

The Effect of Using Wordwall Game Application Media on Economics Subjects on Student Learning Outcomes at SMA Negeri 2 Sanga Desa

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Received : November 15, 2023

Accepted : Desember 05, 2023

Published : January 01, 2024

Citation: Lestari, P., Rachmawati, D, W., & Toyib, M. (2024). The Effect of Using Wordwall Game Application Media on Economics Subjects on Student Learning Outcomes at SMA Negeri 2 Sanga Desa. *Data : Journal of Information Systems and Management*, 2(1), 1-13

ABSTRACT: In this study, the problems found in the field are that the teaching and learning process is not optimal because students experience a form of learning difficulties related to characteristic, personality and study habits or students who excel below their ability level (wordwaall game). By applying synectic learning media, it is expected to overcome or at least direct adjustments to the problems faced by students. This study aims to determine the learning interest of grade XI IPS 1 students in economic growth and development at SMA Negeri 2 Sanga Desa. The method used in this study is the experimental method. Based on the results of the study, the results of the student wordwall game test showed that the average student who experienced it was 85.66% in the experimental class. In the synectic model category, the average student activity is 46.66% and in the experimental class learning outcomes students have an average Student activeness is 46.66%. The overall increase that occurred in students after applying wordwall game media synectic learning in the experimental class had an average of 85.66% or in the creteria "Improving / influential". In the results of the hypothesis carried out by researchers using a simple regression formula, this study there is an influence of wordwall games on the interest of high school students in economics subjects at SMA Negeri 2 Sanga Desa on the material of economic growth and development obtained $t_{(count)} = 7.277 > t_{(table)} = 1.697$ which means H_a is accepted while H_o is rejected. This study has an influence on other factors. Thus, this study shows that there is an influence of wordwall games on high school students' interest in economics subjects at SMA Negeri 2 Sanga Desa.

Keywords: Wordwall Game Media, Learning Outcomes



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INTRODUCTION

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

To achieve these learning objectives, one of them needs to cause learning outcomes to students. Learning outcomes as one of the internal factors that come from within students on learning effectiveness (Hartati, S, Fatmawati, L, Krismilah, & T, 2020) students have learning outcomes during the learning process. And because of these results students will continue to do what they

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love without any coercion. . In addition, high learning outcomes make students tend to obtain learning outcomes (Ricardo, Meilani, R, & I, 2017), this is also ruled out by (Aprijal, Alfian, & Syarifudin, 2020) that learning outcomes have a huge influence on learning outcomes, because if the learning material is not in accordance with the results, then students will not learn well because they are not interesting to them. Students will be lazy to study and will not get satisfaction from the lesson. Learning materials that attract student learning outcomes, are easier to learn so that they can improve learning outcomes.

Based on observations made by researchers at SMA Negeri 2 Sanga village in class XI IPS 1, there are still 2 (two) students whose scores are below KKM (70 points) which means that learning has not been successful, and innovation in learning is needed so that students can learn more actively and are interested in participating in learning. Low learning outcomes make students less active in discussions and question and answer sessions, easily bored and not infrequently students submit assignments or homework given by teachers not on time. This condition is because during the learning process, the learning media used by teachers in delivering teaching materials makes the learning process monotonous. The learning media used only comes from package books so 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, cultivating 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. Learning economics involves new innovations that are more impactful for students. Teachers should pay more attention to the circumstances and needs of students during the learning process, so as to grow their learning outcomes to learn economics. In teaching, teachers use technology and Have the ability to help students engage in learning through learning media that is decreasing because the material provided is less interesting.

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

Wordwall games can attract more students because of their innovative features presented as games. In addition, teachers can use wordwall directly. 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 materials is also a kind of application support, there are templates such as quizzes, competitions, and open cities, which also adds to the fun of use. The benefits of using text walls are also expected to be the right solution to improve student learning outcomes, especially in presenting economic growth material effectively and efficiently. Innovative.

