

MULTIMODAL DIGITAL STORYTELLING FOR DEVELOPING SPEAKING COMPETENCE AND CRITICAL THINKING SKILL

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ABSTRACTS	ARTICLE INFO
In the digital era, English learners are expected not only to communicate effectively but also to demonstrate higher-order thinking skills. MDST integrates various communication modes, including text, images, audio, video, and animation, enabling learners to construct meaningful and engaging narratives. The study aims to examine the effectiveness of MDST in improving students' oral communication abilities and fostering critical thinking through collaborative and reflective learning activities at the English Education Department of Mandalika University of Education. This research employed a mixed-methods design, combining quantitative and qualitative approaches. The participants consisted of undergraduate students enrolled in an English-speaking course. Quantitative data were collected through speaking performance assessments and critical thinking questionnaires administered before and after the implementation of MDST. Meanwhile, qualitative data were obtained from classroom observations and students' reflective journals. Quantitative data were analyzed using descriptive statistics and paired-sample t-tests to determine the significance of students' improvement, while qualitative data were analyzed through thematic analysis to identify emerging patterns related to learners' experiences and perceptions. The findings reveal that the implementation of MDST significantly improves students' speaking fluency, pronunciation, vocabulary use, and confidence in expressing ideas. Furthermore, the processes of planning, organizing, evaluating information, and presenting digital stories encourage learners to analyze issues critically, solve problems creatively, and make informed decisions. The integration of technology and storytelling also enhances students' motivation and active participation in English learning. The study concludes that Multimodal Digital Storytelling serves as an innovative pedagogical approach that effectively promotes both speaking competence and critical thinking skills.	Article History: Received: 17th July 2026 Revised: 18th July 2026 Published: July 2026 Keywords: Multimodal Digital Storytelling; Speaking Competence; Critical Thinking Skills; English Language Learning

INTRODUCTION

The rapid advancement of digital technology has significantly transformed educational practices, particularly in English language teaching. In the twenty-first century, students are expected not only to master linguistic competence but also to develop higher-order thinking skills, creativity, communication, collaboration, and digital literacy. Consequently, English language instruction should provide learning experiences that integrate language development with critical thinking and technology-enhanced learning environments.

Speaking competence is considered one of the most essential skills in English language learning because it enables learners to communicate ideas, opinions, and experiences effectively. According to Brown (2004), speaking is an interactive process of constructing meaning that involves producing, receiving, and processing information.

Similarly, Nunan (2003) argues that speaking is the productive oral skill consisting of systematic verbal utterances to convey meaning. However, many English learners still encounter difficulties in speaking due to limited vocabulary, lack of confidence, fear of making mistakes, and insufficient opportunities to practice authentic communication.

Besides speaking competence, critical thinking has become an indispensable skill in modern education. Facione (2015) defines critical thinking as purposeful, self-regulatory judgment that results in interpretation, analysis, evaluation, and inference. Likewise, Ennis (2011) states that critical thinking is reasonable and reflective thinking focused on deciding what to believe or do. The integration of critical thinking into language learning enables students to analyze information, solve problems, and express arguments logically and effectively in communicative contexts.

To address these educational demands, innovative pedagogical approaches are needed. One promising approach is Multimodal Digital Storytelling (MDST). Digital storytelling refers to the practice of combining traditional storytelling with digital media such as images, audio, videos, animations, and texts to create meaningful narratives (Robin, 2008). The multimodal perspective emphasizes the use of multiple semiotic resources in meaning-making processes. Kress (2010) explains that multimodality involves communication through various modes, including linguistic, visual, audio, gestural, and spatial elements.

The theoretical foundation of MDST can be explained through the Multimodality Theory proposed by Kress and van Leeuwen (2006), which suggests that meaning is constructed through the interaction of multiple modes rather than through language alone. Furthermore, Mayer's (2009) Cognitive Theory of Multimedia Learning posits that learners understand information more effectively when it is presented through a combination of words and images because learning occurs through dual channels of visual and auditory processing. In addition, Vygotsky's (1978) Social Constructivist Theory emphasizes that learning is socially mediated and occurs through interaction, collaboration, and meaningful experiences. Through collaborative digital storytelling activities, students actively construct knowledge while developing language and thinking skills.

Several previous studies have reported the positive effects of digital storytelling in language learning. Digital storytelling has been found to improve students' speaking performance, motivation, creativity, and engagement in learning activities. It provides authentic opportunities for students to practice pronunciation, vocabulary usage, fluency, and communicative competence while simultaneously encouraging them to organize ideas, evaluate information, and present arguments critically.

Despite the growing interest in digital storytelling, studies specifically examining the integration of multimodal digital storytelling in developing both speaking competence and critical thinking skills remain limited, particularly in English as a Foreign Language (EFL) contexts. Most previous studies have focused primarily on language achievement or students' motivation, with less attention given to the simultaneous enhancement of higher-order thinking skills.

Therefore, this study aims to investigate the implementation of Multimodal Digital Storytelling in developing students' speaking competence and critical thinking skills in English language learning. This study is expected to contribute theoretically to the growing body of literature on technology-enhanced language learning and provide practical implications for English teachers in designing innovative and meaningful instructional practices that foster communicative competence and critical thinking in the digital era.

