Effectiveness of Using Learning Media to Improve Student Learning Outcomes at SMA Negeri 10 Wajo

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Abstract

This thesis describes several things related to the influence of the use of learning media on learning outcomes, especially for students at SMA Negeri 10 Wajo. The method used in reviewing the research in this thesis is ex post facto with a quantitative approach. The data collection techniques used in this research are: observation, questionnaires and documentation. Research based on initial observations shows that the use of appropriate learning media can influence student learning outcomes. The results of this research indicate that the use of learning media has a significant positive effect on student learning outcomes. Students who study with audiovisual learning media tend to achieve better learning outcomes compared to those who do not use this media.

Keywords: *learning media, learning outcomes, audiovisual.*

INTRODUCTION

Background

Learning is the creation of an environmental system that allows for a more adequate learning process, so good learning strategies must be created in it to create better instructional goals. Law number 20 of 2003 concerning the national education system explains that education is conscious and planned efforts to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, noble morals, and skills needed by themselves, society, nation and state.

Education is an effort made by teachers or educators to form students with character, quality and independence, so that education is needed to achieve their goals.

In reality, it is not uncommon to find that students have quite potential abilities, but because in the learning process teachers use inappropriate learning media, this will affect student learning outcomes. At SMA Negeri 10 Wajo, the learning process still applies a lecture system in teaching, so that students feel bored, sleepy and even not interested in following the learning process so that the material delivered by the teacher is not understood by the students, which of course will have an impact on student learning outcomes in particular. economics subjects.

Based on observations through interviews conducted by researchers with 10 class XI students majoring in Social Sciences at SMA Negeri 10 Wajo, they consider that economics is an easy subject. Researchers also asked the students in the learning process which learning media they preferred to use or not. They answered that they preferred it when teachers used media in the learning process, because the material taught by the teacher would be easy to understand, the learning process would be more interesting, students would not feel bored and sleepy.

The researcher asked the economics teacher concerned, namely Mr. Muhammad Isya Ansyari, SE, how to use media in the learning process and also the learning outcomes of students in economics subjects. He said that during the learning process he rarely used learning media such as audio-visual media, only books, worksheets and lecture methods were often used. And regarding the students' learning outcomes, Mr. Isya said that the learning outcomes of the subjects he teaches in terms of daily tests, there are still many of them whose results are unsatisfactory and some even do not reach the specified KKM.

The learning outcomes that do not reach the KKM are caused by several problems, such as there are still many students who think that economics is an easy lesson,

when the learning process takes place it is still monotonous using the lecture method, so students feel sleepy and bored, even students not interested in learning, so that much of the material taught by teachers is not understood or comprehended by students, which of course will affect student learning outcomes, a good learning process will produce good learning products too.

There are many technological tools or sophisticated media that are used in learning, such as computer media, LCD projectors, which are modern multimedia-based tools. Through media or technology like this, educators can easily deliver assignment material interactively and variedly to their students, Heri Setiawan (2016).

Regarding this problem, researchers are interested in conducting research about **"The Effect of Using Learning Media on Student Learning Outcomes".**

Problem Formulation

So that the research is more focused, the problem can be formulated: Is there an influence of learning media on student learning outcomes?

Research purposes

The objectives to be achieved in this research are: to determine the effect of using learning media on student learning outcomes.

Benefits of research

1. Theoretical Benefits

It is hoped that the results of this research will be useful for increasing knowledge and insight as well as developing more varied learning media, so that it can improve student learning outcomes, especially in economics subjects.

2. Practical Benefits

a) For schools, as input to the head as material for consideration in efforts to improve and complete educational facilities and infrastructure to support the learning process at school and as knowledge about the importance of using media in learning.
b) For teachers, as information so that student learning outcomes and use of learning media can increase.
c) For students, so that students are more interested in the learning process.
d) For future researchers, as information in looking for references for further research.