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As for several previous studies conducted by (Gandasari, P, Pramudiani, & P, 2019), explained that the use of wordwall applications affects student motivation in learning social studies subjects . During the implementation using the wordwall application, students show a good attitude and 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) has an impact on improving learning outcomes in economics. This research uses an experimental method(Khusna, 2014; Ningtyas, 2018).

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

Based on the explanation above, interested in conducting research entitled "The effect of the use of wordwall game application media on economic eyes on student learning outcomes at SMA Negeri 2 Sanga Village.

METHOD

1. Population and Sample / Research Object / Research Subject

Population is a collection of all data that becomes a research unit. According to (Sugiyono, 2021a) population is a generalization area consisting of objects / subjects that have certain quantities and characteristics that are determined by researchers to be studied and then conclusions are drawn(Sugiyono, 2019; Thabroni, 2021). From this explanation, the population taken is class XI students of SMA Negeri 2 Sanga Desa.

Table 1 Study population

Class	Man	Woman	Sum
XI IPS 1	7	28	30
XI IPS 2	10	19	30
Sum	17	47	60

The sample is the portion of the number taken from the share of the population. According to (Sugiyono, 2021a) the sample is part of the population that has crasteristics to be studied. In the population above, it is known that the level of student activity in economic subjects is homogeneous between classes, therefore, (Sugiyono, 2019) "Samples are part of the number and characteristics possessed by the population". This study uses *Cluster random sampling*, which is random sample data collection carried out by mixing subjects in the population

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so that all subjects are considered equal. In this study, there were two classes, namely class XI IPS 1 which became the Experimental class, class XI IPS 2 which became the Control class.

Table 2 Research sample

Class	Man	Woman	Sum
XI IPS 1	7	23	30
XI IPS 2	10	19	30
Sum	17	42	60

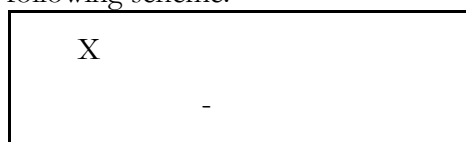
Source: Administration of SMA N 2 Sanga village

2. Research Methods

In this study, researchers used experimental research methods using a quantitative approach. According to (Sugiyono, 2021) the experimental method is a quantitative research method used to determine the effect of independent variables (Treatment) on the dependent variable results under controlled conditions.

3. Treatment Design

In this study, the treatment design used was *posttest only control design*. The treatment design can be seen in the following scheme:



Information:

:Experimental Class.

: Control class.

: *Wordwall game* learning treatment.

: No *wordwall game* learning treatment.

: Learning outcomes of economic learning.

: Economic learning on student outcomes.

4. Data collection techniques

Data collection is an activity to collect various types of information or data treated in research. According to (Sugiyono, 2021) data collection is a process of collecting primary and skunder data, in a very important step data collection research, the data collected arena will be used for solving the problem being researched or to test hypotheses that have been formulated. From the explanation above, the researcher uses data collection techniques using test techniques, and documentation.

1) Test

"Tes is a question or exercise and other tools used to measure skills, knowledge, intelligence, abilities or talents possessed by individuals or groups" (Arikunto, 2016: 197). The tests in this study were used to obtain data on economic learning (Arikunto, n.d.). In this study, researchers used a multiple choice test (*multiple choice*) totaling 20 questions after the application of *wordwall game* learning was carried out with economic growth material.

Table 3 Test question indicators.

KD 3	K D 4
3.2 Describe the concepts of economic growth and economic development and problems and how to overcome them.	4.2 Present findings on problems of economic growth and economic development and how to overcome them.
IP K K D 3	IP K K D 4
3.2.1 Able to explain the definition of economic growth. 3.2.2 Able to explain the difference between economic development and economic growth. 3.2.3 Able to explain how to measure economic growth. 3.2.4 Able to explain the theory of economic growth. 3.2.5 Able to explain economic development planning economic development plans. 3.2.6 Able to identify factors affecting economic development. 3.2.7 Able to Identify Predictors of the Success of Economic Development 3.2.8 Explain economic development problems in developing countries 3.2.9 Explain economic development policies and strategies.	4.2.1 Able to present and explain how to measure economic growth. 4.2.2 Present the results of factors affecting economic development. 4.2.3 Able to present economic development problems and how to overcome them.

