

DIGITAL STORY TELLING USAGE TO BOOST CREATIVE THINKING: STUDENTS' AND TEACHERS' PERCEPTIONS

R.A. Fitri

UIN Walisongo, Semarang, Indonesia
e-mail: revinaaf393@gmail.com

DST had emerged as an effective strategy for developing students' creative thinking abilities. By merging technology and storytelling into educational activities, it gave an alternate technique for engaging students in learning. Using DST, educators might engage students' imaginations and encourage their creativity. This study explored students' and teachers' perceptions about the package of DST to boost student' creative thinking and the accommodation of students' creative thinking through DST. The data collected through survey within two weeks. The findings indicate that DST is helpful in expressing students' creative idea. Besides, DST can develop and enhance creativity among students. In packaging DST, teachers believe that some elements affecting it, such as well-organized and good narrative, multimedia or digital technology usage. Besides, teachers believe that students' participation and interactivity can enhance creative thinking.

Keywords: *Creative Thinking; Digital Story Telling, DST Package; English Learners; Students' Creativity*

1. INTRODUCTION

Creativity is required for all subjects and all levels in school, whether students study in psychology, economics, communications, science, engineering, or another field. Creativity entails mixing existing labor, objects, and ideas in novel ways for new objectives. In Bloom's Taxonomy, creativity requires higher levels of thinking, such as synthesis where ideas are generated. The teaching of English is an excellent example of creative education. This is true if the course contains audio books and creative writing assignments. Students' imagination is stimulated by audio books.

Students can assume the characters' appearances and personality while listening to them speak and react. They can also generate ideas for the story's time period and environment. Furthermore, English class allow students to write imaginatively about fiction and nonfiction topics. They can also come up with names for interesting people and stuff utilized in their stories, as well as potential new products for the market. This is accomplished by blending concepts, ideas, and words in novel ways (Kanematsu & Barry, 2016).

Digital Storytelling (DST) has emerged as an effective strategy for developing students' creative thinking abilities. The telling of stories or personal narratives connected with the use of digital technology to generate meanings is referred to DST (Lambert & Hessler, 2018). DST, as the name implies, distinguishes itself from traditional storytelling by utilizing technology to create digital stories. DST or digital story artifacts are typically created in the form of short films lasting two to three minutes (Wu & Chen, 2020). By merging technology and storytelling into educational activities, it gives an alternate technique for engaging students in learning. Using DST, educators may engage students' imaginations and encourage their creativity. Students can actively participate in the development of their own stories with this method, allowing them to convey their ideas and thoughts in a creative and engaging way (Erdogan, 2021).

Several studies have revealed a beneficial association between DST and creative thinking. DST experiences were used in a transition course aimed to help students build critical and creative thinking abilities, adjust to college life, and grasp college-level work ethics (Akyeampong, 2018). There were encouraging outcomes when DST was used as an intervention approach in conventional scientific classrooms to enhance creative thinking

capacities (Wardiah et al., 2022). DST has been acknowledged as a constructivist instructional method that can be utilized to enhance project-based, technology-integrated, and student-centered learning experiences in the years afterwards (Robin, 2008). Recent study has also indicated that digital storytelling can help students improve higher order thinking skills such as critical thinking and creative thinking (Anderson et al., 2018).

DST incorporates multimedia components with traditional narrative, such as photographs, videos, and sounds. Students engage in a dynamic learning process that stimulates their imagination and creativity with this method. Digital platforms give students with a vast canvas on which to express their thoughts, hence increasing their creative potential (Ohler, 2016). Students can create storylines using digital storytelling, which encourages them to think critically and creatively. Students use their creative capacities by inventing characters, plotlines, and locations, honing abilities essential for problem-solving and imaginative thinking.

DST has the potential to operate as an instrument in documenting students' scientific innovation process (Yang et al., 2022). As scientific creativity is described as the ability to perform unexpected, unique and beneficial scientific thoughts, ideas, or actions. Collaborative digital storytelling projects encourage peer connection and allow students to express their ideas and experiences. Students participate in brainstorming sessions as part of this teamwork, strengthening their creative thinking through various input and feedback (Chen et al., 2023).