METHOD

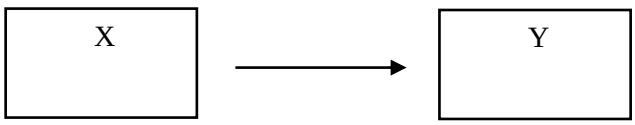
A. Type and Research Design

1. Type of Research

This type of research is ex post facto research. According to Sugiyono (2016: 7) ex post facto research is research carried out to examine events that have occurred and then work backwards to find out the factors that caused the incident to occur. The analysis used is a quantitative data approach. A quantitative approach is research with the data used in the form of numbers or qualitative data that is summarized (Sugiyono, 2013: 14)

2. Research Design

By determining the variables that are the subject of research, a research design can be designed so that these variables describe the relationship between one variable, in this case the design of the relationship between variables X and Y can also be described.



Information:
X: Use of Learning Media
Y: Student Learning Outcomes

B. Location and Place of Research

The location where researchers will collect data directly from respondents is at SMA Negeri 10 Wajo class XI majoring in social studies, economic subjects, which is located on Jl. Poros Sengkang - Soppeng,

Wage Village, Sabbangparu District, Wajo Regency, South Sulawesi Province

C. Population and Sample

1. Population

Muhadi Muhadi (2014: 33) states that population is the totality of all possible values, both calculation results and measurement results, quantitative and qualitative of a certain characteristic regarding a clear and complete set of objects. The population in this study were class XI students majoring in Social Sciences at SMA Negeri 10 Wajo with a total research population of 30 students.

Table 1. Population of class XI students majoring in Social Sciences at SMA Negeri 10 Wajo

Class	Number of Students	
	Man	Woman
XI	17	13
Total	30 Students	

Source: Data from students at SMA Negeri 10 Wajo

2. Sample

So, the sample size and population used as respondents in this study were 30 people, all of whom were Class XI IPS students at SMA Negeri 10 Wajo.

D. Operational Definition of Variables

1. Learning Outcomes

The learning outcomes referred to in this research are the grades of class

2. Learning Media

The learning media referred to in this research are everything that teachers use in the learning process, while the media used in this research is audio-visual media.

E. Research Variables

1. Variable Type

a. Dependent Variable

The dependent variable is a variable that is influenced by the independent variable (Muhadi 2014:24). The independent variable in this research is learning outcomes. Learning outcomes are a measure of student learning that determines how well students are able to achieve the learning goals that have been set. This goal arises from the impressions of interactions during learning which cause changes in each individual. We can see students' learning success through their learning outcomes.

b. Independent Variable

The independent variable is a variable that we often call a stimulus variable, meaning that the independent variable is a variable that influences the dependent variable (Muhadi, 2014:24). The independent variable in this research is the use of learning media. The use of learning media refers to choosing a variety of media that is interesting and appropriate to the learning carried out by the teacher and whether the learning media used by students is correct and interesting or not. These variables are factors that are thought to influence student learning outcomes which are the dependent variable of this research.

F. Research Instruments

To support the data collection process and obtain the information needed by researchers, researchers use instruments in the form of questionnaires to collect information in the field. The Likert scale is a scale that measures the attitudes, opinions and perceptions of a person or group of people about events or social phenomena.

G. Data Collection Techniques

In order to obtain accurate data and information, this research used a number of data collection techniques such as:

1. Observation (Observation)

Observation is a data collection technique by making direct initial observations of the research location. This observation was carried out to directly observe the influence of learning media on the learning outcomes of class XI Social Sciences students at SMA Negeri 10 Wajo.

2. Questionnaire (Questionnaire)

A questionnaire is a way of collecting data by giving respondents a written list of questions. The questionnaire technique is the main method used by researchers to collect data in this research. In this study, 30 respondents were surveyed.

3. Documentation

Documentation techniques are used to obtain supporting information in this research, such as a description of the research location and organizational structure, as well as vision and mission statements.

