



Vocational High School Students' Perspectives on Digital Storytelling in Developing Speaking and Writing Skills [Perspektif Siswa Sekolah Menengah Kejuruan Terhadap Digital Storytelling Dalam Mengembangkan Keterampilan Membaca Dan Menulis]

Elvina Anggraeni Retno Palupi¹⁾, Ermawati Zulikhatin Nuroh^{*:2)}

¹⁾ Department of English Education, Universitas Muhammadiyah Sidoarjo, Indonesia

²⁾ Department of English Education, Universitas Muhammadiyah Sidoarjo, Indonesia

*Corresponding author ermawati@umsida.ac.id

Abstract. *The purpose of this study to investigate students' viewpoints regarding the application of digital storytelling to the improvement of speaking and writing abilities. Technology is advancing so quickly that learning is now easier and more sophisticated in the educational process. Students from vocational high schools in the tenth grade participated in this study. A qualitative research methodology based on case studies was employed in this study. Information was gathered by means of student interviews, video analysis, and observation. The analysis of the results showed that the approach taken could improve students' writing and speaking abilities as well as their readiness for digital storytelling in the context of learning English.*

Keywords – Digital Storytelling, Speaking Skill, Writing Skill

Abstrak. *Penelitian ini bertujuan untuk menganalisis bagaimana perspektif siswa pada penggunaan digital storytelling dalam pengembangan kemampuan berbicara dan menulis. Dengan kemajuan teknologi yang pesat, pembelajaran kini menjadi lebih mudah dilakukan dan lebih maju dalam proses pendidikan. Partisipan dalam penelitian ini adalah siswa sekolah menengah kejuruan kelas sepuluh. Penelitian ini menggunakan metodologi penelitian kualitatif yang berpusat pada studi kasus. Data dikumpulkan melalui observasi, analisis video siswa, dan wawancara siswa. Hasil yang diperoleh adalah analisis bahwa metode yang digunakan mampu memberikan kontribusi yang baik terhadap keterampilan berbicara dan menulis pada siswa dan persiapan digital storytelling dalam pembelajaran bahasa Inggris.*

Kata Kunci - Digital storytelling, kemampuan berbicara, kemampuan menulis

I. INTRODUCTION

Entering the 21st century, technological advancement and development has been very rapid. Social life is now easily accessible and infinite between distance and time. Today's society is familiar with technological advances by starting to recognize the existence of gadgets and the internet, not only young people but also parents and children have begun to recognize and can operate gadgets and other electronic goods. Existing technology also plays an important role in education to improve the quality of the implementation of learning activities. According to Tom Cutchall, educational technology is a research and application of the science of behavior and learning theory using a systems approach to analyze, design, develop, implement, evaluate, and manage the use of technology to assist in solving learning problems [1]. The main goal is to utilize technology to help solve learning and human performance problems. With all the advantages possessed by current technology, all learning materials can be accessed easily and without limits. As educators, we must be able to adjust the way we educate students according to the way of life in the digital age and prepare them to face future challenges. Although the determinant of success in education is not the teacher, the learning process is the qualification and central point of education and a mirror of quality. Learning media is one of the things that can be designed, made, used, and developed to support the increase in student acceptance of the information to be provided. Media integrated into educational technology, if designed and used properly, can be utilized to achieve the effectiveness and efficiency of teaching and learning activities.

The utilization of technology in education for learning media varies greatly, one of which is to improve reading and speaking skills. Speaking in general can be intended as a skill in conveying one's ideas or ideas to others using spoken language [2]. In the application of this speaking skill, students can start by training themselves to tell stories

and present an event that they have experienced themselves or events that have occurred with the knowledge of students. The results of the story conveyed can be through media intermediaries that can be read by them. In the application of learning about past stories both fiction and non-fiction in class X students in vocational high schools, educators still use textbook media tailored to learning needs. Although technology is used in this case, its potential needs to be investigated further to give students the best learning experience. Reading and writing are the first steps in this process. Students are encouraged to write what they see, hear and think during learning activities, which helps ideas emerge and develop into more advanced forms of literacy. This enables a culture of literacy to grow. The aim of literacy practice during the familiarization stage is to increase enjoyment of reading outside the classroom, improve reading comprehension skills, increase readers' confidence and encourage the use of a variety of reading materials. As students rely solely on textbooks and oral explanations from teachers, the process of problem identification and disclosure by students is minimal, which contributes to their weak understanding of literacy skills. A new concept in learning is the integration of technology with previously used learning models. One of the updates in the delivery of learning materials, especially in English lessons, is the introduction of learning methods using digital storytelling media.

