

## The Influence of Wordwall Learning Media on the Interest and Learning Outcomes of Students at Muhammadiyah 1 Vocational School, Pekanbaru

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### ABSTRACT

Low student learning interest and learning outcomes that have not yet reached the Minimum Competency Criteria (KKM) are challenges in accounting learning at SMK Muhammadiyah 1 Pekanbaru. This study aims to determine the effect of using Wordwall learning media on improving student interest and learning outcomes in grades XI AKL and XI MPLB. The research subjects consisted of two classes, namely the experimental class and the control class. The method used was quantitative with a quasi-experimental design of the nonequivalent control group design. Data collection techniques included a learning interest questionnaire, observation of student activities, and learning outcome tests (pre-test and post-test). The data analysis technique used the t-test (independent sample t-test) with the help of SPSS software. The results showed that there was a significant effect of using Wordwall media on improving student interest and learning outcomes. The average post-test score in the experimental class increased to 85, higher than the control class. In addition, student learning interest scores also increased significantly with a significance value of 0.000 (<0.05). Wordwall media has been proven effective in increasing student engagement, conceptual understanding, and academic achievement in accounting learning.

**Keywords:** *Wordwall, Learning Interest, Learning Results*

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### INTRODUCTION

In every school environment, there are very wide differences in student interests and learning outcomes. There are students who have very high learning interests and learning outcomes that reach very good levels, as well as students with relatively low learning interests and learning outcomes that require improvement. So that every school has students with different levels of learning interests and learning outcomes, which require different considerations in the teaching and learning process. Therefore, it is important for teachers to be able to use a variety of learning media and create a more creative classroom atmosphere in the teaching and learning process that can build learning interests and improve student learning outcomes, so that students can be enthusiastic in participating in learning activities in class.

Ikhshan and Salman nd(2022:256)stated that the influence of learning media is very significant on learning outcomes, learning interests, curiosity, motivation and students' interest in learning materials. According to Beautiful and Kasman (2021:2) Learning media plays a very important role in achieving learning goals, but these efforts have not necessarily been tested optimally. Andari (2020:136) argues that learning that uses games involving student participation in technology makes students more interested in continuing the learning process compared to conventional learning.

Based on the explanation above, it can be concluded that with the existence of learning media that involve games and technology, students can be more active in participating in learning

and educators must be able to increase students' interest in learning because interest in learning has an influence on learning outcomes.

Syarifudin (2020:77) argues that interest has a very large influence on learning outcomes, if learning does not match interests, then students will not be interested and will not be able to learn well. Based on research conducted Rina, Herna, and Nur Fahri Tadjuddin (2021:26) It is known that interest in learning has a direct positive influence on learning outcomes. According to Setiawan, Nugroho, and Widyaningtyas (2022:107) There is a significant relationship between interest and learning outcomes.

Learning outcomes also need to be considered because learning outcomes are the key in the learning process. As stated by Sumarni (2019:187) learning outcomes are measurements of the assessment of the learning process achieved by students. While learning outcomes according to Wicaksono and Iswan (2019:114) namely the abilities acquired by students through learning process activities and exercises and changes in behavior as a result of learning experiences. Beautiful and Kasman (2021:4) stating that learning outcomes are skills that students have after a learning experience

Based on the explanation above, it can be concluded that learning outcomes are the final evaluation obtained by students in the learning process which is carried out repeatedly in a certain time, so as to obtain better results. When conducting observations at SMK Muhammadiyah 1 Pekanbaru, teachers explain the material using the lecture method and often give group assignments in the form of power points and video making.

**Table 1.1 Learning Outcomes of Accounting Subjects**

| No | Class   | Number of Students | KKM | Average Student Score |
|----|---------|--------------------|-----|-----------------------|
| 1  | XI MPLB | 12                 | 70  | 58.15                 |
| 2  | XI AKL  | 24                 | 70  | 61.75                 |

Charisma (2020:53) argues that the completeness of student learning outcomes can be seen through their test results reaching the minimum completeness criteria (KKM), the more students who achieve KKM, the higher the completeness of learning outcomes. The Minimum Completeness Criteria of SMK Muhammadiyah 1 Pekanbaru in the Accounting subject is 70. Based on the average value above, both classes are in the range of 58 to 61.