RESULT AND DISCUSSION

1. Description of Learning Outcomes Test Data Experimental Class and Control class

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 an experimental class and XI IPS 2. as a control class. The population in this study was all class XI students who were divided into 3 classes with a total of 90 students. The data collection of this study was obtained from test results to students. The sample of this study amounted to 60 students, 30 students from the experimental class and 30 students from the control class. Valid questions were tested in the experimental and control class as many as 20 questions. The test was carried out 1 time, namely for the experimental class after being given treatment using learning using the *wordwall game* application while for the control class using the lecture, question and answer and assignment methods. This test is conducted to find out whether student learning outcomes can achieve a minimum completeness (KKM) of 75 determined in economics subjects.

Learning in experimental groups using learning using the *wordwall game* application encourages students to be more courageous in expressing their opinions and knowledge. Learning is done to gain whole-class participation and individual responsibility. This model provides opportunities for

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students to interact more with fellow groups and individuals so that they can be more active in teaching and learning activities.

1. Description and test results of the experimental class

In the experimental class, researchers use *wordwall game* learning in the learning process related to subjects. Researchers give tests to students after discussing the topic. The instrument used is a double choice test totaling 20 questions according to the basic competencies applied, to collect data on student learning outcomes. In addition, researchers also provide the same test questions for both classes of samples and the tests have been tested for validity and reliability. The experimental class test results can be seen in the following table;

Table 4 scores of experimental class students

No	Name	Value	Information
1	adit tiya erisa	75	enough
2	Aldi Saputra	80	Good
3	Aurel memey suranda	95	Excellent
4	Sustainable image flower	90	Excellent
5	Dhini wielda monica	90	Excellent
6	Dinda flowerence	80	Good
7	Fitr is	80	Good
8	Haikal Hadi Saputra	80	Good
9	Herlina Rahmadora	90	Excellent
10	Ichi Juliana	80	Excellent
11	Intan full moon sari	90	Excellent
12	Kiemas Apriansyah Azwad	80	Good
13	Luri Azzahra	85	Good
14	Nabil Syawalludin	90	Excellent
15	Nandah kartina	90	Excellent
16	Sustainable penta	80	good
17	Pranjes junior	95	Excellent
18	Grace	90	Excellent
19	Ria	95	Excellent
20	Rindiani	80	Good
21	Ringo	85	Good
22	Aulia's risk	90	Excellent
23	Sandy Saputra	75	enough

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24	Concern	95	Excellent
25	Sera Indriyani	80	Good
26	Holy Damayanti	80	Good
27	Holy bi-listari	95	Excellent
28	Rev. Ariadi	80	Good
29	Yudi primary	95	Excellent
30	Yuniarti	80	Good
Sum		2570	
Average		85,66	

In the appendix above, there are a total score of 2570 students with an average score of 85.66% in the "Very Good" category. The control class test score got the highest score of 95 with a total of 6 students and the lowest score was 2 students with a score of 75. Based on the results of obtaining the above scores, it can be seen the distribution of frequency and the highest or lowest value of learning interest of control class students can be seen in tables 9 and 10 below.