Digital storytelling (DST) is one of the many artistic media that has been adapted for use in the research environment. Storytelling is one of the oldest and most popular teaching methods for describing events that have happened in the past or will happen in the future. Digital storytelling videos are videos that convey the emotional impact of a story so that the audience can feel it [3]. Since storytelling is appropriate for all ages and has a place in all cultures, it has been acknowledged as a universal teaching method. The role of storytelling in education has not changed over time, despite the influence of religion, language, and race. However, the manner in which stories are told has evolved [4]. Digital storytelling, in its broadest definition, is the dissemination of independent short films made with multimedia applications that make use of digital text, images, video, and sound materials that are replayed through a projector, television, or computer monitor/screen and given to viewers in order to educate them about a particular topic [5]. Digital storytelling, according to, allows students to utilize new technologies effectively, especially when they interact with digital resources and editing tools that help produce high-quality stories [6]. The art of storytelling using digital components, such as text, audio, and video, is known as "digital storytelling" [7]. Digital storytelling usually consists of a few minutes of narration accompanied by music and visuals that explain concepts related to a particular theme [8]. The multimedia component in digital storytelling encourages video production and editing capabilities, according to Barber [9]. To produce video clips for digital storytelling activities, students can acquire video editing skills [10]. They are also able to present ideas and share them creatively with others through various media and formats. Students are said to benefit from digital storytelling.

This research has differences from previous research. The applications used to create digital storytelling media were overly numerous in earlier studies. This study produces high-quality learning media using only two applications, which is a more practical implementation than the four applications used previously to assist in the creation of media. The tool that researchers use is called Canva. It is used to make videos one at a time, which are then combined using the Cap Cut application. Canva is also used to record sounds, add background effects, and put previously created video slides together. In this study, vocational students in the tenth grade are given improved speaking and reading skills through the use of digital storytelling media. Another way that research on digital storytelling in vocational high schools differs from earlier studies is how it is conducted. The purpose of this study is to determine how vocational high school students view and respond to the use of recount text materials in digital storytelling in the classroom. One type of text that high school or vocational students' study in class is a recount text. Telling someone about something that happened in our lives—typically referred to as a past story or an event that has already happened—is known as recounting. It might be about our weekend activities or something that happened when we were on vacation the previous year. Recount texts are also written to assess and interpret the meaning and significance of historical events in a particular way, in addition to recounting them. Giving the audience a general idea of what happened and where it happened is crucial. This study takes the initiative to evaluate the ways in which students' perceptions of digital storytelling can impact their comprehension of the English language, develop their creative faculties, and inspire them to participate in active learning. Additionally, this study will examine how well students believe that digital storytelling can be used in a professional setting based on their understanding of the topic and their experience creating digital storytelling media. Thus, the primary objectives are to facilitate the creation of more efficient teaching methods that take advantage of current technological advancements and cater to the needs of learners, and to offer a comprehensive comprehension of how learners view the use of digital storytelling in English language learning (EFL).

Research Questions

1. What are the students' perspectives on creating digital storytelling videos?
2. Does digital storytelling assist students in developing their speaking and writing abilities?

II. METHOD

This study employed a qualitative research methodology. As per Gerring, the present study investigates the incorporation of digital storytelling within the framework of English language acquisition [11]. 10th grade students majoring in TITL 1 from SMK Negeri 2 Probolinggo, in all 33 students participated, 6 of whom were involved with the research subject. The authors used direct observation during the data collection process to look at how the students interacted using the digital storytelling-presented content. In-depth qualitative data collection techniques like semi-structured interviews have been widely employed in educational research. Semi-structured interviews were employed in this study for the following reasons: For educational research, semi-structured interviews work well, particularly for case studies. The interviews' semi-structured format made it possible to thoroughly analyse the experience of creating the digital storytelling video.

