

**EXPLORING PRE-SERVICE TEACHERS' EXPERIENCES
WITH DIGITAL MULTIMODAL COMPOSING
IN NARRATIVE STORYTELLING**

**Irma Savitri Sadikin^{1*}, Imam Santosa², Muhammad Rijal Fadli³, Khusnul Fatonah⁴,
Muhamad Bahrul Ulum⁵**

¹irma.savitri@esaunggul.ac.id, ²imam.santosa@esaunggul.ac.id, ³rijal.fadli@esaunggul.ac.id,
⁴khusnul.fatonah@esaunggul.ac.id, ⁵m.bahrul_ulum@esaunggul.ac.id

UNIVERSITAS ESA UNGGUL

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ABSTRACT

In the 21st century, digital competency is a fundamental requirement for language instruction, necessitating the integration of technology into teacher training programs. This study investigates four pre-service teachers' experiences in designing digital narrative videos using the Digital Multimodal Composing (DMC) framework. Adopting a narrative inquiry approach, data were gathered through reflective diaries and semi-structured interviews to explore how participants engaged with the critical, creative, and technical domains of multimodal composition. Findings indicate that pre-service teachers initially faced challenges in conceptualizing multimodal elements but gradually developed confidence in integrating text, visuals, and audio to enhance their instructional materials. They critically analyzed multimodal texts, structured their narrative-based lessons for greater engagement, and refined their technical proficiency with digital tools. Peer discussions and online tutorials played a significant role in helping them navigate the complexities of multimodal composing, fostering collaborative learning and iterative refinement. This study emphasizes the role of DMC in preparing pre-service teachers for technology-enhanced instruction through structured support, hands-on practice, and digital literacy training. By merging creativity with pedagogy, it highlights the importance of integrating multimodal composing into teacher education programs in EFL instruction.

Keywords: Digital Multimodal Composing, Narrative storytelling, EFL instruction, Pre-service teachers

A. INTRODUCTION

The advancement of digital technology has profoundly impacted language teaching methodologies, especially in English as a Foreign Language (EFL) courses. Educators are increasingly shifting from conventional text-based instruction to Digital Multimodal Composing (DMC), which combines text, images, sound, and movement to enhance meaning-making and engagement (Hafner & Ho, 2020; Lim & Unsworth, 2023; Zhang &

Yu, 2022). DMC has been acknowledged as an effective teaching instrument for enhancing linguistic proficiency, creativity, and digital literacy (Kim et al., 2022). In teacher education, pre-service teachers are required to cultivate digital competences to produce interactive instructional materials, so acquiring skills pertinent to contemporary classrooms (Liang & Lim, 2020; Tour & Barnes, 2021). However, DMC has been extensively utilized in writing pedagogy, its application in grammar instruction and digital narrative storytelling within TEFL teacher training is still inadequately examined.

The incorporation of multimodal writing in pre-service teacher education offers a systematic method for improving educational efficacy. Numerous theoretical frameworks endorse this integration, notably Systemic Functional Linguistics (SFL) and Design Thinking (Halliday, 1978; Lim & Nguyen, 2022). For instance, Jewitt (2016) stated that SFL emphasizes the interaction of semiotic resources—such as images, text, and sound—in meaning construction, making it crucial for the advancement of multimodal literacy. In other words, design thinking promotes iterative learning, enabling pre-service teachers to create, design, and refine their digital narratives according to organized pedagogical frameworks (Liang & Lim, 2020; Tour & Barnes, 2021). Prior research indicates that the successful application of multimodal frameworks in teacher education necessitates scaffolding strategies to assist pre-service teachers in utilizing multimodal tools and balancing linguistic precision with creativity (Kim et al., 2022; Jiang & Ren, 2020).

Despite the advantages of DMC, pre-service educators frequently encounter difficulties in incorporating digital storytelling into TEFL pedagogy. Numerous individuals encounter difficulties with digital literacy, multimodal coherence, and pedagogical clarity, especially during the shift from conventional text-centric teaching to interactive digital composition (Zhang & Yu, 2022; Lim & Unsworth, 2023). Furthermore, whereas multimodal composition fosters engagement and creativity, research suggests that inexperienced educators may emphasize aesthetics at the expense of linguistic precision, leading to pedagogically inefficient instructional materials (McGrail et al., 2021; García-Pinar, 2024). A further problem lies in the technical intricacy of multimodal technologies, as students frequently necessitate systematic assistance in correctly synchronizing digital components (Hafner & Ho, 2020; Kim et al., 2022). Prior studies have highlighted the necessity of scaffolded instruction, peer collaboration, and explicit training to assist pre-service instructors in efficiently navigating multimodal composing (Lim & Nguyen, 2022; Jiang et al., 2022). Nevertheless, few empirical researches have particularly investigated how pre-service teachers envision, plan, and construct digital multimodal narratives for Teaching English as a Foreign Language instruction

This study seeks to examine pre-service teachers' experiences in applying DMC within a TEFL narrative storytelling framework, concentrating on the three domains of the DMC pedagogical model established by Liang and Lim (2020):

1. Critical Domain (Conceptualization) – the manner in which pre-service teachers assess audience requirements and multimodal literacy components in the development of story classes.
2. Creative Domain (Preparation) - the methods employed to produce ideas, organize content, and utilize digital resources efficiently in multimodal storytelling.
3. Technical Domain (Creation) - the manner in which they use digital tools, include multimodal components, and overcome technical obstacles.