H. Instrument Testing Techniques

1. Instrument Validation and Rehabilitation Test

Validity and reliability testing is used for questionnaire instruments

a) Validity Test

To determine the validity of the question items, a validity test of the question items is carried out. According to Suharsim Arikunto (2013:211), validity is a measure that shows the validity or level of validity of an instrument.

The Pearson product moment correlation technique is used in instrument validation testing. Next, the scores are processed with product moment correlation using the SPSS version 22 application. After the calculated r value is obtained, it is compared with the r value in the table at a significance level of 5%. Valid criteria are achieved if rcount > rtable.

The correlation formula is:

Information:

$$r_{xy} = \frac{n \sum XY - (\sum X)(\sum X)}{\sqrt{\{n \sum X^2 - (\sum X)^2\}\{n \sum AND^2 - (\sum AND)^2\}}}$$

r_{xy} = Correlation Coefficient

$\sum Y$ = Number of scores in the Y distribution

$\sum X$ = Number of scores in the Y distribution

$\sum XY$ = The number of times the scores of X and Y are paired

N = many subjects to be studied

X = learning media score

Y = learning outcome score

b) Reliability Test

The reliability test is useful for determining whether the instrument, in this case the learning outcomes test and student response questionnaire, can be used more than once, at least by the same respondent, and will produce consistent data. In other words, instrument reliability characterizes the level of consistency.

I. Data Analysis Techniques

1. Descriptive Analysis

Sudjana (Muhadi, 2014:77) states that descriptive analysis is a statistical step that tries to describe and analyze groups of data only without making or drawing conclusions about larger populations or groups. In this research, the material is classified based on the PAP type II formula proposed by Saptono (2020:5) as follows: Point percentage value x (highest possible score - lowest possible score) + minimum possible score. Table 3.5 below shows the PAP type II categories:

Table 4. Type II benchmark reference assessment (PAP) categories

Competency Assignment Level	Letter Value	Variable Trend Categories
81%-100%	A	Very good
66%-80%	B	Good
56%-65%	C	Currently
46%-55%	D	Not good
Below 46%	AND	Very bad

In this study, variables were measured using a questionnaire determined based on a Likert scale with four answer choices.

a) Student Learning Results

The average value of economics students' report cards for the odd semester of IPS

class XI was used to reveal variable data on student learning outcomes. Therefore, to determine the level of PAP type II, it is calculated:

Potential highest score: 100
Lowest potential value: 0
The following table 3.5 presents the frequency of student learning outcomes:

Table 5. Frequency table of student learning outcomes

Criteria	Category
81% (100-0) +0 s/d 100% (100-0) +0	Very good
66% (100-0) +0-<81% (100-0) +0	Good
56% (100-0) +0-<66% (100-0) +0	Currently
46% (100-0) +0-<56% (100-0) +0	Not good
Under 46% (100-0) +0	Very bad

b) Use of Learning Media

To reveal information from the variable use of learning media, a questionnaire consisting of 15 statements was used, the highest value was 4 and the lowest value was 1, so the highest value obtained was:

Potential highest score: 4 x 15 = 60
Lowest potential value: 1 x 15 = 15
The following table 3.6 presents the frequency of learning media:

Table 6. Table of frequency of use of learning media

Criteria	Interpretation
81% (60-15) +15 s/d 100% (60-15) +15	Very good
66% (60-15) +15-<81% (60-15) +15	Good
56% (60-15) +15-<66% (60-15) +15	Enough
46% (60-15) +15-<56% (60-15) +15	Not good
Under 46% (60-15) +15	Very bad

2. Hypothesis Testing

Test the research hypothesis using a simple linear regression analysis formula. This formula is used to determine the influence of learning media on the learning outcomes of class XI IPS students at SMA Negeri 10 Wajo. According to Sugiyono (2013: 47) the simple linear analysis formula is as follows:

$$Y' = a + bX$$

Where:
Y= Learning Outcome Variable
X = Learning Media Variable
a = Constant Price
b = Direction number or coefficient

For simple linear regression purposes, the F-test is used via the Anova table. The hypothesis is:
H0: α: $\beta = 0$, against
Hi: $\alpha \neq 0$ or $\beta \neq 0$

The test criteria are Fcount > Ftable. At a significance level of 5%, H0 is rejected which states that learning media has no significant positive effect on student learning outcomes, and H1 is accepted which states that learning media has a significant positive effect on student learning outcomes, and vice versa. If Fcount < Ftable at the 5% significance level, H0 is accepted, which means that learning media has no significant positive effect on student learning outcomes, and H1 is rejected.

