

## Impact of Digital Storytelling for Developing Oral Communication Skills, Digital Literacy, and Learning Motivation Among Pre-service Elementary Teachers

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### ABSTRACT

In the digital era, oral communication skills, digital literacy, and learning motivation are crucial aspects of education. Digital storytelling is an innovative method that enhances speaking abilities and fosters creativity and active engagement among pre-service elementary teachers in learning. This study aims to explore the impact of digital storytelling in enhancing oral communication skills, digital literacy, and learning motivation among pre-service elementary teachers. A quasi-experimental design with a non-equivalent control group was employed. The sample consisted of 120 pre-service elementary teachers from the State Islamic Cyber University Syekh Nurjati Cirebon, selected through purposive sampling. The experimental group included 58 participants, while the control group comprised 62. Data were collected through oral communication tests, digital literacy questionnaires, and learning motivation surveys administered before and after the intervention. Instrument validity was assessed using content validity with two experts in education and technology, while reliability was measured using Cronbach's Alpha. Data analysis involved T-tests and Cohen's D effect size calculations. The findings indicate that digital storytelling significantly improved all three variables, with large effect sizes for oral communication skills ( $d = 2.21$ ), digital literacy ( $d = 2.52$ ), and learning motivation ( $d = 2.65$ ). These results suggest that digital storytelling is an effective pedagogical tool for equipping pre-service elementary teachers with essential competencies in the digital era. This study recommends systematically integrating digital storytelling into pre-service elementary teacher education curricula, developing structured pedagogical scaffolding, and collaborating with partner schools to support skill application in teaching practice.

**Keywords:** Digital Storytelling, Pre-service Teachers, Communication Skills, Digital Literacy, Learning Motivation



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## 1. INTRODUCTION

The digital era has brought significant changes to various aspects of human life, including the field of education (Akour & Alenezi, 2022; Haleem et al., 2022). Advances in information and communication technology have introduced a range of innovative learning approaches that can be utilized to enhance the quality of the teaching and learning process (Alenezi et al., 2023; Ghory & Ghafory, 2021). One such innovation is digital storytelling, a method that integrates traditional storytelling with various digital elements such as images, sound, and video (Palioura & Dimoulas, 2022; Rutta et al., 2021). Digital

storytelling offers a more interactive, personalized, and contextualized approach, which has the potential to develop essential skills among pre-service teachers (Anunti et al., 2023; Çetin, 2021; Drajati et al., 2023).

The primary challenges in pre-service teacher education today include a lack of proficiency in oral communication skills, digital literacy, and low learning motivation. Pre-service teachers often struggle to effectively convey ideas, organize their thoughts, and utilize digital technology appropriately. This aligns with findings that emphasize the necessity for future educators to possess strong communication skills and technological proficiency to create meaningful learning experiences for students (Alenezi et al., 2023). Additionally, conventional teaching approaches often fail to stimulate students' interest and active engagement (Ginting, 2021). In the context of modern education, teachers must integrate technology with innovative pedagogical approaches to accommodate the learning needs of digital-native students (Reid et al., 2023; Wilson et al., 2022). Unfortunately, many pre-service teachers still lack the necessary skills to adapt technology-based teaching methods (Şen Akbulut & Öner, 2021), resulting in insufficient preparedness to address the challenges of 21st-century education.

The implications of this issue are critical, considering that pre-service teachers will eventually serve as learning facilitators for a generation growing up in a technology-driven environment. Therefore, enhancing digital literacy, communication skills, and learning motivation in pre-service teacher education should be a primary focus to ensure their effectiveness in the digital era.

Previous studies have highlighted the potential of digital storytelling in improving communication skills and digital literacy. Saripudin et al. (2021) found that digital storytelling fosters a constructivist learning environment that promotes active student engagement. Similarly, Nair & Yunus (2021) and Fu et al. (2022) argued that digital storytelling enables learners to develop both digital competencies and communication skills. Furthermore, Tanrikulu (2022) and Kim & Li (2021) revealed that implementing digital storytelling can enhance learning motivation and facilitate collaborative learning. However, most of these studies have focused on primary and secondary school students, while its application in pre-service teacher education remains underexplored.

