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English Major Students' Experiences in Digitizing Contemporary Written Stories into Film through a Project-Based Learning Approach in a State University in the Philippines

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Abstract. Project-Based Learning is a teaching strategy that provides students with authentic, purpose-driven learning experiences. The study aims to explore English majors' experiences in adapting contemporary literature into film. The aim was to highlight how the approach influenced their creativity, critical thinking, and collaboration. This qualitative study used a narrative analysis approach to gather and analyze data. There were 15 participants chosen using purposive sampling; these were English major students enrolled in a literature course who took part in a Project-Based Learning task where they digitalized contemporary written narratives from the real-life stories of the subjects they had chosen. Semi-structured interviews were conducted to collect the data. The findings reveal that students struggled to use digital tools because they lacked resources, considering they needed to convert text-based stories into a digital format. However, they reflected that it helped to develop their creativity, critical thinking, and imagination skills as they developed their written stories on screen. The Project-Based Learning (PBL) approach enabled students to cultivate essential twenty-first-century skills – digital literacy, collaboration, and adaptability. It is recommended that teachers adopt authentic and formative assessments beyond quizzes and essays. Teachers must be critical in preparing rubrics that evaluate creativity, collaboration, critical thinking and other twenty-first century skills that are needed by students to develop. Giving students the skills to meet sustainable development encourages them to use innovative ideas like PBL, which is important in

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achieving quality education, which is one of the developmental goals of the United Nations (SDG-4).

Keywords: Contemporary written stories, collaboration, critical thinking, digital film, project-based learning, limited resources

1. Introduction

Technology use in the classroom has become one of the main components in students' learning development in the twenty-first century, enabling teachers to find many ways to improve students' knowledge-gaining process (Morgan, 2012). One such development is PBL, in which students are taught to use modern skills effectively, such as interactive communication, interpersonal relations, and technology (Thang et al., 2014).

Over the past years, the PBL strategy has focused on using the problems that students are interested in and related to the real world and, when applied meaningfully to students, to help them learn better (Al-Amri, 2020). This PBL method encourages students to dive into real-world issues, collaborate with their peers, and showcase the knowledge and skills they can actually use in practice (Ntelioglou et al., 2014). A popular example of PBL is transforming contemporary written stories into films, which boosts students' creativity, communication, and tech skills (Yiğit, 2020).

Digital storytelling provides students the opportunity to conduct research to create their own narratives, and then collaboratively transform those stories into digital formats" (Robin, 2016). Learners are often keen to dive into technology and multimedia to share their ideas or recount their experiences (Thang et al., 2014). Turning written stories into films enhances creative thinking, problem-solving, and teamwork skills (Yiğit, 2020). When paired with technology and other engaging media, digital storytelling inspires students to craft and share their stories interactively (Thang et al., 2014). As they work to express their thoughts digitally, this journey nurtures their imagination, helps them express themselves, and deepens their understanding of the course material (Morgan, 2012).

On the other hand, there are problems concerning using PBL techniques, where students turn written history into video films, for which potential compensations have been noted. These can be due to lack of experience with video editing programs, challenges related to the content transference from text to images, and the necessary synchronization of joint video production (Pascual, 2022). Thus, studying students' narratives becomes crucial for understanding how students address these problems and what their solutions reveal about their learning, adaptation, and the development of related competencies in the process. This knowledge would enable educators to adjust their methodologies and help students get the most out of this method.

The results add to the existing literature on PBL applications in the context of digital stories and offer direction to teachers who want to use the approach in the classroom. Notably, other scholars have not addressed how to implement PBL in

digital storytelling among English major students in far-flung areas. These areas are often less populated and have less access to digital means of information than urbanized locations, hence the need for tailored ways of providing learning opportunities. Thus, this research aims to answer the following question: How does PBL shape English majors' digital literacy and creativity in resource-limited settings?

Although digital storytelling has been shown to improve communication and creativity, its application in underserved areas with limited access to technology has received little attention. Studies on how students overcome obstacles, including video editing, content adaptation, and teamwork, are also lacking. The specific impact of digital storytelling on language acquisition remains under-examined, as does the role of educators in facilitating this approach. Furthermore, comparative analyses with traditional teaching methods are scarce, leaving questions about their effectiveness in English language learning. Addressing these gaps can help develop more inclusive and effective pedagogical strategies.

2. Literature Review

The integration of PBL in higher education, particularly in English and literature studies, has become increasingly recognized as a strategy for deepening student engagement, creativity, and collaboration. PBL aligns well with the objectives of teaching contemporary literature, where learners are encouraged to explore real-world themes, construct meaning through interpretation, and produce original works. This pedagogical approach offers a viable alternative to the more passive modes of instruction found in traditional settings.