RESULTS AND DISCUSSION

A. Research Results

1. General description of the research location

a) A brief history of SMA Negeri 10 Wajo

State High School (SMA) 10 Wajo or previously known as SMAN 1 Sabbangparu is a school located in South Sulawesi province, Wajo Regency, whose address is Wage village, which began accepting students in 2005,

because it did not yet have a building for activities. learning to teach, then staying at the village office for a salary of approximately 6 months. The background to the formation of SMA Negeri 10 Wajo was that initially a meeting was held at the sub-district of the education office to discuss the location for the construction of SMA Negeri 10 Wajo.

As for the purpose of establishing SMA Negeri 10 Wajo, namely to expand opportunities to obtain education, it is deemed necessary to open a new school unit, especially senior secondary school, and in connection with the above, it is necessary to determine this by a decision of the Regent of Wajo, considering the regional regulation of Wajo Regency number 1 of 2001 concerning the authority of the Regency Government. Wajo as an autonomous region. Based also on the decision of the Regent of Wajo, namely H. Andi Asmidin, he has decided that the costs of implementing this decision will be differentiated from the Wajo Regency APBD. With the enactment of this decision, the number of state high schools in Wajo Regency will be nine so that on May 15 2005, the State High School was established. 10 Wajo in Wajo district.

SMA Negeri 10 Wajo has quite a large area of land so it has several buildings that are still good and in use. The buildings that are still in good condition can be seen from Table 4.1 Buildings of SMA Negeri 10 Wajo.

Table 7. Wajo 10 State High School buildings

No.	Building Type	Amount
1.	Cashier's Room	1
2.	Classroom	12
3.	TU room	1
4.	Student Council Room	1
5.	UKS room	1
6.	Teachers' Council Room	1
7.	Laboratory	1
8.	Library	1
9.	Picket Room	1
10.	School Radio Room	1
11.	Prayer room	1
12.	Toilet room	5
13.	Sports field	1
14.	Parker Field	1

B. Vision and Mission of SMA Negeri 10 Wajo

1. Everyone

The vision of SMA Negeri 10 Wajo is to excel in character, compete in achievement and care for the environment.

2. Mission of SMA Negeri 10 Wajo

a) Forming students who have faith and piety to God Almighty as well as good morals and good manners.
b) Creating superior human resources through the 3 S culture (sipakatau, sipakalebbi, sipakainge)
c) Improving academic and non-academic achievements by integrating local wisdom value systems
d) Creating a conducive, clean and beautiful school environment.

C. Number of Students, Teachers, Education Personnel at SMA Negeri 10 Wajo

The total number of teachers at SMA Negeri 10 Wajo in the 2022/2023 school year is 26 people, while the number of civil servants is 17 people, the number of PPPK is 5 people, the number of non-permanent teachers is 4 people, and the number of educational staff is 7 people, so the total number of teaching staff and there are 33 educators at the school. Meanwhile, the number of male students is 132 people and the number of female students is 172 people, the total number of students is 311 people. For more details, see the table.

Table 8. Number of students, teachers and teaching staff at SMA Negeri 10 Wajo

No.	Educator	Woman	Man
1.	Civil servants	10	7
2.	PPPK	4	1
3.	Teachers are not permanent	4	0
4.	Non-permanent officers	5	2
5.	Student	172	132
	Amount	195	142

Source: SMA Negeri 10 Wajo

D. Instrument Test

1. Validation Test

Validity test is a test carried out to determine whether a questionnaire used in research is valid or not. The questionnaire used will first be tested to see whether it is valid and reliable. The following is a table of instrument validity tests obtained based on research conducted at SMA Negeri 10 Wajo, based on the results of a questionnaire distributed to students.

