Cendikia : Media Jurnal Ilmiah Pendidikan, 14 (5) (2024) pp. 480-492
Published by: IOCSCIENCE

Cendikia : Media Jurnal Ilmiah Pendidikan

The effect of using Wordwall Game application media in economics subjects on student interest at SMA Negeri 2 Sanga Desa

Ayu Lestari[1], Diana Widhi Rachmawati[2], M Toyib[3]
Pendidikan Akuntansi, Universitas PGRI Palembang, Palembang, Indonesia

ARTICLE INFO

Article history:

Received Jan 10, 2024
Revised Mar 24, 2024
Accepted Mar 26, 2024

Keywords:

Economic Learning
High School Students
Learning Interests
Synectic
Wordwall Game

ABSTRACT

This study identified problems in the teaching and learning process at SMA Negeri 2 Sanga Desa, especially related to student learning difficulties related to personality characteristics and learning habits, as well as students performing below their abilities. The research aims to evaluate the effect of synectic learning media, especially wordwall games, on the learning interest of students in class XI IPS 1 in the subject of economic growth and development. The research method used is the experimental method. The results of the wordwall game test in the experimental class showed an average increase in students of 85.66%. In the synectic model category, student activeness reached an average of 46.66%, and experimental student learning outcomes showed an increase of 46.66%. The overall analysis showed a significant increase in students after applying the wordwall game media of synectical learning, with an average increase of 85.66%, categorized as "Improving /affecting". The research hypothesis also supports the positive influence of wordwall game on students' interest, with the value of t_hitung=7.277>t_tabel=1.697, so Ho is rejected and Ha is accepted. Nonetheless, the study recognizes the possible influence of other factors on the results. The conclusion of the study shows that wordwall games have a positive influence on high school students' interest in economics subjects at SMA Negeri 2 Sanga Desa..

Corresponding Author:

Ayu Lestari,
Pendidikan Akuntansi,
Universitas PGRI Palembang,
Jl. Jend. A. Yani Lorong Gotong Royong, 9/10 Ulu, Kota Palembang, Sumatera Selatan 30116,Indonesia
Email: ayulestari101101@gmail.com

INTRODUCTION

Social studies (IPS) is one of the subjects of the primary and secondary education curriculum that focuses students on facts, concepts, and generalizations related to the social conditions of society. Guiding students to become democratic and responsible citizens of Indonesia, as well as peace-loving citizens of the world, through social studies and economics(Baihaqi, S., & Lidinillah, 2018).

To achieve these learning objectives, one of them needs to generate interest in learning to students. Interest in learning as one of the internal factors that comes from within students towards learning effectiveness (Hartati, S, Fatmawati, L, Krismilah, & T, 2020) students have an interest

during the learning process. and because of this interest students will continue to do what they like without coercion. Besides that, high interest in learning makes students tend to get learning results (Ricardo, Meilani, R, & I, 2017) this is also in line with (Aprijal, Alfian, & Syarifudin, 2020) that interest in learning has a very big influence on learning outcomes, because if the learning material is not in accordance with interest, the student will not learn well because it is not interesting to him. Students will be lazy to learn and will not get satisfaction from the lesson. Subject matter that interests students is easier to learn so that it can improve learning outcomes.

Based on observations made by researchers at SMA Negeri 2 Sanga Village in class XI IPS 1 there are still also from the results of student tests that there are still 2 (two) students who score below the KKM (70 points) which means that learning has not been successful, and it is necessary to innovate in learning so that students can learn more actively and are interested in participating in learning. Low interest in learning makes students less active in discussions and question and answer sessions, easily feel bored and it is not uncommon for students to collect assignments or homework given by the teacher not on time. This condition is because during the learning process the learning media used by the teacher in delivering teaching material makes the learning process monotonous. The learning media used only comes from textbooks so that it seems that learning is only teacher-centered.

One way to overcome the above problems is to use Wordwall application media that can encourage students to be more active in the learning process. Wordwall is a game application that offers a wide selection of games that teachers can use to convey information or material to be taught (Minarta & Maulidina, 2022). For teachers, fostering student understanding is the main task of teaching. This understanding can be built by involving technology so that all obstacles or problems in the learning process can be overcome. Economic learning involves new innovations that have more impact on students. Teachers should pay more attention to the circumstances and needs of students during the learning process, so as to foster their interest in learning economics. in teaching, teachers use technology and have the ability to help students engage in learning through learning media which is decreasing because the material provided is less interesting.

In this case, reducing student barriers in suppressing interest in learning economics through the use of wordwall game media applications in the form of fun and innovative applications is one of them. Learning media as a tool or service to help students communicate learning material, especially economic growth material. Emphasis on the characteristics of the discipline of economics by considering all relevant learning media to be applied can serve to attract students' attention and enable them to master the required material. In addition, continuous changes in the globalization process encourage teachers to use learning media that can also work effectively and innovatively.