As the researcher had searched the studies using keyterm 'digital storytelling to boost students' creative thinking', only little research shown. One study showed that DST contributed to the development of various creative thinking skills, such as fluency, originality, imagination, analytical thinking, different perspectives, media elements, and content dimensions (ERTAN ÖZEN & DURAN, 2021). Besides, there is a need for more research that explores teachers' perceptions on the use of DST to boost students' creative thinking (Tabieh et al., 2020).

This article aims to describe teachers' perception about the package of DST and its use in order to boost student' creative thinking and the accommodation of students's creative thinking through DST.

Teachers may utilize development of DST to help students improve their creative thinking skills. This package should contain guidelines, tools, and resources to assist teachers in incorporating digital storytelling into their classroom practices (Schmoelz, 2018). It is necessary to provide instructors with training and professional development chances to learn how to use DST successfully to boost students' creative thinking skills. This training should concentrate on the technical abilities required to create digital stories, as well as pedagogical tactics for improving students' creative thinking (Smeda et al., 2014).

This study was carried out based on the previous research that mentioned: DST contributes to the development of various creative thinking skills, such as fluency, originality, imagination, analytical thinking, different perspectives, media elements, and content dimensions and teachers' perception of digital storytelling is fun and engaging teaching method that can have a positive effect on students' learning outcomes.

2. RESEARCH METHOD

This study is survey research. Creswell (2005) defined survey research as a procedure in quantitative research in which the researcher administers a survey to a sample or to an entire population of people to describe attitudes, opinions, behavior or special characteristics of the population. The researcher explored how to package storytelling and its use to enhance students' creative thinking and how to accomodate students' creative thinking through digital storytelling. The research participants were senior and junior high schools' teachers and students who are learning English in the class.

Data were collected through survey. The survey was done within two weeks. The researcher used questionnaire. The data were analysed using 5 steps of interactive model of analysis, i.e. (1) collecting data; (2) classifying data; (3) reducing data; (4) displaying data, and; (5) drawing conclusion (Miles & Huberman, 1994).

3. FINDINGS AND DISCUSSION

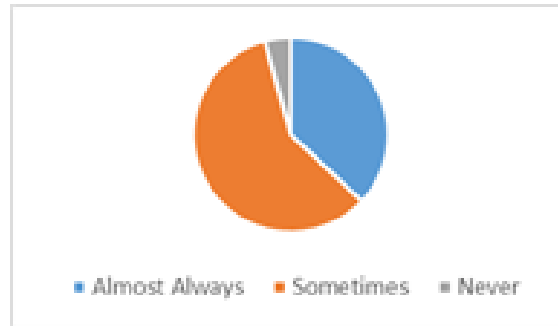


Figure 1. The Frequency Of Multimedia Usage In DST

The pie chart above reflected the pattern of multimedia usage in DST among students. 58,7%, indicated that senior and junior high students sometimes used multimedia (images, videos, and audios) to enrich their DST. Meanwhile, 37% indicated that the respondents almost always incorporated multimedia into their DST. However, 4,3% stated that they never used multimedia in their digital stories.

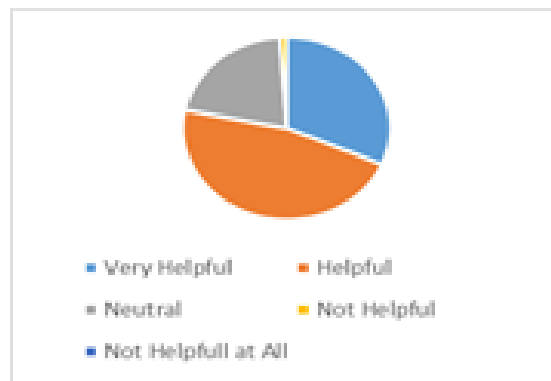


Figure 2. The Help of DST in Developing Creativity

The pie chart illustrated responses to the help of DST in developing creativity. According to the data, 31,5% of respondents found DST to be very helpful, indicating that it significantly aided them in viewing ideas with a fresh and creative outlook. The majority, comprising 46,7% expressed that DST was helpful in fostering a different and more creative perspective. A smaller percentage, 20,7% maintained a neutral stance, implying that they neither strongly agreed nor disagreed with the idea that DST contributes to a more creative viewpoint. 1,1% of respondents indicated that DST was somewhat less helpful in prompting them to see ideas from different and more creative angles.