Results of Validity Testing of Learning Media Variables

No. Item	r count	r table	Information
1.	0.848	0.361	Valid
2.	0.910	0.361	Valid
3.	0487	0.361	Valid
4.	0.389	0.361	Valid
5.	0.502	0.361	Valid
6.	0.373	0.361	Valid
7.	0.470	0.361	Valid
8.	0.482	0.361	Valid
9.	0.410	0.361	Valid
10.	0.523	0.361	Valid
11.	0.615	0.361	Valid
12.	0.467	0.361	Valid
13.	0.371	0.361	Valid
14.	0.404	0.361	Valid
15.	0.424	0.361	Valid

Table 9. is a table of test results using instrument validity. Based on the statements in the questionnaire distributed to students, it can be seen the influence of the use of learning media on student learning outcomes at SMA Negeri 10 Wajo. Of the 15 statement items in the questionnaire/questionnaire regarding the influence of using learning media, there were no items that met the invalid criteria.

2. Reliability Test

Reliability tests are used to measure whether or not an instrument used is reliable and whether the data obtained from research

results is reliable or unreliable based on questionnaires that have been distributed and filled in by students. The following is a table of instrument reliability tests obtained based on research conducted at SMA Negeri 10 Wajo from the results of questionnaires distributed to students which were processed using the SPSS version 22 application.

Table 10. Results of instrument reliability testing

No. Statement	Nilai Cronbach Alpa	Standard r Value (N=30)
1.	0.705	0.6
2.	0.714	0.6
3.	0.732	0.6
4.	0.738	0.6
5.	0.741	0.6
6.	0.729	0.6
7.	0. 711	0.6
8.	0.694	0.6
9.	0.742	0.6
10.	0.682	0.6
11.	0.711	0.6
12.	0.671	0.6
13.	0.690	0.6
14.	0.728	0.6
15/.	0.715	0.6

Source: Data Processing Results via SPSS 22

E. Description of Research Variables

The independent variable in this research is the use of learning media and the dependent variable is student learning outcomes. The description of the data presented is processed data, it can be seen from the mean, median, mode, standard deviation, range, minimum and maximum. The following are the results of descriptive analysis using SPSS version 22. A summary of the results of descriptive statistical analysis of research variables is presented in table 11. as follows:

Table 11. Summary of descriptive analysis results

	Use of Learning Media	Student Learning Outcomes
N valid	30	30
Missing	0	0
Median	45.97	85.30
Mode	48.00	85.25
Std.	48	84[a]
Deviation	3.557	1.557
Variance	12.654	2.424
Range	14	6
Minimum	34	83
Maximum	51	89

Source: Data Processing Results via SPSS 22

1. Descriptive Research Data on Student Learning Outcome Variables

From the results of calculating learning outcome variable data using SPSS version

22, it was obtained that mean = 85,300, median = 85,250, mode value = 84, standard deviation = 1,557, range = 6.0, minimum value = 83.0, maximum value = 89.0. Based on this information, the following calculations are presented using PAP type II.

Potential highest value = 100
Lowest potential value = 0
Value = lowest value + % (highest value – lowest value)
0 + (81% (100-0)) = 81
0 + (66% (100-0)) = 66
0 + (56% (100-0)) = 56
0 + (46% (100-0)) = 46

Based on this data, it is known that the frequency distribution of student learning outcomes is as presented in table 12 below:

Interval	Frequency	Percentage	Category
81-100	30	100%	Very good
66-80	0	0%	Good
56-65	0	0%	Currently
46-55	0	0%	Not good
0-45	0	0%	Very bad

Table 12 shows that all 30 respondents had very good learning outcomes, this shows that the learning outcomes of Class XI IPS students at SMA Negeri 10 Wajo are generally very good. If mean = 85,300, median = 85,250, class range is between 81-100, mode = 84, class range is between 81-100, which can be interpreted as a very good category.