The four primary steps of the research process in qualitative research are data collection, data categorization, data display, and conclusion drawing. A variety of techniques, including of student interviews, video analysis, and observation, were used to collect data. In order to find meaning in the data, the analysis involved grouping and categorizing the data, and conclusions were made using the data analysis. This research is expected to contribute to students' understanding of how digital storytelling can influence learning English in vocational schools, providing a foundation for the development of more effective and relevant technology-enhanced learning strategies at the vocational level.

III. FINDINGS AND DISCUSSION

1. FINDINGS

Digital storytelling has the potential to improve students' communication and critical thinking abilities in vocational education. Because of this, vocational high schools should provide their students with a foundational understanding of information and communication technologies so that they can use digital storytelling effectively. In this case, vocational high schools can teach students the foundations of ICT and demonstrate to them the applications of digital storytelling in a range of fields, such as business, social science, and natural science. The development of foundational information and communication technology skills is one of the most important steps in preparing vocational students for the use of digital storytelling. Students can learn the principles of information and communication technology, including how to use software, apps, and internet networks, at a vocational high school.

The purpose of this research is to teach students how to use storytelling technologies, understand stories in terms of their meaning and context, use English as a storytelling tool, and engage in multimodal activities. Students have gathered this information, shared story drafts, and created digital stories. In addition to using various video creation platforms and editing apps, students can learn about stories and prepare to create interactive stories based on their own experiences. Teachers have also increased students' knowledge about digital stories, which are creative mash-ups of text, voice, images, music, and/or sound that are usually presented as short films. Students may be given new opportunities to write a wide range of story texts if they are able to demonstrate their growth through the use of digital stories. Through the use of apps on smartphones and other electronic devices, students also receive instruction on creating digital stories. In other words, during the knowledge development stage, students have participated in the creation of digital narratives. Enabling others to take part in the production means arming students with a variety of skills, such as language resources, editing software, storytelling, and extra technical support tools (like telephones or cameras).

Note that a variety of data sources, such as songs and images, have an impact on the digital story's overall meaning and implications. The teacher guides the class in using a variety of online language resources, such as smartphone apps and electronic translators, while they are producing digital stories. Students are also free to use audio, video, and image content that is protected by copyright as long as the source is properly cited or acknowledged (they learn literacy to avoid plagiarism and respect copyrighted content). Additionally, they were told to use the cameras on their cell phones to snap images of the objects they were seeing. After acquiring knowledge, students participate in writing a narrative about the object they have observed. During a field trip, the conditions surrounding the school are visited and examined, leading to the creation of this story. According to every participant, none of them had ever received instruction on how to use these digital devices to write stories. With no regard for the technology surrounding them, they simply wrote stories. In an in-depth story that they had never heard before, every student reported receiving new instructions. The students realized that thinking about how to create digital stories was prompted by intellectual exchange and collaborative story-telling. Students can now follow the story text development and story circle through organized learning activities. Every student admitted that they had never received instruction on how to use this digital device to write stories. They wrote stories without considering the surrounding digital technology. Every student reported that they were receiving one-on-one instruction in a detailed narrative that they were unfamiliar with. They realized that thinking about how to create digital-based stories was influenced by exchanging knowledge and crafting

stories with one another. At this point, learners are prepared to follow the story text development and story circle through structured learning.