RESEARCH METHODS

This study employs a mixed-methods research design, particularly an embedded mixed-method design, to investigate the effectiveness of Multimodal Digital Storytelling (MDST) in developing students' speaking competence and critical thinking skills. Quantitative data are used to measure the improvement of students' speaking and critical thinking skills, while qualitative data explore students' experiences and perceptions during the implementation of MDST. The study also adopts a quasi-experimental pre-test and post-test design involving one experimental group. This design allows the researcher to examine the changes in students' abilities before and after the intervention. The study is conducted at Mandalika University of Education (Universitas Pendidikan Mandalika / UNDIKMA), Indonesia. The participants consist of undergraduate students enrolled in the English Education Study Program. A purposive sampling technique is employed to select participants who are taking speaking-related courses and have basic digital literacy skills. There were 30–40 students participate in the study. These participants are frequently engaging in speaking activities and are expected to integrate digital technology into language learning. The data collection techniques consist of several instruments to obtain comprehensive data regarding students' speaking competence and critical thinking development. The primary instrument is a speaking test, administered as both a pre-test and post-test. The test aims to measure students' improvement in speaking competence after participating in Multimodal Digital Storytelling (MDST) activities. The data obtained from the implementation of Multimodal Digital Storytelling (MDST) were analyzed using both quantitative and qualitative approaches to comprehensively examine students' speaking competence and critical thinking development. The quantitative data were derived from the students' speaking performance scores obtained through pre-test and post-test assessments. The analysis aimed to determine whether MDST significantly improved students' speaking competence. The qualitative data were analyzed using the Interactive Model of Data Analysis proposed by Miles, Huberman, and Saldaña (2014), consisting of three stages: a). Data Reduction, b) Data Display and c) Conclusion Drawing and Verification

RESEARCH FINDING AND DISCUSSION

The implementation of Multimodal Digital Storytelling (MDST) demonstrated positive effects on students' speaking competence and critical thinking skills. The study involved undergraduate students of Universitas Pendidikan Mandalika who participated in a series of storytelling projects integrating text, images, audio narration, video clips, animations, and digital applications. The findings indicated significant improvement in students' speaking performance after participating in MDST activities. Students showed better pronunciation, fluency, vocabulary usage, grammatical accuracy, and confidence in delivering oral presentations. During the pre-implementation stage, many students experienced difficulties in expressing ideas orally, frequently paused during presentations, and demonstrated limited vocabulary. However, after engaging in MDST projects, students became more confident and capable of organizing their ideas coherently.

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During the pre-implementation stage, many students experienced difficulties in expressing ideas orally, frequently paused during presentations, and demonstrated limited vocabulary. However, after engaging in MDST projects, students became more confident and capable of organizing their ideas coherently. The improvement can be explained through the theory of speaking competence proposed by Brown (2004), who states that speaking competence involves micro-skills and macro-skills, including pronunciation, fluency, vocabulary, discourse management, and strategic competence. The multimodal nature of digital storytelling provided students with opportunities to rehearse, revise, and reflect on their speaking performance, leading to greater communicative competence. Furthermore, Harmer (2007) argues that speaking activities should encourage meaningful communication and provide authentic contexts for language use. MDST enabled students to communicate personal experiences and social issues creatively, thereby increasing motivation and engagement. The findings also support Robin's (2008) assertion that digital storytelling combines traditional storytelling with multimedia elements, creating meaningful learning experiences and enhancing communication skills. Students reported that recording and editing their stories allowed them to practice pronunciation repeatedly before presenting the final product.

The results further revealed that MDST significantly contributed to the development of students' critical thinking skills. Students demonstrated improved abilities in analyzing information, evaluating sources, making interpretations, and generating creative solutions to problems presented in their stories. The process of creating digital stories required students to determine themes, select relevant information, organize ideas logically, and justify their viewpoints. These activities stimulated higher-order thinking processes. This finding aligns with Facione's (1990) framework of critical thinking, which includes interpretation, analysis, evaluation, inference, explanation, and self-regulation. Through MDST, students engaged in these cognitive processes while planning and producing their stories. Similarly, Ennis (2011) defines critical thinking as reasonable and reflective thinking focused on deciding what to believe or do. Students had to critically evaluate information sources and make decisions regarding the content and presentation of their stories.

The integration of multiple modes of communication also encouraged students to think creatively and critically about how visual, textual, and auditory elements could effectively convey meaning. Interview data indicated that students had positive perceptions of MDST implementation. Most participants stated that digital storytelling made speaking activities more enjoyable and reduced anxiety during oral presentations. Students also perceived that multimedia integration helped them understand topics more deeply and express ideas more effectively. The collaborative aspects of story development encouraged discussion, negotiation, and peer feedback, further contributing to the enhancement of critical thinking skills.

CONCLUSION

The implementation of Multimodal Digital Storytelling (MDST) demonstrated positive effects on students' speaking competence and critical thinking skills. The study involved undergraduate students of Universitas Pendidikan Mandalika who participated in a series of storytelling projects integrating text, images, audio narration, video clips, animations, and digital applications. In MDST projects, students became active creators rather than passive recipients of information, leading to greater engagement and deeper understanding. The final digital storytelling product represented the highest cognitive level,

namely creating. The multimodal environment encourages students to synthesize information from various sources and present their ideas in meaningful ways.

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