2. Descriptive Research Data on Learning Media Use Variables

According to SPSS version 22, based on the results of data calculations for the variable use of learning media, mean = 45.97, median = 48.00, mode value = 48, standard deviation = 3.557, range = 14, minimum value = 34, maximum value = 51.

Meanwhile, for the use of variable learning media according to data, the highest response value is 4 x 15 = 60 and the lowest response value is 1 x 15 = 15. The range of frequency distribution values for the use of learning environment variables is as follows:

Value = lowest value + % (highest value – lowest value)
15 + (81% (60-15)) = 51.45 rounded to 51
15 + (66% (60-15)) = 44.7 rounded to 45
15+ (56% (60-15)) = 40.2 rounded to 40
15 + (46% (60-15)) = 35.7 rounded to 36
15 + (0% (60-15)) = 15

Based on this data, it can be seen in the variable categories of use of learning media as presented in table 4.7 below:

Table 13. Table of frequency of use of learning media

Interval	Frequency	Percentage	Category
51-51	2	6,7%	Very good
45-50	18	60,0%	Good
40-44	6	20,0%	Currently
36-39	2	6,7%	Not good
15-35	2	6,7%	Very good
Amount	30	100%	

Based on Table 12, it can be seen that 6.7% are in the very good category with the variable use of learning media, 60.0% are in the good category, 20.0% are in the fair category, 6.7% are in the sufficient category, and 6, 7% is in the very bad category. In conclusion, the majority of respondents stated that the use of learning media was well received by teachers and students. Based on this information, it can be concluded that the use of learning media for Class XI IPS SMA Negeri 10 Wajo is

generally in the good category. With mean = 45.98, median = 48.00 between 45 and 50, with mode = 48 between 45 and 50 which can be interpreted as a tendency to fall into the good category.

F. Hypothesis Testing

This research uses simple linear regression analysis for hypothesis testing. The research hypothesis that can be tested is that the use of learning media is thought to have a significant positive effect on student learning outcomes.

The test criteria are if Fcount > Ftable at the 5% significance level, reject H0 which states that learning media has no significant positive effect on student learning outcomes, and accept H1 which states that learning media has a significantly positive effect on student learning outcomes. See Table 13.

Table 14. Simple linear analysis

Variable	B	F_{count}	Say	T_{count}	Say
constant	88.772			9.872	0.000
		2.112	0.281		
Instructional Media	0.189			2.112	0.041

Results: Data Processing Source via SPSS 22

The F test with the anova table is used to determine simple linear regression. The accepted hypothesis is H0: α: β or β ≠ 0. The results of the F test calculation show that the F count is 2.211, while the F table is 2.048, which means F count > F table. Because F count > F table, H0 is rejected and H1 is accepted, which means that the learning media variable depends on student learning outcomes, so the results of data management in this research with the hypothesis "it is suspected that the use of learning media has a significant positive effect on student learning outcomes" can be accepted.

B. Discussion

Based on the results of data analysis, 2 students out of 30 respondents (6.7%) stated that the use of learning media was carried out very well, in the good category there were 18 students (60.00%), in the sufficient category there were 6 students (20.0%). %), in the poor category there were 2 students (6.7%) and in the very poor category 2 students (6.7%)"). Then, in the description of the student learning outcomes data, it was proven that all students had very good learning outcomes, namely 30 students (100%). According to Arsyad (2019:10) learning media has a role in the learning process, as he stated, learning media is anything that can be used for teaching and in the learning process to convey messages or information so that it can attract students' attention and interest in learning. The use of educational media refers to the teacher's selection of appropriate media options for teaching materials. Apart from that, the use of learning media is also related to whether it is correct or not, and whether or not students are interested in using the learning media. Because accuracy in selecting and using media also influences the success of learning objectives.

