

EFFECT OF ONLINE LEARNING MEDIA QUALITY ON STUDENT LEARNING EFFECTIVENESS AT SMPN 13 SUKABUMI CITY

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ABSTRACT

This study aims to determine the effect of the quality of Online Learning Media on the effectiveness of Student Learning in SMPN 13 Sukabumi. This research has been carried out from November to December 2022. The method in this study is to use quantitative research methods with operationalvariable approach or the influence between the independent variable and the dependent variable. Sampling technique in this study is to use Proposive sampling. Instrument in this study used a closed questionnaire with likert scale form. Data analysis techniques used in this study validity test, reliability test, normality test, determination, regression, and hypothesis test F. The results found in this study that there is a significant influence between the independent variable is the quality of instructional Media with the effectiveness of Student Learning in SMPN 13 Sukabumi. The results of this calculation is to use the SPSS program which is presented as follows: Based on the results of the study showed that from the calculation data, it was concluded that the independent variables (X) simultaneously affect the dependent variable (Y). With the value of pgaruhnya between variables X and Y is equal to 36.3%, based on the value of R square. So according to the researcher that the independent variable (X) is the quality and dependent variable (Y) effectiveness there is a significant influence because of the variable X and variable Y. Based on the simultaneous F Test value Fcount and Ftable. If the value Fcount > of Ftable then the independent variable (X) affect the dependent variable (Y). Then $DF_1=5.318$ with $DF_2=2.361$. Because f count is $5.318 > F$ table 2.361 , then H_1 is accepted or which means a set of free variables is proven to significantly affect the bound variable. Thus there is a significant influence between variable X is the quality and Y variable effectiveness in research at SMPN 13 Sukabumi.

Keywords: *Quality, Effectiveness*

A. INTRODUCTION

The corona virus phenomenon occurs throughout the world which has an impact on the spread of the disease ranging from mild to severe symptoms. This Virus was first spread by the Chinese state, Wuhan which made unrest and spread widely to various countries, especially the country of Indonesia. On March 2, 2020, the Indonesian government reported that the corona virus or covid-19 had entered Indonesia with the number of patients affected by covid-19 as many as 2 people and until March 16, 2020, it increased by 20 people. On March 11, 2020, the World Health Organization (WHO) designated the covid-19 virus as a global pandemic. Various policies were set by the government to overcome the spread of the covid-19 virus.

With the emergence of the covid-19 virus in Indonesia, it is currently having an impact on the community and also has an impact on various fields in Indonesia such as economic, social and also in the field of Education. On March 24, 2020, the Minister of Education and culture of the Republic of Indonesia issued the *Surat Edaran Nomor 4 Tahun 2020* concerning the implementation of Education Policy in the Emergency period of the spread of Covid-19 by closing all educational activities and must provide alternatives as a substitute for the educational process for students and students who are currently unable to carry out, we must be able to adapt to this new age where learning that was previously done face-to-face becomes non-face-to-face learning through networks in this way. Online learning methods (online) are also called e-learning or online learning.

Before the pandemic, teaching and learning activities at SMPN 13 Sukabumi were carried out face-to-face and more activities were carried out inside schools. But when the covid-19 pandemic occurred around the world, learning with students can only be done online, of course the innovations that teachers must do must be more creative and wider in scope so that the entire learning process can run effectively and efficiently, such as making interactive learning media through animation and other learning media. The total number of students is 709 consisting of 347 male students and 362 female students, the number of study groups is 21 and the number of teachers is 35. There are several applications and learning media that can be used by both teachers and students to conduct online teaching and learning activities, including laptops, gadgets, Google Classroom, Zoom, YouTube, and Whatsapp groups, from several applications or learning media, teachers are required to be more creative when teaching. SMPN 13 Sukabumi has a minimum provision criteria of subjects is 70.00, while one of the minimum provision criteria of Indonesian subjects is 70.00 for Class VII and Class VIII and for Class IX 75.00. Some of the things done by teachers at the time of online learning is to make videos of learning materials uploaded on the YouTube application so that students can learn learning materials outside of class hours, make interactive learning materials, and visit the homes of students who cannot follow online learning because they do not have online learning devices this is so that students can still follow the learning and not be left behind from the materials that have been given by the teachers.