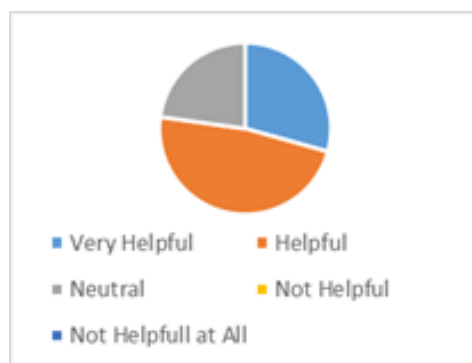


Figure 3. The Role of DST in Developing Unique Plot and Enhancing Creativity

The pie chart depicted responses to the role of DST in developing unique plot and enhancing creativity. A notable 29,3% of respondents affirmed that DST was very helpful, indicating a significant positive impact on the development of distinctive characters and plots, ultimately fostering creativity. 47,8% acknowledged that DST was helpful in the development of unique characters and plots. On the other hand, 22,8% of respondents maintained a neutral standpoint, neither strongly affirming nor negating the impact of DST on character and plot development.



Figure 4. The Belief of Using DST in Motivating Creative Thinking

The pie chart depicted responses to the belief of using DST in motivating creative thinking. About 18,5% of respondents expressed a strong belief in the positive impact, stating that “very confident”, that DST motivated them to think more creatively and come up with new solutions. A significant majority, 63% indicated a substantial level of confidence, stating that they “confident” in the motivating impact of DST on their creative thinking and solution creation. Approximately 17,4% of respondents maintained a neutral standpoint, neither strongly affirming nor negating the belief that DST served as a significant motivator for creative thinking and innovative solution creation. 1,1% expressed a certain degree of skepticism, stating that “not confident” in the motivating impact of DST on their creative thinking.

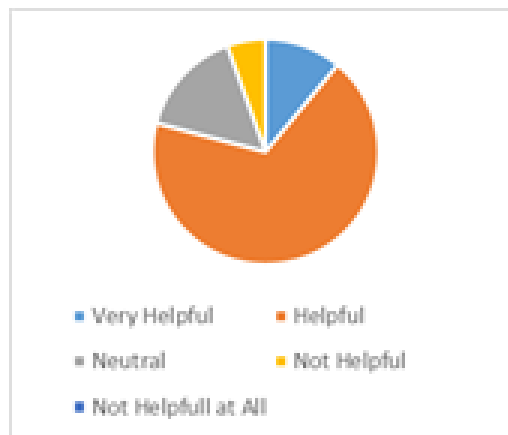


Figure 5. The Help of DST in Expressing Creative Ideas

The pie chart represented responses to the help of DST in expressing creative ideas. Approximately 11% of respondents expressed a strong belief in the substantial assistance of DST, stating that it is “very helpful” in articulating creative ideas with clarity and expressiveness. The majority, constituting 68,1%, indicated a significant level of assistance, stating that DST is “helpful” in articulating creative ideas with clarity and expressiveness. About 15,4% of respondents maintained a neutral stance. A smaller percentage, 5,5% stated that DST was not helpful in helping express creative ideas with clarity and expressiveness.



Figure 6. The Belief of DST in Stimulating Creative Imagination and Expanding Knowledge

According to the results, 32,6% of respondents strongly believed that DST was very confident in prompting the creation of imagination and expanding understanding of creativity in diverse fields. A significant majority, 50% expressed a belief that DST was confident in fostering imagination and expanding comprehension of creativity across various domains of knowledge. About 15,2% of respondents maintained a neutral stance, neither strongly affirming nor negating the belief that DST significantly contributed to the creation of imagination and the broadening of understanding about creativity. A smaller percentage, 1,1% expressed a certain degree of skepticism, stating that they “not confident” to the effectiveness of DST in stimulating imagination and expanding understanding of creativity. A minimal 1,1% of respondents stated that they were not confident at all in the belief that the effectiveness of DST in prompting imagination and broadening understanding of creativity.



Figure 7. The Belief of Multimedia Usage in Enhancing Students' Creative Appeal

According to the results, a substantial 72,7% of respondents very agree that the use of multimedia significantly improved the creative appeal of students. An additional 27,3% expressed agreement, indicating a widespread acknowledgment that multimedia in storytelling had a positive impact on enhancing students' creative engagement.