Evidence across various socioeconomic contexts highlights the adaptability and effectiveness of PBL. In resource-limited environments, such as many developing countries, PBL promotes learner autonomy and community-centered tasks that compensate for traditional material shortages. Wahyuni, Sujoko, and Sarosa (2021) showed that in an Indonesian public school, PBL combined with digital storytelling not only improved students' oral fluency but also developed confidence, even in classrooms lacking advanced technological infrastructure.

Comparative studies provide valuable insights into how PBL performs in comparison to traditional instruction. Luke et al. (2021) conducted a meta-analysis comparing PBL and conventional teaching methods, concluding that while traditional instruction may yield higher short-term academic satisfaction, PBL tends to promote greater long-term retention, critical thinking, and practical skill development. Similarly, Zhang and Ma (2023) found that PBL approaches were superior in enhancing higher-order thinking skills and motivation in diverse classroom environments.

Specifically in the field of English education, Putri (2023) observed that middle school students in Dumai showed increased motivation and deeper textual engagement when participating in digital storytelling activities grounded in PBL principles. Meanwhile, Rahardi et al. (2023) found that university-level English majors gained both writing proficiency and twenty-first-century competencies,

such as collaboration and creativity, when engaged in academic writing projects that required planning, feedback, and presentation stages.

Nevertheless, some studies caution that the success of PBL varies across socioeconomic groups. Students from higher-income or more technologically advanced settings may benefit more readily from digital tools integral to PBL. Conversely, learners from underserved communities often face barriers such as limited internet access, inadequate teacher training, or insufficient classroom resources (Puspitasari, 2020). Despite these challenges, tailored support and culturally responsive facilitation have been shown to mitigate disparities significantly.

From a cross-disciplinary lens, Munawar et al. (2023) suggest that project-based instruction, particularly when integrated with storytelling, nurtures both scientific and literary literacy. Their findings emphasize that story-driven projects can bridge the gap between abstract content and student experiences, a benefit particularly pronounced in under-resourced settings where traditional textbooks may not accurately reflect learners lived realities.

The PBL approach emerges not only as an effective approach for teaching contemporary literature but also as a responsive method adaptable to varying socioeconomic contexts. It encourages deeper engagement, practical skill development, and thematic exploration, particularly when learners are tasked with digitalizing narratives that reflect contemporary issues. The study, which explores the experiences of English majors as they digitalize written stories through PBL, adds to the growing evidence that student-driven, contextualized projects enrich the study of literature in both high- and low-resource settings.

3. Methodology

This qualitative study collected and analyzed data using a narrative analysis approach. It aimed to examine students' experiences with PBL by translating their modern written stories into films. The 15 participants were chosen through purposive sampling. These participants were enrolled in an English literature course tasked with writing contemporary stories. These informants have less exposure to videography and video editing; they have interviewed individuals whose experiences are the subject of contemporary stories and who are using a mobile phone and CapCut as tools in their project. Semi-structured interviews were conducted to gather data from the key informants. The duration of the interviews was 30 minutes. Responses were recorded in writing with participants' consent (through a consent form).

This study involved 15 participants, which is considered appropriate for a qualitative research design, particularly one that uses thematic analysis. This research aims not to generalize findings to a larger population but to gain in-depth insights into participants lived experiences, perspectives, and interpretations regarding PBL and digital storytelling. The selection of 15 participants allowed for rich, saturated, and detailed data collection while maintaining a manageable scope for in-depth analysis.

Additionally, the study focused on a specific group (e.g., English major students in resource-limited settings), and the sample size reflected the research's contextual limitations and targeted nature. The participants were enrolled at a State University situated in a rural area in the Philippines. The number was also informed by accessibility, ethical considerations, and the depth of interaction required in the data collection process.

Responses from the participants were transcribed, coded manually, and thematically analyzed to identify significant patterns and themes. The method of analysis originated from the students' experiences in carrying out a digital film-making task in PBL. For ethical reasons, responses provided by all key informants have been conducted solely for research. Hence, with the extended involvement, the confidence that the findings based on people's experiences are valid, reliable, and authentic. Data were checked twice during the data collection period, and analyses were sent back to the participants for checking. An independent external coder not associated with this research was hired to confirm the study's findings.