Table 5 highest and lowest student grades

No	Name	Highest and lowest scores
1	Aurel finds mey mey	95
2	Pranjes junior	95
3	Ria	95
4	Concern	95
5	Holy bi-listari	95
6	Yudi primary	95
7	Sandy Saputra	75
8	adit tiya erisa	75

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Table 6 Distribution of Learning Outcomes of Class XI IPS2 Students (experimental class)

Interval Valuation	Frequency	Percentage of Student Learning Outcomes	Criterion
86-100	14	14: $30 \times 100 = 46.66\%$	Very Good
70-85	16	16: $30 \times 100 = 53.33\%$	Good
55-69			Enough
40-54			Less
<40		0	Very Lacking
Sum	30	100	
Average	85,66	Good	

Based on the table above, it can be seen that in the teaching and learning process With *the Wordwal Game* application, it turns out that the largest percentage of students is 46.66% interested in learning on the "**Very Good**" criteria, followed by the "**Good**" criteria by 53.33%,

a. Description of Control Class Test Results Data

In the control class, researchers only use *wordwall game* applications in the teaching and learning process related to the material. At the end of the lesson, researchers conducted a test to find out the students' grades. The control class test can be seen in the following table

Table 7 Control class test results

No	Name	Intent on control	Information
1	Ice	80	Good
2	Write it down	80	Good
3	Arin Nurhuda	85	Good
4	Aris	75	Good
5	Sustainable image flower	75	enough
6	Chika	80	Excellent
7	Dendi fafutra	85	Good
8	Early aminarti	85	Good
9	Early sustainable	85	Good
10	Dimas will sleep	85	Good
11	Eliza	85	Good
12	Charisma helia sapitri	85	Good
13	Charisma graceful Ramadhani	80	Good
14	Marsanda	80	Good

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15	Muhammad chairul umam	90	Excellent
16	Nanda Anggraini	90	Excellent
17	Octa Saputra	80	Good
18	Parel	85	Good
19	Praise	85	Good
20	Rahmat triansah Abdurrahman	90	Excellent
21	Ramadan	90	Excellent
22	Reva	70	Enough
23	Revaldo	75	Enough
24	Reva Wulandari	80	Good
25	I'm sorry	80	Good
26	Riyanti	85	Good
27	Sandri	85	Good
28	Serli Octaviani	80	Good
29	Tria beautiful susan	85	Good
30	Thomas	75	Enough
Sum		2470	
Average		82,33	

Source:data processed by researchers

In the appendix above, there are a total score of 2470 students with an average score of 82.33% in the "Good" category. The control class test score got the highest score of 90 with 4 students and the lowest score was 4 students with a score of 75. Based on the results of obtaining the above scores, it can be seen the distribution of frequency and the lowest highest value of learning outcomes of control class students can be seen in tables 12 and 13 below.

Table 8 highest and lowest student grades

No	Name	Highs and lows
1	Muhammad chairul umam	90
2	Nanda Anggraini	90
3	Rahmat Triansyah Abdur	90
4	Ramadan	90
5	Reva	70

Table 9 Distribution of Learning Outcomes of Class XI Social Studies Students 1 (Control Class)

Interval Valuation	Frequency	Percentage of Student Learning Outcomes	Criterion
86-100	4	$4 : 30 \times 100 = 13.33\%$	Very Good
70-85	26	$26 : 30 \times 100 = 86.66\%$	Good
55-69	0		Enough
40-54	0		Less
<40		0	Very Lacking
Sum	30	100	
Average	82,33	Good	

Table 10 Test Score Results Data of Experimental and Control Class Students

Class	Value	
	Highest	Lowest
Experiment	95	75
Control	90	70

In the table above, it can be seen that the test results of grade XI IPS 1 students as an experimental class using the wordwall game application are higher than the test results of grade XI IPS 2 students as a control class, which uses conventional learning methods. This means that the influence of using *the wordwall game* application has a better impact on student learning interest in SMA Negeri 2 Sanga Desa (Synthesis, 2018).