Figure 1. Provide an explanation of digital storytelling

The first student, a male student leading class 10 TITL 1, stated that he had never created a digital storytelling before. He used to think that writing stories involved just writing them the conventional way—that is, on paper, typing them into Microsoft Word, and then reading them aloud to the class or just gathering them up and giving them to the teacher. Having studied digital storytelling learning materials, he stated that the use of readily available and readily available digital media and technology can make the storytelling process more engaging and expressive. During the interview, he mentioned that digital storytelling media is a relatively recent development. As a result of the thorough explanation provided, Student 1 claimed to have gained new and valuable knowledge about digital storytelling, having previously known nothing about it. Student 1 said that:

“In response, I can now finally understand what digital storytelling is like and how to make it that way after learning about it initially... Very beneficial, as we also discuss historical events or personal experiences... Very helpful, made my English more fluent”

Canva and CapCut are two of the editor programmes used in the process of creating digital storytelling videos in order to support the best video results. This application was chosen because of its many features and ease of use. Some features are free of charge, but their quality may not be as high as they could be. In addition, many features require payment. Student 1 reported that as he worked on digital storytelling materials that required him to write and speak, his speaking and writing abilities gradually got better.

Digital storytelling is new and amazing, according to Student 2, this is the first time he has discovered an engaging learning resource in his years of studying English. During the interview, student 2 clarified that he was unfamiliar with the concept of digital storytelling and found it to be somewhat challenging. In digital storytelling, the first step is choosing a story to write. Next, the text of the story is translated using the app DeepL, which also helps with word pronunciation. Student 2 then went on to explain that, once the story's text was in English, he used Canva to create video slides and decorate them in accordance with the theme. Next, he moved to CapCut to combine the video slides, his own voice, and the appropriate background music. Student 2 reported that throughout the process, he felt that his writing and speaking abilities had improved, with the discovery of new vocabulary being the primary factor in his improvement in speaking. Student 2 said in his interview;

“When I learned this, I responded by saying that I had learned something new and that it was also a little challenging... I also struggled with the pronunciation at first, just the pronunciation part..... Very helpful, especially when there are new vocabulary words in the story”

Digital storytelling is also a novel concept, as student 3, have used editing software before clarified in this interview. Experience and knowledge that will enable him to keep innovating. The third student reported that everything went well while creating the video. He stated that the video editing process came first in the process, followed by the selection of the story. On the other hand, he claimed that he was able to finish the digital storytelling video solely with the aid of the Canva application. Then, student 3 stated that Google Translate was useful at that time for both sentence pronunciation practice and as a translation tool for the story he writes. And at that point, pupil number three reported feeling as though his writing and speaking abilities had improved. Additionally, he emphasis that he had no problems at all while creating the video and that the series had gone through him without any issues. Student 3 explained who can view his digital storytelling video and stated that it is available for viewing by all ages. And student 3 said;

“Knowledge of it still lacks an understanding of what digital storytelling was in the past... Experience in addition to gaining a heightened comprehension of the English language... I feel that my English skills during digital storytelling are still normal like before... And I think that in order

to use digital storytelling as a teaching tool to enhance my writing and speaking abilities, I need to practice on a regular basis”

The fourth student was interviewed next, he spoke well of digital storytelling, which he considered to be a recent development. He asserts that his understanding of digital storytelling is distinct from his prior assertion that he was well-versed in storytelling. Student 4 made a good impression with her understanding of digital storytelling, and he expressed a desire to learn more and improve her English. Student 4 gave an explanation of his process for creating his digital storytelling media. He stated that he encountered no difficulties at all while creating his video. Whether in the writing, speaking, or video production process. Additionally, Student 4 explained how he was able to read the story text with fluency. According to him, in order to acquire a clear and intelligible voice, student 4 read the story text two or three times over during the process. Student 4 claimed to have used the editing programmers Canva and Cap cut to support the best video results. And student 4 mentioned using Google Translate as his aid to help him pronounce words clearly and read stories aloud. It is stated that the results of his digital storytelling video are intended for audiences that include junior high school students and older. During his interview, student 4 said;

“While I was aware of conventional storytelling, I was unaware of digital storytelling at the time... Yes, at first I looked for references on Google, then wrote the story in Indonesian first and continued to Google Translate to translate it, then edited it in Canva and then put the audio in Cap Cut... Though I still need to learn more, I believe I've made some progress”

