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The Effect of Using Web-Based Learning Media on PAI Learning Outcomes of Class VIII Students at SMP Negeri 1 Duampanua, Pinrang Regency

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Abstract

Keywords: Learning outcomes; Web-Based Learning Media.

This type of research is an experimental research aiming to determine the effect of web-based learning media on PAI learning outcomes for class VIII students at SMP Negeri 1 Duampanua consisting of two classes, namely the experimental class is taught using web-based learning media and the control class is taught without using web media. The type of instrument uses a questionnaire, while the learning outcomes are in the form of PAI tests. The learning outcomes of students who are taught using web-based learning media towards PAI learning outcomes have values that are in the high category. This shows that the encouragement to learn makes students enthusiastic, feel happy learning so that they are in the high category. The hypothesis test shows that there is a significant effect of web-based learning media on PAI learning outcomes. If seen from the test results data with the average score and post-test of the experimental class which is greater than the control class and likewise if seen from the enthusiasm of students in receiving learning material.

INTRODUCTION

Many educational activities that can be carried out by utilizing technology have been easier as a result of its development and advancement, from academic administration to the actual application of learning. The prevalence of technologically oriented learning resources is one sign; as a result, contact between teachers and students will be simpler and more pleasurable.

Technology is utilized as a tool to enhance and increase human learning as well as to facilitate human activities. the use of technology within the school network,

such as the packaging of a web-based learning media design (multimedia) that delivers learning

resources, or even on an individual basis by educators.

In fact, the power of Allah Almighty and the usage of media are inextricably linked. It has been clarified in QS al-Alaq/96:4 as the utterance of Allah Almighty.

الَّذِي عَلَّمَ بِالْقَلَمِ

“Who instructs (people) through intermediaries is the meaning.”

Based on the Quran where the phrase "bilqalam," which means the intercession of qalam (pen), is used, Allah swt gave the Prophet Muhammad (peace be upon him) the order to educate people how to read and write using a pen as one of the learning tools. based on what Allah (swt) has said. This indicates that media must be used as a tool for conveying information during the learning process.

Today, communication between instructors and students is generally formed through the usage of web apps. While particularly it may be an endeavor on the part of educators to transmit information or learning activities to their students. The Internet can also be utilized to establish or design a custom website that can be used to offer learning materials. Giving pupils access to learning materials effectively and quickly.

The world wide web (www) on the internet is a collection of site pages that are often housed under a domain or subdomain. The primary page of a website is referred to as a homepage, whereas each individual web page is also known as a web page. An HTML (hyper text markup language) document known as a web page can almost always be accessed via HTTP, a protocol used to transfer data from a web server to users' web browsers for display.

Indicators of the usage of web-based learning resources for students include their presentation being clear and pertinent to their level of learning preparedness.assist students in using web-based learning resources and use these resources themselves.

The creation of web-based learning media, where each class provides learning content according to existing subjects, needs to be explored in order to integrate learning media into classroom learning activities. As a result, it will be simpler to meet learning objective targets, which will enhance learning outcomes. Learning outcomes include cognitive, emotional, and psychomotor skills, according to Bloom in Ayuwanti.

According to a pilot study carried out at SMP Negeri 1 Duampanua, web-based learning media can solve learning issues caused by conventional learning methods, which have many shortcomings that must be fixed, one of which is that students appear less active or passive during the learning process in the classroom when attending PAI lessons. As a result, this web-based learning tool has developed to serve as a PAI learning tool that is complimentary to or additional to the learning that has already been done. Created with the intention of ensuring that students have a deeper understanding of the subject they are studying from teachers in the classroom. The application of web-based learning is anticipated to contribute to the completion of conventional learning because preliminary studies also show that interactive web-based learning content is necessary because it can aid in understanding the concepts covered in traditional classroom settings.

According to the information gathered from an interview with a PAI class VIII instructor at SMP Negeri 1 Duampanua, the learning outcomes of PAI students are still subpar. This is a result of the students' lack of knowledge that they should take the lesson seriously when the teacher explains it in front of the class. In PAI lessons, students typically participate less actively. The teaching method of educators still uses conventional methods/lectures and the lack of use of learning media so that the interaction that occurs in the teaching and learning process in the classroom only takes place in one direction, namely from educators to students. This can be seen from the activities of students who only listen, take notes, and only a few ask, if given questions by educators only a few are willing to answer.

