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THE EFFECTIVENESS OF IMPLEMENTATION ON LEARNING EVALUATION THROUGH GOOGLE FORM DURING COVID-19 PANDEMIC

Tiofanny[1], Venny Herawati Simangunsong[2], Darma Indra Gultom[3], Remia Warni[4], Cici Limbong[5], Tutiarny Naibaho[6], Ruthmayasari Simanjuntak[7]
[1,2,3,4,5]Students of Mathematics Education Program, Postgraduate School
[6,7]Lecturer of Mathematics Education Program, Postgraduate School
[1,2,3,4,5,6,7]Universitas HKBP Nommensen, Medan, Indonesia
Corresponding author: tiofannynapitupulu@yahoo.co.id

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Abstract:

This research is carried out to determine the effectiveness of the implementation of the evaluation of learning based on the Internet by using a Google Form. The type of research conducted at the research was the descriptive quantitative research. The population in the study was 120 students. From the population, the researchers took samples in this research for 30 students that were considered to have the same cognitive ability. Techniques of collecting data used here were using the test and observation sheet. After collecting the data and did the data analysis through all the data, the researchers found that using google form in the implementation of the evaluation learning was effective for grade VII students. The researchers hope that this research can be a reference for other researchers in order to conduct more research related to the implementation of online learning process to face the pandemic situation nowadays.

Keywords: Effectiveness , Google Forms , Results Learning

INTRODUCTION

The Covid 19 pandemic, which has been endemic throughout the world since 2019, has had a tremendous impact on education. Because of this outbreak, the world and even Indonesia in particular have taken a lot of preventive measures, so that COVID-19 doesn't spread too much. One of the preventive measures taken in Indonesia is distance learning (PJJ). "Schools must be closed, PJJ will be implemented to prevent the spread of covid 19, prevent children's learning from being left behind, even PJJ is the best out of all worst scenario," said Nadiem as Minister of Education.

The development of science, information technology, and communication provides enormous assistance for the progress and success of the world of education. Even when the development of science and technology is very rapid, some Indonesian people are able to balance it well. Especially for today's students, who were born in the era of the internet, students are already internet literate, and this can make the distance learning process easier. E-learning, blended learning, and other virtual learning are some instances of IT-based learning that have been used to complement the learning process in vocational high schools or colleges in the IT area (Sherly et al, 2021). Since the introduction of PJJ starting in March 2019, existing technology applications have been exploited as much as possible to support good learning, starting from the WhatsApp application, Zoom, Google Meet, Google Classroom, Google Form, and even other applications (van Thao et al, 2021). The use of information technology in this learning is expected to help improve students' understanding of the material being taught. According to Firman and Rahman (2020), this learning is learning that uses the internet network with accessibility, connectivity, flexibility and the ability to bring up various types of learning interactions. In the implementation of online learning, students can access learning information anywhere and anytime, with the support of mobile devices such as smartphones, tablets and laptops.

Understanding effectiveness in general is a condition that shows the level of success or achievement of a goal as measured by quality, quantity and time as previously planned. Effective learning is learning that has a structured

combination including human, material, facilities, equipment and procedures directed at changing student behavior in a positive and better direction according to the potential and differences possessed by students to achieve the learning objectives that have been set, according to (Supardi, 2013).

According to Arikunto (2016), evaluation is a process of collecting data to determine to what extent, in what way, and in what part educational goals can be achieved. So learning evaluation is a process to obtain data and information needed in determining the extent and how the learning has been going in order to make judgments and improvements needed to maximize the results. The development of learning evaluation media is provided by Google based online. The learning evaluation application offers can be accessed easily using a mobile device. One that can be used and utilized as an online-based learning evaluation media is Google Form or often called Google Form. Google Forms is part of the Google Docs component provided by Google, and the software is freely accessible and fairly easy to operate.

One of the platforms used in evaluating learning at SMP Methodist Pematangsiantar is Google Form. According to Rahardja dkk (2018), this platform is generally used to fill in data easily and effectively. To add features from Google Forms, it is very easy and friendly to be accessed by users, in this case students. Likewise, according to Septiawan (2020), the use of Google Forms makes it easier for students to do assignments, is skilled at using technology and information facilities and can quickly find out their learning outcomes.

Based on the description above, this research focuses on looking at the effectiveness of using Google Forms in online learning in mathematics subjects in class VII SMP Methodist Pematangsiantar.

