



Application of Digital Literature Based on Video, Website and Peer Tutoring on Student's Academic Literature Skills

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Abstract. The rapid development of the world of information communication and technology (ICT) has made the use of the internet a basic need. This can be seen from the activities of the world of education, especially in higher education which cannot be separated from digital devices such as the use of gadgets and laptops. The use of such technology must of course be equipped with good and correct literacy skills for optimal implementation. To perform this optimization, there are several ways that students can do, such as viewing videos in the digital space, exchanging information on personal websites, and peer tutoring, often known as peer tutoring. The purpose of this study was to determine the literacy skills of video-based, website and peer tutoring in improving students' academic literacy. The research method used is quantitative research with experimental research design. The sample used in this study were FKIP students at the University of Lampung. In this study, students are expected to be able to improve their literacy skills in the face of today's rapid technological advances.

Keywords: Literacy · video · peer tutoring · website

1 Preliminary

The rapid development of science and technology certainly has an impact on all human activities, thus making humans seem inseparable from science and technology. According to Cholik (2017) [1] the rapid development of technology does not only have an impact on the economic, health, and social fields, but also in the field of education. The world of education today really needs the facilities and infrastructure of educational resources that aim to facilitate the process of implementing teaching and learning so that it is expected to be more effective, of course, various efforts are needed to be able to develop the abilities of each student by utilizing technological advances. Syamsuar (2019) [2] emphasized that having ICT skills must of course be accompanied by an understanding that ICT advances must be used positively, one of which is by improving learning outcomes.

Technological advances in the field of education as an exploration medium certainly have a very important role, especially for the achievement of a national education goal.

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Currently, there is so much presentation of information related to learning that is presented differently than usual. Students who were previously only able to listen, see, and imitate what the teacher said. With this technology, the flow of information that will be received by students will be wider through various other interactive media. So that in the end students will be able to build a social understanding of knowledge but also learning is more meaningful.

One of the benefits brought from these technological advances is by using audio visuals, for example, such as learning videos, video tutorials, training videos, etc. According to Hadi (2017) [3] video is included in audio-visual media which can be interpreted as learning media that can be seen and heard using the senses of sight and hearing. The use of audio-visual media, which is a technology that can be used for the delivery of material, both presented in the form of sound and moving images. By being presented in a moving image, the experimental process, seeing various natural phenomena, or students can be easily understood when observations can be made repeatedly.

Apart from using video media, there is also digital literacy through website media or we often hear about the web. Website is a collection of various web pages in a particular domain or sub domain according to the content to be contained on the website, including text information, still and moving images, data, illustrations, sound, video, and even a combination of all of them for various purposes. Which are static or dynamic. Rahayu (2019) [4] said that the website media is very appropriate to support learning because it can be accessed anytime, meaning it is not limited and continuous, anywhere and can be used by many people, and it is hoped that learning can be carried out intensively and continuously.

The learning videos and digital literacy will certainly be easier with the existence of a peer tutoring method. This method is one of the alternatives used in small groups with the aim of making it easier for each student to learn, considering that each student certainly has a different level of intelligence. According to Laksemiwati (2019) [5] in learning it is necessary to create groups so that students can collaborate and one of them who has more ability can be used as a tutor to present the material that he has mastered.

In the end, the progress of information and communication technology is a necessity, its very rapid development requires every human being including students to be able to adapt well, adapt quickly and always want to learn. The application of literacy or processing and identifying various information obtained from the internet world either through websites or videos is a must for every student. Sources and ways to obtain certain information that are increasingly easy and broad must be utilized, on the other hand collaboration between students is also expected to accelerate understanding of literacy through various media so that technological advances have wider benefits and the impact on students' academic abilities can be significantly felt.

Although advances in science and technology have brought great benefits to students related to academics, there are also many negative impacts, such as various internet fraud crimes, misleading information (hoaxes), pornography, etc. Therefore, to overcome these negative impacts, every student living in the 21st century must have language skills, cultural skills, critical and creative thinking skills, the ability to do work, and must have adequate digital literacy.

Students related to education in the 21st century become one of the components related to literacy. Students, of course, must have a variety of literacy, one of which is digital literacy. Students with good digital literacy will try to find/select important information and understand it, communicate ideas and ideas in the digital space. Thus, digital literacy skills will give students the opportunity to think, communicate, and be creative, which ultimately leads to successful learning. Given the importance of digital literacy in determining the academic success of students, digital literacy skills need to be developed and improved.

2 Research Methods

This study uses quantitative research methods with experimental research design. Experimental research is research that is intended to determine whether there is a consequence of something imposed on the subject under investigation (there is a causal relationship) [6]. This study uses a quasi-experimental design (pretest-posttest non-equivalent control group design), which is a comparative analysis between groups of students who have been given video-based literacy lessons, websites, and peer tutoring students who are given synchronization of learning with multimedia while the other groups do not. The research design design can be seen in Fig. 1.

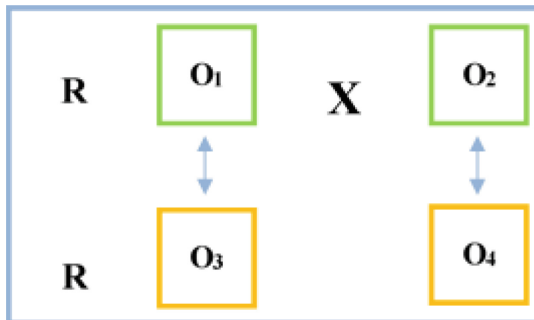


Fig. 1. Pretest-Posttest Non Equivalent Control Group Design

Information:

R = random sampling;

O 1 = experimental class pretest;

O2 = posttest experimental class;

O 3 = pretest control class;

O 4 = posttest control class.

