Digital storytelling: pre-service English teachers' experiences, difficulties and solutions

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Article Info

ABSTRACT

This study aimed to investigate the impact of digital storytelling on the teaching practicum experiences of pre-service English teachers (PSET) and to delve into the challenges they encountered in creating digital storytelling, along with the strategies used to overcome these challenges. This study provided deeper understanding of the impact of digital storytelling on the learning and teaching experiences of PSET. Moreover, it provided information to face obstacles in the digital storytelling creation process. A total of 30 PSET, comprising 13 males and 17 females, engaged in their sixth-semester teaching practicum, participated in this study. Self-reflection and semi-structured interviews were conducted to collect the data. The researcher applied thematic analysis to analyze the data obtained. The findings of this study revealed that the implementation of digital storytelling yielded positive experiences for PSET, encompassing enhancements in pedagogical approaches, self-development, and technology integration into the teaching-learning process. PSET encountered various difficulties in creating digital storytelling, including seamless integration of movement, audio, images, and animations within the narrative, crafting engaging animations and narratives, and proficiency in using diverse editing applications. Moreover, the challenges encompassed collecting and curating appropriate materials and organizing a coherent storyline aligning with the lesson plans and real-world contexts. Nevertheless, PSET proposed solutions to overcome those difficulties.

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1. INTRODUCTION

In the context of English education, pre-service English teachers (PSET) need to have proficient technology skills and exemplify technical precision as role models for their students. Beginning teachers are expected to be able to utilize technology effectively, and aspiring language teachers who have undergone pre-service English teacher training are also anticipated to use technology for their own educational purposes and professional growth. As a result, it is crucial to integrate technology into the education of prospective English teachers, which requires combining relevant undergraduate curriculum and practical experience [1]–[3]. Additionally, instructors in PSET must provide comprehensive lectures to prospective teachers on the proficient integration of technology in educational environments [4], [5].

The application of digital storytelling in the world of education has increased in recent years. Several studies examine the application of digital storytelling in several scientific disciplines. It was found that digital

storytelling is more widely used in the fields of language and literacy, among other fields of humanities and social sciences [6]. Implementing digital storytelling in educational settings has several benefits, including facilitation of reflection [7], improvement of reading skills [8], and development of students' competencies [9]. Scholars have advanced the idea that creating digital narratives has the potential to enhance educators' reflective practice, increase their proficiency in utilizing technology, and increase their self-perceived efficacy in using technology [4], [10].

In the context of English language education, it is crucial for PSET to not only possess proficient technological skills but also exemplify technical accuracy as role models for their students. However, it is noteworthy that a significant number of novice educators have primarily encountered technology in the context of gaming, accessing social media platforms, and entertainment rather than as an instructional tool [11]. In contemporary times, teachers are increasingly expected to utilize technology effectively. Consequently, prospective language teachers who have undergone pre-service training are also anticipated to employ technology for educational purposes and for their personal and professional growth as well. In this particular context, the literature contains research aimed at equipping aspiring teachers with the necessary skills to proficiently utilize technology, thereby minimizing challenges encountered in their professional endeavors. Therefore, the integration of technology into pre-service English teacher education is imperative, necessitating the inclusion of undergraduate subjects and field experience [12]–[14]. Furthermore, instructors in pre-service English teacher education programs must act as role models by delivering comprehensive lectures to aspiring teachers on the effective integration of technology within educational environments [2], [3].

Teacher education should make sure that PSET are fitted with competencies appropriate to the context and specific challenges of the working world [15], [16]. The practicum teaching experience plays a crucial role in understanding and enriching the theories of a teacher's life and work. This experience can be conveyed through digital storytelling, which serves as a reflective or pedagogical tool [17], [18]. In PSET, digital storytelling reflects their practical teaching experiences [4], [19], [20]. When they apply digital storytelling with others, individuals can witness others' reactions, increase their reflection about meaning structures, and gain new perspectives about themselves. In this way, digital storytelling fosters self-awareness [21]–[24]. The use of digital storytelling in teaching can be utilized to explore the impact of digital storytelling on PSET's experiences in learning English.

The integration of digital storytelling into PSET' education is essential to growing and improving their digital literacy [4], [5]. The use of digital storytelling has had a beneficial effect on the ability of teachers and students to gather information, improve problem-solving skills, and foster a collaborative attitude [4], [25]–[27]. Several literatures indicate that developing digital storytelling helps to increase pedagogical topic knowledge and learning outcomes [6], [28], [29], and positively affects teaching experiences in general [4], [30]–[32]. However, little research exists into how the PSET as foreign language (EFL) teachers are affected by digital storytelling experience processes [33]. Likewise, it is cropped up against the problems regarding what difficulties PSET have in digital storytelling processes and what solution suggestions are included.