This study used a narrative inquiry technique to address the existing research gap by documenting pre-service teachers' lived experiences in creating multimodal teaching lessons. The results could yield educational insights on how TEFL course program can improve pre-service teachers' digital, pedagogical, and multimodal skills, presenting organized directives for incorporating DMC into EFL instruction. Consequently, this study is directed by the subsequent research question:

How do pre-service teachers engage with the critical, creative, and technical domains of the Digital Multimodal Composing (DMC) framework when designing narrative story videos in EFL instruction?

By addressing these questions, this research aims to contribute to multimodal pedagogy and digital literacy development in TEFL pre-service teachers, bridging the gap between theoretical frameworks and practical applications in designing digital narrative storytelling through DMC.

1. Digital Multimodal Composing (DMC) in Language Learning

Digital Multimodal Composing (DMC) has garnered considerable interest in second language (L2) teaching, as it allows learners to create meaning by synthesizing text, pictures, sound, and motion. Hafner and Ho (2020) and Wulan et al. (2022) assert that DMC promotes enhanced participation in language acquisition by prompting students to utilize other semiotic resources instead of depending exclusively on conventional text-based literacy. Kessler (2024) and Zhang and Yu (2022) believe that the multimodal method facilitates linguistic development and augments digital literacy, essential for modern communication.

Nonetheless, the effective implementation of DMC in learning a language presents several problems. Jiang and Ren (2020) observe that numerous educators and students encounter difficulties in transitioning from conventional writing to multimodal composition, especially with the evaluation of students' multimodal projects. Tour and Barnes (2021) emphasize that the absence of explicit assessment criteria in multimodal composition frequently results in instructors being unclear about evaluating students' language and digital competencies concurrently. In response to these issues, research has increasingly advocated for organized pedagogical frameworks that assist educators in effectively incorporating multimodal composing in EFL classrooms (Lim & Unsworth, 2023; Trisanti et al., 2022).

2. Digital Multimodal Composing Framework

A number pedagogical models have been suggested to facilitate the effective implementation of DMC. Liang and Lim (2020) present a structured approach that organizes the multimodal composing process into three primary domains: Critical Domain (Conceptualization), Creative Domain (Preparation), and Technical Domain (Creation). Lim and Unsworth (2023) argue that the Critical Domain emphasizes the critical analysis of multimodal texts, facilitating students' evaluation of the interaction among various semiotic resources in meaning-making. Anderson et al. (2018) assert that this stage is crucial for developing students' comprehension of audience and rhetorical ability to make choices in digital composition.

The Creative Domain, as articulated by Jiang et al. (2022), highlights the importance of content design and organization, urging students to explore diverse modes including animations, voiceovers, and text overlays to facilitate meaning-making. Hafner and Ho (2020) contend that structured guidance during this phase enables learners to harmonize

creativity with pedagogical clarity, thereby ensuring the effectiveness of their multimodal compositions for language learning. In the final stage, the Technical Domain, Zhang et al. (2021) analyze the development of digital fluency in students through practical engagement with editing tools, video-making software, and various digital platforms. Lim and Nguyen (2022) emphasize that technical proficiency is essential for enabling learners to synchronize multimodal elements, a skill frequently difficult for individuals with limited digital experience.

Tour and Barnes (2021) observe that despite the increasing research on DMC frameworks, pre-service teachers frequently encounter difficulties in effectively integrating multimodal composing into their instructional design, primarily due to insufficient training. Researchers highlight the necessity of explicit scaffolding techniques and structured teacher training programs to equip educators with the skills required for successful implementation of multimodal teaching (Zhang & Yu, 2022; Hafner & Ho, 2020).

3. Digital Storytelling in EFL Instruction

Digital storytelling has become a significant application of digital media communication in English as a Foreign Language instruction, enabling students to create narrative-based multimodal compositions that improve their linguistic and digital competencies. Jiang et al. (2020) and Sadikin et al. (2023) assert that digital storytelling offers a significant context for learners to engage in language practice. In addition, the integration of text, visuals, and audio promotes deeper cognitive processing among students, thereby enhancing their comprehension of complex linguistic structures (Christiansen et al., 2016; Alemi et al., 2022).

García-Pinar (2024) asserts that digital storytelling enhances creativity and self-expression, enabling students to personalize their learning experiences and cultivate multimodal literacy. Anderson et al. (2018) highlight that digital narratives offer genuine opportunities for students to utilize language in context, thereby enhancing the engagement and accessibility of grammar instruction. Research by Kim et al. (2022) indicates that although digital storytelling improves student motivation, technical difficulties, including the synchronization of narration with visuals and the maintenance of multimodal cohesion, frequently impede students' capacity to create well-structured narratives (Kim et al. 2022; Alemi et al. 2022). Navila et al. (2023) emphasize the necessity of structured digital literacy training, providing students with explicit instruction on the effective integration of multimodal elements. Lim and Nguyen (2022) emphasize the importance of collaborative learning in aiding students throughout the storytelling process, as peer feedback facilitates then iterative quality of their narratives. In other words, incorporating scaffolding techniques and technology-supported feedback can enhance digital storytelling as a valuable tool for EFL learners, improving their narrative skills and multimodal competence

4. Challenges in Implementing DMC in TEFL Pre-Service Teacher Training

Despite its pedagogical promise, the implementation of Digital Multimodal Composing (DMC) in TEFL pre-service teacher education presents a range of challenges. One of the most prominent issues is the disconnect between theoretical understanding and practical application. While pedagogical models such as Liang and Lim's (2020) three-domain framework offer structured guidance, research shows that pre-service teachers often lack the pedagogical readiness to apply these concepts effectively in classroom contexts (Tour &

Barnes, 2021). This difficulty is compounded by insufficient hands-on practice and lack of structured support during teacher training programs (Zhang & Yu, 2022).

