

Effectivennes Use Of Interactive Student Worksheets In Class Iv Theme The Beauty Of Diversity In My Country Subtema Of Ethical And Religious Diversity In My Country In Sdn Rambipuji 02 Jember

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Abstract: During the pandemic, education in Indonesian implements an online school system. This online system requires students to study from home with available technology, such as the use of gadgets and laptops or computer. Innovative learning activities can be applied based on technology, example by utilizing computer based learning. Teachers need to develop learning resources by utilizing teaching materials, example interactive student worksheets. The purpose of this study was to determine the effectivennes use of interactive student worksheets in class IV theme the beauty of diversity in my country subtema of ethical and religious diversity in my country in SDN Rambipuji 02 Jember. The type research used is quantitative with the expost facto method. Research is carried in class IV A and C in SDN Rambipuji 02 Jember with the subject of each class is 30 students. Data collection in research by test and interview. Class IV C students use manual assignments, while grade IV A uses interactive worksheets. The average score for manual assignments (Class IV C) is 71,26. The average score for using interactive worksheet (Class IV A) is 90,16. The increase that occurred before and after using the interactive worksheets was 23,41%. This figure calculated base on the relative effectiveness formula quoted by (Masyhud, 2016)

Keywords: effectiviness, interactive student worksheets, online learning

1. Preliminary

Corona virus has forced the world of education in Indonesian to follow a process that can improve school conditions in urgent situation. During the pandemic, education in Indonesian implements an online school system. This online system requires students to study from home with available technology, such as the use of gadgets and laptops or computer. The media make it easier for students to acces learning with teachers. The process of learning activities can be facilitated by utilizing technology. Teachers are required to make efforts to use technology to improve the quality of learning. Innovative learning activities can be applied based on technology, example by utilizing computer based learning. Teachers need to develop learning resources by utilizing teaching materials, example interactive student worksheets.

Interactive student worksheets is a material for teaching students whose use can optimize the learning process (Herawati et al., 2017:340). Along with technological developments, now student worksheets can be delivered in interactive computer based display. Student worksheets interactive is an alternative method that includes subject matter and a collection of computer based questions, this requires a computer or gadget to operate it (Alfa, 2017 in (Ani & Lazulva, 2020)). Interactive worksheets can be designed in such a way as to be more interesting, effiecient, and can also improve students thinking in answering questions, so that the difficulties that students will face can be minimized. Pictures, animations, videos are complemantary to the contents of the interactive student worksheets.

The benefits of using interactive student worksheets in the learning process are making students more active during learning activities, being able to suport students in developingall their creative ideas, as a guide in the process of learning activities between students and teachers, making it easier for students to get notes about the material being studied in learning activities, helping students to get an explanation of the material taught by the teacher systematically (Widodo, 2017). Interactive student worksheets can be used as materials for innovative teaching to help students improve understanding of learning materials. The use interactive student worksheets is expected to increase effectiveness learning activities in the school. However, interactive worksheets have weaknesses in their use. Students must have a smartphone and internet network to operate it. Interactive student worksheets affects success if it is carried out by meeting ability standards, can achieve the desired goals, and add more meaningful student knowledge (Amali et al., 2019:192).

The little taken in this research is “Effectivennes Use of Interactive Student Worksheets in Classs IV Theme The Beauty of Diversity in My Country Subtema of Ethical and Religious Diversity in My Country in SDN Rambipuji 02 Jember”. The formulation of the problem raised of how is the effectivennes use of interactive student worksheets in classs IV theme the beauty of diversity in

my country subtema of ethical and religious diversity in my country in SDN Rambipuji 02 Jember? The purpose of this research was to determine the effectiveness use of interactive student worksheets in class IV theme the beauty of diversity in my country subtema of ethical and religious diversity in my country in SDN Rambipuji 02 Jember.

2. Research Method

This research is a type of quantitative research with ex post facto method. This research was carried in class IV A and IV C in SDN Rambipuji 02 Jember with the subject of each class is 30 students.

Data collection in research by test and interview. Class IV C students use manual assignments, while grade IV A uses interactive worksheets. Giving assignment manually in class IV C, namely through by whatsapp group, then the test questions are printed and collected at the school on the day of the weekly assignment. Interactive student worksheets activities given to class IV A are using the "live worksheets" website in the form of learning videos, pictures, and test questions that can be done by students. Interviews were conducted with the homeroom teacher of class IV A and IV C.

2.1 Instrument Validation

The validation test in this study uses expert lecturer validation. Validated instruments are interview and test. The formula for the average value from the validation results carried by the validator for each indicator is as follows.

$$I_i = \frac{\sum_{j=1}^n V_{ji}}{n}$$

Information :

I_i = The average value from the validation results carried by the validator for each indicator

V_{ji} = Validator value data j against indicators i

n = Number of validators

Then value (I_i) in each aspect is added up and divided by the number of aspects to determine the whole average value of all aspects using the following formula.

$$V_a = \frac{\sum_{i=1}^n A_i}{n}$$

Information :

V_a = average value of all aspects

A_i = average value of aspects i

n = Numbering of aspects

The value V_a is then calculated to be the value of the correlation coefficient (α) and then interpreted into a table of levels of validity which has been revised by (Hobri, 2010)

Table 2.1 Instrument Validity Criteria (Hobri, H. 2010)

Score	Validity Level
$V_a = 3$	Very valid
$2.5 \leq V_a < 3$	Valid
$2 \leq V_a < 2.5$	Quite valid
$1.5 \leq V_a < 2$	Not valid
$1 \leq V_a < 1.5$	Invalid

Data analysis used in this study is statistical data analysis techniques to find how much the relative effectiveness of learning outcomes by using two methods. The method used is giving manual assignments and learning using interactive student worksheets.

