

'A double-edged sword?' Digital storytelling for early childhood education: Vietnamese teachers' beliefs and practices

Le Ngoc Hoa*  <https://orcid.org/0000-0001-5618-5495>
Lu Hung Minh  <https://orcid.org/0000-0002-8419-525X>

School of Education, Can Tho University, Vietnam

ABSTRACT

The advancement of Information Communication and Technology (ICT) offers enormous opportunities to enhance the efficacy of learning process in all levels of education, including Early Childhood Education (ECE). However, in the light of the recent years, there have not been some concern about the issue of use of technology to assist ECE process in the context of Vietnam. Thus, this study explores Vietnamese early childhood teachers' beliefs and practices about the use of technology to facilitate storytelling for pre-school children. A web-based survey research was adopted to scrutinize the beliefs and practices of 228 ECE teachers about digital storytelling in Can Tho Vietnam. The results demonstrated that these teachers hold high levels of beliefs that digital storytelling could be used to enhance learning. In addition, they had carried out digital storytelling activities in their learning practices. The results emphasized that several concerns must be taken by teachers, parents, and related stakeholders in using technological tools in young children's learning environment. This study offers pedagogical insights for ECE teachers to integrate digital storytelling in their learning activities. In short, the use of technology for pre-school children can provide a lot of benefits if it is skillfully executed by both teachers and parents.

This is an open access article under [CC-BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/) license.



ARTICLE INFO

Keywords:
digital storytelling; pre-school children; teachers' beliefs and practices; Vietnamese teachers

Article History:
Received: 25 August 2022
Revised: 12 December 2022
Accepted: 29 January 2023
Published: 05 February 2023

How to Cite in APA Style:
Hoa, L. N. & Minh, L. H. (2022). 'A double-edged sword?' Digital storytelling for early childhood education: Vietnamese teachers' beliefs and practices. *Journal of Educational Management and Instruction*, 2(2), 124-132.

Introduction

The increased use of technology has given multiple effects to the other fields, one of which is education. The integration of technology for educational purposes has gained enormous attention from practitioners in the recent years (Magen-Nagar & Firstater, 2019; Schriever, 2018). For the recent years, the use of technology is also growing in the context of primary and elementary education (Paciga et al, 2013). Through the concept of digital storytelling, the use of technological platforms in teaching young learners now attracts many experts and researchers. It integrates the coherence of images, music, narrative and voice in creating a digital story, and further used it as a medium for teaching young learners (Alghamdi et al., 2022). It combines the social functions of storytelling and the multimedia features of computer technology (Yang et al., 2022).

Robin and McNeil (2019) state that digital storytelling is a creative process in which conventional storytelling is combined with personal use of digital devices, such as a tablet, smartphone, computer, video camera, and sound recorder. By its development from time to time, an educational definition of digital storytelling has been added. Wu and Chen (2020) define digital storytelling as a deep reflective learning activity and a self-representation of its creators. More specifically, digital storytelling is a process of creating stories that enables classroom stakeholders to improve their efficacy of learning, problem-solving skills, and to support students' development of particular skills (Robin, 2016). Digital storytelling is a way of engaging students in a topic through multimedia elements such as images, video, audio, and text (Rubegni et al., 2022). It can help to make the subject matter more interactive, entertaining, and memorable for students, which can lead to increased engagement and motivation in learning (Purnama et al., 2022).

Digital storytelling for young learners has been growing enormously in the recent years. Research has revealed that digital storytelling has been shown to be an effective teaching tool in various studies, as it helps to engage students, increase motivation, and improve understanding of academic content (Rubegni et al., 2022; Quah & Ng, 2022). By incorporating technology, digital storytelling can provide a dynamic and interactive learning experience for students, making it a popular choice among teachers (Tanrikulu, 2022; Yang et al., 2022). Kervin and Mantei (2016) and Rutta et al. (2020) found that digital storytelling had a positive impact on 8-year-old children's reflection and construction of science knowledge. The results suggest that digital storytelling can be an effective tool for promoting student learning and engagement in science education. This highlights the potential for digital storytelling to be used as an innovative teaching method in primary education. Sarica and Usluel (2016) demonstrated the use of digital storytelling in promoting writing skills and personal expression in students. Yamac and Ulusoy (2016) found that using multimedia in digital storytelling helped students to better understand their communities. Meanwhile, Fitri et al. (2021) used digital storytelling to emphasize the idea that everyone has a unique story to tell, which can be a powerful tool for self-expression. These studies highlight the potential for digital storytelling to be used as a means for promoting literacy and creativity in students.