RESEARCH METHODOLOGY

The study was conducted in a quantitative research. It was a test-and-see approach to research. "Quantitative research used objective measurements to gather numeric data that is used to answer questions or test predetermined hypotheses, according to Ary (2010:22), which includes a pre-test and post-test to determine the impact of the implementation on learning evaluation via Google Form during the COVID-19 pandemic (Barus et al, 2020). This was an experimental study in which a particular amount of experimentation is applied to the population or sample. This research was conducted with a population of 120 people. This type of research is descriptive quantitative research, to see whether internet-based learning evaluation using Google Form is effective in evaluating learning. The sample in this study consisted of 30 people.

Table 1. Research Design

Pre-test	Treatment	Post-test
-	X	O

Notes:
X : Learning -based web by using *Google Forms*
O : Observation results after treatment in class .

The data analysis technique in this research is descriptive data analysis technique .

1. Analysis Descriptive Power Absorption Materials Learning

a. Descriptive Analysis of Absorbability of Learning Materials
Individual absorption, a student is said to have completed learning if he reaches a minimum score of 70. As for knowing the mastery of learning individually used the formula:

$$KB = \frac{\text{Total score obtained}}{\text{Total maximum score}} \times 100\%$$

Note:
KB : Complete Learning Progress

b. Classical absorption, the class will be declared complete in learning if in the class there are 85% of students achieving a score of 70. As for knowing it can use the formula:

$$PKK = \frac{\text{Number of students exceeding minimum score}}{Total\ number\ of\ students} \times 100\%$$

Note:
PKK : Percentage of Learning Activities

Criteria for the percentage of students' learning completeness in the learning process (Aqib, et al., 2009: 41) as shown in table 3.2 below.

Table 2. Criteria for the Percentage of Student Learning Completeness

Percentage	Criteria
> 80%	Very High
60% - 79%	High
40% - 59%	Medium
20% - 39%	Low
< 20%	Very Low

2. Descriptive analysis of learning level suitability

The suitability of the level of learning means here is seen from the ability of teachers to manage learning, this is seen from student learning outcomes in knowing or understanding learning materials and observation sheets of teacher teaching abilities. The criteria for the ability of teachers to teach (TKG) are as follows::

Table 3. Criteria of Teacher's Ability

Teaching Ability	Category
$1 \leq TKG < 2$	Not Good
$2 \leq TKG < 3$	Not good
$3 \leq TKG < 4$	Pretty Good
$4 \leq TKG < 5$	Good
$TKG = 5$	Very Good

Learning outcomes show a measure of the ability obtained by students after learning activities take place. Where the learning outcomes in this study are in the form of scores obtained by students from the results of using Google Form. In accordance with Permendikbud 2006 learning outcomes can be seen from the score obtained by students whether they meet the KKM that has been determined, in this case the minimum score is 70. The categories of learning outcomes based on the 2006 Minister of Education and Culture are as follows.

Table 4. Student Learning Outcomes Criteria

Total Score	Category
0-25	Not Good
26-50	Not good
51-75	Pretty Good
76-100	Good

FINDING AND DISCUSSION

Test Result Validity of instrument tests were submitted to the student class VII SMP with the number of students 30 and 4 about to score a total of a maximum of 50 .

Table 5. Results of Test Instrument Validity Test

Variable	No question	r count	r. table	Conclusion	Information
Learning Outcomes (Y)	1	0.45 3 6	0.3610	Valid	Enough
	2	0.6 20 9	0.3610	Valid	High
	3	0.6 56 5	0.3610	Valid	High
	4	0.605 9	0.3610	Valid	High

Table 6. Test Reliability Test

No	Statistics	Score
1	Number of Item Variants	5, 23 3 1
2	Total Variance	7, 30 0 9
3	Reliability	1, 4 6 33
Conclusion		Reliable

Table 7. Testing the Difficulty Level of Questions

No	Question Difficulty Criteria	Number of Questions	Percentage
1	Easy	3	75%
2	Medium	1	25%

Table 8. Distinguishing Level Test Questions

No	Test Instrument	Index Level differentiator Problem
1	1	1.2673
2	2	3.0992
3	3	3.1156
4	4	2.5200

Table 9. Students' Learning Process Description

No	Criteria	Number of Students
1	Exceeding	2 7
2	No Exceeding	3

Table 10. Criteria for Student Learning Process

No	Variable	amount
1	Exceeding	2 7
2	Sample	30
PKK		90 %
Criteria		Very High

Table 11. Level of Teacher's Ability

No	Aspect of Observation	Score
1	The suitability of the material with the strategy	20
2	Submission of materials	13
3	Teacher - Student Communication	9
amount		4 2
TKG		4, 2

