



Wordwall Games Based Media To Improve Students ' Learning Outcomes

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Abstract. Low learning outcomes are one of the big problems in the learning process, this can be caused by various factors including a lack of innovation in choosing learning media which can make learning less interesting and result in reduced student motivation. In this digital era, the application of *wordwall games*- based media will improve student learning outcomes in Civics learning. However, there are no empirical studies that show that this can increase students' learning motivation so that it can influence learning outcomes. There were 30 participants in this research who were class X students at SMAN 15 Garut. This research uses a *pre-experimental method* with a One Group Pre-Test and Post-Test Design research design . The research instruments used were *pre - test*, *post - test* and questionnaire. The research results show that (1) Implementation *word-wall games* - based learning media for class _ (2) There is an increase in student learning outcomes before (pretest) and after (*post - test*) the application of *word-wall games -based learning media* This research also shows that there is a difference in improvement in the achievement of student learning outcomes after implementing *wordwall games* . With the average value of the normalized gain score being 0.75, the interpretation is classified as high. (3) The relationship between the application of *wordwall games*- based learning media *to* student learning outcomes in Civics learning in Class X11 SMAN 15 Garut is obtained . The Sig (2-tailed) value is $0.000 < 0.05$, which means there is a significant correlation between variables X and Y. Furthermore, it is known that the calculated r value for the relationship between variables X and Y is $0.804 > r \text{ table } 0.361$. By interpreting the assessment, the correlation coefficient was found to be 0.804 , which is included in the " Very Strong Close Relationship " category.

Keywords: Learning Media, *Wordwall Games*, Learning Results, *Civics education*.

1 Introduction

Education as a strategic effort to advance the nation's intelligence is an irreplaceable foundation for national development. By providing broad and quality access, education is able to form individuals who are intelligent, skilled and have noble character. A well-educated generation will be the driving force for development in various sectors, such as economics, science, technology, culture and social. As stated in Law of the Republic

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J. Handhika et al. (eds.), *Proceedings of the 4th International Conference on Education and Technology (ICETECH 2023)*, Atlantis Highlights in Social Sciences, Education and Humanities 25,

https://doi.org/10.2991/978-94-6463-554-6_40

of Indonesia Number 20 of 2003 Article 1 paragraph (1) defines education as conscious and planned efforts to create a learning atmosphere and learning process so that students can actively develop their potential so that they have spiritual strength, self-control, personality, intelligence and the skills they need to be useful to society, nation and state.

The quality of education in Indonesia currently has not experienced significant changes. From data released by the Worldtop20.org site, Indonesia's education ranking in 2023 is 67th out of 209 countries in the world. Indonesia is next to Albania in 66th position and Serbia in 68th place. This shows that the progress of education in Indonesia is not much different from before, in 2022 Indonesia will be ranked 67th in education. Even in Southeast Asia, Indonesia lags behind Singapore, Brunei and Vietnam. Indonesia is only two places above Timor Leste, a country that recently became independent.

In an effort to provide quality education, teaching staff often face challenges in delivering learning material to students. The use of technology in the learning process is one factor in improving the quality of education, because it allows educators to present material in a more interactive, interesting and relevant way to students' needs. The use of technology in the world of education also encourages all parties, including the Ministry of Education, Culture, Research and Technology as an important player in education to continue to optimize the use of technology in positive ways. This is based on the regulation of the Minister of Education and Culture of the Republic of Indonesia number 65 of 2013 concerning technology contained in paragraph (13) which states that ICT can increase the efficiency and effectiveness of learning. Because of this policy, teachers are required to use ICT-based media in their learning.

Especially in the learning process of Pancasila and Citizenship Education (PPKn), which is an important subject in the educational curriculum to shape students' attitudes, knowledge and skills in understanding and applying democratic values, human rights and an active role in national life and state in accordance with the objectives of Law Number 20 of 2003 article (3) which explains that the function of national education is to improve the abilities of the nation's generation and shape the nation's civilizational character which has dignity in an effort to achieve the State's goals.

Based on the results of observations made at SMAN 15 Garut, that the students' enthusiasm in participating in PPKn learning is still and the rest are passive in learning, there are problems with difficulty understanding in remembering learning material, especially rote learning materials such as the 1945 Constitution, the use of electronic-based learning media used by Educators are still not varied, limited to web learning resources in the form of text and YouTube videos, and are not familiar with learning media based on *Wordwall games* so that this learning media is not yet known to students and teachers have never used this media in implementing learning.