The aim of this study is to examine the impact of digital storytelling on PSET' experiences and to explore their difficulties in creating digital storytelling and their actions to overcome those difficulties. This study provides a deeper understanding of the effects of digital storytelling on the learning and teaching experiences of PSET. Furthermore, it identifies the challenges faced by PSET in creating digital storytelling and the actions taken to deal with those challenges. It can be essential for PSET' education institutions or English language teachers to prepare themselves to face obstacles in the digital storytelling creation process.

2. METHOD

A case study is a research design that facilitates the investigation of the causes and effects of a specific environment under inquiry [34]. The present study employed a series of holistic case designs wherein the perspectives and experiences of PSET were treated as individual cases [35]. The participants of this study were 30 pre-service teachers (13 male and 17 female) who were involved in teaching practicum throughout the sixth semester of their final year. As part of this course, they engaged in a six-week practicum in junior high schools, where they were required to attend daily. They were obligated to develop a comprehensive instructional framework in accordance with the 2013 National Curriculum established by the Ministry of Education and Culture (MONEC). Furthermore, they were expected to execute their devised lesson plans within the context of secondary level. They were obligated to generate an assessment report regarding the execution procedure. The National Curriculum predominantly relied on the pedagogical approach of rote memorizing and drilling, as supported by the research conducted by Hardman and Rahman [36], Hawanti [37], and Widodo [38].

The study was conducted in two months throughout the academic year of 2022-2023. Before conducting the research, the researchers provided training to the participants in creating digital storytelling based on the steps outlined by Widodo [38]. These steps comprised five stages: introduction to digital storytelling, scaffolder creation of digital storytelling, creation of digital storytelling, presentation of digital storytelling, and reflection. The study

involved the PSET' reflection by asking them to make self-reports. In this stage, all the participants (24 PSET) were required to make a reflection in the form of a written self-report based on their experience in designing and implementing digital storytelling in the English language learning process. They wrote it after they had done all the stages in the digital storytelling creation adopted from Widodo [38] and sent it via email to the researcher.

Semi-structured interviews were also utilized in this study to obtain data regarding the difficulties encountered by the participants in designing digital storytelling and the actions they took to address these challenges. Individual semi-structured interviews were conducted with six PSET (three male and three female) who had designed digital storytelling based on the steps outlined by Widodo [38]. The interview duration was set at 20 minutes for each participant. The interview questions encompassed the initial process of digital storytelling creation, the obstacles faced during digital storytelling development, and the measures taken by the participants to overcome these challenges.

Thematic analysis was carried out to analyze the data. The primary objective of thematic analysis was to identify, examine, and present recurring patterns (referred to as themes) within the collected data [39]. In order to adopt a comprehensive perspective in the analysis phase, the entirety of the data was collectively examined. In relation to this matter, the analysis was conducted independently for each participant's reflection and semi-structured interview data. Subsequently, categories were formed through the amalgamation of the acquired codes, and ultimately, themes were derived.

3.   RESULTS AND DISCUSSION
3.1. Impacts of digital storytelling on pre-service English teachers' experiences
The results of reflections documented in the self-reports indicate that PSET perceived an enhancement in pedagogical approaches. They affirmed that, in designing and implementing digital storytelling in the English language learning process, they gained additional experience in applying diverse instructional approaches and fostering their creativity in English language instruction. Moreover, this practice broadened their understanding of teaching methodologies for English language learning.

> *"I found that utilizing digital storytelling allows me to incorporate elements of creativity and innovation into English language instruction, rendering the teaching process more engaging and dynamic for students."* (PSET 3)
> *"I view digital storytelling as a tool for implementing a communicative approach in teaching English, facilitating student interaction, and promoting the use of English in authentic contexts."* (PSET 5)
> *"Digital storytelling reinforces a differentiation approach, enabling me to tailor materials and tasks according to individual students' proficiency levels and interests, thereby maximizing their learning outcomes."* (PSET 10)
> *"Through digital storytelling, I can apply a contextual approach by linking English language materials to real-life situations, establishing relevance and meaning in students' learning."* (PSET 11)
> *"Digital storytelling allows me to employ a student-centered learning approach, wherein students can take an active role in their learning, fostering their creativity and critical thinking abilities."* (PSET 20)
> *"Utilizing digital storytelling expands my teaching methods, enabling me to present learning materials in a more varied and engaging manner."* (PSET 23)

Other outcomes revealed by PSET in their self-reports demonstrate a significant development in their self-potential through the experience of utilizing digital storytelling in English language instruction. They observed an enhancement in self-confidence, analytical skills, and the ability to evaluate the learning process within the classroom. Furthermore, PSET acknowledged that the utilization of digital storytelling enabled them to plan and organize learning materials more effectively and manage time more efficiently.