In addition to using the wordwall game application, teachers strive to enable learning to take place in an efficient and innovative way by utilizing technology for convenience, especially in terms of interaction, improving communication and increasing student interest in learning (Sari & Yarzah, 2021).

Wordwall games can attract more students due to its innovative features presented as a game. In addition, teachers can use wordwall online. The material learned is then delivered through various games that make students interested and try to compete with each other and motivate other students. The delivery of the material is also a kind of application support, there are templates such as quizzes, competitions, and open cities, which also add to the fun of use. The benefits of using text walls are also expected to be the right solution to increase student interest in learning, especially in presenting economic growth material effectively and efficiently innovative.

As for some previous research conducted by (Gandasari, P, Pramudiani, & P, 2019), explaining that the use of wordwall applications affects student motivation in learning social studies subjects. During the implementation using the wordwall application, students showed a good attitude and a tendency to answer assignment questions correctly and on time. In addition, the features presented as templates in the wordwall application are an attraction to motivate students in

learning. Then the research conducted (Sari & Yarzah, 2021) explained that the use of android-based quiz game media (wordwall) had an impact on improving learning outcomes in economics. This research uses experimental methods.

According to some of the research above, the use of wordwall can be a learning media that can be adapted to the characteristics of students as well as other subjects such as social studies and history, especially at the elementary and high school levels. Therefore, researchers conducted this study because no one has discussed the effect of using media applications for high schools and their application in economics.

Based on the explanation above, it is interested to conduct research with the title "the effect of using the wordwall game application media in economics on student interest in SMA Negeri 2 Sanga Desa..

RESEARCH METHODOLOGY

Research Variables

"Research variables are anything in the form of anything that is determined by the researcher to study so that information about it is obtained, then conclusions are drawn" (Sugiyono, 2021a, p. 60). The variables in this study consist of dependent variables. Independent variable (X): Wordwall game application media. The dependent variable (Y): Student learning interest.

According to (Sugiyono, 2021b), a variable is an attribute, trait or value of a person, object or activity that has certain variations that have been determined by researchers to study and then draw conclusions. In order for the research to be directed, the variables of this study are: (a). Media Application wordwall game Wordwall is an interactive technology-based interactive application media that provides various interactive games designed by the teacher when designing interactive application media in learning activities in the form of learning activities (Minarta & Maulidina, 2022). (b). Interest in learning is a willingness that arises from within the student as an encouragement for students to learn something without any coercion. The learning interest referred to in this study is the interest of students in participating in learning after the existence of educational facilities. The indicators that will be used are indicators of feelings of pleasure, attention, interest and student involvement (Fazillah & Sarah, 2019).

The design of this research design is as follows:

Figure 1. Draft research design

Description: X1 : Pre-test, X: Treatment, X2: Post-test

The steps of this research include:

1. Conducting an initial test (pre-test)

Pre-test is applied before treatment is given, this is intended to obtain initial results and can find out their initial abilities. Giving treatment (treatment). The material used in the treatment process is taxation. Conducting post-test

2. Operational Definition

Operational definition is an explanation of the meaning of this operational term containing an explanation of the terms used in the study. Operational definitions are used as a basis for detailing the lattice of research instruments. (Minarta & Maulidina, 2022).

3. Wordwall

Wordwall is an interactive technology-based interactive application media that provides various interactive games designed by teachers when designing interactive application media in learning activities in the form of learning activities. Interest in learning is a willingness that arises from within the student as an encouragement for students to learn something without any coercion.

The learning interest referred to in this study is the interest of students in participating in learning after the existence of educational facilities.

RESULTS AND DISCUSSIONS

Description of Research Place

SMA Negeri 2 Sanga Desa was established on July 01, 2011 with an operational license 155/1.11/F.1989 which has the status of private education and has Accreditation. SMA Negeri 2 Sanga Desa is located on the Sekayu-Lubuk Linggau Provincial Road, Keban II Village.Deskripsi Data Tes Hasil Belajar Kelas Eksprimen Dan Kelas kontrol

Test data is used to determine student learning outcomes. The test was given to students who were sampled in this study, using a comparison of 2 classes, namely class XI IPS 1 as the experimental group and XI IPS 2 as the control group. The population in this study were all XI grade students who were divided into 3 classes with a total of 90 students. Data collection in this study was obtained from the test results to students. The sample of this study amounted to 60 students, 30 students from the experimental group and 30 students from the control group.