4. Results

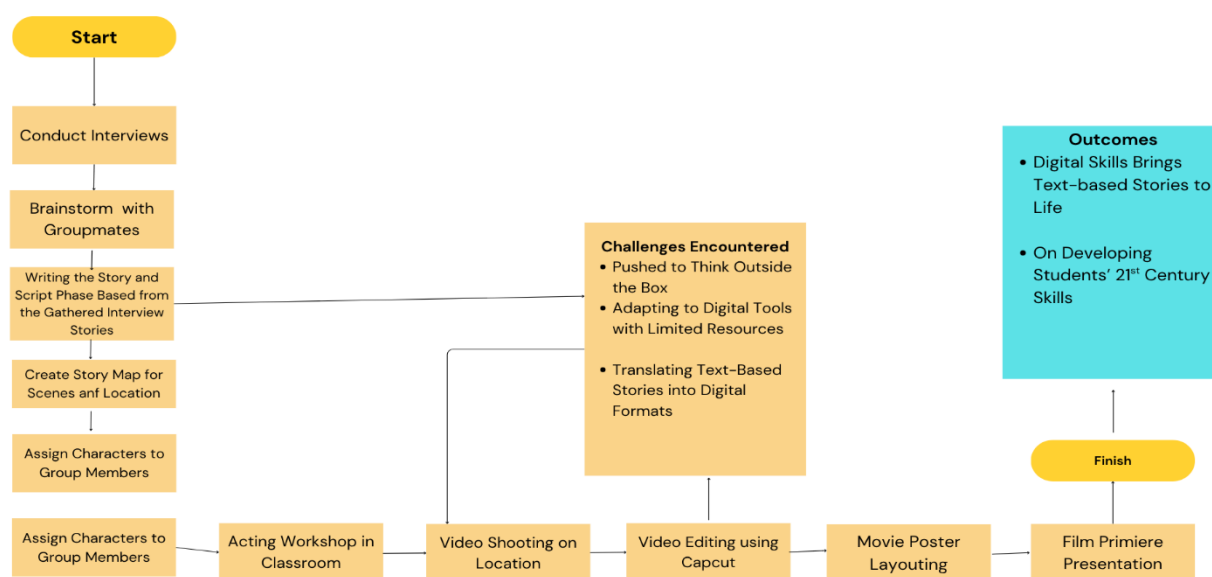


Figure 1 Project-Based Approach in Film Digitalization of Contemporary Written Stories

In this section, PBL guides the analysis of key informant narratives, and decision-making themes emerge. It was a digitalization of contemporary written stories into a film. They offer a holistic view of how this manner of doing literary studies in English sets students up to be competent and engaged.

4.1 Adapting to Digital Tools with Limited Resources

The emerging central theme highlights the students' experience adjusting to digital tools with limited resources. The primary problem shows how limited

resources can challenge students' creativity and ability to create excellent digital stories.

Informant 4 emphasized that:

Some of the main challenges I faced when adapting literary works into a digital format included technical constraints, copyright and permissions, and the cultural sensitivity of the piece-making careful consideration of cultural interpretation and representation.

Informant 6 also expressed that:

For me, ma'am, we had to deal with limited resources and ensure that our visuals matched the narrative we wanted to tell.

The statements concur with Informant 7, who mentioned that:

The main challenges I have faced are creating with limited resources, making the literary works accessible, and making the work visually appealing to the audience.

Commenting on his film's adaptation process of the tech, Informant 4 explained some of the challenges that acted as very substantial problems in the production process. One of the biggest obstacles faced was managing technical limitations.

"And then there were the restrictions of the technology on offer that made it difficult to deliver the desired look and sound quality, forcing us to be creative with how we would deliver the vision, as well as the challenges around clearance with the music and other editing elements."

Getting the right to use particular music or visual assets can be complicated and time-consuming and often led him to have to rethink or customize creative choices. Adding a layer of complexity was the cultural sensitivity of the story. Difficulties in those processes, like ensuring respectful, accurate portrayals of cultures (Interview 4) also meant that the technical adaptation of Informant 4 needed to be enriched through interviewing and consultation.

Informants 6 and 7 shared this sentiment of producing film with limited resources while trying to maintain high-quality visuals. It was also a reminder about the importance of balancing creative imagination with practical realities, from having to be resourceful and yet be able to think outside the box as they have to deal with what are available to them and not losing any of the content integrity in the process.

Both informants stated that without good equipment or financial resources, they had to use their ingenuity and resourcefulness, which led them to discover innovative ways to improve the aesthetic experience of their movies. Nevertheless, they found ways to finish a product that met their artistic standards, finding the courage to work despite the limitations of technology and resources.

Digital stories also serve as an effective strategy in technology integration and a role in having impactful learning (Guo, 2021). Digital storytelling, having been

established to enhance educational performance and engage learners (Smeda et al., 2014), presents a challenge to many students who struggle to digitalize their written stories. Comments from these works provide a small indication that they are not used with software such as multimedia editing software, graphic design software, or content management systems (Wang & Zhan, 2010), all of which involve a significant investment in learning how to use them before work begins.