2.2 Relative Effectiveness

The effectiveness level calculated using the following formula (Masyhud, 2016).

$$ER = \frac{MX_2 - MX_1}{\left[\frac{MX_1 + MX_2}{2} \right]} \times 100 \%$$

Information :

ER = The relative effectiveness of the experimental group treatment compared to the control group

MX_1 = The mean value in the control group

MX_2 = The mean value in the experimental group

The results of the effectiveness analysis are interpreted based on the following criteria:

81% - 100% = Very high effectiveness

61% - 80% = High effectiveness

41% - 60% = Moderate effectiveness

21% - 40% = Low effectiveness

0% - 20% = Very low effectiveness

3. Result and Discussion

3.1 Test Validation Result

No.	Rated Aspect	Evaluation			
		Validator 1	Validator 2	I_i	V_a
1.	Interactive worksheets contain student activities in online learning	2	3	2,5	2,825
2.	There are components that are in accordance with the interactive worksheets	2	3	2,5	
3.	There is a review of material that relates to everyday life	3	3	3	
4.	Students are given the opportunity to actively answer question	3	2	2,5	
5.	Increase students insight into new knowledge	3	3	3	

6.	The material presented is in accordance with the theme 7 sub theme 1 kelas IV.	3	3	3
7.	Accuracy and suitability of the material	2	3	2,5
8.	Students are able to understand the concept being studied by using illustration	3	3	3
9.	Be consistent in the use of words and terms in the instrument	3	2	2,5
10.	The latters used are correct	3	3	3
11.	Use communicative language	3	2	2,5
12.	Using senteces that contain meaning	3	3	3
13.	Do not use senteces that contain multiple interpretations	3	3	3
14.	Therms are written well and correctly	3	3	3
15.	Use of good and correct punctuation	3	3	3
16.	Use of letters and clear reading	2	3	2,5
17.	Ilustration can help students understand	3	3	3
18.	Using ilustrations that are suitable for students learning	3	3	3
19.	Use an attractive cover	3	3	3
20.	Use interesting pictures or videos	3	3	3

The results of the test validation in this study were 2,825. This shows that the test given to students is valid.

3.2 Relative Efecctiveness

The average score for manual assignment (Class IV C) is 71,26 while the average score for using interactive student worksheets (Class IV A) is 90,16. The increase that occurred before and after using the interactive worksheets was 23,41%. This figure calculated base on the relative effectiveness formula quoted by (Masyhud, 2016).

$$ER = \frac{MX_2 - MX_1}{\left[\frac{MX_1 + MX_2}{2} \right]} \times 100 \%$$

$$ER = \frac{90,16 - 71,26}{\left[\frac{71,26 + 90,16}{2} \right]} \times 100 \%$$

$$ER = \frac{18,9}{80,71} \times 100 \%$$

$$ER = 23,41\%$$

Information :

ER = The relative effectiveness of the experimental group treatment compared to the control group

MX₁ = The mean value in the control group

MX₂ = The mean value in the experimental group

The results of the effectiveness analysis are interpreted based on the following criteria:

81% - 100% = Very high effectiveness

61% - 80% = High effectiveness

41% - 60% = Moderate effectiveness

21% - 40% = Low effectiveness

0% - 20% = Very low effectiveness

Based on results of the average value of students who use manual assignment and the use of interactive students worksheets can be seen to have increased by 23,41%. It can be stated that the average value is categorized as low effectiveness. The criteria for low effectiveness are 21% to 40%.

This research reviews the causes and effects of using interactive worksheets for class IV theme 7 sub theme 1 at SDN Rambipuji 02 Jember with a total 30 students for class IV A, and 30 students for class IV C. The initial stage in this research to give a test for class IV A and Class IV C students according to a predetermined method. The effectiveness of using interactive students worksheets in class IV theme 7 sub theme 1 at SDN Rambipuji 02 Jember can be seen based on the test scores of students in grades IV A and IV C, then calculated using the relative effectiveness formula.

The advantage of using interactive students worksheets in the learning process is that students can watch learning videos while working on questions or tests. An attractive interactive students worksheets display or design can increase students learning interest. In interactive worksheets students can see directly the scores or grades that have been done. The problem with using interactive students worksheets is that students must have a good internet connection in order to carry out the learning process smoothly. In addition, the use of interactive students worksheets is also hampered by students who do not have smartphone or gadget. Students who do not have smartphone or gadget must come to the teacher house so that they can carry out learning like other students using interactive worksheets.

Students use manual assignments, the tests given are the same as those done with interactive students worksheets, but the difference is how they are done. Students use manual assignment take test on sheet of paper and are collected to school when taking assignment from the next. The advantage of using manual assignments is that students do not need a stable internet connection to take the test. Students will be more active to read books looking for answer in test questions. The weakness experienced by students who use manual assignments is that students do not get learning video facilities as stated in the interactive students worksheets. Students also cannot see directly the scores that have been done. The teacher must correct one by one the tests done by the students. It can take a long time to share results from students tests.

4. Conclusion

Based on the results of data analysis obtained from test (interactive students worksheets and manual assignment), it can be concluded that there is a low effectiveness between the use of interactive students worksheets in class IV theme the beauty of diversity in my country subtema of ethical and religious diversity in my country in SDN Rambipuji 02 Jember.

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