The conclusion in this observation is that during the learning process, students tend to feel bored so that most students are busy with other things such as chatting with their friends, playing with their cellphones, and students show less interest in following the learning. This can be seen in the table below:

**Table 1.2 Learning Interest Indicators**

| No     | Indicator                       | Number of students | Percentage (%) |
|--------|---------------------------------|--------------------|----------------|
| 1.     | Students' attention to learning | 3                  | 23%            |
| 2.     | There is a feeling of joy       | 1                  | 9%             |
| 3.     | Not focus                       | 4                  | 38%            |
| 4.     | Play HP                         | 4                  | 30%            |
| Amount |                                 | 12                 | 100%           |

Based on the table above, out of 13 students, 3 students (23%) paid attention to the learning and 1 student (9%) enjoyed the learning. While 9 students or 68% of them, 5 students did not focus on the learning such as talking to friends, feeling sleepy and 4 students playing with their cellphones.

One of the learning media that can attract students' attention is the wordwall learning media. Sinaga and Soesanto (2022:1847) stated that wordwall media can make the class more lively and create a fun learning atmosphere. The advantages of this application have many templates that can be created by teachers. This game can be directly shared via a link sent with the WhatsApp, Google, Classroom and Email applications. The purpose of this study was to determine the

influence of wordwall learning media on the interests and learning outcomes of students at SMK Muhammadiyah 1 Pekanbaru.

## METHOD

This study uses a quantitative approach with a quasi-experimental research method. Quasi-experimental is a method that can find the influence of one variable on another variable. The research design is nonequivalent control group design, the first stage is to determine the sample of the experimental class and the control class, before giving treatment, a pre-test will be given to the experimental class and the control class. After being given treatment, a post-test will be carried out to determine the condition of students after being given treatment.

The place of implementation of the research was at SMK Muhammadiyah 1 Pekanbaru, Senapelan sub-district, Pekanbaru. The reason for choosing this research location was because the researcher had carried out PKL at the school and at the school they learned to use cellphones, therefore the researcher wanted to know how much influence the wordwall media had in the school.

According to Sugiyono (2015) in The Story of Gandasari and Pramudiani (2021:3691) Population is an area in the form of objects that researchers determine to be studied and conclusions drawn. So the population is all objects in the study. The population in this study were students of class XI AKL and XI MPLB at Smk Muhammadiyah 1 Pekanbaru, totaling 36 students.

## FINDINGS AND DISCUSSION

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The calculation of the pretest validity test conducted by the author uses the product moment formula, the number obtained is 25 valid questions and 8 invalid questions from 33 questions tested. The instrument is tested for validity with the criteria for accepting the question items as follows: if  $r_{count} < r_{table}$  then the question item is said to be invalid, while if  $r_{count} > r_{table}$  then the question item is said to be valid. Calculation of reliability test using alpha formula. The following is a reliability test of the learning interest questionnaire, which can be found in Table 1.

**Table 1. Results of the Reliability Test of the Learning Interest Questionnaire**  
**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .935             | 33         |

*(Data Source: Processed SPSS ver. 23 output, 2024)*

Based on the categories that have been described for testing the reliability of the instrument, the researcher conducted a reliability test of the questions. The alpha value obtained was 0.935. So by referring to the description of the questionnaire instrument, it is declared reliable.

The approach used in the normality test in this study is the Shapiro-Wilk approach with the help of SPSS 23. The results of the normality test on the pretest of students' learning interests in the control and experimental classes can be seen in the following table:

**Table 2. Normality Test Results**

|                     |                | Tests of Normality              |    |       |              |    |      |
|---------------------|----------------|---------------------------------|----|-------|--------------|----|------|
|                     | Kelas          | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|                     |                | Statistic                       | Df | Sig.  | Statistic    | df | Sig. |
| MinatBelajarSebelum | Kontrol        | .155                            | 24 | .142  | .951         | 24 | .289 |
|                     | Eksperi<br>men | .189                            | 12 | .200* | .917         | 12 | .266 |
| MinatBelajarSesudah | Kontrol        | .119                            | 24 | .200* | .961         | 24 | .454 |
|                     | Eksperi<br>men | .115                            | 12 | .200* | .979         | 12 | .980 |

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on table 2, it can be concluded that both samples (control class, experimental class) have normally distributed data. This statement can be proven by the significance value of the normality test in the control class and experimental class in the Shapiro-Wilk table which is higher than 0.05.