Valid questions were tested in both groups, namely the experimental and control groups, totaling 20 questions. The test was conducted once, namely for the experimental group after being given treatment using learning with the Wordwall Game application, while for the control group using the lecture, question and answer, and assignment methods. This test was conducted to determine whether student learning outcomes could reach the minimum completeness (KKM) of 75, which is determined in economics subjects..

Description and Test Results of Experimental Class

In the experimental class, researchers used Wordwall Game learning in the learning process related to the subject. Researchers gave tests to students after discussing the topic. The instrument used was a multiple choice test of 20 questions, according to the basic competencies applied, to collect data on student learning outcomes. In addition, researchers also gave the same test questions to both sample classes, and the test had been tested for validity and reliability. The experimental class test results can be seen in the following table:

Table 1. Student scores of the experimental class

No	Name	Value	Description
1	Adittiyaerisa	75	Enough
2	Aldi saputra	80	Good
3	Aurel memeysuranda	95	Very good
4	Bunga citralestari	90	Very good
5	Dhini wieldamonica	90	Very good
6	Dinda flowerence	80	Good
7	Fitriyana	80	Good
8	Haikal hadisaputra	80	Good
9	Herlinarahmadora	90	Very good
10	Ichi Juliana	80	Very good
11	Intan purnama sari	90	Very good
12	Kiemasapriansyahazwad	80	Good
13	Luriazzahra	85	Good
14	Nabil syawalludin	90	Very good
15	Nandah kartina	90	Very good
16	Penta lestari	80	Good
17	Pranjes junior	95	Very good
18	Rahmat	90	Very good
19	Ria	95	Very good
20	Rindiani	80	Good

21	Ringgo	85	Good
22	Riskiaulia	90	Very good
23	Sandy saputra	75	Fair
24	Sangkut	95	Very good
25	Sera indriyani	80	Good
26	Suci Damayanti	80	Good
27	Sucidwilestari	95	Very good
28	Wahyu ariadi	80	Good
29	Yudi pratama	95	Very good
30	Yuniarti	80	Good
Total		2570	
Average		85,66	

In the appendix of test data, there are a total of 2570 student scores with an average score of 85.66%, included in the "Very Good" category. The control class test results obtained the highest score of 95, where 6 students achieved this score, while those who got the lowest score were 2 students with a score of 75. Based on the results of the acquisition of the above scores, the frequency distribution and the highest or lowest value of student learning interest in the control class can be seen in tables 2 and 3 below.

Table 2. Highest and Lowest Student Score

No	Name	Highest and lowest score
1	Aurel meymeysuranda	95
2	Pranjes junior	95
3	Ria	95
4	Sangkut	95
5	Sucidwilestari	95
6	Yudi pratama	95
7	Sandy saputra	75
8	Adittiyaerisa	75

Table 3. Distribution of Student Learning Outcomes of Class XI IPS2 (experimental class)

Assessment Interval	Frequency	Percentage of Student Learning Outcomes	Criteria
86-100	14	14: 30x100 = 46,66%	Excellent
70-85	16	16: 30x 100 =53,33%	Good
55-69			Fair
40-54			Deficient
<40		0	Very Poor
Total	30	100	
Average	85,66	Good	

Based on the table above, it can be seen that in the teaching-learning process with the Wordwall Game application, it turns out that the largest percentage of students of 46.66% showed interest in learning in the "Excellent" criteria, followed by the "Good" criteria of 53.33%..

Description of Control Class Test Result Data

In the control class, researchers only used the Wordwall Game application in the teaching and learning process related to the material. At the end of the lesson, the researcher conducted a test to determine student scores. The control class test results can be seen in the following table:

Table 4. Control class test results

No	Name	Control score	Description

1	Aisa	80	Good
2	Andika	80	Good
3	Arin nurhuda	85	Good
4	Aris	75	Good
5	Bunga citralestari	75	Fair
6	Chika	80	Very good
7	Dendifafutra	85	Good
8	Dini aminarti	85	Good
9	Dini lestari	85	Good
10	Dimas handrian	85	Good
11	Eliza	85	Good
12	Karisma heliasapitri	85	Good
13	Kharisma anggunramadhani	80	Good
14	Marsanda	80	Good
15	Muhamad chairulumam	90	Very good
16	Nanda anggraini	90	Very good
17	Okta saputra	80	Good
18	Parel	85	Good
19	Pujianto	85	Good
20	Rahmat triansah Abdurrahman	90	Very good
21	Ramadani	90	Very good
22	Reva	70	Fair
23	Revaldo	75	Fair
24	Reva wulandari	80	Good
25	Ricatsandika	80	Good
26	Riyanti	85	Good
27	Sandri	85	Good
28	Serli oktaviani	80	Good
29	Tria indahsusanti	85	Good
30	Thomas	75	Fair
Total		2470	
Average		82,33	

Calculating the tcount Price

In the appendix of test data, there are a total of 2470 student scores with an average score of 82.33%, included in the "Good" category. The control class test results obtained the highest score of 90, where 4 students achieved this score, while the lowest score was 4 students with a score of 75. Based on the results of the above scores, the frequency distribution and the highest-lowest scores of the control class students' learning outcomes can be seen in tables 5 and 6 below.