Several studies have explored the use of digital storytelling in early childhood education. The study by Parsons et al. (2022) found that early childhood education teacher candidates found digital storytelling to be an effective tool for teaching mathematics to young students. The study also showed that the digital stories created by the teacher candidates reflected the students' daily activities, making the learning experience more relevant and meaningful. In another study, Jitsupa et al. (2022) revealed that using digital storytelling to teach geometry to culturally diverse kindergarten students was an effective teaching method. Other results portrayed that digital storytelling provided an engaging and interactive learning experience that helped students understand mathematical concepts in a fun and meaningful way (Buyukkarci & Muldur, 2022). These findings support the growing body of research that suggests that digital storytelling can be a valuable tool for teaching math to early childhood students, as well as to students of all ages and in other subjects. Moreover, these results highlight the potential for digital storytelling to be used as a valuable teaching tool in early childhood education, as well as in other subjects and at all age levels.

Having explored these previous studies, a research gap is observable. Most of the previous studies have concerned on the potential effects of digital storytelling to enhance learning at all levels of education, from primary to higher education. However, few research concerned on the instructors' beliefs and practices about digital storytelling in early childhood education, particularly in Vietnamese Education. Therefore, this study is directed to fill out the gap by examining the Vietnamese early childhood education (ECE) teachers' beliefs and practices about digital storytelling. Drawing on survey research, this study takes into account ECE teachers from urban and rural areas in Can Tho city Vietnam. This study is urgently required in a way that portraying teachers' points of view about

digital storytelling is crucial to enhance the efficacy of teaching-learning activities for early childhood education. Hence, this study is guided by two research questions: (1) what are the Vietnamese ECE teachers' beliefs about digital storytelling for early childhood education? and (2) what are the Vietnamese ECE teachers' practices about digital storytelling for early childhood education?

Method

Research Design and Study Area

This study used a survey design in order to gain general overviews of the ECE teachers' beliefs and practices on digital storytelling for pre-school children to enhance learning. Survey research is the process of collecting data from particular groups (e.g., teachers or customers) with the primary goal of depicting their views (Fowler, 2013). In the context of this study, general perceptions of the pre-school teachers in Vietnam were investigated through survey research. In terms of the locus, this study was based in Can Tho city Vietnam, with a total of eight kindergartens. It is a city in Vietnam that is often considered as urban and rural area.

Participants

The respondents were pre-school teachers working on eight different kindergartens in an urban and rural areas in Chan Tho city. They were conveniently selected for this study. After the process of survey, a total of 228 teachers filled out the web-based questionnaire. 87.5% (N=207) of the participants in this survey met the qualifications for preschool teachers with a college diploma or higher degree. 38% (N=90) had less than 5 years of experience. The number of children in the classroom mostly ranged from 20-30 students, with a larger number of teachers participating in the survey from urban kindergartens (66%, N=157) compared to rural kindergartens (34%, N=81).

Instrumentation and Data Collection

The main instrument employed to collect the data in this study was a five-point Likert scale questionnaire to explore the Vietnamese ECE teachers' beliefs and practices about digital storytelling to enhance learning. A web-based survey was adopted due to its efficacy and flexibility. The survey consisted of 14 items scrutinizing the participants beliefs (N= 8 items) and practices (N= 6 items). It was divided into three sections. The first section sought for the participants' demographic information such as gender, length of teaching experience, education background, age, etc. The second part was directed to portray the participants' beliefs about digital storytelling for preschool children. The last part dealt with their practices to implement digital storytelling to enhance learning. The online questionnaire was further spread to the targeted respondents using social media WhatsApp and Facebook, as well as through email from May to July 2022. A total of 238 responses were recorded for this study.