Naturally, the absence of internet connectivity and limited access to technology further exacerbate the situation. Due to limited internet access and the inability to afford powerful gadgets, many students may find it challenging to conduct research, collaborate, and publish their work (Wichrowski, 2014). This limitation affects the overall quality of such projects because they may need to resort to using free, less powerful software or lower-resolution graphics. However, despite having limited access, students found workarounds using free tools or devising creative solutions with limited resources. Although this inventiveness is admirable, it also puts much strain on them and may eventually lower the caliber of their digital storytelling efforts.

Students struggle with scarce resources when implementing digitalization as part of the PBL approach, which not only encourages the use of technology but also supports UN Sustainable Development Goal 4 (SDG4), which calls for universal access to high-quality education and opportunities for lifelong learning. Digital storytelling gives students the tools to succeed in a technologically advanced society by encouraging digital literacy and artistic expression. However, resolving structural disparities in infrastructure and resource access is necessary to accomplish this goal. For all students to have the chance to engage in and gain from digital education, regardless of their socioeconomic background, it is imperative that the digital divide be closed.

4.2 Difficulty in Translating Text-Based Stories into Digital Formats

Students facing challenges turning text-based stories into digital formats caused another theme to surface.

Lastly, Informant 3 emphasized that:

Integrating technology to conceptualize the story is my biggest challenge, ma'am.

Informant 7 also stated that:

Based on my experience, adapting literary works into a digital format often simplifies complex themes while keeping the story's core.

Informant 9 also highlighted that:

My biggest challenges are ensuring that the digital version feels like reading the book, finding the right visuals, and ensuring everyone can easily understand and enjoy it.

Informant 3 recognized that the task's most difficult part was conceptualizing the story. They said it took a lot of brainstorming and experimentation to figure out

how to shape the idea or the narrative into a cohesive and visually compelling package. Explaining abstract concepts or emotions into concrete visual elements so that audiences are able to read or understand what the story is trying to convey was a challenge for Informant 3. It was a process that sometimes took many attempts and rewrites until they found the right mix of creativity and clarity. The struggle for Informant 3 highlighted the challenges of storytelling through a visual medium, where the minutiae of details – the images used, the rhythm of the scenes – all had to fit into an overarching vision of the story.

Informant 7, however, highlighted how they had to balance simplifying complex themes to retain the story's originality. He said that it meant adapting complex ideas or stories for a general audience often involved breaking them down into simpler ideas. This needed to be done carefully, though, so as not to simplify or dilute the soul of the story. Informant 7 stressed the need to keep the essence of the story and the emotional aspect to reach potential audiences. The carefully handled balancing meant having a sense of the source and

“a trick up your sleeve to make sure the adaptive process didn't lose the essence of what it was trying to be.”

The responses from Informant 9 elucidated a major challenge in making certain that the digital way of taking the story remained in the nature of reading an actual paper book. “They should be some sort of visuals to accompany the story and hopefully evoke the same emotional and immersive experience of reading a book,” he said. After months of deliberation and testing of formats, this meant designing the translation of these elements into visual and interactive formats for delivery – tone, pacing, descriptive detail, etc.

Informant 9 likewise articulated his perspective that the visuals must be both universally approachable and interesting; the story could be conveyed in a way that would be grasped and appreciated by a spectrum of people. The challenge was inspiring a balance between ingenuity and precision, keeping the depth and richness of the original text while also fantastically translating it into a more accessible and visually custom element within a digital medium.

The responses of these informants underscore the complicated challenges of adapting households' stories into digital or visual formats and the necessity of balancing creativity, accessibility, and fidelity to the original text. Converting text-based narratives into digital formats has ample significance and potential for writers to master the new techniques. This technique also requires you to approach the underlying elements that prop up your story differently, more thoughtfully. One of the primary problems students face when transitioning from text to digital media is keeping the integrity of the work.

Scholars such as Hayles (2008) and Bolter (2001) emphasize the importance of maintaining the “textual integrity” of a digital adaptation, which means the general ideas, emotions, and narrative structures should all be proportionate. The opinion that the digital version should arouse the same emotions as reading the original text is frequently expressed by informants in related conversations. This necessitates a thorough comprehension of the emotional undercurrents, themes,

and characters found in the literary work, as examined in McLuhan's (1964) concept of "the medium as the message."

Multimedia components, including pictures, sounds, and interactive aspects, must be carefully chosen by writers so that they enhance rather than diminish the story. Compelling digital narratives can increase engagement while maintaining the authenticity of the original content, according to Ryan's (2001) beliefs on narrative and immersion. Jenkins (2006), in his work on convergence culture, suggests that the objective is to produce a digital experience that engages the audience and elicits the same emotional responses as the textual form while maintaining the narrative's core. With them, producers can achieve an adaptation that respects the original work while balancing originality and faithfulness.