Based on the results of preliminary observations stated that online learning conducted at SMPN 13 Sukabumi has decreased in value and the percentage of absenteeism has decreased seen from the number of students who have values below the KKM (minimum completeness criteria) and also many students who are absent when doing online learning / online because of the uneven distribution of quotas and have difficulty, evident from the data value of Class VII (A) at the time of semester 1 in the online learning period has an average value of 79.45 (knowledge value) and 81.29 (skill value), at the time of semester 2 in the offline learning period has increased 80.00 (knowledge value) and 82.69 (skill value), for absent data Class VII(A) at the time of semester 1 online learning is 97.95% and at the time of semester 2 offline learning has increased by 99.62%. Therefore, this study needs to be done because the results of this study can be used as one of the evaluation materials for schools in improving the quality of online learning so that schools are able to improve the effectiveness of student learning in SMPN 13 Sukabumi. Based on the description above, the authors are interested to conduct further research on “the effect of Online Learning Media Quality on the effectiveness of Student Learning in SMPN 13 Sukabumi”.

B. LITERATURE REVIEW

The definition of quality is very diverse and contains many meanings, quality is a word that for service providers is something that must be done well. According to the Indonesian Main Library (KBBI online, Web. 5/7/2022), the level of good or bad of something of quality, degree, or level (intelligence, proficiency, and so on). (Gaspersz & Vincent, 1997) states that quality is the totality of the features and characteristics possessed by products that are able to satisfy consumer needs. While the definition of quality according to (Kotler & Philip, 1997) is all the characteristics and properties of a product or service that affect the ability to satisfy the needs stated or implied.

The word effective comes from English effective which means successful or something that is done successfully. The effectiveness of each person has a different meaning, according to the viewpoint and interests of each (sutrisno, 2010:123). According to (Siagian Sondang P, 2002), effectiveness is the utilization of resources, facilities, and infrastructure in a consciously predetermined amount to produce the amount of goods for the services of the activities carried out. Effectiveness shows the success in terms of achieving or not the targets that have been set. If the results of the activity are closer to the target, the higher the effectiveness. Dunn (2003:430) suggests that effectiveness is concerned with whether an alternative achieves the expected result, or achieves the goal of the action.

Tjiptono Quality Model (Tjiptono & Fandy, 2003)

1. Reliability.
Related to the ability of a company, organization, or agency to provide accurate services from the first time without making any mistakes and deliver its services in accordance with the agreed time.
2. Responsiveness.

Related to the willingness and ability of employees to help consumers and respond to their requests, as well as inform when services will be provided and then provide services quickly.

3. Assurance.

Employee behavior that is able to foster consumer confidence in the company and the company can create a sense of security for pre-consumers. Assurance also means that employees are always courteous and master the knowledge and skills needed to handle any consumer questions or concerns.

4. Empathy.

Certify that the company, organization, or agency understands the concerns of its customers and acts in the interests of consumers, as well as providing personalized attention to consumers and having convenient hours of operation.

5. Tangible.

With regard to the attractiveness of physical facilities, complete equipment/equipment, and materials used clean company, as well as the appearance of neat employ. Based on these five quality indicators, customer satisfaction can be measured, understood, and used as a good result for the benefit of quality improvement.

Cambel J.P Effectiveness Model (Campbell, 1997)

1. Program Success.

The effectiveness of the program can be run with operational capability in implementing work programs that are in accordance with previously set goals. The success of the program can be reviewed from the process and mechanism of an activity carried out in the field.

2. Target Success.

Effectiveness is viewed from the point of achievement of objectives by focusing on aspects of output, meaning that effectiveness can be measured by how far the level of output in the policies and procedures of the organization to achieve the goals set.

3. Satisfaction with the Program.

Satisfaction is an effectiveness criterion that refers to the success of the program in meeting user needs. Satisfaction is felt by the users of the product or service produced quality. The higher the quality of products and services provided, the higher the satisfaction felt by users, it can lead to benefits for the institution.

4. Input and Output levels.

The effectiveness of the input and output levels can be seen from the comparison between the input with the output. If the output is greater than the input then it can be said to be efficient and vice versa if the input is greater than the output then it can be said to be inefficient.

5. Achievement Of Overarching Goals.

The extent to which the organization performs its duties to achieve goals. In this case it is a general assessment with as many single criteria as possible and produces a general assessment of the effectiveness of the organization.