3 Results and Discussion

Almost every aspect of life today, including aspects of education using digital technology in the learning process, it can also be said that now is the era of digitalization. Of course, the use of digital technology must be accompanied by skills in using digital technology. So to maximize this use, it is necessary to have skills in digital literacy. Digital literacy allows individuals to communicate with others, work more effectively, and be more productive, especially with those who have the same level of skills and abilities [7].

The application of digital literacy includes three abilities, namely competence in using technology, interpreting and understanding digital content and assessing its credibility as well as how to create, research and communicate with the right tools [8]. Digital literacy is a competency that every student must have. This is because digital literacy allows every student to think creatively. In today's technology-based learning activities, of course, it requires every student to understand and master various technological media with the aim that lectures can run effectively [9]. In other words, the application of digital literacy in learning requires students to be able to use the internet or study e-books or e-modules provided by lecturers as learning resources.

The application of digital literacy for students can certainly increase student activity in the learning process by making it easy to find learning resources that have become digital learning resources. Previous research conducted by Rodin (2020) [10] stated that the application of digital literacy has indicators of increasing student abilities in the high category. The position of digital literacy is not just a national literacy movement. At this time, it should have become one of the necessities for students. It is not only used as a communication tool, but also a very broad interaction tool [11]. The most important thing is the existence of student activities with data sources in an educational context. So that students have wider experience and knowledge without the limitations of the scope of information.

In the application of digital literacy, there are several things that can be done in applying it correctly, the application can be video-based, website, and peer tutoring. The application of video-based digital literacy is carried out using videos that are already available in digital applications. For now, of course, many videos are found on digital platforms, for example through YouTube and Virtual Conference. In fact, in the current learning process the application of video-based digital learning is quite often used. Of course, with the support of digital video-based learning, it can improve the application of student digital literacy. So that it can increase students' skills in searching, filtering, evaluating, and collecting information in the form of visual videos obtained [12].

In the application of video-based digital literacy, students are taught to understand learning materials not only through audio but also to see visually the material being taught. In this study it was found that the use of video media can improve students' academic literacy skills. This is also in accordance with research conducted by Winarni (2021) [13] which states that the application of collaboration between forms of learning media in the form of videos and teaching materials that support digital literacy skills can improve digital numeracy literacy skills.

The use of video-based digital literacy is certainly very beneficial in developing students' abilities. In the research, Intaniasari (2022) [14] mentions several benefits of implementing video-based digital literacy, namely 1) Finding the required modules and

data easily and quickly. 2) Flexible place and time. 3) Simple, you don't have to flip through a decent book through gadgets or other technologies. 4) More variety, not only in the form of text but also in animated videos so that learning is easier and more varied.

The World Wide Web (www), also known as a website or website is an internet application and service that includes multimedia resources in the digital space [15]. The types of websites used by students in this study were limited to dynamic or static search engines, blogs, portals, and company websites. Using a search engine makes it easy to search the internet for information needed by students in the lecture process. Search engines have a database of websites from around the world containing billions of web pages [16]. Just enter the keywords and the search process will be carried out and the search engine will show several sitelinks with short descriptions.

Website-based learning is an educational process where students are connected to each other at the same time via the internet. The web as a learning medium can be accessed whenever and wherever students want and without time limits. Students who use the website in the learning process are more enthusiastic and feel the ease of accessing and mastering the material than students who do not apply the use of websites in digital literacy. The use of the website in implementing digital literacy for students also makes students more active because students can easily find study materials.

The use of websites in the application of student digital literacy is often used to find sources of data as reference material in carrying out the given practice questions. In research conducted by Priyambodo (2012) [17] stated that the application of the use of the website can improve the skills of students in the academic field. Therefore, the use of websites that must be accompanied by digital literacy skills can be optimized.

The application of digital literacy carried out in this study is also one of them by using peer tutoring techniques. Through learning using the peer tutoring method, students will learn by getting help and guidance from smart peers or classmates, who act as tutors in carrying out learning [18]. Therefore, when learning using the peer tutoring method, students will more easily understand concepts because they interact using language that is easier to understand.

Peer Tutoring in the student process is expected to function in exchanging opinions with other students and completing group responsibilities that have been previously assigned by the educator, both tasks completed at home and in lectures. Peer Tutoring is an efficient method to change the pattern of expressing student opinions in class so that students who do not understand the learning material that has been done can ask their friends so that they do not feel shy or embarrassed.

This peer tutoring activity for students is an activity that is rich in experience. This is the need for students themselves in improving digital literacy skills in the academic field. During this preparation, they seek to form new and stable relationships and connections with their peers, discover their role, and develop intellectual skills and concepts. The implementation of peer tutoring can make students immediately learn to be socially responsible, while students who are less motivated become proactive because they are no longer ashamed to ask questions and express opinions freely [9].

4 Conclusion

The discussion that has been described in this study can be concluded that the application of digital literacy is very important in improving students' academic literacy skills, there are various ways that can be done in implementing digital literacy both from the use of videos, websites, and peer tutoring. Where these three things can actively improve students in terms of academic literacy.

The use of video guides students to understand the learning material not only through audio but also visually. The website can be used as a place to look for data sources as reference material and peer tutoring can make it easier for students to understand concepts because they interact using language that is easier to understand.

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