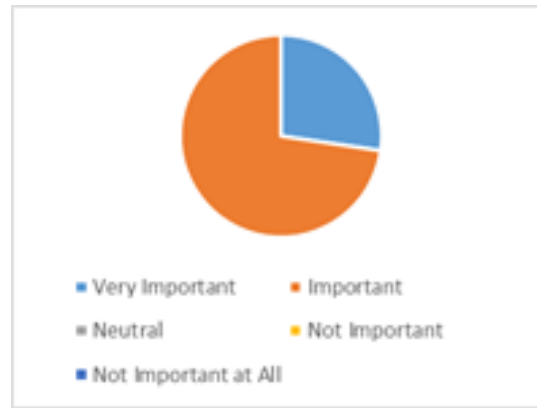


Figure 8. The Importance of Good Narrative in Drawing Students' Attention and Stimulating Creative Thinking

According to the results, 27,3% of respondents strongly believed that a good narrative was very important for emphasizing its significant role in engaging students and fostering creative thought. A substantial majority, comprising 72,7% expressed the belief that a good narrative was important in capturing students' attention and prompting creative thinking.

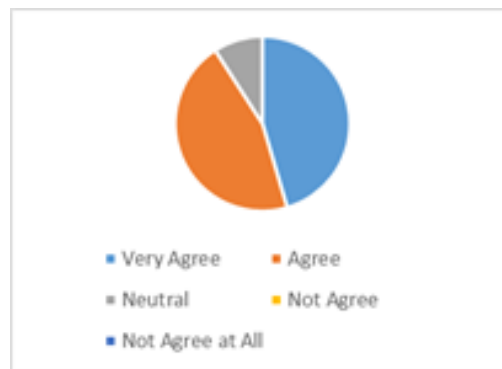


Figure 9. The Belief of Well-organized Narrative in Guiding Students' Creative Thinking

According to the results, 45,5% of respondents very agree that well-structured stories play a crucial role in directing students' creative thinking toward productive outcomes. A significant majority, comprising 45,5% expressed agreement, indicating widespread acknowledgment of the positive impact of well-structured stories in guiding students' creative thought toward productivity. About 9,1% of respondents maintained a neutral stance.



Figure 10. The Evaluation of Multimedia Usage in DST to Understand Concept and Students' Creativity

According to the results, 36,4% of respondents provided a very positive evaluation, indicating a strong belief in the highly positive impact of multimedia elements on students' understanding and creativity. A significant majority, 63,6% expressed a positive assessment.



Figure 11. The Belief of Students' Participation in Using Narrative to Enhance Creative Thinking

According to the results, 36,4% of respondents believed that students' participation in using narrative was very enhancing to think creatively. A significant majority, comprising 63,6% expressed a belief that stories involving active student participation enhanced creative thinking.

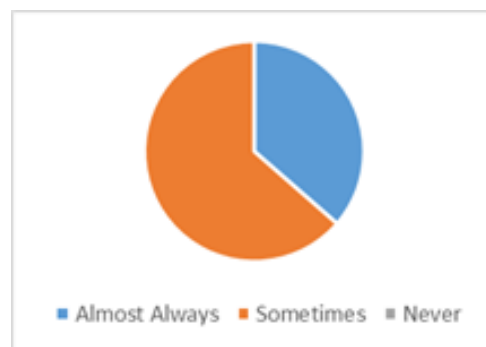


Figure 12. The Frequency of Digital Technology Usage in Supporting Teaching Narrative

According to the results, 36,4% of respondents answered that they almost always DST in supporting teaching narratives. 63,6% responded that they sometimes used digital technology to support storytelling and narrative during their teaching.

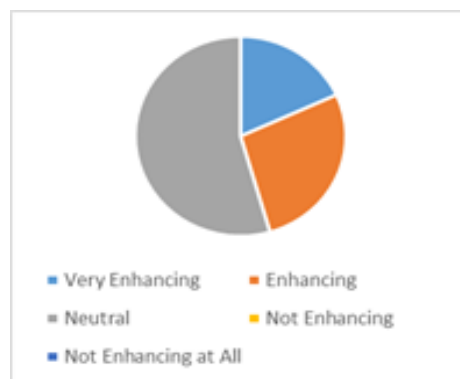


Figure 13. The Belief of DST Usage in Enhancing Students' Participation and Stimulating Creative Thinking

18,2% of respondents strongly believed that the use of DST very enhance students' participation and creative thinking. A substantial portion, comprising 27,3% expressed a belief that the use of DST enhanced student engagement in learning and stimulates creative thinking. About 54,5% of respondents maintained a neutral stance, neither strongly affirming nor negating the belief that DST significantly contributed to increase student engagement and creative thinking.