From the results of interviews conducted with class X PPKn educators, the learning outcomes of class /2023 shows that only 17% or 70 students scored above the KKM, 0% of students scored the same as the KKM and as many as 343 or 83% of students scored below the KKM out of a total of 413 learners. Based on this, it can be concluded that the learning outcomes of students who do not complete are greater than those of students who complete.

To increase the effectiveness of learning in the classroom, teaching staff need to have adequate competence. This is important so that students can obtain maximum learning results with a comprehensive understanding of the learning material. According to Burhanuddin (2019: 79) 'Learning outcomes are a process of effort carried out by a person to obtain a new change in behavior as a whole as a result of his own experience in interaction with his environment'.

Based on the opinion above, it can be concluded that learning outcomes can be defined as the abilities that students have after carrying out learning activities in the form of numbers or scores obtained from assessments or tests carried out in the ongoing process. So in this case, interactive and interesting learning is very necessary in an effort to make students actively involved, carry out independent exploration, and interact with learning material which can increase learning motivation, student involvement, and ultimately improve their learning outcomes in Civics learning .

The use of media is a fundamental skill for teachers within the framework of learning conditioning and an element of pedagogical competence which is a teacher's key competence. As an application that fundamentally influences learning outcomes which are formed through students' thinking abilities. As per Rusmansyah and Zulkhrufah (2019: 105) learning media is a teacher's tool that can be used to channel messages and can stimulate students' mindsets to arouse students' enthusiasm, attention and will so that they can encourage the learning process in students.

In this case, researchers tried to be varied using the application of learning media based on *wordwall games* . According to Riadin, A. (2022: 57) " *Wordwall* is a website in *the browser* that provides various interesting educational *games* which aim to be a fun learning resource, media and assessment tool for students." The benefits of using *Wordwall games* -based learning media in implementing learning according to Maghfiroh (2018: 68) include: '(1) creates the principle of learning while playing, (2) gives students interest, (3) can be used easily by students, (4) foster a sense of enjoyment in learning, (5) foster students' memory, (6) awaken students' creativity and (7) have suitability for learning. From this opinion it can be concluded that the use of Wordwall game-based learning media aims to increase access and interaction students to learning resources so as to enable accidental learning in understanding the material. So, to create a more effective and efficient learning atmosphere, the use of this *wordwall web -based application* can be an effort, without losing the essence of the material that has been delivered by educators. It is hoped that *wordwall games* -based learning media can help improve learning outcomes.

2 Research Method

method used was pre-experimental design using a one group pretest-posttest type (initial test and single group final test) with a quantitative approach. The following is an overview of the research design according to Sugiyono (2019: 114) :

$O_1 \times O_2$

Information:

- O_1 = Pretest score (before treatment)
- O_2 = Posttest value (after being given treatment)

This research consists of two variables, namely the independent variable and the dependent variable. *Wordwall games*- based learning media as the independent variable (X), student learning outcomes in PPKn learning class X-11 at SMAN 15 Garut as the dependent variable (Y). The population in the study was 12 classes X of the independent curriculum with a total of 414 students. The sample for this research was students from class Method of collecting data carried out by observation, tests and questionnaires . The research data analysis method uses qualitative descriptive analysis. Documentation was carried out by collecting various types of data, including school administrative data and relevant images to support this research. Data to determine students' responses to the application of learning media was obtained using a questionnaire and data on student learning outcomes was obtained using an online test based on *wordwall games* . The data analysis technique used by researchers is the Likert scale to determine students' responses to learning media, the normalized gain test to determine the increase in learning outcomes and the product moment test to calculate the closeness of the relationship or correlation coefficient between the application of learning media (Likert scale value) and the increase in results. student learning (N-Gain value) .