2. Data Analysis Comparison of Learning Outcomes of Experimental and Control Classes

From the experimental class learning results, an average score of 85.66% was obtained from the overall student score of 2570/30 after looking at the criteria for the average score of the students' learning interest test. "Very good", good, enough, less, very less. It can be seen in the control class that the score is 82.33% in the category "Good" obtained from the total student score 2470/30 where 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. Where the average learning outcome 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 influence on the use of application media *wordwall game* after seeing the students' interest in learning. The recapitulation of students' learning interest in the experimental class and control class can be seen in the following table:

Table 11 Recapitulation of Comparison of Learning Results for Experimental Class and Control Class

Interval Assessment	Experimental Class		Control Class		Criteria
	F	Percentage	F	Percentage	
86-100	14	46,66%	4	13,33%	Very well
70-85	16	53,33%	26	86,66%	Good
55-69	0	0,00	0	0,00	Enough
40-54	0	0,00	0	0,00	Less
<40	0	0,00	0	0,00	Very less
Amount	30	100	30	100	

From table above is visible that the score is 86-100 classified **very Good** in the control class, namely 4 (13.33%) student, while in the experimental class it was 14 (46.66%) student, and value 70-85 in the shape of **Good** in the control class, namely 26 (86.66%) students while at student experiment, namely 14 (86.66%) students, a score of 55-69 in the sufficient category in the control class, namely 0 (0%) student while in the experimental class it is 0 (0%) student, mark 40 -54 on category less in the control class as much as 0 (0%) student-students while in the experimental class 0 (0%), value <40 in the control class.

From this it can be concluded that the results of the experimental class are better than the control class. This is because the experimental class uses learning methods whereas the control class only uses learning methods *conventional* such as lectures, discussions and questions and answers.

CONCLUSION

Based on the research results, it can be concluded that the use of application media *wordwall game* The results of students in economics subjects are very influential in improving the quality of the teaching and learning process at SMA Negeri 2 Sanga Desa based on the results of the t test = 2.645, meaning $t_{count} \geq t_{table}$ or $7.277 \geq 1.697$. This means that there is an influence on the use of application media *wordwall game* on the learning outcomes of students at SMA Negeri 2 Sanga Desa. Means reject H_0 and accept H_1 . So the hypothesis of this research is that it is able to grow and improve student outcomes in the learning process, there is an influence of the use of application media *wordwall game* towards students' interests at SMA Negeri 2 Sanga Desa.

After knowing the results of the research that the author conducted, there are several suggestions that the author conveys, including:

1. For students, by using applications *wordwall game* the teaching and learning process becomes more interesting and is able to create a pleasant atmosphere so that students are more active and can improve student learning outcomes.

2. For teachers, especially teachers in economics subjects, with the use of applications *wordwall game* able to be an alternative for teachers in interesting and fun learning activities.
3. For schools, use of applications *wordwall game* can be applied to improve students' abilities in the teaching and learning process.
4. For future researchers, provide references to future researchers who are related to this research problem.

REFERENCE

- Abib, R. (2017). Types of research data. *Journal of Data Collection Techniques in Research Design*, 4(2), 33–41.
- Aditia, A. (2019). The Influence of Self Esteem and Learning Independence on the Learning Achievement of Economics Education Students at Siliwangi University. *Developmental psychology*, October 2013, 1–224.
- Aisha. (2019). *The Influence of the Two Stay Two Stray Learning Model on Student Learning Outcomes in Social Sciences Subjects Class IV Min 4 Medan City 2018/2019 Academic Year*.
- Aliarti, R. (2019). The Influence of the Two Stay - Two Stray Learning Model on Student Learning Outcomes in Economics Subjects at Disma Muhammadiyah 1 Palembang. *Neraca Journal: Journal of Accounting Education and Economics*, 3(1), 108–117. <https://doi.org/10.31851/neraca.v3i1.3716>
- Apriani, E. (2019). *The Effect of Implementing the Two Stay Two Stray Learning Model on the Economics Learning Outcomes of Class Xi Students at SMA Negeri 2 Prabumulih in the 2018/2019 Academic Year*. PGRI University Palembang.
- Feladi. (2017). The Influence of the Two Stay Two Stray Cooperative Learning Model on Stay Two Stray Student Learning Outcomes. The Two Stay Two Stray type cooperative learning model was developed by Spencer Kagan. This learning model can be used for all students. *Journal of Information and Science Education*, 6(1), 126–131.
- Fitri, H., & Wardi, Y. (2017). *The Influence of the Type Two Stay Two Stray Learning Model and Interest in Learning on Economic Learning Outcomes in Class X Students of Dian Andalas-Padang High School*.
- Handayani, 2020. (2018). Research methodology. *Applied Chemistry International Edition*, 6(11), 951–952., 2020, 10–27.
- Hidayatullah, A. (2020). *The influence of the two stay two stray type cooperative learning model on learning outcomes and learning interest*. 6, 24–36.
- Huda. (2016). *Teaching and learning model* (D. KK (ed.); VII). STUDENT LIBRARY. Pustakapelajar.co.id
- Huda, W. (2021). The Influence of the Two Stay Two Stray Model on the Mathematics Learning Outcomes of Class II Elementary School Students. *Journal of Elementary Education Didactics*, 5(2), 507–522. <https://doi.org/10.26811/didaktika.v5i2.319>
- Marjuki. (2020). *181 palkem learning models* (N. A. N. (ed.)). PT Rejama Rosdakarya. www.rosda.co.id
- Meliana, I., Hariani, L. S., & Afian, A. (n.d.). *Two Stay Two Stray Learning Model, Learning Discipline and Learning Readiness : Influence on the Economics Learning Motivation of Class XI IPS Students*. 68–77.