4.3 Pushed to Think Outside the Box

PBL is a cutting-edge teaching strategy that involves students in practical projects. This enables them to investigate complex problems and encourages critical thinking and creativity.

Informant 3 highlighted that:

PBL pushes us students to think outside the box, seek more information through research, and share that information through storytelling.

Moreover, Informant 4 explained that:

It made me aware of the factors to consider, especially in the context of contemporary issues. This made the adapted piece more impactful and relevant in this digital age.

Informant 15 also explained that:

Instead of brainstorming ideas, I deeply researched and explored the real-world problem at the heart of my story.

The transformational nature of the task is likely what the informant who commented that it encouraged students to think outside the box and access their creativity to bring to the project is likely referring to. This practice inspired students to forget traditional means of storytelling and think creatively about new means of storytelling, primarily through digital or visual storytelling. While encouraging students to try new techniques, tools, and perspectives, this project created a creative space that allowed students to create unique solutions to storytelling problems.

This mirrors the experience of Informant 4, who told us that the project-based writing of modern stories helped him find meaning and agency in this era. For Informant 4 the project was not only an exercise in academics, engaging modern audiences in manner through contemporary issues and themes was all part and parcel of the project. It gave him a vision of his work in action and of where he might be able to reach people today.

Informant 15 also stated that the project-based approach forced them to engage more in brainstorming and develop a better understanding of the real-world context. After some digging and research, Informant 15 found all that they needed

to know enough to fall in love with the story, within the microcosm of real life. By digging deeper into the narrative's core, they were able to build a deeper, more authentic perspective that gave them a richer sense of storytelling and world-building.

The responses of these informants show how the project-based approach unleashed creativity, relevance and a deeper engagement with the world. It encouraged students to think innovatively, connect their stories to contemporary issues, and use research to infuse their work with authenticity and emotional depth. This holistic approach enhanced their technical and creative skills and provided a greater sense of purpose and impact in their storytelling.

Students' experiences with the PBL approach provided significant insight into shaping the concept of creativity-thinking outside-the-box, which is one of the strategy's primary goals. Likewise, the findings revealed that PBL allowed students to think creatively by encouraging them to conduct in-depth research, analyzing strategically how to get the task done while targeting its primary objective. Thomas (2000) explains that PBL engages students in challenging problems to draw meaningful connections between their work and hands-on applications in their active learning. In this manner, students are responsible for their learning through this comprehensive approach. Thus, this motivates them to participate fully, as observed in their narratives (Krajcik & Blumenfeld, 2006).

Moreover, digitalization enables the integration of multiple media, enriching stories with sound, images, and interaction. As Robin (2008) notes, integrating multiple media elements increases engagement and encourages the development of critical digital literacy skills in the twenty-first century. This allows students a platform to try out new means of storytelling and express themselves in a far more engaging and dynamic way.

4.4 Digital Skills Brings Text-based Stories to Life

In this digital era, PBL is a new approach to engaging students with text-based narratives. Incorporating digital components improves their comprehension of current concerns and revitalizes the storytelling experience through interactive and multimedia formats. This conversation highlights the topics of engagement, relatability, and understanding while synthesizing perspectives from the informants to examine how digitalization affects storytelling.

Informant 2 expressed that:

Digitalizing our stories, ma'am, can help us better understand contemporary issues as part of our reality. We learn pod mam from the task that visuals, sound, and video can also bring the story to life but need to have many people involve achieving the goal of the task.

Likewise, Informant 12 stated that:

For me, the process of converting story to digital form enhances our engagement and grasp skill in using multimedia. The task also help us to collaborate with each in which it helps us to understand better on what we are doing. (Sa akoo mam, ang process sa pagdigitalize sa story naka enhance gyud sa among engagement since group task man siya then ang

pag gamit pd sa lailain technology nga wala mi kahibaw nagyibangay jud mi kay sige mi brainstorm para masabtan gyud ang dagan sa task.)

On the other hand, Informant 2 answered that stories were essential to them, apart from their digitalizing, so they could obtain more knowledge about modern real-life issues. Academic words transferred into visuals (film and animations) were more dynamically and inclusively received (Informant 2). Through this, they could view contemporary issues through a context, to make abstract or complicated topics more relatable. Tools like these, including visualizations, audio, and interactivity, were used to knit the narrative into real-world implementation and enable a more visceral engagement with the themes of the piece. Informant 2's anecdote exemplifies a phenomenon where digitalization enables contemporary topics to be represented in a more interesting and digestible format that breathes life into narratives that appeal to modern audiences.

