

Analysis of the Development Needs of Teaching Materials Storytelling Multimedia-based on the aspect of elementary school student story writing skills

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Received 25 Sept 2021, Accepted 10 Oct 2021, Available online 30 Oct 2021, Vol.9 (July/Aug 2021 issue)

Abstract

Multimedia-based storytelling arises from the integration of multimedia and storytelling to meet learning needs, such as communication and self-expression, and to facilitate teaching in improving language skills is one aspect of story writing skills. This research uses descriptive research with survey methods, the source of data collection from teachers and students at the Primary School of Indonesia Country. Researchers conducted interviews via video calls and distributed questionnaires via google form. The results of interviews and questionnaires show that the use of teaching materials during learning is offline and online not much different. This fact illustrates that learning offline and online requires innovation from an educator to create an active and fun learning process for elementary school students, so that learning objectives can be achieved.

Keywords: Storytelling Teaching Materials, Multimedia, Story Writing Skills

Introduction

Implementation of education in the world has undergone drastic changes, previously face-to-face learning has now become hybrid learning (Ololube, 2014), blended learning (Fong, 2007), flipped learning (Casselman, M. D., Atit, K., Henbest, G., Guregyan, C., Mortezaei, K., & Eichler, 2020) have a significant impact on learning but demand digital skills and literacy for teachers and students (Grimaldi, E., & Ball, 2019). This research is motivated by the current educational situation that requires technology-based learning innovations in elementary schools. One of them is by developing multimedia-based teaching materials.

The use of information technology is a keyword in online learning to enable students to learn better, faster, and smarter (Pujilestari, 2020). Another term is known as ICT (Information and Communication Technology). UNESCO revealed that there are several benefits that can be obtained by implementing information communication technology in the education system, namely simplifying and expanding access to education networks, increasing education equity, quality of learning, teacher professionalism, and more effective and efficient management and governance of education (Adisel, Gawdy, 2020). People who are digital and information technology literate can be said to have adequate information communication technology literacy (Tesi Muskania & Wilujeng, 2017).

Teachers in the practice of implementing online and offline learning must also have adequate information communication technology literacy to facilitate the learning process so that teachers need special training to improve competency in information communication technology (König *et al.*, 2020).

Multimedia-based storytelling arises from the integration of multimedia and storytelling to meet learning needs, such as communication and self-expression, and to facilitate teaching in improving language skills, one aspect of story writing skills. The results of previous research show that *digital storytelling* is effective in the development of cognitive structures, which are initially believed to develop over a long period of time. Therefore, this study reveals the contribution of *digital storytelling* to the development of visual memory, which has a positive impact on the development and acquisition of information and abilities acquired during the learning process (Sarica & Usluel, 2016).

Other studies have shown that *digital storytelling* in learning can generate positive responses to engaging learning, and the use of *digital storytelling* is recommended for continuous integration into the curriculum, which further supports effective learning (Yocom *et al.*, 2020). The use of digital storytelling media has shown to increase self-confidence and open-mindedness. Research subjects become more aware of their strengths, alternative voices, and potential choices (Chan, 2019).

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DOI: <https://doi.org/10.14741/ijmcr/v.9.5.2>

Interactive multimedia computer-based applications are said to be suitable for use in elementary schools. This is supported by the results of research which show that in the learning process, computer-based multimedia plays an important role as a learning medium at this time. Because the designed multimedia system consists of various components, namely text, images, graphics, animation, audio, and video, complementing each other so that it becomes a strong and precise system in its use. Interactive multimedia computer-based applications can be accepted for use in learning because they can improve the independent learning process and the active role of students (Rachmadtullah *et al.*, 2018). Furthermore, research that reviewed 57 literature reviews showed that the use of digital storytelling shows continued interest in primary and secondary school and higher education students. The use of digital storytelling is also often used in learning. This study recommends further research related to digital storytelling design for use in education (Wu & Chen, 2020).

In this preliminary study, the researchers conducted observations and interviews in elementary schools regarding the story writing skills of low-grade elementary school students. It was found that the students' writing skills were not maximal and tended to face obstacles. In some activities, many children have difficulty arranging words and making simple writing, children still have difficulty expressing opinions, have difficulty providing information, find it difficult to answer questions, find it difficult to tell simple experiences, and children's vocabulary skills are still limited so that the difficulty in composing simple writing or story writing. With online learning, it is a new difficulty for teachers and students in carrying out learning because of media limitations. In this study, the researcher plans to develop teaching materials storytelling multimedia-based on the aspect of story writing skills for low-grade elementary school students, so that the media can be used in offline and online learning.

Methods

This research is a qualitative descriptive study with a survey method that was conducted from February to March for elementary school students. The population in this study were all low-grade elementary school students in the Pandeglang District of Indonesia. The sample was randomly selected as many as 120 students. Data collection techniques using semi-structured interviews and questionnaires. The interview technique uses application *video call* to get additional or complementary data. Researchers conducted interviews with teachers to obtain more complete data. The questionnaires were distributed online via a google form. These questionnaires and interviews contain questions that aim to obtain data about learning during offline and online learning, the research data is analysed descriptively qualitatively.

