners develop oral performance and confidence. These findings resonate with earlier international studies, which noted that DST combines creativity with language practice, providing learners with meaningful opportunities for communication and self-expression (Sadik, 2008; Yang & Wu, 2012).

More recent research has focused on specific dimensions of AI-Based Digital Storytelling's impact. Khotimah and Ningrum (2023) showed that both male and female learners benefitted equally from AI-Based Digital Storytelling, suggesting its universal effectiveness. Tymoshchuk (2024) further emphasized that AI-Based Digital Storytelling contributes not only to linguistic development but also to learners' motivation and communicative competence. In the online learning

context, Yavuz and Celik (2022) reported that AI-Based Digital Storytelling created authentic opportunities for interaction, while Ali and Ahmed (2021) found that learners gained vocabulary, fluency, and confidence through storytelling activities. Lee and Park (2024) added another perspective by demonstrating that AI-Based Digital Storytelling reduced speaking-related anxiety and supported learners' self-regulation, which in turn improved oral performance.

Beyond speaking alone, several studies explored the broader benefits of AI-Based Digital Storytelling. Rahman and Sari (2021) observed that students showed progress not only in speaking but also in writing, suggesting the versatility of AI-Based Digital Storytelling as a pedagogical tool. Similarly, Muñoz-Alcón et al. (2023) investigated AI-Based Digital Storytelling platforms for assessment and identified both advantages and challenges in evaluating learners' oral proficiency. In Indonesian classrooms, Maharsi (2021), Sari and Wahyudin (2020), and Hermawan and Yuliana (2021) consistently reported improvements in motivation, participation, and speaking fluency. At the university level, Idayani (2019) noted that students engaged in AI-Based Digital Storytelling projects performed better in post-tests, particularly in organizing their ideas and expanding vocabulary. Arizah et al. (2021) added that AI-Based Digital Storytelling fostered collaboration among learners, while Lustenberger (2023) stressed that DST aligns with Task-Based Language Teaching and remains applicable even in technologically limited environments.

Despite the growing body of evidence, most studies were conducted in general secondary or tertiary institutions with relatively good access to technology. There remains little exploration of AI-Based Digital Storytelling in pesantren-based schools, where students often face limited technological exposure and lower speaking proficiency. In these contexts, classrooms tend to remain teacher-centered, giving learners few opportunities to practice communicative English (Littlewood, 2004; Leong & Ahmadi, 2017). Addressing this gap is essential to understanding the adaptability and effectiveness of AI-Based Digital Storytelling in low-resource environments. Consequently, this study investigates the implementation of AI-Based Digital Storytelling compared with picture-based storytelling in a vocational high school within a pesantren setting, aiming to provide insights into how AI-Based Digital Storytelling can best support students' speaking development under such conditions.