



THE EFFECT OF INTERACTIVE MEDIA WORDWALL ASSISTED BY TALKING STICK ON STUDENT LEARNING IMPROVEMENT AND OUTCOMES AT STATE SENIOR HIGH SCHOOL 01 KUNIR – LUMAJANG

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Abstract:

The rapid development of technology should make students' learning outcomes increase, but in reality, what happens at SMA Negeri 01 Kunir - Lumajang is that students' learning outcomes are low or tend to be unstable. This is apparently caused by the unbalanced number of educators with classes that must be taught. As a result, educators are overwhelmed, and the learning process is boring due to the lack of preparation of educators in using learning models and media. From the description above, the researcher intends to conduct a study using interactive-based Wordwall learning media with the help of Talking Stick to find out whether there is an effect of interactive Wordwall media assisted by Talking Stick on improving student learning outcomes at SMA Negeri 01 Kunir - Lumajang. The method used in this research is Quasi Experimental Design with Nonequivalent Control Group Design type. The technique used to determine the research sample is the Random Sampling technique. Before applying Wordwall interactive media assisted by Talking Stick to the experimental class, the control class and experimental class were both given a pretest to determine the initial ability of the two samples. And it turns out that the results of the two classes are both normally distributed and homogeneous variants. After the application of interactive media Wordwall with Talking Stick, followed by giving the final question (posttest) in the control and experimental classes to determine the results of the application. The result is an increase in the learning value of students in the experimental class. Calculation of values using SPSS shows a very significant difference, learning outcomes with a value of Asymp. Sig (2-tailed) of $1.000 > 0.05$, meaning that the experimental class scores tend to be higher than the control class. So it can be concluded that the use of interactive media Wordwall assisted by Talking Stick has an influence on improving student learning outcomes, especially in class XI students of SMA Negeri 01 Kunir - Lumajang with the material of tolerance and maintaining human life.

Keywords: *Wordwall, Talking Stick, Learning Outcomes*

INTRODUCTION

The rapid development of technology requires educators to continue to hone their ability to understand technology in order to follow the learning styles of today's students and be able to meet the needs of their students. One example of technological

developments that have an impact on the world of education is the use of learning media in a learning process. Learning media is an instrument or media used by educators to convey learning content to students, either individually or in groups.

In teaching and learning activities, the role of learning media is very important. Utilizing learning media facilitates the transmission of abstract material, improves student understanding. Not only that, learning media can also improve student learning outcomes. Learning media should be adjusted to the content being taught, because the use of appropriate teaching media is crucial to achieving the desired results and goals.

According to (Andini, 2022) learning outcomes are the final results of a learning stage, where these results are a benchmark for a person's learning in understanding a material. Meanwhile, according to (Sugiantara et al., 2024) learning outcomes are the results given to students in the form of an assessment after following the learning process by assessing knowledge, attitudes, and skills in students with changes in behavior. So it can be concluded that learning outcomes are the final results of a learning process in the form of changes in behavior.

Based on the results of observations and interviews conducted with one of the teachers who teaches Islamic religious education subjects at SMA Negeri 01 Kunir, it was obtained information that there were only 2 teachers who taught Islamic religious education materials, each aged 40 years old for non-civil servant teachers and 50 years old for civil servant teachers. With the lack of educators who teach Islamic religious education materials themselves, it turns out that it makes it difficult for educators to carry out the learning process with a total of 18 classes. The lack of balance between educators and the number of classes taught is the cause of educators using monotonous learning methods.

AVERAGE PAI LEARNING OUTCOMES

Kelas	2019/2020	2020/2021	2021/2022
X IPA	80	74	75
X IPS	79	73	75
XI IPA	82	80	81
XI IPS	82	76	78

Table 1 Average PAI Learning Outcomes

The table above shows a decline in student learning outcomes at SMA Negeri 01 Kunir - Lumajang due to technological developments over time. In the 2019/2020 school year, it was recorded that the average score for Islamic religious education subjects in class X IPA was 80, class X IPS 79, class XI IPA and XI IPS 82. However, in the 2020/2021 school year, all classes experienced a decline in scores, the average score for class X IPA was 74, class X IPS 73, class XI IPA 80, and class XI IPS 76. One year later, in the 2021/2022 school year, students experienced an increase, although not very significant. The average score of class X IPA and X IPS is 75, class XI IPA 81, and class XI IPS 78.