Results and Discussion

Results

Based on the results of semi-structured interviews with teachers during learning *offline* and *online*, the following data were obtained:

Table 1. Results of Interviews with Teachers

No	Offline Learning	Online Learning
1	The teacher uses print-based teaching materials, such as worksheets, textbooks, and storybooks.	The teacher sends video teaching materials from YouTube or pictures via WhatsApp groups and handbooks for each student.
2	Students are assigned to copywriting from the worksheets or blackboard.	Students are assigned to copy writings from the LKS.
3	Students are assigned to write the results of teacher dictation.	Students are assigned to write the results of their parents'/companions' dictation.
4	Teachers are fixated on delivering teaching materials from books provided by the government.	Teachers are fixated on delivering teaching materials from books provided by the government.
5	Students tend to be passive in learning.	Students tend to be passive in learning.
6	Learning to write is a tedious activity for students.	Learning to write activities is a boring activity for students.
7	Difficulties for teachers in developing innovative teaching materials.	The difficulty of teachers in developing innovative teaching materials.

Based on the results of the interview, the use of teaching materials when learning *offline* and *online* is not much different. This fact illustrates that learning *offline* and *online* requires innovation from an educator so that the learning process can run well and be fun for students so that learning objectives can be achieved.

Discussion

Basically, media development is one of the obligations of teachers to become professional educators. Learning media is anything that can be used to send messages, to stimulate students' thoughts, feelings, attention, and interests in such a way that the learning process occurs. In accordance with its function, learning media is basically to improve the quality of teaching and learning. Therefore, in the teaching and learning process in schools, learning media has a very important role (Fahrurrozi *et al.*, 2019). In the development of instructional media, we really must pay attention to several things. The main principle of

choosing instructional media is the effectiveness of instructional media in achieving learning objectives and its effectiveness in helping students understand the learning material to be presented. We must consider whether the learning media to be used is more effective when compared to other media. Learning media must also be selected based on the principles of the student's level of thinking. The third principle that must be considered in choosing media in classroom learning is interactivity and flexibility (Alexander, B., Adams Becker, S., & Cummins, 2016).

The learning media chosen by the teacher for teaching and learning activities in the classroom must have good interactivity and flexibility. Learning media is said to have good flexibility if it can be used in various situations. Thus, some of these things are used as a consideration for researchers to develop learning media. Along with advances in knowledge and technology, the media has developed into multimedia. As it means, multi is more than one, multimedia is a combination of more than one media that can facilitate the learning process. Multimedia is able to facilitate students with various learning styles (auditory, visual, kinesthetic) (Huang *et al.*, 2019).

The use of multimedia is more effective because it provides information that can be seen, heard, and carried out. In this case, the researcher will develop language learning, especially the aspect of writing stories to low-grade students in elementary schools. The use of *storytelling* multimedia-based shows that in the learning process children quickly understand and adapt the various mechanisms behind the system to create their stories, most of whom are involved in narrative creation or playing language games with various stories. This study describes the application of a digital manipulative system in an educational context, demonstrating that it is a useful tool integrated into high-quality learning practices (Sylla *et al.*, 2015).

There is an increase, especially in the ability in the field of Information Technology, especially in the field of Multimedia, namely making videos using certain software, the ability to work together in groups, and the ability to make presentations in addition to speaking skills and vocabulary mastery (Asri *et al.*, 2017). Research (Bron & Barrio, 2019) shows that the existence of multimedia that has been implemented in elementary schools is in the form of presentation slides, instructional videos, and animated videos. *Storytelling* multimedia-based developed an interactive display in aggregated form Animated display video, text stories, and audio-visual so that learning will be more fun and contextual (Anisimova, 2020).

Applications *storytelling* Digital that students use, make students feel even happier and don't want to change lessons immediately. For this case study, the researcher included additional pictograms/pictures with the vocabulary associated with the cards used by the children. The idea is first to ascertain whether the children know this vocabulary and if they do not, it is taught first by showing signs of the appropriate words, and then they are asked to

associate each word with a specific story (scene) card. From now on, teachers begin the literacy teaching process from stories created by students and selected vocabulary words that are selected based on the children's current knowledge and literacy age (Flórez-Aristizábal *et al.*, 2019).

Writing is one of the most complex cognitive activities and involves a large number of cognitive components (Olive, 2004). Individuals discover their own thoughts and ideas that they really want to express in the creation of their stories through the writing process (Miller, 2010). With digital storytelling, students can learn the art of writing good stories, how text and art can be integrated, and how technology can be used creatively (Miller, 2010). In addition, when students are fully involved in the writing process, they compose stories and participate in the digital story creation process more effectively by developing good scenarios (Xu *et al.*, 2011). Previous research has shown that digital storytelling develops students' writing skills and can be used as an effective learning tool, especially in computer-assisted language acquisition (Abdollahpour, 2018).

Conclusion

Based on the preliminary study, the researcher found the fact that there were obstacles in students' aspects of story writing skills. So that researchers need to carry out further research to develop teaching materials *storytelling* multimedia-based that can be used in Elementary Schools in Pandeglang Negara Indonesia in improving story writing skills in lower grade students in elementary schools. By developing teaching materials, *storytelling* multimedia-based researchers hope to contribute to education, especially in the Pandeglang Regency Elementary School. In addition, it can provide views or inspiration for teachers to be more creative and innovative in developing teaching materials for learning *offline* and *online*.

Acknowledgments

The authors would like to express their gratitude to all parties involved in carrying out this preliminary research study. Especially the Trilogi University who always provide guidance and motivation, then the education office and elementary schools in the Pandeglang District of Indonesia. Of course, don't forget to say thank you to my partner who always provide motivation and enthusiasm to succeed together.

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