Data Analysis

To depict the general views of the Vietnamese ECE teachers about digital storytelling, statistical analysis was conducted in forms of Mean (M) and Standard Deviation (SD) using SPSS version 26. To ensure the validity, reliability, data and the whole research, one of the researchers developed the survey items based on the current literature (Canals-Botines, 2021; Diaz & Ortiz, 2017), and the other researcher checked the instrument as well as the data to perform content-related evidence. The results of SPSS analysis were then tabulated and presented as findings of this study. The conclusion was drawn from the mean score of all items in each dimension of beliefs and practices, with 4.51 – 5 (strongly agree), 3.50 – 4.51 (agree), 2.51 – 3.50 (neutral), 1.51 – 2.50 (disagree), and 0 – 1.50 (strongly disagree).

Results

Teachers' Beliefs about Digital Storytelling

With regards to the first research question about Vietnamese ECE teachers' beliefs on digital storytelling, Table 1 presents the results of data analysis driven from the questionnaire. As shown in Table 1, the teachers agreed to the majority statements in the questionnaire. They agreed that digital storytelling gives learning support to their students, enhances their learning creativity, improve their motivation, and provides ample opportunities of learning experiences. It is also depicted that the teachers believed that digital storytelling is flexible, meaning that it could be performed anytime and anywhere, not only with the teachers but also with the parents. However, this study found that the teachers expressed disagreement toward the statement saying that digital storytelling can promote students' autonomous learning (item 7). In short, Table 1 shows that Vietnamese ECE teachers hold high level of beliefs about digital storytelling to enhance preschool students' learning and creativity.

Table 1. Teachers' beliefs about digital storytelling

No.	Items	M	SD
1	Digital storytelling gives learning support to my students	4.16	0.45
2	Digital storytelling allows students to enhance their creativity	3.95	0.37
3	Digital storytelling offers an alternative method in the classroom for me	3.71	0.67
4	Digital storytelling helps my students perform self-paced and improve motivation	3.85	0.87
5	The flexibility and accessibility of digital storytelling enables my students to do exploration	3.23	1.08
6	Digital storytelling expands my students learning experiences	3.57	0.41
7	Digital storytelling enhances my students' autonomous learning	2.45	1.09
8	Digital storytelling gives me and my students ample opportunities to enhance learning.	3.75	1.84

Notes: the value is drawn from 5-point Likert scale in the questionnaire.

Teachers' Practices of Digital Storytelling to Enhance Learning

As for the second research question about the teachers' practices of digital storytelling, Table 2 demonstrates the result of statistical analysis. It is revealed that the teachers did agree to all six items in the questionnaire, implying that they were already taking digital storytelling regularly in their classroom practices. They used some digital devices to perform digital storytelling and regularly conducted it in the class. They were likely to combine digital storytelling with other teaching methods to enhance their students' learning performance. Moreover, they also continuously enhanced their knowledge and competencies about digital storytelling by joining trainings, seminars, or workshops. In conclusion, the Vietnamese ECE teachers have already carried out digital storytelling into their teaching practices.

Table 2. Teachers' practices of digital storytelling

No.	Items	M	SD
1	I use some digital devices to perform digital storytelling in my class	3.96	0.82
2	I regularly carry out digital storytelling in my class	3.57	1.23
3	I always learn and improve my knowledge about digital storytelling	3.65	1.03
4	I often encourage my students' parents to conduct digital storytelling for their children beyond classroom	3.62	0.97

No.	Items	M	SD
5	I like to combine other teaching methods with digital storytelling	3.76	0.93
6	I join trainings and workshops about digital storytelling to enhance my teaching quality	3.91	1.07

Notes: the value is drawn from 5-point Likert scale in the questionnaire.