Another major challenge relates to digital literacy. Many pre-service teachers begin their training with limited experience using tools like *Canva*, *CapCut*, or audio-visual editing platforms, which can lead to uncertainty in multimodal design. Although Hafner and Ho (2020) focus on the need for effective assessment frameworks, their work highlights the complexity of integrating multiple modes of meaning-making—such as text, visuals, and audio—in a coherent composition. Similarly, Lim and Unsworth (2023) emphasize that learners require guided support to develop multimodal literacy, noting that effective integration of semiotic resources demands careful pedagogical design. Without structured guidance, students may struggle to create purposeful, cohesive multimodal texts. Assessment practices also pose a significant barrier. As observed by Tour and Barnes (2021), many instructors lack clarity on how to evaluate multimodal compositions effectively, particularly when attempting to assess both language competence and digital creativity. Zhang and Yu (2022) echo this concern, emphasizing that multimodal assessment requires updated criteria that go beyond traditional writing rubrics to include elements such as narrative coherence, visual impact, and modal integration.

Lastly, several studies point to technical and compositional difficulties in digital storytelling. For instance, Navila et al. (2023) found that students face challenges in synchronizing visual and audio components, maintaining pacing, and sequencing structures—all essential for delivering coherent and engaging multimodal lessons. These recurring issues suggest that while DMC holds considerable promise for enriching language teacher education, its successful implementation requires deliberate scaffolding, ongoing peer collaboration, and explicit pedagogical training. This study responds to these challenges by documenting how pre-service teachers experience and engage with the critical, creative, and technical dimensions of DMC when designing narrative storytelling videos in a TEFL context.

B. METHOD

This study employed a narrative inquiry (NI) approach to explore EFL pre-service teachers' experiences in designing narrative videos using the Digital Multimodal Composing (DMC) framework. Specifically, it examined their engagement with the critical, creative, and technical domains of multimodal composing, as defined by Liang and Lim (2020). A narrative inquiry approach was selected because it enables researchers to gain an in-depth understanding of participants' lived experiences and meaning-making processes (Clandinin & Connelly, 2000; Barkhuizen et al., 2014). The participants were undergraduate students enrolled in a TEFL course at a higher education institution in Indonesia. These pre-service teachers had no prior professional teaching experience and were still pursuing their bachelor's degrees. After completing the course, four students—Imam, Dion, Lisa, and Maya (pseudonyms)—volunteered to participate in interviews.

Two data collection methods were used: reflective diaries and semi-structured interviews. The reflective diaries allowed participants to document their thoughts, teaching experiences, and challenges throughout the course. The semi-structured interviews provided deeper insights into their experiences, enabling them to elaborate on their reflections. Interviews are considered one of the most effective qualitative research methods for capturing detailed participant perspectives (Creswell, 2012). For data analysis, the study applied Braun and Clarke's (2006) thematic analysis to identify patterns and themes within the data.

Additionally, Widodo's (2014) analytical framework was used to structure the final findings effectively.

C. FINDINGS AND DISCUSSION

This section presents the experiences of pre-service teachers in designing digital storytelling books using Digital Multimodal Composing (DMC). The findings are structured around the DMC framework, which consists of three domains: Critical Domain (Conceptualization), Creative Domain (Preparation), and Technical Domain (Creation). Data were gathered through teachers' reflective diaries and semi-structured interviews, offering in-depth insights into the participants' learning experiences with existing research to highlight the implications of DMC in EFL context.

1. Critical Domain (Conceptualization)

In the Critical Domain, pre-service teachers engaged in analyzing and interpreting multimodal elements within digital storytelling. Through explicit instruction, they were introduced to the metalanguage of multimodal texts, enabling them to critically assess how linguistic, visual, and audio elements interact to create meaning. Following Lim's (2018) recommendation, the participants were guided in deconstructing digital narratives, focusing on how word choice, color schemes, imagery, and video composition influence storytelling and audience engagement.

"I never really thought about how visuals, text, and colors worked together until I started planning my video using the storyboard. Seeing my ideas on paper first helped me understand how different elements interact. In Canva, I experimented with different visual effects and saw how subtle design choices could change the mood of my story. For example, I added a slow zoom effect to highlight important words in my narration, making them stand out more. Without the storyboard, I think I would have just added effects randomly, but now I see how everything needs to be intentional." (Maya-Interview)

"At first, I thought storyboarding was just sketching scenes, but when I started adding detailed notes about transitions, colors, and sound effects, I realized how important planning is. I used Canva to bring my storyboard to life, testing different font styles and background images before finalizing my design. I never really thought about how colors and typography could influence how a story feels, but now I see that a handwritten font can make a scene more personal, while bold letters can add intensity to dramatic moments. This process helped me make more intentional choices instead of just randomly adding elements." (Imam-Interview)

"At first, I was really unsure how to use Canva because I had never worked with a design tool before. But after sketching my ideas in the storyboard, I felt more confident. Instead of feeling lost, I had a guide to follow. I was surprised by how much visuals could change the way my story was received. For example, I initially used plain white backgrounds for my slides, but after looking at my storyboard, I realized I needed to add textures and warm colors to create a nostalgic feeling. Storyboarding made the process much easier because I already knew what I wanted before opening Canva." (Lisa-Interview)

"When I first used Canva, I just dragged and dropped elements without thinking too much about why I was choosing them. But after working with my storyboard, I realized that each element needs to have a purpose. I started aligning text placement with images, making sure that the visuals supported my story rather than distracting from it. For example, in my narrative, I had a moment of suspense, so I darkened the background and used slow fade-in effects. This wasn't something I would have thought about before using the storyboard, but it made a big difference in the final product." (Dion-Reflective)