The homogeneity test in this study was conducted using SPSS 23 for windows with the leven's statistic method. The following is a table of homogeneity of the research data obtained.

**Table 3. Laven's statistic Homogeneity Test**

| Test of Homogeneity of Variance |                                      |                  |     |        |      |
|---------------------------------|--------------------------------------|------------------|-----|--------|------|
|                                 |                                      | Levene Statistic | df1 | df2    | Sig. |
| MinatBelajarSebelum             | Based on Mean                        | 3.013            | 1   | 34     | .092 |
|                                 | Based on Median                      | 2.804            | 1   | 34     | .103 |
|                                 | Based on Median and with adjusted df | 2.804            | 1   | 29.966 | .104 |
|                                 | Based on trimmed mean                | 2.996            | 1   | 34     | .093 |
| MinatBelajarSesudah             | Based on Mean                        | 1.549            | 1   | 34     | .222 |
|                                 | Based on Median                      | 1.528            | 1   | 34     | .225 |
|                                 | Based on Median and with adjusted df | 1.528            | 1   | 29.222 | .226 |
|                                 | Based on trimmed mean                | 1.547            | 1   | 34     | .222 |
|                                 |                                      |                  |     |        |      |

(Data Source: Processed SPSS ver. 23 output, 2024)

Referring to table 3. it can be understood that the results of the homogeneity test using leven's statistic have a homogeneous (same) variance. This conclusion is drawn based on the results of the homogeneity test of the data of interest which is more than 0.05.

**Table 4. T-test (Paired sample test)**  
**Paired Samples Test**

|        |                                           | Paired Differences |                |                 |                                           |       | T     | Df | Sig. (2-tailed) |
|--------|-------------------------------------------|--------------------|----------------|-----------------|-------------------------------------------|-------|-------|----|-----------------|
|        |                                           | Mean               | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |       |       |    |                 |
|        |                                           |                    |                |                 | Lower                                     | Upper |       |    |                 |
| Pair 1 | MinatBelajarSebelum – MinatBelajarSesudah | 5.083              | 4.397          | .733            | 3.596                                     | 6.571 | 6.936 | 35 | .000            |

Sumber Data :Output SPSS ver. 23 yang diolah, 2024

Based on the table and data presentation above, it can be concluded that Ha is accepted and Ho is rejected because sig. (2-tailed) < 0.05 which states that: The Implementation of Wordwall Learning Media Affects the Learning Interest of Class XI AKL and MPLB Students of SMK Muhammadiyah 1 Pekanbaru.

**Table 5. T Test (Paired-Sample T-test)**  
**Paired Samples Test**

|        |                                      | Paired Differences |                |                 |                                           |         | T      | Df | Sig. (2-tailed) |
|--------|--------------------------------------|--------------------|----------------|-----------------|-------------------------------------------|---------|--------|----|-----------------|
|        |                                      | Mean               | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |         |        |    |                 |
|        |                                      |                    |                |                 | Lower                                     | Upper   |        |    |                 |
| Pair 1 | PosttestControl – PosttestExperiment | -22,333            | 11.195         | 3.232           | -29,446                                   | -15,220 | -6.911 | 11 | .000            |

(Data Source: Processed SPSS ver. 23 output, 2024)

Based on the table and data presentation above, it can be concluded that  $H_a$  is accepted and  $H_0$  is rejected because  $\text{sig. (2-tailed)} < 0.05$  which states that: The Implementation of Wordwall Learning Media Affects the Accounting Learning Outcomes of Class XI AKL and MPLB Students of Muhammadiyah 1 Pekanbaru Vocational School.

**Table 6. Z Test (One Samples Test)**  
**One Sample Test**

|         | Test Value = 0 |    |                 |                 |                                           |       |
|---------|----------------|----|-----------------|-----------------|-------------------------------------------|-------|
|         | T              | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |       |
|         |                |    |                 |                 | Lower                                     | Upper |
| Pretest | 60,002         | 35 | .000            | 75,639          | 73.08                                     | 78.20 |
| Class   | 16,733         | 35 | .000            | 1,333           | 1.17                                      | 1.50  |

(Data Source: Processed SPSS ver. 23 output, 2024)

Based on the SPSS output table, it can be seen that the pre-test significance value of 0.000 indicates that the  $\text{sig. (2-tailed)}$  value  $< 0.05$ , so  $H_0$  is rejected and  $H_a$  is accepted.