Table 5. Highest and lowest student scores

No	Name	Highest and lowest student scores
1	Muhammad chairulumam	90
2	Nanda anggraini	90
3	Rahmat triansyahabdur	90
4	ramahdani	90
5	reva	70

Tabel 6. Distribution of Student Learning Outcomes of Class XI IPS 1 (Control Class)

Assessment Interval	Frequensy	Percentage of Student Learning Outcomes Criteria	Criteria
86-100	4	4 :30x100 = 13,33%	Excellent

70-85	26	26:30x100 =86,66%	Good
55-69	0		Fair
40-54	0		Deficient
<40		0	Very Poor
Total	30	100	
Average	82,33	Good	

Tabel 7. Data Hasil Nilai Tes Siswa Kelas Eksperimen dan Kontrol

Class	Grade	
	Highest	Lowest
Experiment	95	75
Control	90	70

In the table above, it can be seen that the test results of students in class XI IPS 1 as the experimental group, which used the Wordwall Game application, were higher than the test results of students in class XI IPS 2 as the control group, which used conventional learning methods. This means that the use of Wordwall Game application has a better impact on students' interest in learning at SMA Negeri 2 Sanga Desa..

Comparative Data Analysis of Experimental Class and Control Class Learning Outcomes

From the learning results of the experimental class, an average score of 85.66% was obtained, which was obtained from the total student score of 2570/30. After looking at the criteria for the average score of the student learning interest test, the categories obtained are very good, good, sufficient, less, very less. It can be seen in the control class that the value is 82.33%, in the "good" category, obtained from the total student score of 2470/30, which is the quotient between the total number of student scores divided by the number of students. It can be seen that the overall average student interest in learning is higher in the experimental class compared to the control class. The average learning value in the experimental class is 85.66%, while the average learning outcome in the control class is 82.33%, or there is a difference of 3.33%.

Therefore, it can be concluded from the explanation above that there is an effect of using the Wordwall Game application media after being seen from student learning interest. The recapitulation of student learning interest in experimental and control classes can be seen in the following table:

Table 8. Recapitulation of Comparison of Learning Outcomes of Experimental Classes and Control Classes

Interval	Experiment Class		Control Class		Criteria
Assessment	F	Percentage	F	Percentage	
86-100	14	46,66%	4	13,33%	Very good
70-85	16	53,33%	26	86,66%	Good
55-69	0	0,00	0	0,00	Fair
40-54	0	0,00	0	0,00	Deficient
<40	0	0,00	0	0,00	Very Poor
Total	30	100	30	100	

From the table above, it can be seen that the scores of 86-100 were classified as very good in the control class, namely 4 students (13.33%), while in the experimental class there were 14 students (46.66%). For grades 70-85 in the good category, in the control class there were 26 students (86.66%), while in the experimental class there were also 26 students (86.66%). As for the 55-69 score in the moderate category, in the control class there were no students (0%), as well as in the experimental class (0%). The value of 40-54 in the poor category, in the control class there were no students (0%), as well as in the experimental class (0%). For grades <40 in the control and experimental classes, both were absent.

From this it can be concluded that the experimental class results are better than the control class. This is because the experimental class used the Wordwall Game application, while the control class only used conventional learning methods such as lectures, discussions, and questions and answers..

Prerequisite Test

Test of Normality of Experimental Class Data

The data normality test really needs to be done to find out whether the data being analysed is normal or not. The steps used are as follows:

1). Range = Largest data - Smallest data
R = 95– 75, R = 20

2). Number of Interval Classes (k)
K = 1 + 3,3 log n = 1 + 3,3 (log 60) = 1 + 3,3 (1,33) = 1 + 4,63 = 5,63

So, the number of classes taken if rounded up is 5 classes.