Based on these data, it can be concluded that the average score obtained by students tends to approach the KKM (Minimum Completion Criteria) that has been set. Where the KKM for the subject of Islamic Religious Education itself is 75. This proves that the learning process in the last few years has been less effective. The effectiveness of teaching and learning activities will be disrupted if the learning process is not equipped with the use of appropriate methods and adequate technology or learning media.

Talking stick is one of the learning methods that can enliven a boring classroom atmosphere. With a lively classroom atmosphere, students become more enthusiastic in following the learning process, and ultimately experience an increase in their learning

outcomes.

Not only methods, learning media are also needed in the learning process, especially interactive learning media. Wordwall is an internet-based educational platform that utilizes game elements to facilitate learning. This platform is designed to create and share various types of interactive learning activities, without requiring programming or design skills. Through the use of Wordwall media, educators can increase the appeal and involvement of teaching materials and make students more involved so that educators are able to improve their learning outcomes.

A study entitled "Implementation of the Talking Stick Learning Method in Improving Motivation and Learning Outcomes of Grade IV Students of SDN Pingkuk 5 Bendo Magetan" revealed that the use of the Talking Stick method can improve student learning outcomes, because students are serious about studying the material so that they can answer the questions they get (Septyaningrum, 2021).

Based on the problems found in schools, it shows that students' learning scores have decreased due to the monotonous learning process without using interesting learning methods or media, so it is necessary to use learning methods and media in the teaching and learning process so that students are more enthusiastic in following lessons and learning outcomes increase. One of the learning media to anticipate these problems is to use Interactive Wordwall Media assisted by the Talking Stick method.

RESEARCH METHODS

The research approach used by researchers in this study is a quantitative research approach. Where the quantitative research approach is a type of approach that in the research process, determines the hypothesis and analysis and conclusions until the writing process uses formulas, measurements, calculations, and certainty of numerical data (Pratika, 2021).

The type of research method used by researchers is experimental research in the form of Quasi Experimental Design. Quasi Experimental Design has a control group but does not fully have the function to control external variables that have an influence on the implementation of the experiment (Prof. Dr. Sugiyono, 2018). Of the two forms of Quasi Experimental Design, the researcher took the Nonequivalent Control Group Design because this method is used to find the presence and absence of influence between the experimental group and the control group whose members are all used in the study.

The population of this study was all students of class XI at SMA Negeri 01 Kunir - Lumajang, while the sample was class XI MIPA 2 as the experimental class, and class XI MIPA 4 as the Control class. While the research instrument used test questions, which aimed to determine student learning outcomes, both the initial test (pretest) and the final test (posttest).

The prerequisite data analysis used for the test questions was the validity and reliability test, while for sample eligibility, it used the normality test and homogeneity test. Then the data analysis for the research results used the T Test for calculating the pretest result hypothesis, and the Mann Whitney Test for calculating the posttest result hypothesis.

RESULTS AND DISCUSSION

The results of the study conducted by the researcher showed that the use of interactive Wordwall media assisted by Talking Stick in improving student learning outcomes in the experimental class was quite effective. This is in accordance with the results of research by (Walidah et al., 2022) regarding the improvement of student learning outcomes in the experimental class compared to the control group.

In the first meeting, the material discussed was about memorizing and reading the arguments (Al-Quran and Hadith) correctly and the meaning of tolerance. In this meeting, the teacher first exemplified how to read the arguments correctly, continued by explaining the meaning of tolerance, then students formed groups to discuss the material that had been determined. After that, the use of interactive Wordwall media with the

Talking Stick method. The conclusion of the learning material is the final series of closing the teaching and learning process.

In the second meeting, learning begins by reviewing the material in the first meeting. Then continued with material on the types of tolerance divisions and their application in life. The teacher explains briefly, then opens the discussion with 3-5 questions. Then continued with working on game questions on the Wordwall platform by each student which is distributed in the form of a link. And closed by concluding the material that has been studied.

In the third meeting, learning begins by reviewing the material in the second meeting. Then continued with the addition of material on reading and memorizing the arguments and understanding of maintaining human life. Then continued with the use of interactive Wordwall media. During this third meeting, students are asked to line up randomly extending backwards, then take turns coming forward to choose the question number on the Wordwall game displayed on the screen, and answer the questions they get. Students who show accurate and concise responses to questions will receive additional points for their team. And closed by concluding the material that has been studied by representatives from each group.