The findings revealed that pre-service teachers experienced a significant shift in their understanding of multimodal storytelling, particularly in how colors, fonts, and visuals impact narrative construction. Initially, many participants admitted that they had not considered how non-linguistic elements contribute to meaning-making, assuming that storytelling was primarily a text-based process. However, as they engaged with storyboarding and Canva, they recognized that linguistic choices alone were insufficient to convey emotions, tone, or narrative flow effectively. This realization aligns with research indicating that multimodal literacy requires an understanding of how various semiotic resources—such as visuals, spatial organization, typography, and motion—work together to create engaging and meaningful narratives (Hafner & Ho, 2020; Lim & Unsworth, 2023; Jewitt, 2016). Across all participants, there was a clear progression from uncertainty to confidence as they learned to navigate digital platforms with purposeful multimodal integration. While some students initially struggled with design choices, storyboarding helped them structure their ideas before working in Canva, reducing cognitive overload and providing a clear visual plan for their projects. This finding supports previous studies emphasizing that scaffolded multimodal instruction, including structured pre-planning activities and guided digital tool exploration, significantly enhances students' ability to compose cohesive and pedagogically effective digital stories (Tour & Barnes, 2022; Zhang & Yu, 2022).

2. Creative Domain (Preparation)

During the Creative Domain (Preparation) stage, pre-service teachers transitioned from analyzing multimodal elements to actively designing their own narrative-based interactive learning videos. The assignment required them to select a narrative text lesson and develop a story-driven video that effectively integrated text, visuals, and audio. Working in groups, students engaged in collaborative discussions with their peers and the instructor to refine their concepts, ensuring that their chosen narratives aligned with the course learning objectives. Initially, some participants struggled with narrowing down their story ideas and structuring their content cohesively. However, through guided discussions and brainstorming sessions, they gained clarity on narrative sequencing, character development, and multimodal composition techniques. Many students highlighted that working in groups enhanced their creativity, as they could exchange ideas, provide feedback, and experiment with different storytelling techniques. This stage also reinforced the importance of planning and structuring their multimodal compositions, helping them visualize how semiotic resources—such as animated text, voiceovers, and transitions—could enhance audience engagement.

In the Creative Domain, pre-service teachers transitioned from understanding multimodal elements to designing and developing their own narrative-based instructional videos. This phase was marked by a growing awareness of how multimodal choices—such as story selection, visual design, and audio features—must align with pedagogical goals, particularly grammar instruction. Rather than simply retelling stories, participants began critically

evaluating how their digital narratives could serve both instructional clarity and learner engagement.

A recurring challenge among participants was selecting or adapting a narrative that was both visually adaptable and pedagogically aligned. Initially, they assumed that any engaging story could be used for instructional purposes. However, as they collaborated and received guidance, they realized the importance of intentional story structuring to support specific language objectives. This aligns with Eisenlauer and Karatza (2020), who argue that narrative texts in digital story must be purposefully chosen to facilitate targeted language learning.

“We thought any story would work, but as we started discussing, we realized that we needed a narrative that wasn’t just interesting but also educational... In the end, we decided that key grammar points should appear as text overlays to reinforce the lesson visually.” (Dion-Reflective)

This excerpt highlights the shift from aesthetic preference to pedagogical reasoning. Pre-service teachers began curating content that balanced creative potential with instructional clarity—an approach emphasized by Lim and Unsworth (2023), who stress the need for narrative coherence in DMC tasks.

Collaboration emerged as a critical factor in shaping this domain. Through group discussions, participants exchanged ideas, critiqued each other’s drafts, and collectively experimented with multimodal strategies. This social construction of knowledge not only enhanced their creativity but also improved their ability to problem-solve and make intentional design decisions.

“Talking to my group helped me understand how different elements like sound effects and transitions could enhance storytelling.” (Lisa, Interview)

These collaborative processes reflect the findings of Tour and Barnes (2021), who argue that peer interaction in DMC settings nurtures both digital confidence and multimodal awareness. Through negotiation and shared responsibilities—such as task division, script writing, and editing—participants not only produced more refined outputs but also developed a stronger sense of audience and purpose. Overall, the Creative Domain reveals how scaffolded collaboration fosters pre-service teachers’ ability to design pedagogically sound and creatively engaging multimodal compositions. Their evolving capacity to harmonize visual, auditory, and textual resources with learning goals reinforces DMC’s role in enhancing both digital literacy and pedagogical sophistication in teacher education.

2.1 Challenges in Selecting the Right Narrative Text

Selecting an appropriate narrative text proved to be a pivotal aspect of the digital multimodal composing process. Initially, many pre-service teachers underestimated the pedagogical complexity involved in identifying or adapting a story that was not only engaging but also aligned with specific grammar instruction objectives. There was a common assumption that any compelling narrative could be effectively repurposed for educational use. However, as the project progressed, participants became increasingly aware of the need to ensure coherence between the narrative content and instructional aims, particularly in relation to the visual and auditory modalities required for digital storytelling. This recognition led to deeper

critical reflection, collaborative negotiation, and strategic decision-making as they refined their story choices to better serve both creative and pedagogical purposes.