Low PAI learning results are the result of this. It is evident from the fact that students' average exam scores are 65 whereas the minimum completion standard (KKM) of 70 is set at SMP Negeri 1 Duampanua. This is evident from the fact that only 33.3% of grade VIII students who can earn KKM scores in semester 2 of the 2020–2021 academic year. This demonstrates that 66.7% of the 30 students in class VIII have not attained KKM, necessitating remedial instruction.

Based on the data collected, it is evident that web-based learning resources have a great deal of potential to enhance learning, which can help make the PAI learning process better, more enjoyable, and easier for students to absorb so that they are highly motivated to study. Additionally, given the significance of employing web-based learning media as a PAI educator, it is envisaged that the availability of web-based learning media will enable the delivery of learning materials and facilitate students' retention of the information presented by educators.

Based on previous research conducted by other studies relevant to the author's research. Related to *web-based* learning media in previous research was used to help get an overview in compiling this research. The previous writings that have discussed this topic show that the internet can be used as an alternative learning

resource in Islamic Religious Education subjects both in cognitive (knowledge), affective (attitude) and psychomotor (skills) aspects. Although not all materials can use the internet, the existence of the internet is very useful as a source of learning Islamic Religious Education.¹

Based on the background that has been stated, the formulation of the problem to be answered in this study is proposed as follows:

1. How is the use of web-based learning media in learning Islamic religious education for grade VIII students at SMP Negeri 1 Duampanua?
2. Does the use of web-based learning media have a significant effect on the learning outcomes of grade VIII PAI students at SMP Negeri 1?

The purpose of this study was to determine the influence of Al Jannah media on the learning outcomes of grade VIII students on sunnah prayer material at SMP Negeri 1 Duampanua.

The variables tested in the research carried out need to be operationalized. The learning media referred to in this study are web-based learning media and power points. Web-based PAI learning media in the form of Al Jannah (Let's Learn Sunnah Prayer), with content presented related to Sunnah prayer material This media is shared with students through WhatsApp in the form of a link, which students will access through the internet network. While PowerPoint media can be used on a laptop with similar content presented in Al Jannah, there is a selection of materials and quizzes. The learning outcomes referred to in this study are the results of scores obtained by grade VIII students of SMP Negeri 1 Duampanua after answering the PAI test given by the researcher.

RESEARCH METHODS

This research is quantitative and uses a type of quasi-experimental research, commonly called pseudo-experiments. Pseudo-experiments are not pure experiments but as if they were pure because they do not allow the study to fully control the research sample. Based on this concept, this study will provide treatment for two classes. All students in both experimental classes will be given questionnaires and then will see how the use of web-based learning media affects learning outcomes.

The research design used in this study was a *non-equivalent pretest-posttest control group design*. This design is almost the same as the pretest-posttest control group design, only in this design neither the experimental nor control groups are randomly selected.

The design scheme of this study, can be described as follows:

¹ Ulyn Ni'ma et al. Utilization of the Internet as a Learning Resource for Islamic Religious Education. *Unissula Journal*.

Pretest	Perlakuan	Posttest
O1	X	O2
O3	-	O4

Keterangan:

O1 : Pretest experimental group

O2 : Posttest experimental group

O3 : Pretest control group

O4 : Posttest control group

X : Treatment with the use of web-based learning media

– : Without applying the use of web-based learning media

The population in this study is all grade VIII students in the even semester of SMP Negeri 1 Duampanua in the 2023/2024 Academic Year, covering 7 classes, totaling 200 students.

This sampling technique researchers use purposive sampling techniques with certain considerations. For sampling, Suharsimi Arikunto stated that if the subjects are less than 100, it is better to take all of them so that it is a population study. Furthermore, if the subjects number 100 or more, then 10-15% or 20-25% or more can be taken. The total population of class VIII students is 200 people, so according to the above opinion the number of samples in this study can be taken 30% of the total population. So that the number of samples for this study amounted to 60 students. Researchers took classes VIII.2 and VIII.3 as samples assuming the students in the class were taught by the same teacher, these 2 classes were calm enough to be able to be discussed and had the ability in the same cognitive shutter. Thus, class VIII.2 as an experimental class with 30 students and class VIII.3 as a control class with 30 people.