Student 5 differed from the other five students in both thought process and approach. Digital storytelling is a relatively new invention, according to Student 5, and it can be used as a learning aid for people who wish to improve their English. He clarified that digital storytelling is an excellent example of technological advancement that is available to everyone, everywhere. a process that uses digital technology to create a product with educational value. Student 5 described in his interview how he went about creating his digital storytelling video with assistance from his loved ones. He produced the digital storytelling video effortlessly and without any problems by using the Canva and Cap Cut applications. Student 5 did, however, mention that he struggled to write a story for his digital storytelling video; he received assistance from his sister and uncle in crafting a compelling tale. During the process, student number five described how he struggled to read the story but was able to succeed with the support of those around him. Student 5 added that he received assistance with pronunciation from Google Translate in addition to his sister and uncle. Student 5 further elaborated that he felt the process had been very helpful in enhancing his writing and speaking abilities, which were given priority. It's also said that the outcomes of his digital storytelling video are excellent for all demographics. On the occasion of his interview, student 5 said;

“Digital storytelling seems like a recent development... I used Canva to create the PowerPoint presentation first, and Cap Cut was used to edit the video after I begged my sister for assistance.... Even though it took some time and assistance from my sister and Google Translate, I felt that my speaking and writing abilities improved during the process of making the digital storytelling video”



Figure 2. Students interview

During the interview, student 6 clarified that despite knowing very little, he was aware of digital storytelling. Student 6 also mentioned that he learned more after reading a thorough explanation of digital storytelling, which is defined as a digital technology that can be an engaging teaching tool. Student 6 took advantage of the opportunity to practice and share the knowledge he had learned by creating a digital storytelling media video. With the definition and other information in hand, student 6 produced his video with ease. He described the process, which started with selecting an appropriate topic for a digital story, was written using the Google Translate app to translate it, and was finished with the Canva app to support the outcomes of engaging digital storytelling videos that matched the narrative. Student 6 used the Cap Cut application to mix his voice with other songs or sounds that could create melodies that

matched his digital storytelling video for the voiceover and back sound addition. Student 6 stated that he had trouble speaking in English, so throughout the process, he claimed to be very helpful and motivated to improve his speaking skills. Student 6 also provided an explanation of the content of his video, stating that it is appropriate for viewers who enjoy adventure or recreation because he picked the subject matter based on his passions. In his interview, student 6 said

“Digital storytelling, in my opinion, is a new science... Got started with Canva and produced his own text, which he then translated using Google Translate to replace his voice in Cap Cut... My writing and speaking abilities have both improved, even though they are still a little shaky, thanks to digital storytelling and the process of creating it”

2. DISCUSSION

The authors concludes that the influence of technological advancements in education can aid in students' growth during the learning process based on the findings that have been presented. But the process of creating educational materials is not without its limitations, and it is not in line with the current state of digital technology. This is also consistent with analysis results that maintain the low number of local wisdom values in digital media [12]. Local wisdom content under consideration includes learning materials that fuse cultural practices or traditions into media content and fictional stories that primarily borrow from foreign narratives [13]. Students' capacity to reason creatively is somewhat hindered by the incongruity with daily routines in the social environment. Although they lack adapted materials, the students are able to use a variety of digital media that can aid in the development of their creativity as well as their English writing and speaking abilities. Accordingly, when it comes to learning through digital media, students' fictional stories can be added to digital stories, which is consistent with research findings regarding the addition of stories to digital story media [14]. The authors also discovered another finding that is in line with the application of speaking and writing skills: students can use digital media to learn through fictional story materials or narrative stories [15]. Students can practice public speaking by first expressing themselves in writing, then creating a digital storytelling video, presenting the story or event to the class, or both. This small activity can help students improve their oral communication skills.

The improvement of students' speaking and writing skills through digital storytelling raises many other motivations and ideas that will be developed over time, as the structure of digital storytelling evolves in the future. Creative ideas that will be developed by students over time, as the structure of digital storytelling and technology that supports the process of creating digital story media in the future. Students can contribute to the development process by focusing on the theme and plot of the story, animation and more active features, moving images, and audio accompaniment that is interesting and relevant to the story's theme. Furthermore, the authors discovered consistency in earlier research regarding the benefit of incorporating this media development into other educational resources to enhance students' speaking and writing skills [16]. The authors also share the outcomes of learning materials that have demonstrated their efficacy with students in vocational high schools based on their research. Scholars offer insights into the creation of digital storytelling as a substitute for traditional learning media.