"We thought any story would work, but as we started discussing, we realized that we needed a narrative that wasn't just interesting but also educational. The story had to match the grammar lesson we were teaching and be visually adaptable for the video format. We watched several storytelling videos on YouTube, trying to figure out which types of narratives worked best with visuals. Some stories were too long, and others had too many abstract ideas that would be hard to represent using simple animations. After a lot of back and forth, we decided to combine elements from two different stories—one had a great sequence of events, while the other had simple, clear dialogues that we could modify to match our grammar focus. We also debated whether to use subtitles, and in the end, we decided that key grammar points should appear as text overlays to reinforce the lesson visually."(Dion-Reflective)

"Initially, I wanted to create a completely original story, thinking it would make our video more unique. But when I started writing the script, I realized how difficult it was to structure everything from scratch while keeping it educational. After discussing with my group, we agreed that modifying an existing story would be much more manageable. We looked at different children's story websites and picked one that was simple but engaging. We then tweaked the setting and added small interactive moments where characters would pause and explain certain grammar rules. One of the biggest challenges was making sure that the visuals matched the grammar explanations. At one point, we argued about whether to use speech bubbles or voiceovers for the explanations. Eventually, we settled on using both—speech bubbles for short clarifications and voiceovers for more detailed explanations. It took a lot of trial and error, but in the end, we were happy with how the visuals and narration worked together."(Maya-Interview)

Through these discussions, both groups navigated challenges in balancing creativity with pedagogical clarity. They experimented with different sources, adapted content to fit the learning objectives, and made strategic decisions on how visuals and audio should support grammar instruction. This process enhanced their ability to critically evaluate digital content while fostering collaboration in multimodal composition. In addition, the process of selecting an appropriate narrative text for digital multimodal composing (DMC) highlighted the pre-service teachers' evolving ability to balance creativity with pedagogical clarity. Many initially believed that any engaging story could be adapted into a digital format but soon realized that the narrative needed to be carefully structured to align with grammar instruction. This aligns with previous research emphasizing that narrative-based digital learning requires intentional content selection, ensuring that stories support linguistic goals while remaining engaging for learners (Eisenlauer & Karatza, 2020; Lim & Unsworth, 2023; Humairoh et al., 2024). The participants navigated these challenges by evaluating multiple sources, including children's story websites and YouTube storytelling videos, adapting elements that best fit their instructional objectives. Research suggests that pre-service teachers often struggle with curating digital content due to limited experience in selecting multimodal materials that reinforce pedagogical aims.

Collaboration played a crucial role in refining the selected narratives, as students engaged in discussions about whether to modify existing stories or create original ones. This process reflects findings from previous studies, which argue that peer collaboration in DMC fosters deeper engagement and enhances problem-solving skills, allowing learners to refine their content through iterative discussions (Tour & Barnes, 2021; Paradita, 2023). The groups also had to determine how best to integrate multimodal elements, debating whether to use speech bubbles, voiceovers, or text overlays to explain grammar rules. Research on multimodal literacy confirms that effective digital storytelling requires careful orchestration of semiotic resources to maintain coherence and enhance comprehension (Jewitt, 2016; Hafner, 2015). Their strategic decision-making in integrating visuals, text, and audio aligns with studies that highlight the importance of structured scaffolding in developing multimodal composing skills among pre-service teachers (Lim & Nguyen, 2022; García-Pinar, 2024). Ultimately, the pre-service teachers' reflections demonstrate how engaging in digital storytelling not only improves their content curation skills but also strengthens their multimodal awareness and pedagogical decision-making in EFL instruction (McGrail et al., 2021; Wang & Zhang, 2023).

2.2 Collaboration Enhances Creativity

As pre-service teachers advanced from story selection to the actual design phase of their multimodal projects, collaboration emerged as a critical factor in shaping the creative outcomes of their work. While earlier stages involved individual reflection on narrative coherence and pedagogical purpose, this phase emphasized the value of teamwork in refining ideas, solving problems, and making effective design choices. Group work enabled participants to draw on each other's strengths—such as editing skills, storytelling techniques, and digital tool familiarity—ultimately fostering more cohesive and pedagogically sound narrative videos.

"I think working with my group really helped because we all had different ideas. Someone suggested using voiceovers instead of text-heavy slides, and that made our video feel more like a real story instead of just a lesson." (Imam-Interview)

"Talking to my group helped me understand how different elements—like sound effects and transitions—could enhance storytelling. Someone in my group knew how to edit well, so we learned from each other." (Lisa, Interview)

"At first, I was nervous about adding animations, but after discussing it with my group, we found a way to use them effectively. I realized that moving visuals can actually help reinforce key parts of the story." (Dion-Reflective)

"We divided tasks, and that made everything more manageable. I focused on narration, another member handled animations, and another worked on transitions. It was a real team effort, and I don't think I could have done it as well on my own." (Maya-Interview)

These excerpts highlight the common realization among pre-service teachers that planning, selecting suitable narrative texts, and collaborating effectively were key aspects in successfully implementing Digital Multimodal Composing for storytelling videos. The findings reveal that collaboration played a crucial role in enhancing creativity and problem-solving among pre-service teachers as they developed their digital storytelling projects. Working in groups allowed participants to share ideas, distribute tasks effectively, and learn from each other's strengths. This aligns with previous research suggesting that collaborative

learning environments encourage deeper engagement with multimodal composing, as students can exchange expertise and refine their creative choices through peer discussions (Kim et al., 2022; Jiang, Yu, Zhao, 2021). Imam and Lisa's reflections highlight how group discussions fostered new perspectives on integrating voiceovers, sound effects, and transitions to improve storytelling quality, a key component in making multimodal narratives more immersive and engaging (Hafner & Ho, 2020; Zhang & Yu, 2022).