Tjiptono Connecting Theory (Tjiptono, 2003)

1. Quality includes the business of meeting or exceeding customer expectations.

2. Quality of products, services, people, processes, and the environment.
3. Quality is a condition that is always changing (for example, what is considered less quality in the future).

C. METHOD

According to (Creswell & Poth, 2018), quantitative research methods are approaches to test objective theories by examining the relationships between variables. These variables in turn can be measured usually on instruments, so that the numbered data can be analyzed using statistical procedures. The final written report has a structure consisting of an introduction, literature and theory, methods, results, and discussion. Like qualitative researchers, those involved in this form of inquiry have assumptions about testing theories deductively, establishing protections against bias. Control alternative or counterfactual explanations, and be able to generalize and replicate findings.

Meanwhile, according to (Sugiyono, 2018), quantitative research method is a research method based on positivism philosophy, used to research on a certain population or sample, data collection using research instruments, data analysis is quantitative or statistical with the aim of testing the hypotheses that have been used.

The descriptive research method according to (sugiyono, 2018) is to determine the existence of independent variables, either only on one or more variables (stand-alone variables or independent variables) without making comparisons of the variables themselves and looking for relationships with other variables.

From some understanding of quantitative research from some experts, researchers can conclude that: “quantitative research is research based on numbers or data obtained from populations and samples that are analyzed using measurable statistical mathematical models for making a conclusion”.

The sample is a portion of the population. Because of the large population, it is not possible for researchers to study everything. So because of limited funds, energy, and time, researchers use samples taken from the population to apply to all populations (sugiyono, 2018).

To determine the number of feasibility samples researchers use the Formula Slovin (Ryan, 2013: 20) as follows:

$$n = \frac{N}{1 + Ne^2}$$

Description

N = population size

n = sample size

e = critical value (limit of allowance) desired (percent allowance for inaccuracy due to population sampling errors). The set critical value is 10%

$$n = \frac{226}{1 + 226(0,1)^2}$$

$$\begin{aligned} &= \frac{226}{3.26} \\ &= 69,33 \end{aligned}$$

The number 69.33 is the number in decimal form that is not possible to apply to respondents. Therefore, the need for rounding in order to obtain a whole or round number to facilitate sampling is to be 69 samples which means 69 respondents.

Validity Test

Validity is a measure that shows the levels of validity and validity of an instrument. The instrument is said to be valid if it can reveal the data variables studied appropriately. The high and low validity of the instrument indicates the extent to which the collected data does not deviate about the variable in question.

The method that is often used to assess the validity of the questionnaire is the moment product correlation (pearson correlation) between the score of each question item and the total score, so it is often referred to as interitem-total correlation. The provisions of the validity of the instrument are valid if the results of R count > R table.

Reliability Test

Reliability is a measurement tool in measuring a symptom at different times always shows the same results, so in various times the measured results show fixed results.

Instrument reliability is a reliable measurement result. Reliability of the instrument is needed to obtain data in accordance with the purpose of measurement. The method used to perform the reliability test is cronbach Alpha measured by Cronbach Alpha 0 to 1. A variable is said to be reliable, if the Cronbach Alpha >0.60. So testing the reliability of the instrument in a study is done because the depth of the instrument is related to the efficacy and level of confidence in the research instrument.

Normality Test

According to (Ghozali & Imam, 2012) normality test aims at whether the regression model of the dependent variable and the independent variable has a contribution or not. A good regression Model is a normal or near-normal distribution.

Regression

This analysis was conducted to examine whether there is a causal relationship between the two variables or examine how much influence the quality of online learning on the dependent variable, namely the effectiveness of student learning. The formula used is:

$$Y = a + b1X1 + e$$

Description :

Y = student learning effectiveness

a = number of constants

X1 = quality of learning

e = standard error

b_1 = regression coefficient for the independent variable

Determination

According to (Ghozali & Imam, 2012) coefficient of determination (R^2) is a tool to measure how far the ability of the model in explaining the variation of the dependent variable. The value of the coefficient of determination is between zero or one. A small value of R^2 means that the ability of the independent variable to explain the variation of the dependent variable is very limited. And vice versa if the value is close to 1 means the independent variable provides almost all the information needed to predict the dependent variable.