This study proposes an integrated approach by systematically implementing digital storytelling in the pre-service teacher education curriculum. This approach comprises three main stages: designing digital narratives, producing multimedia content, and engaging in critical reflection. Pre-service teachers will be guided in creating pedagogically driven digital stories, developing technical skills for multimedia content production, and reflecting on both the process and outcomes of their work. This comprehensive process is designed to simultaneously enhance oral communication skills, digital literacy, and learning motivation. This study aims to explore the impact of digital storytelling in enhancing oral communication skills, digital literacy, and learning motivation among pre-service elementary teachers.

The novelty of this research lies in the development of a digital storytelling implementation model specifically tailored to meet the needs of pre-service teachers in the context of higher education in Indonesia. Unlike previous studies, this research not only examines the effectiveness of digital storytelling as a learning tool but also develops a comprehensive framework that can be integrated into teacher education curricula.

## 2. METHOD

The method employed in this study is a quasi-experimental design using a non-equivalent control group design. This method aims to explore the use of digital storytelling in developing oral communication skills, digital literacy, and learning motivation among university students as pre-service elementary school teachers. The population comprises pre-service elementary school teachers at the State Islamic Cyber University of Syekh Nurjati Cirebon. The sample size includes 120 participants, comprising 18 males and 102 females. The sample is divided into an experimental group (58 prospective elementary school teachers) and a control group (62 prospective elementary school teachers). The participants were selected using purposive sampling, with the criterion that they had prior teaching practice in elementary schools for a minimum of three months.

Data were collected through oral communication tests via presentations, digital literacy questionnaires, and learning motivation surveys designed to measure the variables before and after the intervention. The validity of the data was tested using content validity methods involving two experts in education and technology to ensure that the instruments used were relevant and aligned with the research objectives. Reliability was measured using Cronbach's Alpha. The results of the validity and reliability tests are presented in Table 1.

Table 1 presents the results of the validity and reliability tests of the instruments used in this study. The validity score of the oral communication skills test is 0.85, indicating a very high level of validity. The reliability score of 0.92 signifies a very high level of internal consistency. Furthermore, the validity score of the digital literacy questionnaire is 0.80, indicating good validity, while the reliability score of 0.89 demonstrates good internal consistency. Similarly, the validity score of the learning motivation

questionnaire is 0.78, indicating good validity and the reliability score of 0.87 suggests good internal consistency. Thus, interpreting the validity and reliability results confirms that all instruments used in this study meet high-quality standards.

**Table 1.** Validity and Reliability Test

| Instruments                       | Validity | Reliability |
|-----------------------------------|----------|-------------|
| Oral Communication Skills Test    | 0.85     | 0.92        |
| Digital Literacy Questionnaire    | 0.80     | 0.89        |
| Learning Motivation Questionnaire | 0.78     | 0.87        |

Data analysis was conducted using descriptive and inferential statistical techniques, including a t-test to compare pre-and post-intervention scores following the implementation of digital storytelling. The results of this analysis are expected to provide a clear understanding of the intervention's impact on the measured skills.

### 3. RESULTS AND DISCUSSION

This section explores the transformative impact of digital storytelling on future pre-service elementary school teachers. It highlights how this innovative approach enhances their oral communication skills, strengthens digital literacy, and boosts learning motivation. Through these findings, the study reveals the potential of digital storytelling as a powerful tool in modern education.

#### 3.1. Assumption Testing for Analysis

Before conducting the hypothesis testing, an assumption test, including normality and homogeneity tests, was performed. The normality test was conducted using the Kolmogorov-Smirnov method, while the homogeneity test was carried out using Levene's test. The results of these tests are presented in Table 2.

**Table 2.** Results of Normality and Homogeneity

| Variables                 | Experimental (E) or Control (C) Group | Normality          |       | Homogeneity |       |
|---------------------------|---------------------------------------|--------------------|-------|-------------|-------|
|                           |                                       | Statistical Values | Sig.  | F Values    | Sig.  |
| Oral Communication Skills | E                                     | 0.093              | 0.200 | 1.358       | 0.246 |
|                           | C                                     | 0.098              | 0.200 |             |       |
| Digital Literacy          | E                                     | 0.087              | 0.200 | 2.103       | 0.149 |
|                           | C                                     | 0.102              | 0.184 |             |       |
| Learning Motivation       | E                                     | 0.095              | 0.200 | 0.813       | 0.369 |
|                           | C                                     | 0.091              | 0.200 |             |       |

Based on Table 2, the normality test results indicate a significance value of  $p > 0.05$  for all variables in both groups, confirming that the data follow a normal distribution. The homogeneity test also shows a significance value of  $p > 0.05$  for all variables, indicating that the data variance is homogeneous. Therefore, the assumptions for conducting parametric statistical tests have been met.