3). Interval Class Length (C)
Length of interval class = Range
Number of Interval Classes
$= \frac{20}{5} = 4$

Then the length of the interval class taken is 4. For more details, it can be seen in the table below:

Tabel 9. Helper Table for Normality Testing of Experimental Class Data

Interval Kelas	Fo	Fh	(Fo - Fh)	$(f_o - f_h)^2$	$\frac{(f_o - f_h)^2}{f_h}$
75-78	2	2,7 x 30=8,1	-6,1	37,21	4,59
79-82	12	13,53 x30=4,059	7,41	54,90	1,35
83-87	3	34,13x30=10,23	-7,23	52,27	5,1
89-93	8	34,13 x30=10,23	-2,23	4,97	0,4
94-98	5	13,53x30=4,059	0,94	0,88	0,2
	30				11,064

Calculating the tcount Price

The x^2 price at α 0.05 dk6-1, namely in the list of distribution tables x^2 = 11.070 (Sugiyono, 2021, p. 376). With decision-making guidelines, namely: If $x_{hit}^2 \leq x_{tab}^2$ then the data is normally distributed, If $x_{hit}^2 \geq x_{tab}^2$ then the data is not normally distributed. Then the data is concluded that $x_{hit}^2$11.064≤≤ $x_{tab}^2 = 11{,}070$, so it is concluded that it is normally distributed.

Control Class Data Normality Test

The data normality test really needs to be done to find out whether the data being analysed is normal or not. The steps used are as follows: 1). Range = largest data - smallest data
R = 90-70 = 20

Number of Interval Classes (k)
K = 1 + 3,3 log n = 1 + 3,3 (log 60) = 1 + 3,3 (1,33) = 1 + 4,63 = 5,63

So, the number of classes taken if rounded up is 5 classes.3). Interval Class Length (C)
Length of interval class = Range
Number of Interval Classes= $\frac{20}{5}$ = 4
So, the length of the interval class taken is 4. For more details, it can be seen in the table below :

Table 10. Helper Table for Normality Testing of Control Class Data

Class Interval	Fo	Fh	(Fo - Fh)	$(f_o - f_h)^2$	$\frac{(f_o - f_h)^2}{f_h}$
70-73	1	2,7 x 30=8,1	7,1	50,41	6,2
74-78	4	13,53 x30=4,059	0,09	0,081	0,01
79-83	9	34,13x30=10,23	1,23	1,5	0,14
84-88	12	34,13 x30=10,23	1,77	3,13	0,30
89-92	4	13,53x30=4,059	0,59	0,3	0,07
	30				6,72

Calculating the tcount Price

The x^2 price at the 0.05 significance level with degrees of freedom dk6-1 is in the $\chi 2$ distribution table = 11.070 (Sugiyono, 2021, p. 376). With decision-making guidelines, namely: (a). If $\chi 2 < 11.070$, then the data is normally distributed. (b). - If $\chi 2 \geq 11.070$, then the data is not normally distributed. So, with a $\chi 2$ value of 6.72, it can be concluded that the data is normally distributed because 6.72 < 11.070

Hypothesis testing criteria
Simple Regression Analysis

Simple regression analysis is used to determine the functional relationship between the independent variable and the dependent variable in this study, which has one dependent variable and one independent variable.
Simple regression formula :

Y =a +bX (Riduwan, 2019)

Description : Y = (read Y hat), the subject of the projected dependent variable, X = Independent variables that have a certain value to be predicted, a = The costanta value of the price of Y if X = 0, b = Direction value as a determinant of the prediction forecast, which shows an increase value (+) or a decrease value (-).

variable Y.b = $\frac{N\sum XY}{N\sum X^2}\frac{(\sum Y)(\sum Y}{\sum X^2}$ a = $\frac{\sum y - b\sum X}{n}$

$\sum X = 30$ $\sum X = 0{,}5$ $\sum X^2 = 30$
$Y = 84{,}63 \sum Y^2 = 431592$ $\sum XY = 2570$
$\sum N = 60$
Then it can be calculated :

$\sum x^2 = \sum x^2 - \frac{(\sum X)^2}{n}$

$\sum x = 30 - \frac{(30)^2}{60} = 30 - \frac{900}{60} = 30 - 15 =$ **15**

$\sum y^2 = \sum y^2 - \frac{(\sum Y)^2}{n}$

$\sum y^2 = 431592 - \frac{(5078)^2}{60} = 431592 - \frac{25.786.084}{60} = 431592 - 429765 =$ **1.827**

$\sum xy = \sum XY - \frac{(\sum x)(\sum y)}{n}$

$\sum XY = 2570 - \frac{(30)(5078)}{60} = 2570 - \frac{152340}{60} = 2570 - 2.539 =$ **31**

Calculating the price of b and a is as follows:

$b = \frac{\sum x.y}{\sum x^2} = \frac{31}{15} =$ **2,06**

$\alpha = \bar{Y} - b.X = 8463 - 2,06\ (0,5) = 84,63 - 1,03 =$ **83,6**

Regression Equation Y = 84,63 + 83,6 X

Calculating Regression Standard Error

$$Se^2 = \frac{\sqrt{\sum y^2 - b \quad \sum xy}}{n-2} = \frac{\sqrt{1.827 \quad - 2,06\ (31)}}{60-2} = \frac{\sqrt{1.827 \quad - 63,86}}{58} = \frac{-4.559}{58} = -78,60$$

