The Effectiveness of Online Learning with Microsoft Sway Platform on the Result of the Regional Themes of My Residence in Class IV Students of SDN Kesilir 05 Jember

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Abstract: *this study describes the effectiveness of online learning on the learning outcomes of fourth grade students. The online learning used in this research is learning using the Microsoft sway platform. The introduction in this article is part of the research report. The main focus in this study is to determine the effectiveness of online learning with the Microsoft sway platform in terms of two approaches, namely the comparison of the t-test on the data before the action (pre-test) with after the action (post-test). The results of this study indicate that there are differences in students' ability to receive online learning before using the Microsoft sway platform and after using the Microsoft sway platform. In this case, online learning with the Microsoft sway platform has a positive impact on the learning outcomes of fourth grade students.*

Keywords: *online learning, Microsoft sway platform, learning outcomes.*

INTRODUCTION

Education is one of the important role holders in order to educate the nation's life. A nation is able to compete with other nations if it has a good education system. In an effort to improve the quality of education, a nation must keep up with the times, namely science and technology (IPTEK). In addition, education also has an important role in preparing the younger generation in the future. According to Suparlan (2008:71) in the world of education there are three main components consisting of curriculum, students, and teachers. These components are interrelated and cannot be separated from each other. If the process of teaching and learning activities is carried out in the school environment, the three components can run optimally.

The education system used in Indonesia is the 2013 curriculum, where the 2013 curriculum is an improvement from the previous curriculum or better known as the Education Unit Level Curriculum (KTSP). In the 2013 curriculum, more emphasis is placed on knowledge, attitudes, and skills. The purpose of using the 2013 curriculum is to prepare us as young people to become productive, faithful, innovative, and creative citizens, and to contribute to the life of the nation, state, society, and world civilization (Kemendikbud, 2013:2). The success of education in learning cannot be separated from several aspects, including teachers, students, materials, learning media, learning methods, and learning models. Learning is the process of interaction between teachers and students well in a learning environment so that learning objectives can be achieved.

The year 2020 is a year in which the whole world experiences new challenges, including Indonesia. The challenge is the corona virus pandemic (covid-19) which hampers all aspects of life such as the economy, transportation, and education. In the field of education, the Indonesian government immediately made a policy to break the chain of the spread of the corona virus (covid-19) by studying from home (study from home) from kindergarten to university level. The learning process that was previously carried out face-to-face at school can now only be done online for learning at home in accordance with government policy.

The development of science and technology (IPTEK) has a very important impact in the field of life, not least in the learning process. As an innovation in the field of information technology, it should be responded well and so that it can be used to improve the quality of learning. The development of information technology in the learning process is the use of online-based media in learning. In the current era of technology, it is very possible that the learning process is carried out online. Online learning can be carried out by selecting the right learning media and must be adapted to the character of the students and the material presented. Online learning delivered by teachers to students, at least using modern media such as Microsoft Sway, Zoom, Google Meet, and the Teacher's Room. One of the modern learning media is Microsoft Sway. Microsoft sway is an application that makes it easy to create interactive presentations and reports. According to Istiqomah (2016), Microsoft Sway has excellent features that make it easier for users (teachers) to upload video content from YouTube. Microsoft sway can update automatically when the user (teacher) reloads the created presentation. On the other hand, students will also get new experiences regarding Microsoft Sway in receiving learning materials, doing assignments given by the teacher, and portfolios.

The results of interviews with the principal of SDN Kesilir 05, it can be concluded that online learning is constrained by several obstacles, such as mobile phones, internet networks, and students' level of understanding. One of the most serious obstacles to online learning is the level of student understanding. Students who do not understand the material given by the teacher are more than students who understand the material. This is due to the lack of direct

interaction in learning between teachers and students. In face-to-face learning, students can ask questions about learning materials that they do not understand. This is in contrast to online learning. In online learning, students only collect assignments given by the teacher, do not express, and do not ask questions about learning materials that they do not understand.

One of the steps taken in online learning is to use appropriate online learning media. Microsoft sway was chosen in online learning because it is in accordance with the learning taught in class. Where in Microsoft Sway can be added various videos, images, and various content that will certainly attract students in carrying out the online learning process. This online learning media with the Microsoft Sway platform can maximize the role of students in receiving learning materials presented by the teacher through images and visuals displayed.