Hypothesis Test F

According to (Ghozali & Imam, 2012) the F statistical test basically shows whether the independent variable and the independent variable included in the models have an influence together on the dependent variable or dependent variable. To test this hypothesis used F statistics with the following decision-making criteria:

1. If the value of F is greater than 4 then H_0 is rejected at 5% degree in other words we accept the alternative hypothesis, which states that the independent variable simultaneously and significantly affects the dependent variable.
2. Compare the value of F calculation results with F according to table. If the value of F is greater than the value of F_{table} , then H_0 is rejected and accepts H_a .

D. EXPLANATION

Based on the results of research that has been done through filling out questionnaires on 69 respondents who have done online learning for approximately 1 year. This study uses the theory of quality (X) according to Tjiptono (2011:198) which consists of 5 dimensions of reliability, responsiveness, assurance, empathy and physical evidence. This study also uses the theory of effectiveness (Y) according to Campbell J.P (1989) which consists of 5 dimensions namely program success, target success, satisfaction with the program, input and output levels, and overall goal achievement. The results of this study are:

Validity test

Validity test is used to show the level of validity of the research instrument (questionnaire), meaning that the instrument can be used to measure what should be measured. A decision on a question item can be considered valid if the calculated R (pearson correlation coefficient) $> R$ is critical 0.30. Validity test using pearson product moment method with SPSS version 26.

To find out the questionnaire question items on the variable quality of Online learning in SMPN 13 Sukabumi declared valid or Invalid are presented in the following table:

| No Item | R count | R critical | Validity |
|---------|---------|------------|----------|
| 1. | .279 | 0,30 | Valid |
| 2. | .291 | 0,30 | Valid |
| 3. | .466 | 0,30 | Valid |
| 4. | .473 | 0,30 | Valid |
| 5. | .545 | 0,30 | Valid |
| 6. | .280 | 0,30 | Valid |
| 7. | .384 | 0,30 | Valid |
| 8. | .497 | 0,30 | Valid |
| 9. | .485 | 0,30 | Valid |
| 10. | .620 | 0,30 | Valid |

Based on the results of the table above it can be stated that all items of online learning quality instrument is valid, because in each item above the value of R count exceeds the critical r is 0.30. In the above items that have the highest validity value is at Number 10 with a value of 0.620. While the lowest validity value is at Number 1 with a value of 0.279.

To find out the questionnaire question items on the variable effectiveness of Online learning in SMPN 13 Sukabumi declared valid or Invalid are presented in the following table:

| No Item | r_count | r_critical | Validity |
|---------|---------|------------|----------|
| 1. | .293 | 0,30 | Valid |
| 2. | .216 | 0,30 | Valid |
| 3. | .502 | 0,30 | Valid |
| 4. | .365 | 0,30 | Valid |
| 5. | .594 | 0,30 | Valid |
| 6. | .536 | 0,30 | Valid |
| 7. | .402 | 0,30 | Valid |
| 8. | .330 | 0,30 | Valid |
| 9. | .572 | 0,30 | Valid |
| 10. | .523 | 0,30 | Valid |

Based on the results of table 4.5 it can be stated that all items of online learning quality instrument is valid, because in each item above the value of R count exceeds the critical r is 0.30. In the above items that have the highest validity value is at Number 5 with a value of 0.594 sebesa. While the lowest validity value is at Number 2 with a value of 0.216.

Reliability Test

Reliability test shows the extent to which the measurement results can be trusted, reliable, and consistent in measurement. Reliability testing is done with internal consistency using Cronbach alpha. If the Cronbach alpha value is >0.7 , the instrument is said to be reliable.

The results of reliability testing of research instruments or online learning quality variables questionnaire are presented in the following table:

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .682 | 11 |

Based on the table above, known Cronbach alpha value obtained a value of 0.682 where the score is above the critical r 0.70, so it can be stated reliable, reliable, and consistent in the measurement.

The results of reliability testing of research instruments or online learning quality variables questionnaire are presented in the following table:

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .679 | 11 |

Based on the table above, known Cronbach alpha value obtained a value of 0.679 where the score is above the critical r 0.70, so it can be stated reliable, reliable, and consistent in the measurement.

Normality Test

Normality test aims at whether the regression model of the dependent variable and the independent variable has a contribution or not. A good regression Model is a normal or near-normal distribution.