The collection technique used in this *study is in the form of* questionnaires, so researchers will distribute questionnaires containing statements to students in accordance with the title of the study which is more focused on web-based PAI learning media on the learning outcomes of students at SMP Negeri 1 Duampanua, Pinrang Regency in the hope that researchers are able to get accurate data or information. Data collection using questionnaires that refer to the *Likert scale*. The test used in measuring student understanding is in the form of subjective test questions in the form of multiple choice. The test is given before the learning activity (pretest) and after the learning activity (posttest). The test sheets used in this study are about PAI learning which is delivered to determine the level of understanding of students related to sunnah prayer material.

There are two variables contained in this study, namely independent variables, namely web-based learning media (X) and dependent variables, namely learning outcomes (Y). The Islamic Religious Education learning outcomes test instrument

of students is used to measure student understanding in the form of multiple choice test questions on the subject matter using learning media after a series of learning.

Research data analysis is intended to analyze research data. Data obtained from research results through instruments will be processed and analyzed. This data will be used to test the hypothesis, this is where it will be known whether the hypothesis can be accepted or rejected.

Descriptive statistical analysis is used to get a general picture.

Inferential statistics is a statistical technique used to analyze sample data and the results are applied to a population.

Inferential statistical analysis is used to test hypotheses. Hypothesis testing is intended to determine how much influence the use of web-based learning media has on the learning outcomes of grade VIII students of SMP Negeri 1 Duampanua.

RESULTS AND DISCUSSION

A. Research Results

The data collected from each variable are analyzed descriptively to describe the variable relationship.

Descriptive analysis of PAI learning outcomes of students who learn using web-based *learning media as an experimental class and power point learning media* as a control class as follows:

1. Web-Based Learning Media

		Frekuensi		Persentasi	
Table 1: Learning Media	Kategori	Eksperimen	Kontrol	Eksperimen	Kontrol
Nilai					
85 - 100	Sangat Baik	28	9	93,3%	23,3%
69 - 84	Baik	2	23	6,7%	76,7%
53 -68	Sedang	0	0	0%	0%
37 -52	Kurang Baik	0	0	0%	0%
20 - 36	Sangat Kurang Baik	0	0	0%	0%
Total		30	30	100%	100%

Source: data processed 2023

a. Learning Outcomes

Table 2: Learning Outcomes

Nilai	Kategori	Frekuensi		Persentasi	
		Eksperimen	Kontrol	Eksperimen	Kontrol
93-100	Sangat Tinggi	3	4	10%	13,3%
84-92	Tinggi	14	13	46,67%	43,4%
75-83	Rendah	1	3	3,3%	10%
0-74	Sangat Rendah	12	10	40%	33,3%
Total		30	30	100%	100%

Source: data processed 2023

Inferential statistical analysis is carried out several tests to answer the research hypothesis that has been formulated, before conducting inferential statistical analysis, assumption tests are first carried out, namely normality tests and homogeneity tests.

a. Normality Test

ATA is said to satisfy the normality assumption test if the significance value $> \alpha$ (0.05). The results of the variant normality assumption test can be seen in the table below:

One-Sample Kolmogorov-Smirnov Test		
		Standardized Residual for hasil belajar
N		60
Normal	Mean	.0000
Parameter	Std.	.97424
s ^{a,b}	Deviation	
Most	Absolute	.147
Extreme	Positive	.075
Difference	Negative	-.147
S		
Kolmogorov-Smirnov Z		1.137
Asymp. Sig. (2-tailed)		.151

a. Test distribution is Normal.

b. Calculated from data.