3 Finding and Discussion

3.1 Response Participant Educate Regarding Learning Media Based *Wordwall Games*

Response participant education revealed _ in study This is response participant educate only to learning media Interpretation questionnaire to eight aspects studied _ obtained mark maximum of 1,800 and a minimum score of 450 with amount total score 1,377. This thing show response participant educate in a way general towards learning media interpret OK . By concise interpretation response participant educate can seen in Table 1. below this :

Table 1. . Interpretation of students' responses in general to wordwall games- based learning media

Aspect Attitude	Total Questionnaire Score	Interpretation	Percentage (%)
Media is used with the principle of learning while playing	1377	Good	76.5
Can arouse student interest			
Can be used easily by students			
Cultivate a happy feeling of trying to learn with <i>wordwall games</i>			
Develop memory abilities			
Developing students' creativity			
Have suitability in learning			

Then For know response every participant educate regarding the learning media applied namely learning media based *wordwall games* , necessary done calculation score response questionnaire participant educate every the person . Interpretation questionnaire For all over the aspect being measured every the person obtained score maximum of 60, and a minimum score of 15. Because every participant educate give different response , then _ For see interpretation response For every participant educate can seen in Table 2. below :

Table 2. . Recapitulation of individual student responses to wordwall games- based learning media

Interpretation	Many students	Percentage (%)
Very good	10	33.3
Good	20	66.7
Enough	0	0.0
Not enough	0	0.0
Amount	30	100.0

Based on Table 4.7 is obtained percentage For response participant educate every individual with very good interpretation 33.3%, for interpretation Good amounted to 66.7%, whereas For interpretation Enough of 0%, and for interpretation not enough of 0 %.

This research is in accordance with the opinion of Isnaeni & Hildayah, (2020: 153) "the use of learning media can make students more enthusiastic about learning and interact well". This is in accordance with previous research conducted by Puspitarini (2023: 394) entitled "Increasing Civic Education Activity and Learning Outcomes Through *Discovery Learning Assisted by the Wordwall Games* Application. " The results of the research show that the *discovery* learning model assisted by the *Wordwall Game* application can increase participants' activeness and learning outcomes. educate. The results of the research are increasing student activity, shown by an increase in the activity indicator from 61.92% in cycle I to 74.31% in cycle II or an increase of 12.39%.

Individual activity increased, from 9 students who got high category scores in cycle I (25%), to 17 students (47.22%) in cycle II, or an increase of 22.22%.

In this case, the application of *wordwall games -based learning media* is considered capable of providing a more pleasant atmosphere so that the learning process is more lively, which can be seen from the students' attitudes during learning. Thus, this research provides a positive contribution in the form of students' responses to the application of *wordwall games -based learning media* which has never been applied before.

3.2 Improved Learning Outcomes Before and After Implementation of Learning Media Based *Wordwall Games*

For know is There is difference enhancement results Study before and after application of learning media based wordwall games so results from posttest and pretest calculated mark the gain . After the data complete , then step furthermore is do normalized gain processing based on steps already normalized gain processing _ explained in chapter before .

From the results calculation obtained Gain analysis of average score count and deviation standard normalized gain as in Table 3. below this :

Table 3. Average Calculated Score and Standard Deviation of Normalized Gain

Lots of Data	Smallest Gain Score	Biggest Gain Score	Average Normalized Gain	Standard Deviation
30	0.5	1.00	0.75	5.96

Note : ideal score 1.00

Based on Table 3. obtained that normalized gain analysis , namely the average score count of 0.75 and deviation standard of 5.96. Following This will outlined recapitulation interpretation quality enhancement results Study before and after application of learning media participant educate in a way the whole and each individual after get learning media based *wordwall games* . As in Table 4.

Table 4. X-11 class upgrade

Class	Average Score Normalized Gain	Interpretation
X-11	0.75	Tall

Based on Table 4. known that the average gain score is normalized is 0.75 in the range $0.70 \leq g \leq 1.00$ with interpretation high . So that can concluded that quality enhancement results Study participant educate after application of learning media based *wordwall games* classified high .

This thing in line with study Khairunisa , (2021: 143) application online gamification with *wordwall* own results Enough effective in enhancement absorption material learning . With so application of learning media based *wordwall games* For increase results Study participant educate in learning PPKn stated successful . Research results This

supported by the results study carried out Akbar, HF, & Hadi, MS (2023: 1653) Calculation results use *Effect Size* obtained in the results Study participant educate is 1.9 (79.4%) so criteria big *Effect Size* classified tall learning using *wordwall* media in class experiment give high influence _ to results Study Study participant educate .