> *"The process of creating digital storytelling allows me to collaborate and share ideas with peers, fostering an inclusive and inspiring learning environment."* (PSET 1)
> *"I feel more confident in managing the classroom and motivating students to speak English because digital storytelling provides a powerful tool for practicing speaking and listening skills." (PSET 4)*
> *"Digital storytelling opens doors for the development of analytical skills, enabling me to evaluate and enhance my teaching approach based on data and feedback from student learning outcomes."* (PSET 9)
> *"Utilizing digital storytelling has honed my abilities in planning and organizing learning materials, constructing a coherent and engaging narrative structure."* (PSET 17)
> *"The process of creating digital storytelling has sharpened my skills in time management, task prioritization, and efficient meeting of deadlines."* (PSET 24)

In developing a more effective pedagogical approach and exploring their potential, PSET have affirmed that utilizing digital storytelling in English language instruction provides invaluable experiences, particularly concerning integrating technology into the learning process. Furthermore, it enhanced their skills in designing effective learning experiences by synergizing technology and the power of narrative. By combining these elements, educators can craft engaging learning experiences and creatively integrate technology to enhance students' understanding and interest in English.

"The experience of using digital storytelling has provided me with insights into integrating technology into English language teaching, enhancing student engagement and appeal." (PSET 8)

"The utilization of digital storytelling enables me to integrate a technology-based approach in teaching English, enhancing overall learning effectiveness." (PSET 13)

"The process of creating digital storytelling has assisted me in developing instructional design skills, including crafting effective narratives and utilizing appropriate media." (PSET 20)

"Through digital storytelling, I can blend multimedia and specialized software, allowing me to leverage technology in creating interactive and dynamic stories." (PSET 19)

"The digital storytelling creation process offers us opportunities to comprehend how to optimize relevant software and applications, enabling us to effectively apply them in English language learning." (PSET 27)

The findings of this study demonstrate that digital storytelling provides many positive experiences for PSET, particularly in improving pedagogical approaches, encouraging self-development, and integrating technology into teaching and learning. Regarding improving pedagogical approaches, the PSET acknowledged that by creating and utilizing digital storytelling in English education, they gained additional experience in applying diverse teaching methods and fostering creativity in teaching English. It also broadens their understanding of teaching methods in English language teaching. In terms of developing their personal potential, they experience increased self-confidence, analytical skills, and the ability to evaluate the learning process in class. Moreover, PSET recognize that the use of digital storytelling allows for more efficient learning planning and material management while improving time management. Regarding the integration of technology in teaching and learning, they emphasized that the application of digital storytelling in English language teaching provides valuable experience, especially in integrating technology into the English language learning process. It also improves their ability to design effective learning experiences by combining technology and storytelling. These findings show that the creation and utilization of digital storytelling in English education produce positive experiences that are very valuable for PSET. This corroborates the previous research, which states that the application of digital storytelling in English education overs additional experience and insight for PSET [19]. In addition, using digital storytelling improves their skills in utilizing technology as a media for learning English [17], [19], [20].

3.2. Pre-service English teachers' difficulties in creating digital storytelling

The results of interviews with six PSET indicated several challenges in creating digital storytelling for English language learning, including harmonizing movement, audio, images, and animations within the story; composing engaging animations and narratives and editing using various applications; gathering and selecting appropriate materials; and structuring a storyline aligned with the lesson plan and real-life context.

"The most challenging aspect of creating digital storytelling is the synchronization of motion, audio, images, and animation." (PSET 2)

"The most formidable stage involves learning to compose compelling animations with a coherent storyline using various applications. This process is time-consuming due to a lack of proficiency in operating these applications." (PSET 7)

"I perceive the limitation of technical knowledge and multimedia skills as a significant hurdle in crafting engaging digital storytelling content." (PSET 12)

"In my perspective, the editing phase poses the greatest difficulty in creating digital storytelling, demanding precision in integrating multiple image elements to construct a cohesive story setting." (PSET 15)

"The most challenging stage entails gathering and selecting appropriate materials for digital storytelling, particularly considering time and resource constraints." (PSET 21)

"I find that structuring an engaging and coherent storyline aligned with students' levels and real-life contexts is the most demanding aspect." (PSET 26)

"The most arduous step in creating digital storytelling involves writing or composing a story that aligns with the lesson plan." (PSET 30)

Based on the results of interviews with PSET, it can be inferred that the creation of digital storytelling for English language learning presents several challenges that need to be addressed. Those challenges encompass efforts to synchronize motion, audio, images, and animations within the story, crafting engaging animations and narratives while utilizing various applications, gathering and selecting appropriate materials, and structuring a storyline in alignment with the lesson plan and real-life contexts. Addressing and overcoming these challenges is crucial to maximizing the potential of digital storytelling in enriching the English language learning experience for students. These findings are in line with previous studies explaining the dominant challenges in digital storytelling development, such as technological proficiency and time constraints [2], [20], [33]. Özüdoğru and Çakır [19] noted that aligning topics with a curriculum connected to real-life experiences in the digital storytelling process constraints in digital storytelling design. In line with these findings, Sadik [31] highlighted that challenges are inherent in the digital storytelling creation process by PSET. However, those challenges can be valuable input in overcoming those problems, especially for PSET and educational institutions.