**Table 7. Z Test (One Samples Test)**  
**One Sample Test**

|          | Test Value = 0 |    |                 |                 |                                           |       |
|----------|----------------|----|-----------------|-----------------|-------------------------------------------|-------|
|          | T              | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |       |
|          |                |    |                 |                 | Lower                                     | Upper |
| Posttest | 36,193         | 35 | .000            | 76,472          | 72.18                                     | 80.76 |
| Class    | 16,733         | 35 | .000            | 1,333           | 1.17                                      | 1.50  |

(Data Source: Processed SPSS ver. 23 output, 2024)

Based on the SPSS output table, it can be seen that the post-test significance value shows that the  $\text{sig. (2-tailed)}$  value  $< 0.05$ , so  $H_0$  is rejected and  $H_a$  is accepted.

## DISCUSSION

### 1. The Influence of Wordwall Learning Media on Students' Learning Interests

Normality testing on the pre-test questionnaire of students' learning interest at a significance level of 0.05. Based on table 2, it is known that the significance value of learning interest before being given treatment in the control class is 0.289 and the experimental class is 0.266, while after being given treatment in the control class is 0.454 and the experimental class is 0.980. From this statement, it can be understood that the interest data before and after both in the control class and the experimental class are normally distributed. The results of the homogeneity test using Laven's statistic have a homogeneous (same) variance.

Based on the analysis of the learning interest test in table 4, it can be seen that the T test for learning interest is  $0.000 < 0.05$ , so it is concluded that the wordwall media has an influence on the learning interest of students at Muhammadiyah 1 Pekanbaru Vocational School.

### 2. The Influence of Wordwall Learning Media on Student Learning Outcomes

Based on the analysis of the learning outcome test in table 5, it can be concluded that  $H_a$  is accepted and  $H_0$  is rejected because  $\text{sig. (2-tailed)} < 0.05$  which states that: The Implementation of Wordwall Learning Media Affects the Accounting Learning Outcomes of Class XI AKL and MPLB Students of SMK Muhammadiyah 1 Pekanbaru.

Based on the T-test of post-test data on student learning outcomes, the results of the data show that the t-test  $< 0.05$ , the conclusion is that there is a significant influence of the data that has been tested. This means that the Implementation of Wordwall Learning Media Affects the Interests and Learning Outcomes of Students of SMK Muhammadiyah 1 Pekanbaru.

## CONCLUSIONS

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## 1. Conclusion

Based on the data analysis and previous discussion, it can be concluded that:

- 1) Wordwall learning media in the subject of Accounting for Service Companies for grade XI AKL and XI MPLB students of SMK MUHAMMADIYAH 1 PEKANBARU has been developed in accordance with the learning media development procedure. This shows that students understand the steps of Wordwall learning media.
- 2) Based on the T-test of pretest and posttest data on students' interest and learning outcomes, the results of the data show that the  $t$ -test  $< 0.05$ , the conclusion is that there is a significant influence of the data that has been tested. This means that the Implementation of Wordwall Learning Media Affects the Interest and Learning Outcomes of Students of SMK Muhammadiyah 1 Pekanbaru.
- 3) Based on the Z test of pretest and posttest data on students' interest and learning outcomes, the results of the data show that the pre-test significance value of 0.000 indicates that the sig. (2-tailed) value  $< 0.05$ , then  $H_0$  is rejected and  $H_a$  is accepted. This means that there is a significant influence in the use of wordwall learning media on the interest and learning outcomes of students at SMK Muhammadiyah 1 Pekanbaru.

## 2. Suggestion

### 1) Practical Advice

- a. The use of wordwall learning media can create a more enjoyable learning atmosphere and make it easier for teachers to use this learning media.
- b. The use of wordwall learning media can make students more active in learning.

### 2) For Further Researchers

Further relevant research needs to be conducted so that there are improvements in both the implementation of learning and the use of wordwall learning media.

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