$Se^2 = \sqrt{-78,60} =$ **8,86**

Menghitung Standar Error Koefisien Regresi

$$S_b = \frac{Se}{\sqrt{\sum x^2}} = \frac{\mathbf{8,865}}{\sqrt{15}} = \frac{\mathbf{8,865}}{3,872} = \mathbf{2,28}$$

Calculating the tcount Price

$$t_{hit} = \frac{b}{Sb} = \frac{2,06}{2,289} = 9,03$$

This means that there is an effect of using the Wordwall Game application media on the learning outcomes of SMA Negeri 2 Sanga Desa students. The t test is used to determine whether the use of Wordwall Game application media has a significant effect or not on student learning outcomes. With a significance test level of 0.05, the steps are as follows formulate a hypothesis: (a). Ho: The use of Wordwall Game application media has no effect on student learning outcomes. (b). Ha: The use of Wordwall Game application media has an effect on student learning outcomes. (c). Determining t count with significance: We can see in the output above, we get t count of 9.03. (d). Determine t table: Can be seen from the t statistical table at a significance of 0.05/2 = 0.025 with degrees of freedom df = n-2 or 60-2 = 58. The results obtained for the t table are 1.697. (e). Testing criteria, If reject accept: Then there is an effect of using Wordwall Game application media on student learning outcomes at SMA Negeri 2 Sanga Desa. If accept reject: Then it cannot be concluded that there is an effect of using the Wordwall Game application media on student learning outcomes at SMA Negeri 2 Sanga Desa. Based on the data processing above, the t test result = 9.03, meaning that t count ≥ t table or 9.03 ≥ 1.697. This means that there is an effect of using the Wordwall Game application media on student learning outcomes at SMA Negeri 2 Sanga Desa.

This study has results that are in line with research conducted (Srimuniyati, 2022) entitled "Significant Effect of Using Wordwall-Based Interactive Media on Social Studies Learning Outcomes". The results of the study were obtained by examining multiple choice tests. The pretest learning outcomes in the experimental class were in the very poor category with a mean of 37.29 with a percentage of 71.4%, while the control class obtained a very poor category with a mean of 35.50 with a percentage of 70%.

Posttest learning outcomes in the experimental class were in the very good category with a mean of 84.71 with a percentage of 80%, while the control class was in the good category with a mean of 68.75 with a percentage of 30%. Data collection techniques using tests. Data analysis technique using independent sample t-test. The results of this study indicate a significant effect of the use of Wordwall-based interactive media on social studies learning outcomes.

Discussion

After conducting research, which was carried out four days by applying the learning model, one day carrying out the final test, the class used was class XI IPS 1 as the experimental class and class XI IPS 2 as the control class. Researchers conducted research by conducting two meeting sessions for the teaching process, and at the last meeting, researchers conducted a final test to see the results of the previous session for student knowledge during the research. In the experimental class, researchers used the Wordwall Game application in learning economics, where this model measures students' learning interest after receiving the subject matter. The test consisted of 20 questions.

Based on the results of the final statistical analysis, both in the experimental and control classes, according to student learning outcomes, the average of the experimental class that received

treatment using the Wordwall Game application media was 85.66%, in the "very good" category. This is because this media provides opportunities for students to actively participate in learning. Meanwhile, the control class that used conventional learning obtained an average of 82.33%, in the "Good" category, because conventional learning only uses lecture, question and answer, and discussion methods. With an average difference between the experimental class and the control class of 3.2%, this is influenced by other factors. Based on the analysis above, the difference in learning interest is due to the implementation of learning in the experimental class which is applied with the use of Wordwall learning media.

Game, where students are encouraged to actively participate in learning. While in the learning process in the control class using conventional learning, students are directed to actively follow a varied lecture learning process, and the information obtained by students in the control class is sometimes still hesitant to be used as an opinion. This affects students' ability to master the material. To see the effect of using the Wordwall Game application on student learning outcomes in economic subjects at SMA 2 Sanga Desa, researchers collected test results given at the end of the meeting in the experimental class and control class with the subject matter of economic growth and development. Researchers want to know if there is an effect of using the Wordwall Game application media with lecture, question and answer, discussion, and assignment methods on student learning.

Research Results Associated with Theoretical Studies

After analysing the results of research conducted at SMA Negeri 2 Sanga Desa, it can be concluded that there is an effect of using the Wordwall Game application media on student interest in class XI economic growth material. Based on the final analysis, both in the experimental class and in the control class, the average student learning outcomes of the experimental class that applied learning with the Wordwall Game application media were 86.5%. While in the control class, with conventional learning, student learning outcomes reached an average of 83.3%. By looking at this percentage, it can be seen that the achievement in the experimental class is higher than the control class which only uses conventional learning.