One-Sample Kolmogorov-Smirnov Test

| | | | Unstandardized Residual |
|----------------------------------|---------|----------------|-------------------------|
| N | | | 69 |
| Normal Parameters ^{a,b} | | Mean | .0000000 |
| | | Std. Deviation | 2.50293625 |
| Most Extreme Differences | Extreme | Absolute | .060 |
| | | Positive | .060 |
| | | Negative | -.050 |
| Test Statistic | | | .060 |
| Asymp. Sig. (2-tailed) | | | .200 ^{c,d} |

Based on the results of the above calculation results in a value of 0.200 with a significant level acceleration=0.05. The value indicates that the result is more than 0.05 which is the minimum number of data can be called normal. Thus, with a significance value of 0.200 the normal distribution data.

Regression

To perform data analysis techniques, researchers used the help of software SPSS 26. The calculation results using SPSS 26 software are as follows:

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .603 ^a | .364 | .355 | 2.52155 |

Based on the above calculation, it can be seen that the correlation of the effectiveness of online learning in SMPN 13 Sukabumi is 0.603 (see the R value in the table above).

| Interval Koefisien | Tingkat Hubungan |
|--------------------|------------------|
| 0,00 – 0,199 | Sangat Rendah |
| 0,20 – 0,399 | Rendah |
| 0,40 – 0,599 | Sedang |
| 0,60 – 0,799 | Kuat |
| 0,80 – 1,000 | Sangat Kuat |

Based on the Guilford criteria, the results of the correlation calculation resulted in a value of 0.603 with a significant level acceleration=0.05. Based on this, the value obtained lies in the criteria strong correlation or relationship.

Determination

To determine the contribution to the optimal effectiveness of learning using the formula coefficient of determination according to Sugiyono (2014: 231) as follows:

Where: $Kd = r^2 \times 100\%$

Kd = coefficient of determination $Kd = x \times 100\%$

r = correlation coefficient

Unknown :

$r = 0.603$

$Kd = (0.603)^2 \times 100\%$

$Kd = 0.363 \times 100\%$

$Kd = 36.3\%$

Criteria for the coefficient of determination:

1. If "kd " is close to 0, then the influence of variable X on variable Y is weak
2. If "kd " is close to 1, then the influence of variable X on variable Y is strong.

Based on the calculation of the coefficient of determination that the authors have done, it is known that the value of $Kd = 36.3\%$ it can be concluded that the effectiveness of online learning in SMPN 13 Sukabumi is strong.

Hypothesis Test F

The F statistical test basically shows whether the independent variable and the independent variable included in the model have an influence together on the dependent variable or dependent variable.

ANOVA^a

| | Model | Sum of Squares | df | Mean Square | F | Sig. |
|---|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 243.914 | 1 | 243.914 | 38.362 | .000 ^b |
| | Residual | 425.999 | 67 | 6.358 | | |
| | Total | 669.913 | 68 | | | |

Then DF1 5.318 with DF2 2.361. Because f count is 5.318 > F table 2.361, then H1 is accepted or which means a set of free variables is proven to significantly affect the bound variable.

E. CONCLUSION

After the author collects data in order to prove the hypothesis proposed and process it with statistical techniques using product moment by using calculations through the SPSS application. Furthermore, the authors can draw conclusions from the study entitled "The effect of Online Learning Media Quality on the effectiveness of Student Learning in SMPN 13 Sukabumi " is as follows:

1. Based on the results showed that from the calculation data, it was concluded that the independent variables (X) affect the dependent variable (Y). with the value of correlation between variables X and Y is equal to 36.4 %, based on the value of R square.
2. Based on the simultaneous F test the value of F count and F table-if the value of F count > of F table then the independent variable (X) affect the dependent variable (Y). DF1 5.3.18 with DF2 2.361. Because f count is 5.318 > F table 2.361, then H1 is accepted or which means a set of free variables is proven to significantly affect the bound variable.

Suggestion

For students are expected to be more active in the online learning process in order to apply the positive things gained from these learning activities in everyday life. For schools are expected to support and always support their students to be active in following the online learning process because it can develop student learning activities, and student skills in keeping up with the Times. For parents must remain supportive and must keep an eye on children's activities when the child is doing the learning process is done online or when the child is working on a task, so that children can follow the learning process well and do positive things during learning.

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