#### 3.2. Impact of Digital Storytelling on Oral Communication Skills

Oral communication skills were assessed through a presentation test in both the experimental and control groups. The experimental group utilized digital storytelling as an innovative approach, while the control group followed conventional methods. This comparison highlights the potential of digital storytelling in enhancing students' communication abilities.

**Table 3.** Results of T-Test and Cohen's D Effect Size of Oral Communication Skills

| Group      | N  | Pre-test |      | Post-test |      | T    | P      | Cohen's D |
|------------|----|----------|------|-----------|------|------|--------|-----------|
|            |    | Mean     | SD   | Mean      | SD   |      |        |           |
| Experiment | 58 | 67.32    | 8.45 | 84.76     | 7.12 | 9.87 | <0.001 | 2.21      |
| Control    | 62 | 68.05    | 8.21 | 73.18     | 7.95 | 3.42 | 0.002  | 0.63      |
| Gains      |    |          |      |           |      | 8.95 | <0.001 | 1.65      |

Table 3 shows that both groups experienced an improvement in oral communication skills from pre-test to post-test. The experimental group demonstrated a highly significant increase, with a post-test mean score ( $M = 84.76$ ,  $SD = 7.12$ ) substantially higher than the pre-test score ( $M = 67.32$ ,  $SD = 8.45$ ), yielding  $t = 9.87$  and  $p < 0.001$ . The effect size (Cohen's  $d = 2.21$ ) indicates a very large impact of the digital storytelling intervention in the experimental group.

The control group also showed an improvement from the pre-test ( $M = 68.05$ ,  $SD = 8.21$ ) to the post-test ( $M = 73.18$ ,  $SD = 7.95$ ), with  $t = 3.42$ ,  $p = 0.002$ , and an effect size (Cohen's  $d = 0.63$ ), suggesting a

moderate effect. A comparison of gain scores between the two groups revealed a significant difference ( $t = 8.95$ ,  $p < 0.001$ ), with an effect size (Cohen's  $d = 1.65$ ), indicating a substantial advantage of the digital storytelling method over conventional approaches.

The study findings indicate that implementing digital storytelling significantly impacts the development of oral communication skills among prospective teachers. These results confirm that engaging in the process of designing and presenting digital stories substantially enhances students' ability to express ideas verbally.

Several mechanisms can explain the improvement in oral communication skills through digital storytelling. First, creating digital narratives requires students to formulate ideas clearly and structurally, essential for effective communication (Ben-Ahmed, 2023). When students develop digital story scripts, they indirectly practice planning and organizing messages for oral delivery (Riani et al., 2021). This mechanism aligns with the findings of Özüdoğru & Çakır (2021), which suggest that the pre-production stage of digital storytelling facilitates the mastery of communicative competencies before the actual presentation.

Second, the performative aspect of digital story presentations allows students to practice key elements of oral communication, such as intonation, volume, and speech pacing, in a contextually appropriate manner (Kim & Li, 2021; Silviyanti et al., 2022). These findings reinforce the study by Yang et al. (2022) and Zhussupova & Shadiev (2023), which demonstrated that students engaged in digital storytelling projects exhibit significant improvements in paralinguistic aspects of oral communication.

Third, the feedback and evaluation processes integrated into digital storytelling enable students to reflect on and progressively enhance their communication performance. This finding is consistent with Liang & Hwang (2023), which identified that self-assessment and peer evaluation mechanisms within digital storytelling projects significantly improve oral communication skills.

The theoretical implication of these findings is that digital storytelling provides a practical framework for developing oral communication skills in teacher education. Specifically, this approach integrates linguistic and technological aspects, addressing the gap in traditional oral communication instruction, which often lacks technological engagement. Supported by Mustoip et al. (2023), enhancing these skills is highly relevant in preparing prospective elementary school teachers, given their role as models of effective communication for their future students. Their ability to convey information clearly and engage students meaningfully directly impacts the quality of learning.

### 3.3. Impact of Digital Storytelling on Digital Literacy

Digital literacy was assessed using a questionnaire administered to both groups before and after the intervention. This approach allowed for a comprehensive evaluation of changes in students' digital competencies over time. By comparing pre- and post-intervention results, the study highlights the impact of digital storytelling on enhancing digital literacy skills.