In the fourth or final meeting, learning was opened by reviewing the material in the previous meetings. Continued with material on the benefits of tolerance and maintaining human life. Then students were asked to gather with their groups and discuss the material that had been determined. Then after finishing, students were asked to return to their respective seats. Continued by concluding all the material learned during the first to last meeting using the Talking Stick method by students. Then ended with working on post-test questions and learning motivation questionnaires.

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hasil Belajar	Equal variances assumed	,000	,985	-,423	70	,673	-1,250	2,952	-7,138	4,638
	Equal variances not assumed			-,423	69,990	,673	-1,250	2,952	-7,138	4,638

After going through an extensive learning phase, the experimental class obtained an average pretest score of 47.22, while the control class obtained an average score of 47.36. Both the experimental and control classes comply with research standards by showing a normal distribution and having the same variance. Furthermore, the pretest data was analyzed using the Independent Sample T Test as a hypothesis test to evaluate the initial abilities of the experimental and control classes studied. The findings of the Independent Sample T Test in the table above show a significance value (2-tailed) of 0.673 exceeding 0.05. This implies that there is no statistically significant difference in initial abilities between the two sample groups. This finding is in line with previous research findings, which underscore the importance of using samples that show a normal

distribution and uniform variance (Andini, 2022).

After a pretest to assess students' initial skills in the experimental and control classes, the next stage includes implementing teaching with the aim of instilling knowledge about tolerance and preserving human life. A posttest is then conducted at the end of the meeting to assess students' understanding of the subjects taught, as well as the effectiveness of the interactive Wordwall media assisted by Talking Stick in increasing students' motivation and learning achievement.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Pretest Eksperimen	36	25	70	47,22	11,492
Posttest Eksperimen	36	80	100	91,25	7,008
Valid N (listwise)	36				

Table 2 Experimental Class Results

The data above is the result of pretest and posttest calculations in the experimental class assisted by the SPSS version 25 application.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Pretest Kontrol	36	25	70	47,36	12,449
Posttest Kontrol	36	60	100	80,56	9,545
Valid N (listwise)	36				

Table 3 Control Class Results

The data above is the result of pretest and posttest calculations in the control class assisted by the SPSS version 25 application.

Research data shows that the average posttest score in the experimental class is 91.25, while in the control class it is 80.55. Based on research prerequisites, the control class has a significance value of 0.099, which means that the data still follows a normal distribution and has the same variance. On the other hand, the significance value of the experimental class is 0.001, less than 0.05. This shows that the posttest data of the experimental class does not follow a normal distribution, even though it has a uniform variance. As a result, it can be concluded that the posttest data in both classes are less normally distributed.

Uji Mann Whitney Posttest

	Hasil Belajar
Mann-Whitney U	648,000
Wilcoxon W	1314,000

Z	,000
Asymp. Sig. (2-tailed)	1,000

a. Grouping Variable: Kelas

As a result, the use of the non-parametric Mann Whitney method for hypothesis testing showed a 2-tailed significance value of $1,000 > 0.05$. This shows a fairly large disparity in learning outcomes between the experimental class and the control class. This finding is in line with research by (Aidah & Nurafni, 2022) which states that the use of interactive Wordwall media has a beneficial effect on student engagement and academic achievement.

CONCLUSION

Research and data analysis conducted at SMA Negeri 01 Kunir Lumajang showed that the use of interactive Wordwall media assisted by Talking Stick had a good effect in improving student learning outcomes in Islamic Religious Education subjects with the material of tolerance and maintaining human life.

The influence of interactive media Wordwall assisted by Talking Stick on improving student learning outcomes at SMA Negeri 01 Kunir - Lumajang, is proven by the results of the Mann Whitney test which is a combination of posttest scores from 2 groups calculated using the SPSS version 25 application.

Test Statistics^a

	Learning outcomes
Mann-Whitney U	648,000
Wilcoxon W	1314,000
Z	,000
Asymp. Sig. (2-tailed)	1,000

a. Grouping Variable: Kelas

From these results, it is known that the Asymp. Sig (2-tailed) value is 1000, which is greater than 0.05, so it can be concluded that there is a significant difference between the learning outcomes of the control class and the experimental class.

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