According to Lestari (2021), efforts to increase student learning motivation in online learning through educational media Wordwall Game in the 2020/2021 school year lesson is a very interesting browser application with the aim of being a source of students to learn, media, and a fun assessment tool for students. This is also reinforced by Sari's research (2021) with the title "The Effect of Wordwall Game on History Learning Outcomes of Class X MIPA SMA 2 Lubukbasung". Wordwall is a network-based digital gamification application that provides various game and quiz features that can be utilised by educators in delivering evaluations. Wordwall is useful as a learning resource, media, and fun assessment tool for students. This game can be used through a laptop or smartphone, where in the Wordwall Game application there are images, audio, animation, and interactive games that can make students interested. From this explanation, the researcher explains that Wordwall Game learning media is a Wordwall Game application learning media, where two students stay in the group and two students are guests. This model is a group learning system aimed at training students to work responsibly, help each other, and promote excellence. This is done based on the results of research tests with class tests that apply Wordwall Game application learning better than class test results that apply conventional learning. So, the previously determined problem formulation, namely "Is there an effect of using the Wordwall Game application media on student learning outcomes in economic subjects at SMA Negeri 2 Sanga Desa," is proven correct.

Research Results Associated with Relevant Studies

After conducting research on both experimental and control classes at SMA Negeri 2 Sanga Desa using the Wordwall Game application, the results showed that economic learning had a significant effect. This research is in line with research by Purmungkas, Sakinata, Maulidina, Minarta, & Heni (2022) which the effectiveness of Wordwall Game media to improve student

economic learning outcomes at MAN Lamongan using experimental research methods one group pre-test post-test design. The average percentage increase reached 21.75%.

The second similar study was conducted by Srimuniyati (2022) who tested the significant effect of using Wordwall-based interactive media on social studies learning outcomes. The pretest results in the experimental class were in the very poor category, while in the control class in the very poor category. However, the posttest results in the experimental class were in the excellent category, while the control class was in the good category. This shows a significant effect of using Wordwall-based interactive media on social studies learning outcomes. This research is also in line with the research of Maita Satri Prihatin (2017) on the influence of learning facilities, learning styles, and learning outcomes on the interest in learning economics of grade XI students at SMA Negeri 1 Sayengan. The results showed that learning facilities had a positive effect on learning outcomes, while learning styles had no significant effect. Learning interest also has a positive effect on interest in learning economic subjects.

Although the three studies have similarities with this study regarding the use of Wordwall Game application media, the difference lies in the focus of the research. The first and second studies emphasise more on improving student learning outcomes, while this study focuses more on the effect on student learning outcomes.

CONCLUSION

Based on the results of the study, it can be concluded that the use of wordwall game application media on student learning interest in economic subjects at SMA Negeri 2 sanga desa. The t test result = 2.645, meaning that t count ≥ t table or 2.645≥ 1.697. This means that there is an effect of using the wordwall game application media on student interest in learning at SMA Negeri 2 Sanga Desa. This means reject Ho and accept H1, so the research hypothesis in this study is that there is an effect of using the wordwall game application media on student interest in learning at SMA Negeri 2 Sanga Desa.

References

Abib, R. (2017). Jenis jenis data penelitian. *Jurnal Teknik Pengumpulan Data Dalam Rancangan Penelitian*, *4*(2), 33–41.

Aditia, A. (2019). Pengaruh Self Esteem dan Kemandirian Belajar Terhadap Prestasi Belajar Mahasiswa Pendidikan Ekonomi Universitas Siliwangi. *Psikologi Perkembangan*, *October 2013*, 1–224.

Aisyah. (2019). *Pengaruh Model Pembelajaran Two Stay Two Stray Terhadap Hasil Belajar Siswa Mata Pelajaran ips kelas IV Min 4 Kota Medan Tahun Ajaran 2018/2019*.

Aliarti, R. (2019). Pengaruh Model Pembelajaran Two Stay - Two Stray Terhadap Hasil Belajar Siswa Pada Mata Pelajaran Ekonomi Disma Muhammadiyah 1 Palembang. *Jurnal Neraca: Jurnal Pendidikan Dan Ilmu Ekonomi Akuntansi*, *3*(1), 108–117. https://doi.org/10.31851/neraca.v3i1.3716

Apriani, E. (2019). *PENGARUH PENERAPAN MODEL PEMBELAJARAN TWO STAY TWO STRAY TERHADAP HASIL BELAJAR EKONOMI SISWA KELAS XI DI SMA NEGERI 2 PRABUMULIH TAHUN PELAJARAN 2018/2019*. Universitas PGRI Palembang.

Arikunto. (2013). *Implementasi pendidikan karakter, anida istiqomah al munawaroh, fai ump 2017*. 8–34.