**Table 4.** Results of T-Test and Cohen's D Effect Size of Digital Literacy

| Group      | N  | Pre-test |      | Post-test |      | T     | P      | Cohen's D |
|------------|----|----------|------|-----------|------|-------|--------|-----------|
|            |    | Mean     | SD   | Mean      | SD   |       |        |           |
| Experiment | 58 | 62.14    | 9.32 | 83.92     | 8.05 | 11.24 | <0.001 | 2.52      |
| Control    | 62 | 63.27    | 8.97 | 69.45     | 9.18 | 3.78  | 0.001  | 0.68      |
| Gains      |    |          |      |           |      | 9.76  | <0.001 | 1.83      |

The analysis results in Table 4 indicate that the experimental group experienced a highly significant improvement in digital literacy from the pre-test ( $M = 62.14$ ,  $SD = 9.32$ ) to the post-test ( $M = 83.92$ ,  $SD = 8.05$ ), with  $t = 11.24$  and  $p < 0.001$ . The effect size (Cohen's  $d = 2.52$ ) suggests a very large impact of the digital storytelling intervention.

The control group also showed an increase from the pre-test ( $M = 63.27$ ,  $SD = 8.97$ ) to the post-test ( $M = 69.45$ ,  $SD = 9.18$ ), with  $t = 3.78$ ,  $p = 0.001$ , and Cohen's  $d = 0.68$ , indicating a moderate effect. A comparison of gain scores between the two groups revealed a significant difference ( $t = 9.76$ ,  $p < 0.001$ ), with an effect size of Cohen's  $d = 1.83$ , demonstrating a substantial advantage of the digital storytelling method in enhancing digital literacy compared to conventional approaches.

Statistical analysis indicates that digital storytelling has a highly significant impact on improving students' digital literacy, with a large effect size. This improvement encompasses the ability to search for, evaluate, and utilize digital information, as well as the skills needed to use various technological tools for content creation.

The substantial increase in digital literacy can be attributed to the inherent characteristics of the digital storytelling process. First, the stages of content collection and curation enhance students' ability to assess the credibility of digital information sources and select relevant content (Maragh-Bass et al., 2022).

Students become more critical of online information and more selective in choosing sources, which is a key component of digital literacy (Reddy et al., 2022).

Second, the technical aspects of digital storytelling, including audio-visual editing and multimedia integration, provide hands-on experience with various technologies, fostering the development of technical competencies. These findings reinforce prior research showing that digital storytelling projects significantly enhance students' technological literacy (Çetin, 2021).

Third, the process of creating digital stories encourages students to consider copyright issues and the ethical use of digital media, fostering awareness of digital ethics, which is a crucial component of comprehensive digital literacy. This aligns with findings showing increased awareness of ethical media usage among students involved in digital storytelling projects (Schmoelz, 2018).

The substantial improvement in digital literacy has important implications for preparing future teachers in an increasingly digitalized education landscape. As Kasperski et al. (2022) emphasized, teachers must possess adequate digital literacy to facilitate learning that aligns with the needs of the digital generation. This study's findings provide empirical evidence that digital storytelling can serve as a practical pedagogical approach for developing the digital literacy of prospective teachers, equipping them to meaningfully integrate technology into their future teaching practices.

### 3.4. Impact of Digital Storytelling on Learning Motivation

Student learning motivation was assessed using a questionnaire administered to both groups before and after the intervention. This approach provided valuable insights into changes in their motivation levels over time. By comparing the results, the study highlights the impact of digital storytelling on fostering a more engaging and motivating learning experience.

**Table 5.** Results of T-Test and Cohen's D Effect Size Learning Motivation

| Group      | N  | Pre-test |      | Post-test |      | T     | P      | Cohen's D |
|------------|----|----------|------|-----------|------|-------|--------|-----------|
|            |    | Mean     | SD   | Mean      | SD   |       |        |           |
| Experiment | 58 | 65.73    | 7.86 | 85.29     | 6.94 | 12.35 | <0.001 | 2.65      |
| Control    | 62 | 66.18    | 7.75 | 71.64     | 8.21 | 3.65  | 0.001  | 0.69      |
| Gains      |    |          |      |           |      | 10.21 | <0.001 | 1.97      |

The analysis results in Table 5 indicate that the experimental group experienced a highly significant increase in learning motivation from the pre-test ( $M = 65.73$ ,  $SD = 7.86$ ) to the post-test ( $M = 85.29$ ,  $SD = 6.94$ ), with  $t = 12.35$  and  $p < 0.001$ . The effect size (Cohen's  $d = 2.65$ ) suggests a very large impact of the digital storytelling intervention on learning motivation.