Discussion

This study reveals that Vietnamese ECE teachers have high levels of beliefs about digital storytelling to enhance learning for early childhood education. Another finding shows that they have already carried out digital storytelling teaching practices in their classroom. In other words, digital storytelling is often used in their classroom practices as an alternative method to enhance students' creativity, motivation, and engagement. This study further implies that early childhood teachers who used digital storytelling in the classroom experienced several benefits, including increased motivation in students, improved teaching practices, overcoming parental resistance, equal opportunity for all students, and support for the use of technology in early childhood education. From the study as depicted in the questionnaire, we also can conclude that digital storytelling helps develop teachers' pedagogical knowledge and skills as they use it as an instructional tool. It is in line with the previous research that the digital stories can be used to introduce content, engage students, and make abstract or conceptual information more understandable (Cetin, 2021; Gursoy, 2021). This leads to better student engagement and discussion.

The results of this study also suggest that digital storytelling provides an effective way for teachers to develop their technology knowledge and 21st-century skills. The process of crafting digital stories allows teachers to think critically, creatively, and collaborate with others (Pappamihel et al., 2017). This, in turn, enhances their written, visual, and digital literacy skills. Moreover, by becoming authors, teachers become motivated to continue producing digital stories and sharing them with others (Belda-Medina, 2022). Thus, digital storytelling can be a valuable tool for teachers to integrate technology into their teaching practices, improve their skills, and create engaging learning experiences for their students. Many studies confirm this finding such as Shinas and Wen (2022) and Zhanat et al. (2022), that incorporating technology through digital storytelling could not only enhance students' learning performance, but also provide teachers ample opportunities to develop their digital teaching literacy.

When we see young learners, every student has different characteristics and unique identities, as well as feeling about a situation. The use of digital storytelling in the classroom can also provide an engaging and meaningful learning experience for students (Fu et al., 2022). By using technology to create their own stories, children are able to express themselves and showcase their creativity and imagination. This also allows them to develop important skills such as problem-solving, critical thinking, and collaboration, as they work together to create their digital stories. Additionally, digital storytelling can help children to develop their digital literacy skills and become more confident in using technology (Kristiawan et al., 2022). Hence, the use of digital storytelling in the classroom can have a positive impact on children's motivation and engagement in learning. By providing a meaningful and enjoyable learning experience, digital storytelling can help children to develop important skills, increase their interest in learning, and build their confidence in using technology (Fitri et al., 2021).

In ASEAN countries, digital storytelling has been enormously used for teaching-learning activities, including in Vietnam. For the context of early childhood education, it is acknowledged as a promising alternative method. Digital storytelling provides a unique opportunity for young children to engage with technology in a meaningful way and to develop important skills, such as critical thinking, problem-solving, and creativity (Rubegni et al., 2022). Moreover, digital storytelling can also help to foster a love of

learning in young children by providing them with a platform to express their ideas and showcase their creativity (Chen et al., 2022). Children are able to engage with their imagination and bring their stories to life through the use of digital media (Purnama et al., 2022). This can also help to develop their digital literacy skills, as they learn how to use different technologies to create and share their stories. In short, incorporating digital storytelling into early childhood education can have a significant impact on children's learning and development. By providing a fun and interactive way to engage with technology, digital storytelling can help young children to develop important skills, foster a love of learning, and build their confidence in using technology (Belda-Medina, 2022; Quah & Ng, 2022). As such, digital storytelling is an important tool for early childhood educators to consider when looking for ways to integrate technology into their teaching practices.

Additionally, teachers can use digital storytelling activities to promote inclusivity and diversity by encouraging students to tell stories that reflect their own experiences and backgrounds. However, it is important to note that not all families have access to technology and digital devices. Teachers should work to address this issue by providing access to technology in the classroom and ensuring that all students have the opportunity to participate in digital storytelling activities (Wening et al., 2022). This can be done through partnerships with community organizations, grants, or other funding opportunities. Teachers should also be mindful of the potential for digital technology to widen existing gaps in achievement and access (Jitsupa et al., 2022; Yasar-Akyar et al., 2022). For example, students from low-income families may not have access to the same quality of technology or internet connection as their peers. Teachers can address this issue by providing students with equal opportunities to access technology, such as providing equal time to work on digital storytelling projects, and by teaching digital skills that students can use to access information and resources. Thus, it is essential for teachers to consider equity and access when incorporating technology into early childhood education, particularly through the use of digital storytelling (Kendrick et al., 2022; Lim et al., 2022). By providing equal opportunities and access to technology, teachers can ensure that all students have the opportunity to learn and participate in digital storytelling activities, which can help to promote inclusivity and diversity in the classroom.