Based on the table above, it can be seen that the significance value = 0.151 $> \alpha = 0.05$ so that it can be concluded that the data meets the assumption of normality.

a. Homogeneity Test

Analysis of *homogeneity of variance test* with *Spss* program-assisted *levene* At

the level of significance 95% or alpha 5% provided that the probability or value of *Sig.(2-tailed) ≥ 0.05 then the population variance is homogeneous or the data comes from a population that has the same variance and if it is 0.05 then the variant is not homogeneous.* $\leq$ The test results of the assumption of homogeneity of variants can be seen in the table at below:

Levene's Test of Equality of Error Variances^a

Dependent Variable: Hasil Belajar

F	Sig.
1.465	.234

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + media_pembelajaran *

Based on the table of Levene's Test of Equality of Error Variances, obtained signification value = $0.234 > \alpha = 0.05$, so it can be concluded that the data comes from homogeneous variance, in other words the data meets the assumption of homogeneity.

b. Uji Hipotesis

The research hypothesis is that there is an influence of web-based learning media interaction on the learning outcomes of Islamic Religious Education students.

$$H_0: \text{Sig} \geq \alpha (0,05)$$

$$H_1: \text{Sig} < \alpha (0,05)$$

Tests of Between-Subjects Effects

Dependent Variable: Hasil Belajar

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1230.933 ^a	3	410.311	2.067	.115	.100
Intercept	376358.400	1	376358.400	1896.240	.000	.971
media_pembelajaran	1711.067	1	1711.067	6.086	.017	.023
Error	11114.667	56	198.476			
Total	388704.000	60				
Corrected Total	12345.600	59				

a. R Squared = ,100 (Adjusted R Squared = ,051)

Based on the table above, a signification value = $0.017 < \alpha = 0.05$ so that H_0 is rejected and H_1 is accepted, so it can be concluded that there is a significant influence of web-based learning media on the learning outcomes of Islamic Education students.

B. Discussion

The study was conducted at SMP Negeri 1 Duampanua with samples VIII.2 as an experimental class and VIII.3 as a control class. The application of *web-based* learning media is intended to help students who have difficulty understanding learning at SMP Negeri 1 Duampanua and make it easier for students to understand the subject matter because students learn through interesting and fun media that are familiar with daily habits and presented with easy-to-understand images, the improvement of student learning outcomes is also very visible for using learning

media web-based. According to Muchlis, learning media can be chosen to achieve learning objectives in accordance with the cognitive development of students.²

Based on the data, the results of research that have been conducted show the influence of the use of learning media on the value of control classes and experimental classes at SMP Negeri 1 Duampanua. This value can be seen in the posttest score of the control class lower than the experimental class treated with web-based learning media. The experimental class has increased after the implementation of web-based learning media, this is also supported by student activities during the lesson showing the interest and enthusiasm of students in following the learning process.

Based on inferential statistical analysis, it can be seen that the hypothesis is acceptable because in the application of web-based learning media there is a significant influence on the learning outcomes of PAI material students in grade VIII.2 SMP Negeri 1 Duampanua. So, it can be concluded that the application of web-based learning media is successful because the average score has reached the high category. In line with the results of the study that student responses to the application of web-based e-learning learning media received a positive response from students, where the average percentage was 76%. The conclusion of this study is that web-based e-learning learning media is *effective in improving the learning outcomes of learning courses*.³

The improvement of student learning outcomes is also very visible for using web-based learning media, *this can be seen by the increase in the achievement of KKM standards after the implementation of web-based learning media*, the statement is in accordance with BSNP that the ideal criterion of learning completeness for each indicator in understanding the concept is that 75% of the number of students in the class have achieved individual learning completeness.⁴ The pretest learning outcomes of students in control and experimental classes are relatively low, this is influenced because students do not understand the concept of PAI material well and during the test strict supervision is carried out to avoid all forms of cheating so that students who are dependent on friends' answers work with their own abilities. Likewise, in the posttest control class and experiments, strict supervision is still carried out. The results of the posttest conducted show that the value of students who actively ask questions during the learning process tends to be higher when compared to passive students.

² Buna'i. *Islamic Education Learning Design and Strategy* (Surabaya: Jakad Media Publishing, 2021), p. 134.

³ Hernik Pujiastutik. The effectiveness of using web-based eLearning learning media in Learning Course I on Student Learning Outcomes. *Garuda Journal*.