Additionally, students gained hands-on experience with digital tools, as seen in Dion and Maya's experiences, where peer support encouraged experimentation with animations and task division. Studies indicate that pre-service teachers often develop greater confidence in using digital tools when they work collaboratively, as they can seek immediate feedback and troubleshoot challenges together (Lim & Unsworth, 2023; García-Pinar, 2024). The division of responsibilities, as noted by Maya, demonstrates how structured teamwork can improve efficiency in multimodal projects and lead to higher-quality outputs (McGrail et al., 2021). These findings support the idea that collaborative DMC enhances not only technical skills but also students' ability to make intentional design decisions that align with storytelling and pedagogical goals (Jiang et al., 2022).

3. Technical Domain (Creation)

In this stage, pre-service teachers moved from planning to producing their digital narrative videos. They used *Canva* and *CapCut App* for slide design, animations, and video editing, while some relied on free AI tools for illustrations. Peer discussions helped them refine editing techniques and troubleshoot issues, while online tutorials provided guidance on using digital tools effectively. They finalized their topics, wrote scripts, and structured content to align with storytelling and language learning objectives. This phase enhanced their digital literacy, collaborative skills, and ability to integrate multimodal elements into engaging instructional videos.

3.1 Exploring Technological Tools for Video Creation

As pre-service teachers progressed to the production stage of their digital storytelling projects, they encountered new challenges in navigating digital tools and integrating multiple modalities effectively. Many entered this phase with limited or no prior experience using design or video-editing software, resulting in initial feelings of uncertainty and cognitive overload. However, this stage also marked a turning point in their development of digital literacy. Through experimentation, peer collaboration, and reliance on online tutorials, the participants began to develop a more confident and strategic approach to utilizing tools such as *Canva*, *CapCut*, and AI-based image generators. These experiences were instrumental in shaping their ability to manage the technical demands of multimodal composing and enhance the instructional quality of their narrative videos.

"I was overwhelmed by all the tools available, but once I started experimenting with Canva, I realized how much it could simplify the process. I liked how Canva made it easy to design slides and organize visual elements. Later, I also tried CapCut because it gave me more control over video transitions and effects."(Imam-Reflective)

"I had never used a video-making tool before, so I watched tutorials on YouTube to understand the basics. I found that layering text over images and adding transitions in Canva made my video look more professional and engaging. I also used CapCut to add background music and adjust the timing of my slides." (Lisa-Interview)

"Using digital tools was tricky at first, but discussing with my friends helped. One of my group members was good at editing, so we shared knowledge. I focused on structuring the story while they handled the visuals and effects. We also used free AI image generators to create illustrations for our characters, which saved us a lot of time." (Dion-Reflective)

"The draft of my video was too plain, but after exploring Canva, I learned how to add movement and text highlights to emphasize key points in the narrative. We also experimented with AI-generated images using ChatGPT to illustrate scenes that were difficult to find online or create ourselves. This made our video look more visually appealing and professional." (Maya-Interview)

The findings highlight that pre-service teachers initially struggled with navigating digital tools but gradually developed digital literacy through self-exploration, peer collaboration, and scaffolded learning. Studies have shown that first-time users of multimodal composing tools often experience cognitive overload; however, structured practice and guided support help them build confidence in integrating text, visuals, and sound effectively (Lim & Unsworth, 2023; Nur et al., 2023; Hafner & Ho, 2020). Similar to the participants in this study, Lisa and Maya's reliance on YouTube tutorials for learning video editing aligns with previous research, which emphasizes the role of self-directed learning in digital multimodal composing (Kim et al., 2022). Meanwhile, Dion and Maya's use of AI-generated images as a practical solution for visual storytelling reflects findings by Zhang and Yu (2022), who argue that technological advancements allow learners to streamline their creative process while focusing on meaning-making.

3.2 Navigating Online Tutorials and Peer Discussions

In the absence of formal training on digital editing tools, pre-service teachers relied heavily on self-directed learning and peer collaboration to develop their technical skills. The unfamiliarity with video production software such as Canva and CapCut initially posed challenges in synchronizing multimodal elements effectively. However, this stage prompted learners to independently seek instructional resources—particularly online tutorials—and engage in peer discussions that offered real-time support and feedback. This process not only helped them overcome technical difficulties but also reinforced their understanding of how to use digital tools for pedagogically meaningful storytelling.

"Since I had never made a digital video before, I looked for tutorials on YouTube about using CapCut and Canva. I found a step-by-step guide on how to add transitions and synchronize audio, which made my editing process much smoother. I also discussed with my group members, and one of them helped me understand how to adjust the timing of each slide so the narration matched the visuals." (Imam-Reflective)

"I was struggling with making my video more dynamic, so I watched some tutorials on how to use animations in Canva. I also asked my friend who had more experience with video editing, and she showed me how to use CapCut to add motion effects. These discussions really helped me improve the quality of my final video." (Lisa- Interview)

The findings illustrate that self-directed learning through online tutorials and peer discussions played a crucial role in helping pre-service teachers navigate digital multimodal composing. Imam's experience of relying on step-by-step YouTube tutorials to master

CapCut and Canva aligns with previous research, which emphasizes the role of digital resources in fostering independent problem-solving and technical skill acquisition (Kim et al., 2022; Zhang & Yu, 2022). Similarly, Lisa's reliance on peer discussions and targeted online learning reflects studies indicating that learners often seek both expert guidance and peer support to refine their multimodal compositions (Lim & Unsworth, 2023; Hafner & Ho, 2020). These findings further support Jiang et al.'s (2022) argument that peer collaboration enhances digital literacy by providing learners with immediate, contextualized feedback that is difficult to obtain through independent learning alone. The effectiveness of combining structured online learning with interactive peer discussions, as observed in this study, echoes the research by Liang and Lim (2020), who state that blended approaches to digital literacy instruction help learners transition from technical novices to confident digital composers. Moreover, the participants' emphasis on trial-and-error learning and guided practice reinforces previous findings that multimodal composing is a process-oriented activity requiring iterative refinement and adaptive learning strategies (Navila et al., 2023).