A question that may arise is that is involving technology for young learners beneficial? It is driven by the social fact that for some parties (parents, teachers), technology is like a double-edged sword that may have both positive and negative sides. Therefore, using technology for children might have negative impacts such as technology addiction. As a result, children would tend to spend their time to search for entertainment features (e.g., games, music, etc.) rather than use technology for educational purpose. This is reasonable. However, this study demonstrates that technology could be used to assist teaching-learning efficacy, but if it is skillfully and carefully executed by the supervision of teachers and parents. Not only do teachers play a crucial role here, but parents also have responsibility to ensure that technology is used in an appropriate manner for educational purposes.

Conclusion

The in-hand study aims to explore Vietnamese ECE teachers' beliefs and practices about digital storytelling for young learners. Employing survey research, the results depict that Vietnamese ECE teachers have high level of beliefs about the efficacy of digital storytelling to enhance learning for preschool students. In addition, they also already take digital storytelling as an alternative teaching method for young learners to enhance their creativity. This study provides an implication that technology can be used for educational purposes for young learners, but with skillful execution in an appropriate manner. This study implies that technology is like a double-edged sword that might have both positive

and negative effects for young learners. However, it is a promising tool to enhance their learning if it is used in a suitable environment.

This study further acknowledges several limitations. First, although this study has portrayed a clear picture about Vietnamese ECE teachers' beliefs and practices about digital storytelling for young learners, a more in-depth understanding is necessary to provide further comprehensive explanation. Hence, future studies are suggested to explore in-depth understanding using qualitative instruments such as interviews and Focus Group Discussion (FGD). Second, this study was conducted in only a part of Vietnam, as a result, the sample is limited. Further research is recommended to expand the sample selection to generalize the result of this study by recruiting respondents from other parts of districts in Vietnam.

References

- Alghamdi, J., Mostafa, F., & Abubshait, A. (2022). Exploring technology readiness and practices of kindergarten student-teachers in Saudi Arabia: A mixed-methods study. *Education and Information Technologies*, 27(6), 7851-7868. <https://doi.org/10.1007/s10639-022-10920-0>
- Belda-Medina, J. (2022). Promoting inclusiveness, creativity and critical thinking through digital storytelling among EFL teacher candidates. *International Journal of Inclusive Education*, 26(2), 109-123. <https://doi.org/10.1080/13603116.2021.2011440>
- Buyukkarci, A. & Muldur, M. (2022). Digital storytelling for primary school Mathematics Teaching: Product and process evaluation. *Education and Information Technologies*, 27(4), 5365-5396. <https://doi.org/10.1007/s10639-021-10813-8>
- Canals-Botines, M., Medina-Casanovas, N., Raluy-Alonso, A., & Pujol-Tubau, M. (2021). Using storytelling in distance learning: some teachers' beliefs, online tools and experiences within the context of school lockdown. *Revista Educación y Humanismo*, 23(41), 295-312. <https://doi.org/10.17081/eduhum.23.41.4963>
- Çetin, E. (2021). Digital storytelling in teacher education and its effect on the digital literacy of pre-service teachers. *Thinking Skills and Creativity*, 39, 100760. <https://doi.org/10.1016/j.tsc.2020.100760>
- Chen, A. C. C., Kim, W. S., Todd, M., & Larkey, L. (2022). A digital storytelling intervention for vietnamese american mothers to promote their children's HPV vaccination. *Cancer Prevention Research*, 15(7), 465-472. <https://doi.org/10.1158/1940-6207.CAPR-21-0618>
- Díaz, C., & Ortiz, M. (2017). Unpacking Chilean preservice teachers' beliefs on practicum experiences through digital stories. *International Journal of Educational and Pedagogical Sciences*, 11(6), 1470-1474. <https://doi.org/10.5281/zenodo.1130947>
- Fitri, H. A., Husnawadi, H., & Harianingsih, I. (2021). Implementing digital storytelling-based tasks for the teaching of narrative writing skills. *Edulangue*, 4(2), 168-190. <https://doi.org/10.20414/edulangue.v4i2.3980>
- Fowler Jr, F. J. (2013). *Survey research methods*. Sage publications.
- Fu, J. S., Yang, S. H., & Yeh, H. C. (2022). Exploring the impacts of digital storytelling on English as a foreign language learners' speaking competence. *Journal of Research on Technology in Education*, 54(5), 679-694. <https://doi.org/10.1080/15391523.2021.1911008>
- Gürsoy, G. (2021). Digital Storytelling: Developing 21st Century Skills in Science Education. *European Journal of Educational Research*, 10(1), 97-113. <https://doi.org/10.12973/eu-jer.10.1.97>
- Jitsupa, J., Nilsook, P., Songsom, N., Siriprichayakorn, R., & Yakeaw, C. (2022). Early Childhood Imagineering: A Model for Developing Digital Storytelling. *International Education Studies*, 15(2), 89-101. <https://doi.org/10.5539/ies.v15n2p89>