The use of the Microsoft Sway platform for online learning can maximize the role of students in the learning process in the current era of the COVID-19 pandemic. In online learning with the Microsoft Sway platform, students can receive learning through various videos and pictures that the teacher makes in Microsoft Sway. This research has a significant effect on student learning outcomes. This is based on research conducted by Hamdani, AR, & Priatna, A. (2020) entitled "The Effectiveness of Implementation of Online Learning (Full Online) During the Covid-19 Pandemic at Elementary School Levels in Subang Regency" shows that the results of online learning have effectiveness of 66.97%, which really needs to be improved so that online learning is more effective in improving the quality of the learning process and student learning outcomes.

Based on the background of the problem above, a research entitled " The Effectiveness of Online Learning with Microsoft Sway Platform on the Result of the Regional Themes of My Residence in Class IV Students of SDN Kesilir 05 Jember."

RESEARCH METHODS

This research uses a quantitative approach. Quantitative approach is a research method that has systematic, structured, and well-planned characteristics up to the making of a research design. According to Sugiyono (2013) quantitative research methods are research methods used to examine certain samples and populations. Furthermore, the sampling technique can be done randomly, also data collection can also use tools, and data analysis is designed to test predetermined hypotheses.

In this study using an ex post facto research design. According to Darmadi (2011) ex post facto research is a study used to examine past events and look back at various factors that may have caused these events. In ex post facto research the hypothesis is also tested in the post event but no special treatment is given for some reasons. Because post-event research is methodically experimental research.

According to Emzir (2017) ex post facto research is a structured empirical research where the independent variables cannot be controlled directly by the researcher because the existence of these variables has already occurred and these variables are basically not manipulated. In addition, conclusions regarding the relationship between these variables are based on differences in companion variables without direct intervention.

Sources of research data are 19 grade IV students of SDN Kesilir 05 Jember in the 2021/2022 academic year. Data were collected by test method. The test is designed to test students' ability to understand the information presented using the Microsoft Sway platform. The test was conducted twice, namely pre-test and post-test. To find out changes in students' ability to understand the lesson before and after getting treatment.

Based on the purpose of the research conducted to determine student learning outcomes in online learning with the Microsoft Sway platform, whether it is more effective or not. Then used a separate sample t-test data analysis technique. Separate sample t-test was conducted to determine the difference in the average value of the two variables. The results of the t-test analysis were used to test the indirect hypothesis. In addition, t-test is used to determine the effectiveness of one variable with another variable

RESEARCH AND DISCUSSION RESULT

The data used in this study is primary data. According to Sugiyono (2012:139) primary data is a data source that directly provides data to data collectors. Primary data were obtained directly from students after completing the pre-test and post-test questions. This research was conducted on fourth grade students of SDN Kesilir 05 Wuluhan Jember. In this study, students were given pre-test questions to measure their initial abilities. In addition, students receive online learning up to 3 times with the Microsoft Sway platform. Furthermore, after students study online using the Microsoft Sway platform, there will be test questions to determine the students' final abilities.

Data analysis is used to answer the formulation of the problem in this study. The data analyzed is the difference between pre-test scores and post-test scores of fourth grade students using t-test. The t-test is used to compare which learning is more effective between using the Microsoft Sway platform and not using the Microsoft Sway platform.

The t-test was performed using SPSS version 22. If the standard t-test is count $\geq$ stable, then the null hypothesis (H0) is rejected and the alternative hypothesis (Ha) is accepted. The significance level of the t table value used is 0.05 or 95% confidence level. The results of the calculation of the t-test data analysis can be seen as follows:

Table 1. T-test Data Analysis Results
Group Statistics

	Tes	N	Mean	Std. Deviation	Std. Error Mean
hasil belajar	pre test	19	75,2632	10,86197	2,49191
	post test	19	83,9474	9,94135	2,28070

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
							Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)			Lower	Upper
hasil belajar	Equal variances assumed	0,760	0,389	2,571	36	0,014	8,68421	3,37805	15,53521	1,83321
	Equal variances not assumed			2,571	35,721	0,014	8,68421	3,37805	15,53706	1,83136

Based on the calculation results of SPSS version 22 t-test to get the difference in the average pre-test and post-test data. In the pre-test result data or before receiving online learning with the Microsoft Sway platform, an average of 75.26 was obtained and the post-test result data or after receiving online learning with the Microsoft Sway platform was obtained an average of 83.95. The result of the t-test calculation is count 2,571. As a result, check the table again, we can see that df = 36 At the 5% significance level, the value of ttable = 2.028 is obtained. Based on the results, it can be seen that count stable is 2,571 2,028.