Likewise, Informant 12 stressed that storytelling increased engagement and relativity by establishing emotional connections with the audience. According to Informant 12, stories told in digital mediums were more impactful and dynamic. By incorporating visuals, music, and pacing, digital storytellers can elicit more authentic emotional reactions from their audience, which can lead to more memorable and more relatable narratives. This emotional investment allows viewers to relate on a personal level to the characters and the themes, which promotes the composer's self-reflection and comprehension. Informant 12 illustrated how digital storytelling took text-based narratives and enhanced them beyond the text-based level to be more interesting and to connect better to the story.

Informants' responses point in the direction of what digitalization does with text-based stories – bringing them to life and relevance. Through the use of digital tools, storytellers can tackle modern challenges with visual impact and emotional resonance. This deepens the audience's understanding of multifaceted subject matter and strengthens their attachment to the narrative, rendering it more concrete and compelling. Digitalization has thus bridged the traditional narrative with modern audiences, turning static text into a dynamic, immersive experience that reflects everyday life and its realities.

PBL calls for students to engage in projects requiring creativity, collaboration, and critical thinking to cover real-world problems. PBL helps students become engaged and control their learning processes through research and solving real life problems (Thomas, 2000). When combined with digitalization, students can write and modify text-based stories using various multimedia forms, improving their capacity to convey complex concepts successfully (Robin, 2008). Because of this confluence, learning can be more enjoyable for children as they examine current issues relating to their reality and the story's content.

The process of digitalization makes traditional storytelling more dynamic. By using interactive features, sound effects, and animations, students can engage their audience more successfully than they could with just text (Sadik, 2008).

Students become more interested and drawn into the narrative when these components are engaged. Furthermore, students can relate their stories to real-life circumstances when digital storytelling is connected to societal challenges. This helps them comprehend the material and its broader consequences at a deeper level (Smeda et al., 2014). Due to its relevance, they are more motivated to study and actively engage in the storytelling process and its digital adaptation; however, combining emotional engagement and teamwork results in a more encouraging learning environment.

Students improve their understanding and memory of the subject matter by cooperating, exchanging experiences, and learning from one another. Digital storytelling's collaborative nature fosters a variety of viewpoints, which enriches and elevates the process, claim Wang and Zhan (2010). Thanks to this, students can experiment with their creativity and storytelling skills.

4.5 On Developing Students' twenty-first Century Skills

The need for critical thinking, creativity, teamwork, communication, and digital literacy is growing as society does; thus, students must acquire twenty-first-century abilities.

Informant 2 stated that:

The PBL approach helped me develop skills in research, creativity, teamwork, and multimedia tools like video editing.

Informant 3 expressed that:

During the process, I developed my creative and critical thinking skills, which can be applied to other academic or professional fields.

Informant 6 concurs with the mentioned statements that:

In the process of the PBL being integrated into the class, I developed strong communication and collaboration skills by working closely with my classmates to choose a story and create a script based on our interviews.

Similarly, Informant 11 emphasized that:

PBL altered how I tell stories. It made me a better researcher, always looking for information to make my stories more interesting. It also helped me learn to tell stories differently, depending on who I am talking to.

Informant 2 explained that they were most involved in developing their twenty-first-century skills with the project-based approach. Critical thinking, creativity, collaboration, communication, and problem-solving are just a few of the skills necessary for success in a fast-paced, ever-changing world. Informant 2 was able to utilize these skills in a practical way, encouraging growth both academically and interpersonally through a hands-on, project-based task. The project also asks them to think critically about making stories into new media products, collaborate with peers, and effectively communicate their ideas, all elements of learning for the twenty-first century.

In a similar way, Informant 3 stated that doing the task helped them build up their creative and critical thinking skills. He said that coming up with a concept for a story that had to be designed and built in a digital space, meant that they had to think outside of the box to solve problems in multiple ways. It opened the room for innovation and testing, pushing them to think out of the box. Simultaneously, they had to assess their decisions to make sure the end result matched their vision and the story's fundamental message. The project, as demonstrated through the example of Informant 3, allowed for creativity and analytical thinking that are crucial for tackling complex tasks.

Informant 7 noted that

"The project helped me with that because I was working with my classmates all the time, I think it helped me with communication and collaboration."

He pointed out it was a process that required ongoing interaction with, ideas and coordination to contribute to one common goal. Through this collaborative process, Informant 7 learned how to articulate his thoughts, actively listen to others' perspectives, and navigate conflict, which are important for teamwork and professional environments. By working with others in this way, he was able to develop skills that were ultimately transferable to working on future projects, and he gained an appreciation for the way that collaboration can elevate a creative project by introducing a diversity of viewpoints.

Finally, Informant 11 reported that the project transformed them into better researchers. He said that adapting a story to a digital medium required a lot of research to be accurate, culturally sensitive and relevant. This included researching sources, synthesizing findings, and letting them inform creative decisions. Informant 11 reflected on how the project should hone research skills, learning in the process how to identify credible information, critically consider data, and substantively use their results.