- Kendrick, M., Early, M., Michalovich, A., & Mangat, M. (2022). Digital storytelling with youth from refugee backgrounds: Possibilities for language and digital literacy learning. *TESOL Quarterly*, 56(3), 961-984. <https://doi.org/10.1002/tesq.3146>
- Kervin, L., & Mantei, J. (2016). Digital storytelling: capturing children's participation in preschool activities. *Issues in Educational Research*, 26(2), 225-240. <http://www.iier.org.au/iier26/kervin.html>
- Kristiawan, D., Ferdiansyah, S., & Picard, M. (2022). Promoting vocabulary building, learning motivation, and cultural identity representation through digital storytelling for young Indonesian learners of English as a foreign language. *Iranian Journal of Language Teaching Research*, 10(1), 19-36. <https://doi.org/10.30466/IJLTR.2022.121120>
- Lim, N. Z. L., Zakaria, A., & Aryadoust, V. (2022). A systematic review of digital storytelling in language learning in adolescents and adults. *Education and Information Technologies*, 27(5), 6125-6155. <https://doi.org/10.1007/s10639-021-10861-0>
- Paciga, K. A., Lisy, J. G., & Teale, W. H. (2013). Better start before kindergarten: Computer technology, interactive media and the education of preschoolers. *Asia-Pacific journal of research in early childhood education*, 7(2), 85-104. <https://www.pecerajournal.com/detail/51469>
- Pappamihel, N. E., Ousley-Exum, D., & Ritzhaupt, A. (2017). The impact of digital stories on preservice teacher beliefs about English language learners. *Teaching and Teacher Education*, 67, 171-178. <https://doi.org/10.1016/j.tate.2017.06.014>
- Parsons, S., Kovshoff, H., & Ivil, K. (2022). Digital stories for transition: co-constructing an evidence base in the early years with autistic children, families and practitioners. *Educational review*, 74(6), 1063-1081. <https://doi.org/10.1080/00131911.2020.1816909>
- Purnama, S., Ulfah, M., Ramadani, L., Rahmatullah, B., & Ahmad, I. F. (2022). Digital Storytelling Trends in Early Childhood Education in Indonesia: A Systematic Literature Review. *Jurnal Pendidikan Usia Dini*, 16(1), 17-31. <https://doi.org/10.21009/10.21009/JPUD.161>
- Magen-Nagar, N., & Firstater, E. (2019). The obstacles to ICT implementation in the kindergarten environment: Kindergarten teachers' beliefs. *Journal of Research in Childhood Education*, 33(2), 165-179. <https://doi.org/10.1080/02568543.2019.1577769>
- Quah, C. Y., & Ng, K. H. (2022). A systematic literature review on digital storytelling authoring tool in education: January 2010 to January 2020. *International Journal of Human-Computer Interaction*, 38(9), 851-867. <https://doi.org/10.1080/10447318.2021.1972608>
- Robin, B. R. (2016). The power of digital storytelling to support teaching and learning. *Digital Education Review*, (30), 17-29. <https://doi.org/10.1344/der.2016.30.17-29>
- Robin, B. R., & McNeil, S. G. (2019). Digital storytelling. *The International Encyclopedia of Media Literacy*, 1-8. <https://doi.org/10.1002/9781118978238.ieml0056>
- Rubegni, E., Landoni, M., Malinverni, L., & Jaccheri, L. (2022). Raising awareness of stereotyping through collaborative digital storytelling: Design for change with and for children. *International Journal of Human-Computer Studies*, 157, 102727. <https://doi.org/10.1016/j.ijhcs.2021.102727>
- Rutta, C. B., Schiavo, G., Zancanaro, M., & Rubegni, E. (2020, June). Collaborative comic-based digital storytelling with primary school children. In *Proceedings of the Interaction Design and Children Conference* (pp. 426-437). June 21 - 24, 2020. New York: United States. <https://doi.org/10.1145/3392063.3394433>
- Sarica, H. Ç., & Usluel, Y. K. (2016). The effect of digital storytelling on visual memory and writing skills. *Computers & Education*, 94, 298-309. <https://doi.org/10.1016/j.compedu.2015.11.016>