Table 12. Student Learning Outcomes

No	Information	Learning Outcomes
1	Highest Score	9 0
2	Lowest Score	6 5
3	Average Score	7 5 , 8667
4	KKM (Minimum Completeness Criteria)	75
5	Number of Students	30
6	Percentage of Total Students for KKM	90 %
7	Percentage of Number of Students Not Exceeding the KKM	10 %

Before taking data in the study, the researchers first tested the research instrument on 30 students who had studied the material to be tested. From the results of the calculation of the validity of the mathematical problem solving ability test, four questions were declared valid because rcount > rtable. The results of the calculation of the reliability test of the mathematical problem solving ability test obtained that the calculated value of Cronbach's Alpha is greater than the rtable value at a significance level of 5% or 0.05, which is 0.361. So the test instrument for mathematical problem solving ability is proven to be reliable to be used to collect data, where rcount > rtable. The results of the calculation of the level of difficulty of the test items stated that 75% of the test items were in the easy category and 25% of the test items were in the medium category. So that the researchers used four questions for the mathematical problem solving ability test used to collect research data.

After the researchers conducted the research and the students did the post-test, it was found that the students' learning outcomes with an average value of 75.8667. In accordance with the criteria for mastery of student learning, obtained as many as 27 students who completed from 30 samples. Completeness/Exceeding the KKM is seen from individual absorption and classical absorption. Students' individual absorption has been shown that 27 students get a score of 70 with an average value of 75.8667 and classical absorption shows the percentage of students who complete 90% of the requirements, namely 85% of the research sample. From the suitability of learning, in this case, seen from the level of teacher ability to use google form as a medium for implementing learning evaluations, it is at a value of 4.2 with a good category.

CONCLUSION

Based on research that has been done from 30 students, as many as 25 students meet the individual completeness requirements, namely the score of 70 and class completeness reaches the requirement of 85% of the number of students studied, while students' learning outcomes showed an average value of 75.8667. Meanwhile, from the suitability of learning in this case, it is seen from the level of teacher ability to use Google Form is at a value of 4.2 with a good category. So that the effectiveness indicators are met, it is concluded that the use of Google Forms is effective in evaluating learning in grade VII of SMP Methodist Pematangsiantar.

REFERENCES

1. Aqib, Zainal, dkk. (2009). *Penelitian Tindakan Kelas*. Bandung: Yama Widya
2. Arikunto, Suharsimi. (2016). Dasar-dasar Evaluasi. Jakarta: PT. Bumi Aksara.
3. Barus, L. D. G., Herman., and Niswa, K. (2020). The Effect of Student Teams Achievement Divisions (STAD) to the Students' Writing Ability on Recount Text. *Journal of English Education and Teaching (JEET), Volume 4 number 4, December 2020*, Page 536-547. DOI: https://doi.org/10.33369/jeet.4.4.536-547
4. Ary, D. (2010). *Introduction to research in Education: 8th Ed*. Singapore: Wadsworth Cengange Learning.
5. Firman and Rahman, S. R. (2020). Pembelajaran Online di Tengah Pandemi Covid-19. *Indonesian Journal of Educational Science (IJES), Volume 02, No 02 Maret 2020*
6. Rahardja, U, dkk. (2018). Pemanfaatan Google Formulir sebagai Sistem Pendaftaran Anggota pada Website Asosiasi. *Media Informatika Budidarma, Vol 2, no. 4, Oktober 2018*
7. Septiawan, F. (2020). Efektivitas Penggunaan Google Form dalam Pembelajaran Daring pada Mata Pelajaran Pemeliharaan Mesin Sepeda Motor di SMK Negeri 1 Koba. *Jurnal Pendidikan Teknik Mesin, Volume 7 nomor 2 (November 2020)*
8. Sherly et al. (2021). Socialization for the Implementation of E-Learning Teaching Models for Teachers and Education Staffs at SMA Sultan Agung Pematangsiantar. *ABDI DOSEN: Jurnal Pengabdian pada Masyarakat, Vol. 5, No. 2, PP. 275-280,* DOI: https://doi.org/10.32832/abdidos.v5i2.879
9. Supardi. (2013). *Sekolah Efektif, Konsep Dasar dan Praktiknya.* Jakarta: Rajawali Pers
10. Van Thao, N., Herman, Napitupulu, E. R., Hien, N. T., and Pardede, H. (2021). *Code-Switching in Learning via Zoom Application: A Study in an EFL Context. Asian ESP Journal, Volume 17 Issue 3.1, March 2021, ISSN: 2206-0979, PP. 91-111*.