The control group also showed an improvement from the pre-test ( $M = 66.18$ ,  $SD = 7.75$ ) to the post-test ( $M = 71.64$ ,  $SD = 8.21$ ), with  $t = 3.65$ ,  $p = 0.001$ , and Cohen's  $d = 0.69$ , indicating a moderate effect. A comparison of gain scores between the two groups revealed a significant difference ( $t = 10.21$ ,  $p < 0.001$ ), with an effect size of Cohen's  $d = 1.97$ , demonstrating a substantial advantage of the digital storytelling method in enhancing learning motivation compared to conventional approaches.

The findings indicate that digital storytelling has a profound impact on students' learning motivation, with a significantly greater increase compared to conventional teaching approaches. This suggests that integrating digital storytelling meaningfully enhances student engagement, persistence, and enthusiasm in the learning process.

The significant improvement in learning motivation can be explained through several theoretical perspectives. First, from the lens of self-determination theory (Ryan & Deci, 2017), digital storytelling fosters autonomy through the selection of themes and creative approaches, competence through mastery of technical and narrative skills, and relatedness through collaboration and story sharing. These three elements form the foundation of sustained intrinsic motivation. This finding aligns with research by Adara & Haqiyah (2020), which demonstrated that digital storytelling enhances intrinsic motivation by increasing students' perceptions of autonomy and competence.

Second, from the expectancy-value theory perspective (Wang & Xue, 2022), digital storytelling boosts motivation by increasing expectations of success and task value. Students perceive digital storytelling projects as meaningful activities relevant to their future professional roles as educators (Hava, 2021; Kim & Li, 2021). This supported by Fisher & Hitchcock (2022), which found that students engaged in digital storytelling projects develop a stronger perception of task value.

Third, the multimodal and creative elements of digital storytelling create an engaging and immersive learning experience, which, according to Keller's ARCS model (Xiaohan & Yaoyao, 2022), serves as a key catalyst for motivation. This finding is consistent with Parsazadeh et al. (2021), who reported that the creative and expressive aspects of digital storytelling significantly enhance student attention and satisfaction in the learning process.

The implications of these findings suggest that digital storytelling can serve as an effective strategy for addressing learning motivation challenges in teacher education. As argued by Shonfeld et al. (2021), instructional approaches that meaningfully integrate technology and creativity align more closely with the

learning preferences of the digital generation. For prospective elementary school teachers, this motivation boost is particularly crucial, as motivated teachers are more likely to adopt innovative and inspiring pedagogical practices in their future classrooms.

### 3.5. Comparison of Gain Score Between Groups

To gain deeper insights into the effectiveness of digital storytelling compared to conventional methods, a gain score analysis was conducted across all three research variables. This analysis provided a clearer picture of the improvements achieved through each approach. By examining these differences, the study highlights the substantial advantages of digital storytelling in enhancing learning outcomes.

**Table 6.** Results of Gain Score Analysis between Groups

| Variables                 | Experimental Group |      | Control Group |      | T     | P      | Cohen's D |
|---------------------------|--------------------|------|---------------|------|-------|--------|-----------|
|                           | Mean               | SD   | Mean          | SD   |       |        |           |
| Oral Communication Skills | 17.44              | 5.32 | 5.13          | 3.87 | 8.95  | <0.001 | 1.65      |
| Digital Literacy          | 21.78              | 6.12 | 6.18          | 4.23 | 9.76  | <0.001 | 1.83      |
| Learning Motivation       | 19.56              | 5.84 | 5.46          | 3.95 | 10.21 | <0.001 | 1.97      |

The gain score analysis results in Table 6 reveal a significant difference between the experimental and control groups across all three research variables. For oral communication skills, the experimental group demonstrated a substantially higher gain score ( $M = 17.44$ ,  $SD = 5.32$ ) compared to the control group ( $M = 5.13$ ,  $SD = 3.87$ ), with  $t = 8.95$ ,  $p < 0.001$ , and Cohen's  $d = 1.65$ . In terms of digital literacy, the experimental group showed a significantly greater gain score ( $M = 21.78$ ,  $SD = 6.12$ ) than the control group ( $M = 6.18$ ,  $SD = 4.23$ ), with  $t = 9.76$ ,  $p < 0.001$ , and Cohen's  $d = 1.83$ . Similarly, for learning motivation, the experimental group achieved a notably higher gain score ( $M = 19.56$ ,  $SD = 5.84$ ) compared to the control group ( $M = 5.46$ ,  $SD = 3.95$ ), with  $t = 10.21$ ,  $p < 0.001$ , and Cohen's  $d = 1.97$ . These findings indicate the substantial impact of digital storytelling in enhancing communication skills, digital literacy, and learning motivation compared to conventional methods.