- Schriever, V. (2018). Digital technology in kindergarten: Challenges and opportunities. *Handbook of research on mobile devices and smart gadgets in K-12 education*, 57-76. <https://doi.org/10.4018/978-1-5225-2706-0.ch005>
- Shinas, V. H., & Wen, H. (2022). Preparing teacher candidates to implement digital storytelling. *Computers and Education Open*, 3, 100079. <https://doi.org/10.1016/j.caeo.2022.100079>
- Tanrikulu, F. (2022). Students' perceptions about the effects of collaborative digital storytelling on writing skills. *Computer Assisted Language Learning*, 35(5-6), 1090-1105. <https://doi.org/10.1080/09588221.2020.1774611>
- Wening, L., Rahmanto, A., & Satyawan, A. (2022). Digital Storytelling in Building Emotional Literacy and Social Skills in Early Childhood (Qualitative Analysis at TKIT Al-Huda Wonogiri in Wonogiri District, Indonesia). *International Journal of Multicultural and Multireligious Understanding*, 9(2), 554-561. <https://ijmmu.com/index.php/ijmmu/article/view/3468>
- Wu, J., & Chen, D. T. V. (2020). A systematic review of educational digital storytelling. *Computers & Education*, 147, 103786. <https://doi.org/10.1016/j.compedu.2019.103786>
- Yamac, A., & Ulusoy, M. (2016). The Effect of Digital Storytelling in Improving the Third Graders' Writing Skills. *International Electronic Journal of Elementary Education*, 9(1), 59-86. <https://www.iejee.com/index.php/IEJEE/article/view/145>
- Yang, Y. T. C., Chen, Y. C., & Hung, H. T. (2022). Digital storytelling as an interdisciplinary project to improve students' English speaking and creative thinking. *Computer Assisted Language Learning*, 35(4), 840-862. <https://doi.org/10.1080/09588221.2020.1750431>
- Yasar-Akyar, O., Rosa-Feliz, C., Sunday-Oyelere, S., & Muñoz, D. (2022). Special Education Teacher's professional development through digital storytelling. *Comunicar*, 30(71), 93-104. <https://doi.org/10.3916/C71-2022-07>
- Zhanat, A., Kunimzhan, A., Aigul, A., Agabekkyzy, B. R., & Nurziya, A. (2022). Teachers' Views on Teaching Modern Kazakh Stories over National Values. *Cypriot Journal of Educational Sciences*, 17(1), 205-216. <https://doi.org/10.18844/cjes.v17i1.6702>