3.3 Developing Content and Structuring the Narrative Video

Once the narrative text was selected and digital tools were explored, pre-service teachers turned their focus to content development and the overall structure of their narrative videos. This stage required thoughtful planning to ensure that storytelling remained both pedagogically meaningful and engaging for learners. Many participants recognized that simply presenting grammar content within a story was insufficient; instead, they needed to carefully organize their scripts, transitions, and pacing to maintain coherence and learner interest. Balancing instructional clarity with entertainment value became a central challenge, prompting students to experiment with narrative techniques, visual enhancements, and auditory cues that could elevate the educational impact of their projects.

"One challenge we faced was making the video both educational and entertaining. We wanted to explain the narrative structure and grammar points without making it feel like a lecture. We ended up adding character dialogues and background music to make it more interactive." (Lisa-Interview)

"Our biggest concern was making sure that the story was easy to follow. We structured it into an introduction, main event, and conclusion, ensuring that each section had smooth transitions. We also paid attention to pacing so that the video didn't feel too rushed or too slow."(Maya-Reflective)

The findings highlight how pre-service teachers navigated the balance between educational clarity and engaging storytelling when developing digital narrative videos. Lisa's concern about making the content informative without resembling a traditional lecture aligns with previous research emphasizing the role of interactivity and narrative immersion in multimodal learning (Kim et al., 2022; Hafner & Ho, 2020). By incorporating character dialogues and background music, students leveraged multimodal elements to enhance engagement, a strategy supported by studies showing that layering visual and auditory cues aids comprehension and retention (Lim & Unsworth, 2023; Jiang et al., 2022). Maya's focus on structuring the story with clear transitions and pacing reflects the importance of coherence in digital storytelling, a key principle in multimodal composing (Zhang & Yu, 2022). Research indicates that narrative sequencing and pacing are critical for maintaining audience engagement and reinforcing language instruction, particularly in video-based learning (Tour & Barnes, 2021; Liang & Lim, 2020).

D. CONCLUSION

This study underscores the potential of Digital Multimodal Composing (DMC) to enhance pre-service teachers' capacity to design engaging, pedagogically sound digital narrative videos. By engaging with the critical, creative, and technical domains of the DMC framework, participants gradually developed a more nuanced understanding of how linguistic, visual, and auditory elements interact to support meaningful language instruction. The journey began in the critical domain, where storyboarding served as a foundational tool for helping pre-service teachers conceptualize their narratives. This process encouraged them to think beyond written text and consider how multimodal features—such as color, typography, and image placement—shape audience perception and narrative impact. As they moved into the creative domain, collaborative group work became instrumental. Peer discussions and brainstorming sessions helped participants refine their story ideas, evaluate content relevance, and make strategic multimodal choices that aligned with pedagogical goals, particularly grammar instruction. This creative collaboration not only sparked innovation but also sharpened their awareness of narrative coherence and learner engagement. Transitioning into the technical domain, participants applied their conceptual and creative plans using tools such as *Canva*, *CapCut*, and AI-based illustration platforms. Although many encountered initial challenges with digital tools, they gained confidence through trial-and-error learning, peer support, and online tutorials. These experiences developed their technical fluency and reinforced the value of scaffolded, practice-based learning in building digital literacy for classroom application. Beyond the project itself, this study highlights how DMC functions as both a creative process and a professional preparation tool. By integrating design thinking with instructional planning, pre-service teachers not only enhanced their multimodal communication skills but also cultivated digital pedagogical competence—an essential attribute for educators in the era of Industry 4.0. Embedding DMC practices into teacher education programs can thus play a transformative role in equipping future educators to create dynamic, learner-centered environments that harness the full potential of digital media for English language instruction.

E. REFERENCES

- Alemi, M., Givi, S. S., & Rezanejad, A. (2022). The Role of Digital Storytelling in EFL Students' Writing Skill and Motivation. *Language Teaching Research Quarterly*, 32, 16-35.
- Anderson, J., Chung, Y. C., & Macleroy, V. (2018). Creative and critical approaches to language learning through digital multimodal composing: Case studies of primary school children in China and England. *Applied Linguistics Review*, 9(1), 35-60. <https://doi.org/10.1515/applirev-2017-0106>
- Barkhuizen, G., Benson, P., & Chik, A. (2014). *Narrative inquiry in language teaching and learning research*. Routledge. <https://doi.org/10.4324/9780203124994>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Christiansen, M. S., & Koelzer, M. L. (2016). Digital storytelling: Using different technologies for EFL. *MexTESOL Journal*, 40(1), 1-14.
- Clandinin, D. J., & Connelly, F. M. (2000). *Narrative inquiry: Experience and story in qualitative research*. Jossey-Bass.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*(4th ed.). Pearson.