The effect size summary confirms that the implementation of digital storytelling has a substantial impact on improving oral communication skills, digital literacy, and learning motivation among the experimental group. In contrast, the conventional teaching method yielded only a moderate effect across all three variables. The gain score comparison further highlights a significant advantage of digital storytelling, with effect sizes exceeding 1.6 ( $d > 1.6$ ), underscoring its superiority over traditional methods in enhancing these key competencies.

Based on the statistical analysis, it can be concluded that digital storytelling is significantly more effective in fostering oral communication, digital literacy, and learning motivation among pre-service elementary school teachers compared to conventional instructional approaches. Additionally, the strong positive correlations among the three variables suggest that the development of one competency can contribute to the enhancement of the others.

Despite these promising findings, several limitations must be considered. First, the relatively short intervention period may limit insights into the long-term effects of digital storytelling. Longitudinal research is needed to examine how the acquired skills are retained and developed over time. Second, this study did not extensively explore individual differences in responses to digital storytelling. Future research could employ mixed-method approaches to investigate how factors such as learning styles, prior technological experience, and personal attributes moderate the effectiveness of this approach. Third, the study's focus on pre-service elementary school teachers from a single institution limits the generalizability of the findings. Replicating this research across diverse teacher education programs and institutions with varying demographic characteristics would enhance the external validity of the results.

From a theoretical perspective, this study extends the understanding of digital storytelling as a pedagogical approach that fosters multidimensional competencies. The findings reinforce theoretical frameworks that conceptualize digital storytelling as an intersection of traditional literacy, new media literacy, and constructivist pedagogy (Çetin, 2021; Schmoelz, 2018). The key theoretical contribution lies in identifying the specific mechanisms through which digital storytelling facilitates the development of multimodal competencies essential for 21st-century educators.

From a practical standpoint, the findings have significant implications for teacher education curriculum reform. First, according to Shinas & Wen (2022), embedding digital storytelling within teacher preparation programs can serve as an effective strategy for simultaneously enhancing communication skills, digital literacy, and learning motivation. Second, according to Henriksen et al. (2021), the importance of integrating technology and creativity in teacher education, moving beyond conventional approaches that often separate technological skill development from core pedagogical training. Third, according to Çetin

(2021), the substantial effect sizes across all variables provide strong empirical justification for investing resources in the implementation of digital storytelling within teacher education programs.

#### 4. CONCLUSION

The findings of this study demonstrate that the implementation of digital storytelling in teacher education consistently and significantly enhances all three investigated variables, with large effect sizes ( $d > 1.0$ ). These results provide strong empirical evidence that digital storytelling serves as an effective catalyst for transforming pre-service teacher education in the digital era. The intervention successfully facilitated the development of verbal articulation skills, message organization, and engaging presentation delivery. Through hands-on experience in designing digital narratives, pre-service teachers cultivated critical abilities in searching, evaluating, and utilizing digital information effectively. Furthermore, by fostering an active, meaningful, and goal-oriented learning environment, digital storytelling also contributed to increasing student motivation.

Overall, this study highlights that digital storytelling is not merely a technological tool but a transformative pedagogical framework that supports the development of essential 21st-century teaching competencies. Its added value lies in its ability to integrate traditional communication skill development with contemporary digital literacy while simultaneously fostering intrinsic motivation in the learning process. One limitation of this study is that the respondents were exclusively pre-service elementary school teachers, which may limit the generalizability of the findings to other educational contexts. For future research, an exploration of how digital storytelling skills transfer to real-world teaching contexts would provide a more comprehensive understanding of its pedagogical value. Additionally, investigating ways to systematically integrate digital storytelling into teacher education curricula, rather than treating it as a standalone intervention, would offer valuable insights for curriculum reform.

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