Student learning results are significantly impacted by this educational animation video. The authors other study demonstrates that using media in the classroom can enhance student learning outcomes or accomplish desired objectives, such as learning about students' viewpoints on digital storytelling [17]. In this instance, the authors discovered that the most crucial step in the learning design process is choosing the digital media to be employed [18]. Improving speaking skills for students by using digital storytelling media raises a lot of motivation and creative ideas that will be developed by students over time, as the structure of digital story media develops and technology supports the process of making digital story media in the future. The use of learning media chosen by the authors in this study because it can build early learning skills needed by students in overcoming larger gaps and practical issues that often cannot be taught openly to them [19].

Lessons learned from the research imply that using digital storytelling resources can aid students in attending vocational high schools in improving their speaking and writing skills. This can assist students improve their verbal and nonverbal skills as well as prepare them for social situations in which they will need to write and communicate. Given that the study's participants were junior high school students, it's probable that the conclusions have direct relevance to higher education. Speaking and writing skills can be examined by using the same supporting resources that the students used to produce the digital story medium.

IV. CONCLUSION AND SUGGESTION

Students' opinions regarding digital storytelling's value as a teaching tool, especially for English language learners who want to improve their speaking and writing, are based on the study's findings. When asked to tell stories in digital storytelling videos using their own voices, various translation apps, or assistance from people around them, some students felt that using digital storytelling as their learning medium was very beneficial. They became enthusiastic to present their stories in the best way and with satisfactory results. Repeatedly reading the stories aloud to themselves makes them more proficient speakers who can adjust to different speaking styles, devices, or audience

members while advancing their points. Through digital storytelling, children can improve their speaking skills by acquiring new vocabulary while they continue to employ words and sentences in their stories.

Students' enthusiasm to learn about writing during the process of honing their writing talents increased in large part due to the availability of digital storytelling mediums. A few students acknowledged that their inadequate writing abilities were partly caused by their incapacity to comprehend the conventions of English writing. They struggled to decide which lines were most appropriate as allusions to the story that would pique listeners' interest, even though they had punctuation that could make the story come to life. Despite the availability of translation programmes like Google Translate and Deep L, some still feel that their level of expertise is insufficient to craft a story that will provoke reactions and engagements from their audience. A number of students acknowledged that the emergence of digital storytelling medium had led to a progressive improvement in their writing abilities. The students said that they had no trouble writing stories, and that writing stories was made easier for them by the large amount of new language they learnt.