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- National, W., Competency, P., & School, G. (2020). *Two Stay Two Stray (TSTS) Model in Elementary School Mathematics Learning*. 3(3), 2037–2042.
- Ramadhani, R. (2021). *Educational Research Statistics* (E. Widiyanto (ed.); Digital, 2). DATE. www.prenadamedia.com
- Riadi, M. (2016). *Two stay two stray type learning model*.
- Sartika, N. (2016). *The Effect of Using the Two Stay Two Stray (Tsts) Method on Social Sciences Learning Results for Class V Min 6 Bandar Lampung Year*.
- Synthesis, N. (2018). The Influence of the Two Stay Two Stray Cooperative Learning Model on Student Learning Activities and Learning Outcomes (Experimental Study on Economics Subjects for Class Xi Students at Sma Negeri 1 Cigugur). *Business Lantern Journal*, 6(2), 71. <https://doi.org/10.34127/jrlab.v6i2.184>
- Thabroni, G. (2022). *learn meaning, processes, systems, characteristics, results and principles*. <https://serupa.id/belajar-pengertian-proses-sistem-ciri-hasil-prinsip/>
- Trianto. (2015). *Direct Learning Model (Direct Instruction)*. <https://www.wawasanpendidikan.com/2019/12/model-pembelajaran-langsung-direct-Instruction.html>
- Yulia, Y. (2019). The strategy used in this research is the Associative Strategy. *STEI Repository*, 2007, 45–61.
- Arikunto. (n.d.). *of character education, anida istiqomah al munawaroh, fai ump* (pp. 8–34).
- Khusna. (2014). *Implementation of the Two Stay Two Stray Learning Model at SMKN 3 Yogyakarta*. *Paper Knowledge*. Toward a Media History of Documents.
- Ningtyas, M. (2018). *Chapter III - Research Method Research Method*. *Research methods* (pp. 32–41).
- Sugiyono, P. D. (2019). *Research Methods* (M (S. T. (ed.))). Alfabet. www.cvalfabeta.com. Dr. Apri Nuryanto S.Pd., Ed.).
- Synthesis, N. (2018). The Influence of the Two Stay Two Stray Cooperative Learning Model on Student Learning Activities and Learning Outcomes (Experimental Study on Economics Subjects for Class Xi Students at Sma Negeri 1. *Cigugur*). *Business Lantern Journal*, 6(2), 71. <https://doi.org/10.34127/jrlab.v6i2.184>
- Thabroni, G. (2021). *Research methods, definitions & types according to experts*. <https://doi.org/https://serupa.id/metode-penelitian/>