3.3. Pre-service English teachers' actions to deal with the difficulties in creating digital storytelling
The interview results also demonstrated various actions undertaken by PSET in addressing these challenges, including utilizing diverse applications that supported the editing process of digital storytelling, using platforms such as YouTube, Google, and Chat GPT to acquire knowledge and sources as well as to compose the storyline for creating digital storytelling, and seeking assistance from classmates in selecting materials aligned with the lesson plan.

> *"I use several applications that support me in this process, such as Canva, Kinemaster, and Adobe Audition."* (PSET 2)
> *"I acquired proficiency in using Kinemaster and Canva applications by watching tutorials on YouTube."* (PSET 7)
> *"To overcome the encountered difficulties, I conducted searches on Google and YouTube to gather more information about it."* (PSET 12)
> *"To address these challenges, I utilize various applications such as Capcut, PicArt, and Audacity."* (PSET 15)
> *"To mitigate the identified challenges, I employ Google and YouTube to gather stories and seek assistance from my classmates in the selection process."* (PSET 21)
> *"I navigate the challenges by initially reviewing the lesson plan to determine the story's topic. Subsequently, I watch digital stories on YouTube or other sources that have a similar topic to the lesson plan."* (PSET 26)
> *"I address the challenges by leveraging artificial intelligence tools, specifically Chat GPT."* (PSET 30)

Through the interview findings, a clear picture emerges of concrete actions taken by PSET to overcome the challenges in utilizing digital storytelling in English language instruction. They proactively utilize various applications that support the digital storytelling editing process, harnessing resources such as YouTube, Google, and Chat GPT to acquire knowledge and inspiration for composing stories for digital storytelling. Furthermore, they also ask for help from their colleagues to select the material that fits the learning plan. These steps reflect their dedication to maximizing the potential of technology and fostering fruitful collaboration in creating more effective and engaging English learning experiences. By consistently taking such initiatives, PSET have significant potential to improve their skills and knowledge in integrating digital storytelling into the learning process continually. This finding corroborates previous research that emphasizes the need for training for PSET to improve their technological abilities and skills [4], [17], [19], [20].

4.   CONCLUSION
The present study investigates the impact of digital storytelling on PSET' experiences and their difficulties and activities in dealing with the difficulties in creating digital storytelling. The results of this study highlight that the implementation of digital storytelling provides positive experiences for PSET, including developing personal potential, improving pedagogical approaches, and integrating technology in the teaching-learning process. This study also found that PSET confront several challenges in the process of creating digital storytelling, including balancing the story with the animation movement, images, and audio. Besides, creating an interesting story and operating several editing applications become difficult in the process of composing digital storytelling. In addition, collecting and curating appropriate materials and developing a storyline that is coherent with the lesson plan and real-life context adds to the burden for them. Nevertheless, PSET proposed solutions to overcome these hurdles. The solutions involved utilizing a range of applications conducive to the editing process of digital storytelling, leveraging platforms like YouTube, Google, and Chat GPT for knowledge acquisition and

storyline composition in digital storytelling creation, and seeking collaborative assistance from peers in material selection aligned with the lesson plan.

This study has several limitations that can be considered for future research. Firstly, the research's generalizability is constrained due to its exclusive focus on pre-service English language teachers. Consequently, the findings generated may not be directly applicable to other teaching disciplines or educational programs, as the challenges and benefits associated with the integration of technology, particularly digital storytelling, may vary across various academic fields. Furthermore, it is essential to acknowledge that two primary factors may influence the study's outcomes. First, the sample size of participants in this research is relatively small. Second, the participants exhibit homogeneity in terms of their backgrounds and experiences as pre-service English language teachers. These limitations may curtail our ability to generalize the study's findings to a broader population of pre-service English language teachers. Moreover, it is essential to note that this study primarily focuses on the short-term effects of the use of digital storytelling during the teaching practicum. To comprehensively assess the long-term impact of digital storytelling on the professional self-understanding of pre-service English language teachers, further research involving extended monitoring throughout their teaching practices and career development is imperative.

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