3.3 Connection Application of Learning Media Based *Wordwall Games* There are Learning Outcomes Participant Educate

1.3.1. Normality Test

Pretest and *posttest* data processing is a similarity test ability mathematical participant educate . Normality test done For evaluate distribution of data on a data group or variable . is distribution of the data normally distributed or no . Test the normality of the data used is the *Lilliefors* test because of the data collected in the form of discrete data . Calculation test results can seen in Table 4.2 below this :

Table 5. Normality Test Results of Normalized Gain Data

Lmax	Table	Information
0.143	0.361	Normally distributed

Based on calculations in Table 5, then obtained L_{max} is 0.145 and L_{table} with degrees the recency of 5% is 0.143. Because of value $L_{max} = 0.21 > L_{table} = 0.361$ then can withdrawn conclusion of *pretest* data the No normally distributed.

1.3.2. Pearson Data Test

After carry out normality tests of normalized gain data and the results both of them No normally distributed , then step furthermore is perform *Pearson's* test for measure there is influence application of learning media to results Study participant educate . Before done calculations , researcher moreover formerly formulate hypothesis null and hypothesis the alternative , namely :

H0: No there is connection application of media based on *wordwall* games in learning PPKn to results Study participants.

H1: Yes connection application of based media *wordwall games* in learning PPKn to results Study participant educate.

Table 6. Pearson Product Moment Test Results

	Students' Responses to Word-wall Games-Based Learning Media	Student Learning Outcomes
Students' Responses to Wordwall Games-Based Learning Media	1	,804 **
Pearson Correlation		,000
Sig. (2-tailed)		30
N	30	30
Student Learning Outcomes	,804 **	1
Pearson Correlation	,000	
Sig. (2-tailed)		
N	30	30

Based on results from table 4.13, is known Sig.(2-tailed) value between Response participant educate towards learning media (X) with learning outcomes that is the N-Gain (Y) value is of $0.000 < 0.05$, which means there is significant correlation _ between variables X and Y. Next , it is known mark r_{count} For connection variables X and Y are equal to $0.804 > r_{table} 0.361$, then can concluded that There is connection between variable response participant educate towards learning media with learning outcome variables . Because r_{counts} *Pearson correlations* in analysis This worth positive so That It means connection between second variable the positive or in other words more and more increasing response participant educate towards learning media so will results also increase learn it .

Research results This in line with study Maghfiroh , (2018: 69) with title " Use of *Wordwall* Media For Improving Learning Outcomes Mathematics for Participants educate Class IV MI Roudlotul Huda". Study This produce use of *wordwall* media in learning mathematics proven can increase results learning and activeness participant educate on learning mathematics . Same thing like research conducted _ researcher that exists connection application of based media *wordwall games* For increase results Study participant educate in learning PPKn .

This is also supported by research conducted by Fadhillah, L. (2022: 27) who succeeded in proving that the use of *wordwall application media* in Civics learning can improve student learning outcomes in material on the legal and judicial system in Indonesia in class XI Hospitality 1 at Vocational Schools. Negeri 1 Rancabali. With research results namely; In cycle 1, the percentage of students' learning completeness was 63% and was included in the high category. Meanwhile, in cycle 2 there was an increase in the percentage of learning completeness to 92% and was included in the very high category.

Therefore, the use of *wordwall games- based media* in the learning process has great potential to improve learning outcomes. This media presents an interactive approach that can stimulate student participation more optimally. Through combining game elements, challenges and visual interaction. This learning media is able to increase student involvement in the learning process, strengthen information retention, and trigger interest in the subject matter.

4 Conclusion

Based on results research , Application of learning media based *wordwall games* can increase results Study participant educate in learning PPKn class X at SMAN 15 Garut . This thing proven from results data processing as following : [1] Application learning media based *games wordwall for class X11* students based on tests that have been carried out using questionnaire instruments, the majority of which show results in the "Good" category. [2] There is increasing student learning outcomes before (pretest) and after (*posttest*) the application of *games* -based learning media *wordwall* classified as " high". [3] Relationships between the application of *game*- based learning media *wordwall* to student learning outcomes in learning PPKn in Class X11 SMAN 15 Garut. This shows results that fall into the " Very " category Strong ”.

5 Author's Contributions

Jamilah and Devia as writer main , Arik Darajat and Ade Suherman as data collector , Nadhifa Karimah as translator

6 Acknowledgments

We would like to thank the Garut Education Institute, especially the Chancellor who has supported, motivated and funded, so that this article could be realized and submitted, don't forget to also thank the Dean of FPISBS and the Head of PPKn Study Program.

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