MICROSOFT SWAY ON STUDENT DIGITAL LITERACY IN POST-COVID-19

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Abstract

Microsoft Sway media is a presentation tool created and played online on the sway.com page. This study aims to determine the effectiveness of Microsoft 365: sway media on students' digital literacy in online learning in the era of society 5.0. This research is a quasi-experimental design (quasi-experiment). The form of this research design is the Nonequivalent Control Group Design. The population in this study were students of the University of PGRI Madiun. The sampling technique in this study used a purposive sampling technique. The sample is 60 students in the experimental class and 60 in the control class. The types of instruments used in this research are essays and response questionnaires. Hypothesis testing in this study uses a t-test. The results showed that the Microsoft 365: sway media, applied in the experimental class, was very effective for students' digital literacy.

Keyword: Covid-19, Digital Literacy, Microsoft Sway.

1. Introduction

The COVID-19 pandemic has caused changes in the learning process, from face-to-face learning becomes online learning. The change lead to the emergence of various problems. Although online learning is considered good to keep up with the times and applications that are available for free, of course, there are crises or obstacles in carrying out this online learning, (Dinata, 2017). The shift in the learning process to online learning requires lecturers and students to be familiar with online learning. The ability of lecturers and students to organize online learning is very decisive in the success of online learning. The innovation of learning is very dependent on the creativity of educators/lecturers, (Yustika & Iswati, 2020). Utilizing technology in the learning process must provide more accessible, more extensive, and more diverse access to learning resources in overcoming the problem of distance between students and tutors and facilitating increased interaction and collaboration of rations in online classes, (Siemens et al., 2015). Online learning is carried out using a variety of applications such as zoom, google meet, or through social media such as WhatsApp with the support of an internet network and devices such as smartphones, (Mardiana et al., 2022).

An increase in digital literacy skills does not accompany the large growth in internet use in Indonesia. The definition of digital literacy here doesn't only concern the ability to use technology, such as skills to use software and basic internet (Mardiana et al., 2022). However, it includes digital literacy skills around the ability to understand, evaluate, and use information obtained from digital sources responsibly, (Kateryna et al., 2020). Digital literacy is the ability to understand and use information in various formats from various digital sources. The service on digital literacy has been carried out at Elementary school, with indicators of the success of the activity and increase in understanding of digital literacy, is shown by students' knowledge of knowing which information is right and wrong, being able to make strong passwords and being able to communicate positively in the digital world, (Yustika & Iswati, 2020). An ability to use digital technology and know when and how to use it. Digital literacy is using digital technology, communication devices, or networks to evaluate, create and use information, (Perdana et al., 2019; Maxwell, 2020). Digital literacy is the ability to efficiently and accurately use digital information technology and information obtained in various contexts, such as academic, career, or everyday life. Another thing is how to use current technology and retrieve, use, and analyze the information provided on the technology, (Anggeraini et al., 2019; Shavab, 2020).

Digital literacy brings the perpetrators skills in finding, evaluating, using, creating information, and utilizing it in a healthy, wise, intelligent, careful, precise, and law-abiding manner to foster communication and

interaction in everyday life, (Arono et al., 2021; Hussein Ali et al., 2017). The role of digital literacy is to make someone communicate effectively with others even though they don't have face-to-face meetings, (Rahman et al., 2020). Digital literacy has indirectly involved individual skills with new media, and personal experiences using these new media depend on mastery of ideas or creativity, (Lankshear & Knobel, 2015). During the Covid-19 pandemic, individuals must have high digital literacy skills to understand and utilize information from various forms and sources accessed via the internet. Skills and knowledge in digital literacy must be mastered by each individual so that the implementation of online learning can run smoothly, (Siemens et al., 2015).