Feladi. (2017). Pengaruh Model Pembelajaran Kooperatif Tipe Two Stay Two Stray Terhadap Hasil Belajar Siswa Stay Two Stray . Model pembelajaran kooperatif tipe Two Stay Two Stray dikembangkan oleh Spencer Kagan . Model pembelajaran tersebut bisa digunakan untuk semua koo. *Jurnal Pendidikan Infromatika Dan Sains*, *6*(1), 126–131.

Fitri, H., & Wardi, Y. (2017). *Pengaruh Model Pembelajaran Type Two Stay Two Stray Dan Minat Belajar Terhadap Hasil Belajar Ekonomi Pada Siswa Kelas X Sma Dian Andalas-Padang*.

Handayani, 2020. (2018). Metodologi penelitian. *Angewandte Chemie International Edition, 6(11), 951–952., 2020*, 10–27.

Hidayatullah, A. (2020). *Pengaruh model pembelajaran kooperatif tipe two stay two stray terhadap hasil belajar dan minat belajar*. *6*, 24–36.

Huda. (2016). *Model model pengajaran dan pembelajaran* (D. KK (ed.); VII). PUSTAKA PELAJAR.

Pustakapelajar.co.id
Huda, W. (2021). Pengaruh Model Two Stay Two Stray Terhadap Hasil Belajar Matematika Siswa Kelas II SD. *Jurnal Didaktika Pendidikan Dasar*, *5*(2), 507–522. https://doi.org/10.26811/didaktika.v5i2.319
Khusna. (2014). Pelaksanaan Model Pembelajaran Two Stay Two Stray di SMKN 3 Yogyakarta. *Paper Knowledge . Toward a Media History of Documents*, 8–42.
Marjuki. (2020). *181 model pembelajaran palkem* (N. A. N. (ed.)). PT Remaja Rosdakarya. www.rosda.co.id
Meliana, I., Hariani, L. S., & Afian, A. (n.d.). *Model Pembelajaran Two Stay Two Stray , Disiplin Belajar Dan Kesiapan Belajar : Pengaruh Terhadap Motivasi Belajar Ekonomi Siswa Kelas XI IPS*. 68–77.
Nasional, W., Kompetensi, P., & Sekolah, G. (2020). *Model Two Stay Two Stray (TSTS) dalam Pembelajaran Matematika Sekolah Dasar*. *3*(3), 2037–2042.
Ningtyas, M. (2018). Bab III - Metode Penelitian Metode Penelitian. *Metode Penelitian*, 32–41. file:///C:/Users/WindowsX/Downloads/BAB III METODA PENELITIAN.pdf
Ramadhani, R. (2021). *Statistika Penelitian Pendidikan* (E. Widianto (ed.); Digital, 2). KENCANA. www.prenadamedia.com
Riadi, M. (2016). *Model pembelajaran tipe two stay two stray*.
Sartika, N. (2016). *Pengaruh Penggunaan Metode Two Stay Two Stray (Tsts) Terhadap Hasil Belajar Ips Kelas V Min 6 Bandar Lampung Tahun*.
Sintesa, N. (2018). Pengaruh Model Pembelajaran Kooperatif Teknik Two Stay Two Stray Terhadap Aktivitas Belajar Siswa Dan Hasil Belajar (Studi Ekperimen Pada Mata Pelajaran Ekonomi Siswa Kelas Xi Di Sma Negeri 1 Cigugur). *Jurnal Lentera Bisnis*, *6*(2), 71. https://doi.org/10.34127/jrlab.v6i2.184
Sugiyono, P. D. (2019). *Metode Penelitian Pendidikan* (M. . Dr. Apri Nuryanto, S.Pd., S.T. (ed.)). Alfabeta. www.cvalfabeta.com
Thabroni, G. (2021). *Metode penelitian, pengertian & jenis menurut para ahali*. https://serupa.id/metode-penelitian/
Thabroni, G. (2022a). *belajar pengertian, proses, sistem, ciri, hasil dan prinsip*. https://serupa.id/belajar-pengertian-proses-sistem-ciri-hasil-prinsip/
Thabroni, G. (2022b). *Hasil Belajar: Pengertian, Klasifikasi, Indikator, dan Faktor - Faktor*. https://serupa.id/hasil-belajar-pengertian-klasifikasi-indikator-dan-faktor-faktor/
Trianto. (2015). *Model Pembelajaran Langsung (Direct Instruction)*. https://www.wawasanpendidikan.com/2019/12/model-pembelajaran-langsung-direct-Instruction.html
Yulia, Y. (2019). Strategi yang digunakan dalam penelitian ini adalah Strategi Asosiatif. *Repositori STEI*, *2007*, 45–61.