Based on the conclusions of the descriptive analysis, students who use learning media very well or well should maintain the quality of their use of learning media, as do students who use learning media fairly or poorly. The use of learning media must be further improved.

Based on the results of the hypothesis test that the use of learning media has a significant positive effect on student learning outcomes, it is assumed that teachers and students continue to apply

the use of learning media well in various types of learning media. So that learning material can be delivered in a controlled and correct manner in accordance with student learning objectives. One way to improve the quality of learning media is to carry out activities that support the quality of learning media, such as chatting with friends, reading textbooks or attending seminars.

CONCLUSION

Based on the results of the analysis, the following conclusion can be put forward:

1. Based on the results of descriptive analysis, student learning outcomes are in the very good category with a percentage of 100% and mean = 85,300, median = 82,250 is in the class range 81 – 100 and mode value = 84 is in the class range 81 – 100. The use of learning media is in the category good with a percentage of 60.0% and mean = 45.98. Median = 48.00 is between 45-50 and Mode = 48 is between 45-50.
2. The use of learning media has a significant positive effect on student learning outcomes. This is proven by the F count of 2,211 with an F table of 2.048, which means the F count is > F table, which means the use of learning media has a significant positive effect on student learning outcomes.

SUGGESTION

Looking at the research results, several things can be suggested such as:

1. Considering that the use of learning media influences student learning outcomes, teachers need to design learning media appropriately according to the material to be taught.
2. One way to improve the quality of learning media is to carry out activities that support the quality of learning media, such as exchanging information with friends, reading textbooks or attending seminars.

BIBLIOGRAPHY

Amri, S.dan Ahmadi, I. 2013. Proses Pembelajaran Inovatif dan Kreatif dalam Kelas. Jakarta: PT Pustakarya.

Arsyad, Azhar. 2019. Media Pembelajaran. Cet. 17. Jakarta PT. Raja Grafindo.

Dimyati & Mudjiono. (2013). Belajar dan Pembelajaran. Jakarta: Rineka Cipta.

Djamarah, Syaiuful, Bahri. 2010. Strategi Belajar Mengajar. Cet 14. Jakarta: Rineka Cipta.

Haling, Abdul, dkk. 2007. Perencanaan Pembelajaran. Cet.1. Makassar: Badan Penerbit UNM

Hamdani 2010. Strategi Belajar Mengajar. Bandung: CV Pustaka Setia

Heri Setiawan. (2016) Peran Multimedia Dalam Meningkatkan Motivasi Belajar Siswa Kelas X1 SMA Al Islam 3 Surakarta.

Helena Yunia Mega. (2021) Pengaruh Media Pembelajaran dan Motivasi Belajar Siswa terhadap Prestasi Belajar Pada Mata Pelajaran Ekonomi (Lintas Minat) Siswa SMA Kelas XI MIPA di SMA Negeri 1 Kalasan. Skripsi Universitas Sanata Darma Yogyakarta.

Kunandar.2013. Penelitian Autentik. Jakarta: Rajawali Pers.

Muhadi, F. X. (2014). Modul metode penelitian. Yogyakarta: Universitas Sanata Dharma.

Musfiqom. 2012. Pengembangan Media dan Sumber Pembelajaran. Jakarta: Prestasi Pustaka.

Purwanto. (2010). Evaluasi Hasil Belajar. Yogyakarta: Pustaka Belajar.

Siyoto, Sandu, dkk. (2015). Dasar Metodoligi Penelitian. Literasi Media Publishing.

Sudjana, N. (2010). Penilaian Hasil Belajar Mengajar. Bandung: PT. Remaja Rosdikarya.

Sugihartono. (2013). Psikologi Pendidikan. Yogyakarta: UNY Press.

Sugiyono. (2013). Metode penelitian kuantitatif, kualitatif, dan R&D. Bandung. CV Alfabeta**.**