The data that has been compiled has also gone through a descriptive statistical data analysis process. Descriptive analysis to compare the learning outcomes of pre-test and post-test. The results of the descriptive analysis are shown in the following:

Table 2. Result Descriptive Statistic
Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
pre test	19	35,00	60,00	95,00	75,2632	10,86197
post test	19	30,00	70,00	100,00	83,9474	9,94135
Valid N (listwise)	19					

Based on the results of the above table calculations using SPSS version 22, the average value before and after receiving online learning with the Microsoft Sway platform was obtained. It is known that the average value before receiving online learning with the Microsoft Sway platform is 75.26 and the average value after receiving online learning with the Microsoft Sway platform is 83.95. The average number of differences between the post-test and pr-test scores is 8.69.

Masyhud (2014) argues that the calculation of the effectiveness test aims to measure the effectiveness of a treatment compared to other treatments seen from student learning outcomes. The calculation of the effectiveness test is carried out after testing the hypothesis which shows the effect of treatment.

Table 3. ER Calculation Table
Group Statistics

	Tes	N	Mean	Std. Deviation	Std. Error Mean
hasil belajar	pre test	19	75,2632	10,86197	2,49191
	post test	19	83,9474	9,94135	2,28070

The following is a calculation of the relative effectiveness seen from student learning outcomes as follows:

$$\text{ER} = \frac{MX_2 - MX_1}{\left(\frac{MX_1 + MX_1}{2}\right)} \times 100\%$$

$$= \frac{83,95 - 75,26}{\left(\frac{83,95 + 75,26}{2}\right)} \times 100\%$$

$$= \frac{8,69}{\left(\frac{159,21}{2}\right)} \times 100\%$$

$$= \frac{8,69}{(79,60)} \times 100\%$$

$$= 10\% \text{ (very low effectiveness)}$$

Judging from the results of the t-test testing the hypothesis that the hypothesis has been accepted. It can be seen from the results of table 4. 2 substructure path analysis that the Microsoft Sway platform has a positive effect on learning outcomes with a significance value of 0.014 which is smaller than 0.05 and also a count value of 2.571 which is greater than the stable value of 2.028. That means partially the

Microsoft sway platform variable has an effect on learning outcomes.

Based on the results of the relative effectiveness test, it was concluded that the achievement of student learning outcomes using the Microsoft Sway platform was 10% more effective when compared to the group taught without using the Microsoft Sway platform. Or in other words, that the use of the Microsoft Sway platform is 10% more effective than without using the Microsoft Sway platform in achieving learning outcomes for the theme of the area where I live, a fourth grade student at SDN Kesilir 05 Jember.

CONCLUSION

Online learning with the microsoft sway platform has a positive and significant effect on learning outcomes. This is evidenced by the tcount value of 2,571 and the ttable of 2,028, so tcount > ttable, with a significance value of 0.014 <0.05. From the results of statistical significance, it can be shown that h0 is rejected and ha is accepted. And from the results of the relative effectiveness test, it was concluded that the achievement of student learning outcomes using the microsoft sway platform showed about 10% more effectiveness when compared to the group taught without using the microsoft sway platform.

REFERENCES

Book:

Emzir. (2017). Educational Research Methodology (Quantitative and Qualitative).Depok: Rajagrafindo Persada.

Hamid Darmadi. (2011). *Educational Research Methods.*Bandung: Alfabeta.

Kemendikbud. (2013). *Permendikbud No.65 concerning Standards of Primary and Secondary Education Process*. Jakarta: Kementerian Pendidkan dan Kebudayan.

Masyhud, M. S. 2014. *Educational Research Methods. A Guide to Theory and Practice of Research for Prospective Teachers, Teachers and Education Practitioners. Fourth Edition*. Jember: Lembaga Pengembangan Manajemen dan Profesi Kependidikan.

Sugiyono. 2012. *Understanding Qualitative Research.* Bandung: ALFABETA

Sugiyono. 2013. *Educational Research Methods Quantitative, Qualitative, and R&D Approaches.*Bandung: Alfabeta.

Suparlan. 2008. *Become an Effective Teacher.*Jakarta: Hikayat Publishing.

Journal:

Hamdani, A. R., & Priatna, A. (2020). *The effectiveness of the implementation of online learning (full online) during the COVID-19 pandemic at the elementary school level in Subang Regency. Didactic: Scientific Journal of PGSD STKIP Subang, 6(1),1-9.* https://bit.ly/3goJ84L *[accessed February 5, 2021]*

Istiqomah. (2016). *The development of learning material: explanation text based on multimodal by using sway app in 11th grade of SMAN 1 Batu.* Journal of Education and Recearch Vol. 4 No. 9 September 2016: 313-322. https://bit.ly/3v7cBV7. [accessed February 5, 2021]