⁴ Asori Ibrohim, *Traces of Social Studies Learning Innovation Developing the Learning Educator Profession* (Yogyakarta: LeutikaPrio, 2018), p. 58.

The application of web-based learning media is carried out by forming groups, group leaders are instructed to control all group members in order to read the entire *web-based learning media that has been stored by students, the process of disseminating web-based learning media* via WhatsApp. Students are invited to optimize their potential, usually among them practice Sunnah prayers with their deskmates. Reading with the help of hanphone via the internet, and as for through hanphone as a web-based learning media, then shared with students to learn the material / teaching materials contained in the learning application.

The learning process is fully carried out through the use of internet facilities, both self-developed and learning resources by making links to various sources.⁵ Internet facilities can be used in learning with web-based learning media to be studied independently wherever they are, because they can be accessed outside of class hours.⁶ The Al Jannah app is not only fun and light to understand by learners, but also enhances the imagination of learners. *Web-based learning media* also involves emotions, fun, creativity in understanding lessons, students are very enthusiastic about participating in PAI learning, students feel happy learning with web-based learning media that presents a choice of material that students want to learn and there are quizzes that can be played to measure the extent of mastery of PAI material concepts. But even so, the use of web-based learning media also has many obstacles and difficulties, one of which is for students who do not have mobile phones or lowbath mobile phones during class hours.

Creating a pleasant atmosphere during learning can make students focus can certainly improve their learning outcomes.⁷ In this study, researchers feel still dissatisfied because the targeted results have not been maximized because the media content is not complete to answer all students' questions and researchers are still difficult to adapt to the conditions of students who are mostly critical when asking various questions.

It was very clear the enthusiasm of the students when the researcher explained about the lessons of PAI material using *web-based learning media because this was their first experience learning with web-based media* in the form of the Al Jannah application. Dominant learners like pictures, creative in conveying ideas and good at explaining very enthusiastically, compared to students who are dominant in calculations. However, because previously a group had been formed so that teamwork was very good, they were so compact to understand each other's explanation of PAI material on web-based learning media.

⁵ Poeryanto. *Utilization of the Internet as a Learning Facility in Vocational High Schools* (Malang: Ahli Media, 2020), p. 21.

⁶ Sa'roni et al. *Scientific Journal of Educational Sciences*, Vol. 5 No.4. 2021.

⁷ Akrim. *Learning Strategies* (Umsu Press, 2022), p. 76

Based on the observations of researchers during research, the development of students is very visible. In meeting I the question and answer process carried out by students still focused on the web-based learning media that had been *given, for the second and third meetings students began to develop question forms based on what had been read on web-based learning media*. This is followed by the behavior of students who begin to raise awareness to perform sunnah prayers.

However, in the teaching and learning process, there are still a small number of students who do not pay attention to the lesson, namely at the initial meeting, but students who do not pay attention to the lesson do not affect other students so that the learning process takes place well, while at the last meeting there were no students who did other work, it shows the level of interest of students in the media *web-based learning* of learners during a series of PAI learning. This is what causes an increase in student learning outcomes. Learning Media can help increase motivation and interest, after an increase it will have an impact on learning outcomes.⁸

Fibria stated that there are differences in learning outcomes and understanding of concepts between groups of students who learn using web-based learning media in improving student learning.⁹ In line with this opinion, it can be concluded that web-based learning media has a significant influence in influencing student learning outcomes because it is able to support student interest.

CONCLUSION

The significant influence and web-based learning media on the learning *outcomes of PAI students of SMP Negeri 1 Duampanua for the 2023/2024 school year, can illustrate that with web-based learning media, it will be able to improve their learning achievement*. The PAI learning process by utilizing the internet network, the presence of these media as supporting media for the lecture method can provide new experience and knowledge.

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⁸ Syarifuddin and Eka Dewi Utari. *Learning Media (From Conventional Times to Digital Times)* (Palembang: Bening Media, 2022), p. 13.

⁹ Fibria Anggraini Puji Lestari, The Influence of E-Learning-Based Learning and Learning Motivation on Student Achievement, *National Seminar on Technology Research and Innovation*, Vol. 6 No.1.

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