These responses together illustrate how the project-based framework became an all-encompassing learning opportunity, leading to the acquisition of core twenty-first-century skills. Students honed their technical skills and learned integrative skills through hands-on, collaborative, creative, and research-based activities that they will carry with them well beyond the classroom and into their academic, professional, and personal lives. It is an approach that prepares students not only to be knowledgeable but also to think differently, solve problems, and develop creative solutions—all essential skills in a world without certainty.

The PBL educational method also encourages students to address real-world problems and projects, preparing them for learning and practicing their skills. Indirectly, this method improves understanding of the content and helps hone twenty-first-century skills like critical thinking, collaborative work, and creativity (Thomas, 2000). Digital materials can be used in storytelling that convey ideas, connect to contemporary topics, and work closely with others (Robin, 2008). Informant 2 said

"The PBL model develops basic skills such as research, creativity, teamwork, multimedia skills (i.e., editing video)."

The hands-on, inquiry-based model of PBL naturally creates an environment that is conducive to exploration and improvement of skills (Krajcik & Blumenfeld, 2006). Informant 3 commented that creative and critical thinking skills were developed during the PBL process. These findings resonate with the work of Bell (2010), who highlights the significance of PBL in fostering higher-order thinking skills.

Informant 6 also mentioned the improvement of essential factors of success in the twenty-first century, which are strong communication and collaboration skills. Students develop a collaborative attitude by working closely with their peers in selecting stories and writing scripts. This improves their capacity to express themselves clearly and respect different points of view (Sadik, 2008). Informant 11 described how PBL changed their storytelling methodology by enhancing its ability to conduct effective research and adapt its narratives to various audiences. Wang and Zhan (2010) underline that this flexibility is necessary in today's diverse communication environment, allowing students to interact with a broader range of stakeholders more successfully.

Finally, Informant 13 pinpointed the acquisition of several transferable skills. These are especially useful in an academic and working context; they show how PBL sessions do not only stay in the classroom, as the skills can be used in real life. Project management skills are vital to excel in a modern workplace, as cited by Bell (2010). Thus, PBL develops an all-around skill set, including research, communication, teamwork, and adaptability, besides developing specific skills. Students gain multiple skills as they build literally everything to do with a project and receive specific training for what the modern workplace requires. Integrating technology with storytelling provides students practice in hands-on applications of their skills that will serve them well as they face challenges in professional and higher educational environments.

5. Discussion

The results of this research provide strong evidence that PBL enhances the growth of creativity, collaboration, critical thinking, and digital literacy in students—skills vital for academic achievement and career preparedness in the twenty-first century. These results align with the core tenets of constructivist learning theory, which posits that learners build knowledge through active participation in practical tasks and teamwork in inquiry (Piaget, 1973; Vygotsky, 1978). The student informants indicated that PBL tasks, like developing digital stories from conventional narratives, necessitated thorough content exploration, teamwork, and creative problem-solving. This reinforces the claim made by Barron and Darling-Hammond (2008) that inquiry-based and collaborative learning settings, fundamental to PBL, enhance deeper learning, critical thinking, and teamwork.

An essential element of this research was incorporating digital storytelling, which motivated students to interact with literature more actively and engagingly. Harris (2011) argues that digital storytelling improves critical literacy, emotional involvement, and creativity—views supported by student reflections in this study. Respondents noted that employing multimedia tools like video editing and

sound design enabled them to more effectively interpret, convey, and share literary themes, leading to a more significant and individualized learning experience. This procedure illustrates Jenkins' (2006) idea of "convergence culture," in which the fusion of various media platforms results in more vibrant narratives and enhanced student empowerment. Ryan (2001) likewise highlights the ability of multimedia to rejuvenate conventional storytelling methods, as seen in the informants' accounts of how digital narratives enhanced their involvement with current matters.

Employing digital tools in PBL environments further improved students' technical abilities and encouraged their collaborative working skills. Informants emphasized their development of skills in digital software and multimedia production, acknowledging its growing significance in the current digital economy. These results correspond with Koh and Fraser's (2012) analysis of PBL and conventional classrooms, indicating that PBL develops creativity, collaboration, and student engagement.

The results further reinforce Robin's (2008) assertion that digital storytelling aids students in cultivating digital literacy—a crucial competency in the twenty-first century. The increase in students' skills in research, problem-solving, and communication supports Bell's (2010) and Thomas's (2000) claims that PBL prepares students for real-world challenges by involving them in genuine tasks.