The use of information and communication technology and digital literacy has now become an innovation applied in the world of education. However, the facts show that there are often unbalanced capabilities between accessing digital media and using it to get information, (Mardiana et al., 2022). Although digital technology is developing rapidly and supporting the online learning process carried out by teachers, it still takes time to adapt. Several studies reveal that the information, communication, and technology competencies of teachers in Indonesia are not evenly distributed in all fields, (Perdana et al., 2019). Digital literacy for learning is more than just knowing how to operate technology, but also have proper information management and critical thinking skills, as well as proper online behavior, (Al-Qallaf & Al-Mutairi, 2016).

The problem of deviation in digital literacy is that when given questions, students access sites on Google to find answers without thinking first, Students most often use smartphones to play games and social media, most students spend more than 5 hours a day, Students prefer to play social media than reading material given by the lecturer or material related to the lesson. The results of research by (Ririen & Daryanes, 2022) found that students most often use smartphones to play games and social media, most students spend more than 5 hours a day. In addition, they often share personal information on social media, receive hate speech, and hoax news. Students' ability to manage information is also still in its infancy medium category, (Nurrizqi & Rodin, 2013). Nahdi & Jatisunda's, research revealed that many students make the internet as reference material for academic assignments regardless of the source. Nurrizqi & Rodin's research concluded that the level of digital literacy skills in using e-resources by Science students in the class of 2016 library is classified as high but still lacks in-depth evaluation of the information presented on the internet.

Therefore, the researcher tries to offer the lecture process using Microsoft office sway to improve student digital literacy. Microsoft office sway is a new application from Microsoft. Everyone can view content created by Microsoft office sway users. People who have a Gmail account then can use platform sway, (Larasati & Yuanta, 2021;Maxwell, 2020). In it, there are facilities that teachers and students can use for various activities such as sharing reports, interactive presentations, and importing content from other sources. Microsoft office sway is one of the media or online learning applications currently used by Sway that can access from various devices such as mobile phones, tablets, and notebooks when connected to the internet, (Primaniarta & Wiryanto, 2022). Microsoft office sway It Is expected to be a solution to various student problems in the current digital era. It can transfer the habit of students accessing online games and other non-educational websites to learning with Sway-based online learning media. Thus, the negative impact of technology and information development can be handled.

Based on several studies that have been described, internet users, especially students, do not have good skills in processing and sorting the information obtained. This study will analyses each indicator of students' digital literacy skills and will study the digital literacy skills through the perspective of the length of analysis, gender and employment status. This is the uniqueness and differentiator of this research from previous research on digital literacy. This study aimed to determine the effectiveness of Microsoft Sway media on student digital literacy in post-covid-19 lectures. The formulation of the problem in this study is as follows: 1. Is the Use of Microsoft Sway Media Effective Against Students' Digital Literacy in Online Lectures After the Covid-19 Pandemic??

2. Method

This research uses quantitative research with a quasi-experimental approach. The research design used in this study was the pretest-posttest control group experimental research design. This research's participants and place are students in Indonesian subjects at University in Indonesia. The sampling technique was sample random sampling. Hypothesis testing in this study used the T-test. The data analysis technique used a T-test to see the effect of Microsoft Sway Media on digital literacy. The instruments were test and observation. The test sheet

used description questions to measure and determine the effect of Microsoft Sway Media on digital literacy. The data were analyzed using statistical techniques, namely the normality test and the homogeneity test T-test in this study used the Independent Samples Test formula. And finally, the N-gain test was used to measure the difference between the pretest scores and the post-test scores obtained in each class.

3. Results and Discussion

The results show that by using Microsoft Sway media to literacy digital increased. The details are described below:

1. **Data posttest score data of literacy digital in the experiment class**

Table 1.1 The Analysis result Data posttest score data of literacy digital in the Experiment class
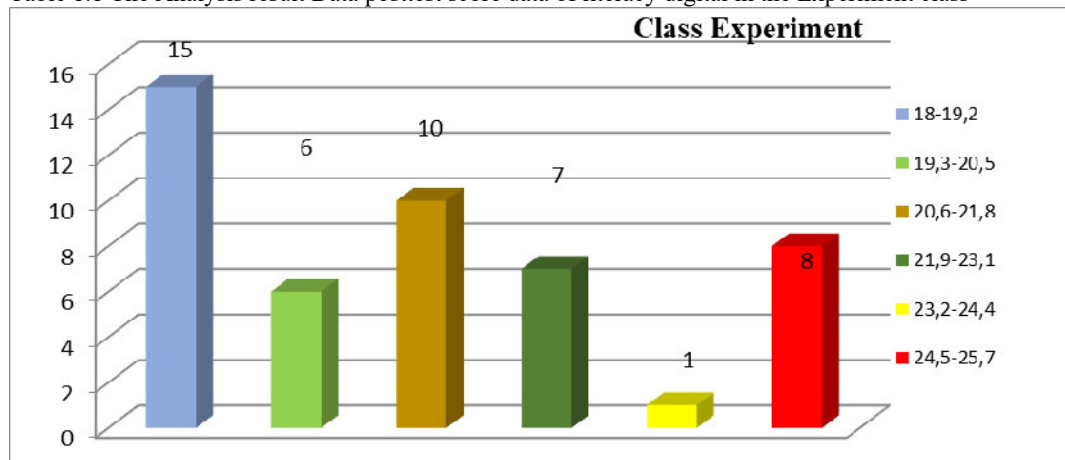
Based on the table above, the score for the final stage of the experimental class student cooperation shows that the lowest frequency is in the sixth interval from 23.2 to 24.4, which is 1 student or 4.0%. Moderate frequency exists at intervals of 19-23, namely as many as 32 students or 60.86%. The highest frequency is in the 18-19 interval, which is 15 students or 16.7%.

2. **Data posttest score data of literacy digital in the control class**

Table 2.1 The Analysis result Data posttest score data of literacy digital in the Control class
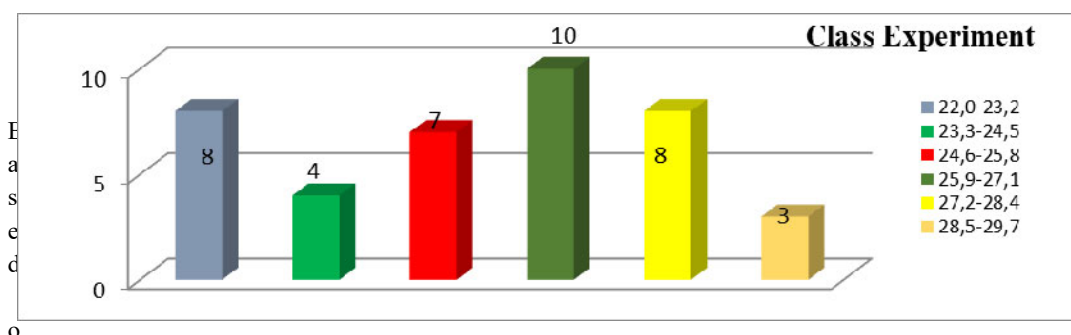
Based on the table above, the cooperation score of the final stage control class students shows that the lowest frequency is in the sixth interval of 28.5-29.7, which is as many as 3 students or 4.0%. Moderate frequency is 37 students or 60.86%. The highest frequency is in the interval of 25.9-27.1, which is as many as 10 students or 16.7%.

The effectiveness of using Microsoft Sway media on digital literacy uses the Paired Sample T-test with the help of the SPSS 25 application. The effectiveness of using Microsoft Sway media on digital literacy can be seen through the analysis of the pretest and posttest results. The results of the calculation of the Paired Sample T-test can be seen in the following table:

Table 1. The Analysis Result Of T-Test

Independent Samples Test

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
									Lower	Upper
Posttest	Equal variances assumed	1,567	,584	7,453	58	,000	10,74	1,32	16,80	5,22
	Equal variances not assumed			7,453	55,388	,000	10,74	1,320	16,80	5,22