REFERENCES

- [1] D. N. R. -, "Engaging Junior High School Students in Speaking Skills Through Digital Storytelling," *Educ. Hum. Dev. J.*, vol. 7, no. 01, pp. 8–15, 2022, doi: 10.33086/ehdj.v7i01.2266.
- [2] N. Solichah and R. Hidayah, "Digital Storytelling Untuk Kemampuan Bahasa Anak," *JIP (Jurnal Interv. Psikologi)*, vol. 14, no. 2, pp. 129–140, 2022, doi: 10.20885/intervensipsikologi.vol14.iss2.art5.
- [3] T. Bratitsis and P. Ziannas, "From Early Childhood to Special Education: Interactive Digital Storytelling as a Coaching Approach for Fostering Social Empathy," *Procedia Comput. Sci.*, vol. 67, no. Dsai, pp. 231–240, 2015, doi: 10.1016/j.procs.2015.09.267.
- [4] A. Chigona, "Pre-service students' perceptions and experiences of digital storytelling in diverse classrooms," *Turkish Online J. Educ. Technol.*, vol. 11, no. 3, pp. 278–285, 2012.
- [5] S. Chung, "Digital Storytelling in Integrated Arts Education," *Int. J. Arts Educ.*, vol. 4, no. 1, pp. 33–50, 2006, [Online]. Available: http://ed.arted.gov.tw/uploadfile/Periodical/1320_arts_education41_033050.pdf
- [6] A. Sadik, "Digital storytelling: a meaningful technology-integrated approach for engaged student learning," *Educ. Technol. Res. Dev.*, vol. 56, no. 4, pp. 487–506, 2008, doi: 10.1007/s11423-008-9091-8.
- [7] Bernard Robin, "A review of Australian neoseiulus hughes and typhlodromips de leon," *Invertebr. Taxon.*, vol. 15, no. 1, pp. 73–158, 2001.
- [8] B. R. Robin, "Digital storytelling: A powerful technology tool for the 21st century classroom," *Theory Pract.*, vol. 47, no. 3, pp. 220–228, 2008, doi: 10.1080/00405840802153916.
- [9] J. F. Barber, "Digital storytelling: New opportunities for humanities scholarship and pedagogy," *Cogent Arts Humanit.*, vol. 3, no. 1, 2016, doi: 10.1080/23311983.2016.1181037.
- [10] W. Clark, N. Couldry, R. MacDonald, and H. C. Stephansen, "Digital platforms and narrative exchange: Hidden constraints, emerging agency," *New Media Soc.*, vol. 17, no. 6, pp. 919–938, Jan. 2014, doi: 10.1177/1461444813518579.
- [11] J. Gerring, "What is a Case Study and What is it Good For?," *Am. Polit. Sci. Rev.*, vol. 98, pp. 341–354, May 2004, doi: 10.1017/S0003055404001182.
- [12] F. Ferdianto and S. Setiyani, "Pengembangan Bahan Ajar Media Pembelajaran Berbasis Kearifan Lokal Mahasiswa Pendidikan Matematika," *JNPM (Jurnal Nas. Pendidik. Mat.)*, vol. 2, no. 1, p. 37, 2018, doi: 10.33603/jnpm.v2i1.781.
- [13] J. S. Fu, S. H. Yang, and H. C. Yeh, "Exploring the impacts of digital storytelling on English as a foreign language learners' speaking competence," *J. Res. Technol. Educ.*, vol. 54, no. 5, pp. 679–694, 2022, doi: 10.1080/15391523.2021.1911008.
- [14] N. Mardiana and H. Kuswanto, "Android-assisted physics mobile learning to improve senior high school students' divergent thinking skills and physics HOTS," *AIP Conf. Proc.*, vol. 1868, 2017, doi: 10.1063/1.4995181.
- [15] S. Munawaroh, "Teaching the Narrative Texts Using Animation Video: Raising Students' Skills on Reading Comprehension," *Utamax J. Ultim. Res. Trends Educ.*, vol. 1, no. 1, pp. 18–22, 2019, doi: 10.31849/utamax.v1i1.2791.
- [16] L. Kaminskienė and N. Khetsuriani, "Personalisation of learning through digital storytelling," *Manag.*, vol. 24, no. 1, pp. 153–165, 2019, doi: 10.30924/mjcmi.24.1.10.
- [17] P. J. R. Ponza, I. N. Jampel, and I. K. Sudarma, "Pengembangan Media Video Animasi Pada Pembelajaran Siswa Kelas Iv Di Sekolah Dasar," *J. EDUTECH Univ. Pendidik. Ganesha*, vol. 6, no. 1, pp. 9–19, 2018.
- [18] Y. Intaniasari and R. D. Utami, "Menumbuhkan Budaya Membaca Siswa Melalui Literasi Digital dalam Pembelajaran dan Program Literasi Sekolah," *J. Basicedu*, vol. 6, no. 3, pp. 4987–4998, 2022, doi: 10.31004/basicedu.v6i3.2996.
- [19] R. Rahmatullah, I. Inanna, and A. T. Ampa, "Media Pembelajaran Audio Visual Berbasis Aplikasi Canva," *J. Pendidik. Ekon. Undiksha*, vol. 12, no. 2, pp. 317–327, 2020.

Conflict of Interest Statement:

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