This study strongly backs the objectives of SDG 4, which seeks to provide inclusive, equitable, and high-quality education for everyone. The practical, student-focused approach of PBL creates an inclusive educational atmosphere that appreciates creativity, critical analysis, and teamwork in solving problems. The experiences of informants highlight how digital storytelling enabled them to interact with content differently, enhancing the relevance and engagement of their learning.

By converting conventional literary analysis into multimedia projects, PBL enhances students' comprehension while closing learning gaps and promoting equal chances for involvement. Voogt and Roblin (2012) assert that educational systems need to incorporate these twenty-first-century skills to stay effective and fair. Consequently, PBL acts as a transformative teaching method that corresponds with SDG 4's focus on quality, inclusive education, preparing students with the skills and flexibility needed for lifelong learning and global citizenship.

Although the results are promising, this study has limitations that impact the generalizability of its conclusions. The sample size was limited and context-dependent, comprising student participants from one school or educational setting. Consequently, the results might not be applicable to various educational settings—especially those with restricted technological resources or alternative teaching approaches. Additionally, the optional aspect of participation might have led to selection bias, benefiting students who were already skilled in digital tools or very motivated.

Comparative research on digital resource disparity uncovered systemic obstacles that could hinder the execution of PBL in areas with limited resources. Warschauer, Knobel, & Stone, L. (2004) and Selwyn (2012) highlight the ongoing inequalities in internet access, availability of devices, and training in digital literacy that continue to exist among schools and areas. Beetham et al. (2009) contend that digital inclusion encompasses more than just hardware—it necessitates ongoing pedagogical support, enhancing teacher capabilities, and curriculum incorporation. Although students in this research shared positive experiences, their insights might not reflect those of peers in marginalized or rural areas that suffer from insufficient infrastructure or support systems.

Further studies should investigate the effectiveness of digital storytelling and PBL frameworks in various socioeconomic contexts, emphasizing teacher preparedness, institutional backing, and student access to technology inside and outside the classroom. A wider, more varied sample would aid in evaluating the flexibility and fairness of digital teaching methods across different learning environments.

This research makes a theoretical contribution by broadening the use of PBL in possibly neglected areas. Although many studies focus on PBL in urban or affluent schools, these results indicate that its fundamental concepts—collaborative inquiry, problem-solving, and student agency—can be successfully modified for rural or remote environments, provided there is adequate support and awareness of local contexts. In this context, digital storytelling arises as a culturally attuned teaching approach that increases engagement, even in situations where conventional learning resources are limited. The research therefore enhances the theoretical perspective of PBL not only as a classroom technique but as a flexible, inclusive, and scalable framework for context-sensitive education (Thomas, 2000; Bell, 2010).

To tackle infrastructure inequalities and expand teaching innovations such as PBL, the study suggests strategic partnerships among universities, tech companies, and education policymakers. Universities are capable of offering teacher training, creating curricula suited to specific contexts, and performing impact assessments, whereas industry partners can supply hardware, software, and connectivity solutions that meet the demands of schools.

These partnerships can help close digital gaps and establish enduring educational environments. Public-private collaborations in Southeast Asia and Africa have demonstrated that partnerships can enhance access to digital education while aligning learning outcomes with workforce development objectives (UNESCO, 2024). This method can act as a reproducible framework for providing all students—no matter where they are—with the digital skills needed in today's interconnected world.

6. Conclusion

The PBL approach is an effective strategy for enhancing creativity, critical thinking, and collaboration among students, particularly in transforming text-based stories into digital films. As students engaged in the challenge of adapting written narratives into compelling visual formats, they developed technical proficiency, resourcefulness, and problem-solving abilities, especially in navigating the constraints of limited digital resources. More than just acquiring technological skills, students cultivated essential twenty-first-century competencies such as adaptability, computer literacy, and teamwork—increasingly vital skills in today's dynamic and technology-driven world. This pedagogical approach aligns with United Nations SDG 4: Quality Education, as it ensures learners gain academic knowledge and practical and transferable skills necessary for sustainable development and global participation.

PBL equips students with the competencies needed to confront both the opportunities and challenges of an evolving world, making it a powerful model for future-ready education. For future research, educators are encouraged to investigate students' access to digital storytelling and movie-making tools, acknowledging the disparity in the availability of these resources, especially in remote or underserved areas. To address this gap, it is recommended that efforts be made to provide equitable access to digital tools, enabling students to fully engage in digital storytelling projects.

Furthermore, teacher training on PBL methodologies is essential to maximize students' potential and support the development of twenty-first-century skills in diverse learning environments. Teachers also need to be equipped in crafting rubrics to evaluate the necessary skills to give the appropriate authentic task to the students. These initiatives collectively support inclusive and equitable quality education for all, reinforcing the commitment to SDG 4.

7. References

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