Based on the results above, the t-count result is 7,453 and the value of sig (2-tailed) <0.05 is 0.000 <0.05, then H0 is rejected, and Ha is accepted. So, it can be stated that there is a significant effect on student digital literacy before and after the application of media using Microsoft Sway media. The use of Microsoft Sway media showed that after being given treatment, students' digital literacy was higher than before being given treatment with Microsoft Sway media. So, it can conclude that Microsoft Sway towards student digital literacy. In learning activities, lecturers play a role in facilitating learning through Microsoft sway e-learning learning media. The application of Microsoft sway e-learning media in the learning process positively impacts learning activities. Students seemed more enthusiastic about using Microsoft Sway e-learning learning media. They also seem creative in achieving a deep understanding of the course being studied and are broad-minded.

Microsoft Sway is a social networking-based platform that resembles a blogger in which there is a variety of educational content to access assignments and grades besides being beneficial for lecturers and students to make teaching and learning activities more effective, efficient and organized, (Lankshear & Knobel, 2015). Moreover, Microsoft Sway is one of the platforms developed by Microsoft. A platform that it can use to create presentations and interactive content that does not require a presenter, (Usman, 2020). (Larasati & Yuanta, 2021) Microsoft Sway can help teachers and students share, collect, format, and display presentations on a web-based interactive canvas that looks great on almost any screen and can easily create new Sways to add text, images, videos, charts, or other types of content.

Microsoft Sway also comes with a group feature. This feature allows us to display two or more presented in a view with a group format or a collection of images. Parts of this group include automatic, stack, comparison, slideshow, and grid, (Falahudin, 2014). The results in the field on the use of students look very enthusiastic and curious about the sway media. Presentation students using Sway enthusiastically use several designs that have been provided by Sway, and students are more active in making lecture materials using Sway's media. It agrees with (Mahpudin, 2021) The attractive appearance of the sway and its easy-to-learn use can increase students' enthusiasm for learning so that it creates confidence, which impacts student learning achievement during online learning. Merliana's et al., 2021 research revealed that An attractive sway display with a unique slide show can help students learn to understand the material so that students' enthusiasm and enthusiasm look more elevated compared to before using sway media. Sway is a new application from Microsoft Office that makes it easy for users to create and share interactive reports, personal stories, presentations, and many other things. With Sway, you don't have to spend much time formatting, (Junaedah & Nafiah, 2020).

Research (Purnamaningsih, 2021) The Microsoft sway application can be used in other subject matter to increase children's interest in learning. In using this application, of course, it is necessary to have mastery of technology that the teacher must own. Microsoft sway is an internet-based presentation tool with various features so that when a presentation is run, it can combine text, images, video, and sound. Sway is also a form of

multimodal text that combines pictures and specific shapes, (Raharjo et al., 2020). Microsoft Sway is also a multimodal text comprising various combinations of images and specific shapes. Microsoft Sway is one part of the software that can be used to create a product. So, it can conclude that the Sway application needs to be developed to assist students in achieving learning goals because Sway has a beneficial support function to foster learning enthusiasm and creativity and increase literacy interest and student understanding. With all the advantages of Microsoft Sway technology and course, supported by a data package for its users, it is felt that it is quite helpful and makes it easier for teachers and students to deliver material and receive subject matter. Sway is an interactive medium easily accessible by students during online learning. It does not require a large quota, and the application is easy to run, In presenting the online learning process, teachers need supporting facilities to assist them in delivering material to students. Therefore, Microsoft Sway can be used as an alternative media to help teachers and students manage the teaching and learning process. The novelty of this study is that the variables analyzed were analyzed by t-test, Microsoft sways media on students' digital literacy in online learning. Suggestions for further research are that can carry out further research by measuring students' digital literacy in other subjects and providing generalizations.

4. Conclusion

This research concludes that the Microsoft sway media used is effective for students' digital literacy. They mastered 21st-century skills and needed to target intervention efforts to increase digital literacy. A person does not naturally acquire digital literacy skills through basic online activities. To improve digital literacy skills, actions are needed simultaneously through two efforts, and the first is to increase awareness of its importance.

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