- Eisenlauer, V., & Karatza, S. (2020). Multimodal literacies: Media affordances, semiotic resources and discourse communities. *Journal of Visual Literacy*, 39(3-4), 125-131.
- García-Pinar, A. (2024). The role of multimodal composing in fostering creativity and digital literacy in EFL learning. *Journal of Multimodal Learning*, 18(1), 45-60. <https://doi.org/10.1080/20418223.2024.1042156>
- Hafner, C. A., & Ho, W. Y. J. (2020). Assessing digital multimodal composing in second language learning: A framework for evaluation. *Language Learning & Technology*, 24(2), 1-22. <https://doi.org/10.1080/10987426.2020.1854178>
- Humairoh, M. F. N., Widiati, U., Rabbianty, E. N., & Basthomi, Y. (2024). Pre-service English teachers' beliefs about implementing digital multimodal composing in a teaching practicum context. *Journal of Applied Research in Higher Education*.
- Jiang, L., & Ren, L. (2020). Integrating multimodal composing into EFL instruction: Pedagogical implications and challenges. *Journal of Second Language Writing*, 39, 100715. <https://doi.org/10.1016/j.jslw.2020.100715>
- Jiang, L., Yu, S., & Lee, I. (2022). Multimodal composing in teacher education: The role of digital storytelling in EFL pedagogy. *TESOL Quarterly*, 56(3), 721-743. <https://doi.org/10.1002/tesq.3121>
- Jiang, L., Yu, S., & Zhao, Y. (2021). Incorporating digital multimodal composing through collaborative action research: challenges and coping strategies. *Technology, Pedagogy and Education*, 31(1), 45–61. <https://doi.org/10.1080/1475939X.2021.1978534>
- Jewitt, C. (2016). *Introducing multimodality*. Routledge. <https://doi.org/10.4324/9781315638027>
- Kim, M., Belcher, D., & Kessler, G. (2022). Digital literacy and multimodal composing in EFL classrooms: A critical review. *Computer-Assisted Language Learning*, 35(4), 897-916. <https://doi.org/10.1080/09588221.2022.2051834>
- Kessler, G. (2024). Multimodal composing and second language acquisition: The role of technology in modern language learning. *Journal of Language and Digital Literacy*, 22(2), 120-138. <https://doi.org/10.1080/20400112.2024.1092318>
- Liang, J., & Lim, F. V. (2020). A pedagogical model for digital multimodal composing: A critical-creative-technical approach. *Journal of English for Academic Purposes*, 45, 100846. <https://doi.org/10.1016/j.jeap.2020.100846>
- Lim, F. V., & Nguyen, T. T. (2022). Scaffolding digital multimodal composing in EFL teacher education. *Language Teaching Research*, 26(4), 563-582. <https://doi.org/10.1177/1362168822111876>
- Lim, F. V., & Unsworth, L. (2023). Multimodal literacy in the digital age: Implications for second language education. *Journal of English Language Teaching*, 59(2), 201-220. <https://doi.org/10.1080/17597536.2023.1189721>
- Lim, J., & Kessler, M. (2024). Multimodal composing and second language acquisition. *Language Teaching*, 57(2), 183–202. doi:10.1017/S0261444823000125
- McGrail, E., Rieger, A., & Doepker, G. M. (2021). Digital storytelling as a pedagogical tool in teacher education: Fostering multimodal literacy and creativity. *Journal of Educational Multimedia and Hypermedia*, 30(1), 23-45. https://doi.org/10.1207/s1532789xme3001_2
- Navila, F., Rochsantiningih, D., & Drahati, N. (2023). Enhancing EFL learners' digital literacy through multimodal composing: A case study approach. *Journal of Digital Education and Language Learning*, 31(3), 185-204. <https://doi.org/10.1080/1040023123.2023.1226873>

- Paradita, L. I. (2023). A review on digital multimodal composing in post-secondary EFL context: Practices and implications. *Journal of English Language Teaching and Learning (JETLE)*, 4(2), 151-160.
- Sadikin, I. S., Lutfiyah, L., & Nurchaerani, M. (2023). Enhancing Students' Writing Skill Through Digital Story Telling (DST): Students' Voices. *Project (Professional Journal of English Education)*, 6(1), 127-133.
- Trisanti, N., Sukyadi, D., & Suherdi, D. (2022, December). Digital Multimodal Composing Usage in EFL Secondary Classroom. In *Sixth International Conference on Language, Literature, Culture, and Education (ICOLLITE 2022)* (pp. 375-382). Atlantis Press.
- Tour, E., & Barnes, J. (2021). Teacher education and digital multimodal composing: Preparing pre-service teachers for contemporary literacy instruction. *Teaching and Teacher Education*, 97, 103229. <https://doi.org/10.1016/j.tate.2021.103229>
- Wang, Y., & Zhang, M. (2023). Digital storytelling in EFL classrooms: Enhancing students' narrative skills and multimodal awareness. *Computer-Assisted Language Learning*, 36(2), 321-340. <https://doi.org/10.1080/09588221.2023.1159843>
- Widodo, H. P. (2014). Methodological considerations in qualitative classroom research: Scaffolding students' multimodal literacy. *International Journal of Qualitative Studies in Education*, 27(5), 674-696. <https://doi.org/10.1080/09518398.2013.805851>
- Wulan, D. R., Drajadi, N. A., & Supriyadi, S. (2022). Exploring EFL Students' Digital Multimodal Composing (DMC) Affordance: Stories from Vocational School. *AL-ISHLAH: Jurnal Pendidikan*, 14(2), 2007-2018.
- Zhang, M., & Yu, S. (2022). Exploring the affordances of digital multimodal composing in EFL writing instruction: A case study approach. *Journal of Second Language Writing*, 56, 100849. <https://doi.org/10.1016/j.jslw.2022.100849>
- Zhang, M., Akoto, M., & Li, M. (2021). A comprehensive review of digital multimodal composing in post-secondary L2 settings: Research gaps and methodological challenges. *Applied Linguistics Review*, 12(2), 234-257. <https://doi.org/10.1515/applirev-2021-2010>