Figure 14. The Belief Of DST Interactivity In Encouraging Active Participation And Creating Creative Ideas

According to the results, 100% of respondents strongly believe that interactivity in DST very encourage students to actively participate and generate their own creative ideas.



Figure 15. The Belief of Students' Response in Using DST to Expand Creative Thinking

The inquiry into the belief of students' response in using DST to expand creative thinking garnered insightful results. A significant 54,5% of respondents reported a very positive response from students, emphasizing the strong impact of DST on enhancing creative thought. Another 45,5% stated that the response was positive, showcasing a widespread acknowledgment of the positive influence of digital narratives. Notably, 4,8% expressed a very negative response, suggesting a fraction of respondents who perceive a detrimental impact on student creativity.

Previous research has found that DST can improve students' creative thinking and imagination (Yalcin & Ozturk, 2019). DST is a sort of multimedia that includes of photos and video segments accompanied by background music and a voice-over narration, and it has been shown to boost students' creativity and critical thinking (Salem, 2022). DST has also been recommended as an impactful language learning method that might improve learners' reading comprehension and creativity (Aboo Bakar, 2019).

Educational multimedia technology can be classified based on whether it is used for teaching or learning (Abdulrahman et al., 2020). In addition, the review presents a taxonomy and component synthesis of widely recognized multimedia applications, as well as an examination of several case studies and findings. It also identifies challenges to the use of ICT and multimedia in teaching and learning.

Another systematic review focuses on multimedia learning concepts in various learning contexts, such as traditional, virtual, and augmented reality. The evaluation noted the growing interest in multimedia learning principles and the need to expand their bounds in order to show the current status and gaps in the area (Çeken & Taşkın, 2022). Furthermore, a study investigating multimedia learning as a method of teaching reading comprehension discovered that technology-infused lessons, including multimedia learning, are proved to assist students learn the language better and can increase their motivation to learn (bin Abdul Samat & Abdul Aziz, 2020).

Previous research has demonstrated that using multimedia can improve students' creative appeal and boost their enthusiasm in actively participating in learning (Agaj, 2016). According to multimedia learning theory, students can learn more successfully when they are provided two or more media and are engaged in processes of picking the most appropriate media.

Teachers agree that using multimedia in DST helps students understand topics and fosters creativity, and others believe that a well-organized narrative can guide students' creative thinking. Teachers also believe that employing narrative to encourage creative thinking improves student involvement, and they occasionally use digital technology to facilitate teaching narrative. However, some teachers are ambivalent about using DST to increase student participation and foster creative thinking. Teachers think that DST interaction encourages active involvement and the generation of creative ideas. Good narratives are essential for capturing students' attention and stimulating creative thinking.

Several studies have examined the impact of multimedia technology on the educational system and demonstrated the importance of multimedia technologies in education as well as the widespread adoption of multimedia tools (Abdulrahman et al., 2020). However, there are drawbacks to using multimedia technology for educational objectives, such as hostile programming or user interface, restricted resources, a lack of required expertise and experience, a lack of time, and a high maintenance cost. As a result, it is critical for teachers to grasp how to construct material presentations for online teaching and courses using multimedia learning principles. To improve students' learning experiences, teachers could offer their materials in more appealing ways, such as by employing more related media.

4. CONCLUSION AND SUGGESTIONS

Based on the results of the study, there are some conclusions that can be drawn in order to answer the research questions. Students believe that DST was helpful in expressing their creative idea. Besides, DST could develop and enhance creativity among students. Students believed DST can stimulate creative imagination and expand their knowledge. In packaging DST, teachers believed that some elements affecting it, such as well-organized and good narrative, multimedia or digital technology usage. Besides, they believed that students' participation and interactivity can enhance students' creative thinking.

Based on the results, some suggestions can be given to students and English teachers. For students, they can increase the use of multimedia in DST because the teachers believe that multimedia usage can enhance students' creative appeal. For English teachers, they can improve using good narratives in drawing students' attention, well-organized narratives, and invite more students' participation when packaging DST.

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