HERITAGE
Journal of Social Studies
OJS: http://heritage.iain-jember.ac.id
|ISSN (Online) 2723-0759|ISSN (Print) 2723-0635|

Pengaruh Penggunaan Media Video Pembelajaran Berbasis Animaker Terhadap Hasil Belajar IPS

The Impact of Using Learning Video Media Animaker in Social Studies Learning Outcomes

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INFORMASI ARTIKEL
Submission: August 09, 2022
Revision: December 21, 2022
Publish: December 30, 2022

KATA KUNCI
animaker learning videos, learning results, learning media, social studies learning, learners

ABSTRACT

This research is motivated by the increasingly uncertain pandemic Covid-19 situation and has yet to show when it will end. Learning during the pandemic is carried out using the Distance Learning (PJJ) system using limited media. Learning could be carried out face-to-face but returned online due to the increasing number of Covid-19 cases. One of the problems teachers face during online learning is low learning outcomes, especially in social studies subjects. The value of learning outcomes can be increased continuously during the learning process, one of which is utilizing and maximizing learning media. This study aimed to determine whether or not the use of Animaker-based instructional video media on social studies learning outcomes for seventh-grade students of SMP N 1 Cikarang Selatan. This study uses a quasi-experimental quantitative approach with a non-equivalent control group design—data collection techniques used learning outcomes tests and questionnaires distributed to the research sample. The sample in this study is class VII.3 as the experimental class and VII.4 as the control class. The analytical technique used is hypothesis testing with the Wilcoxon test technique or the Mann-Whitney test, using statistical tests assisted by IBM SPSS Statistics Version 25. The results of processing and testing research data show differences that at least increase the learning outcomes of experimental class students after the treatment is applied. , with an Asymp. Sig. (2-tailed) value of 0.000 < 0.05. These results align with the questionnaire data on student responses to the use of Animaker-based learning video media, which received positive acceptance as a medium in social studies learning with a percentage of 81%.

A B S T R A K

Penelitian didasari oleh kondisi pandemi Covid-19 yang kian tidak menentu dan belum menunjukkan kapan berakhirnya. Pembelajaran selama masa pandemi menerapkan sistem Pembelajaran Jarak Jauh (PJJ) dengan menggunakan media yang terbatas. Pembelajaran sempat dilaksanakan secara tatap muka, namun kembali daring karena meningkatnya kasus Covid-19. Rendahnya hasil belajar merupakan salah satu masalah yang dihadapi guru dalam pembelajaran selama pembelajaran daring khsususnya pada mata pelajaran IPS. Nilai hasil belajar dapat ditingkatkan secara berkelanjutan selama proses belajar, salah satunya yaitu dengan memanfaatkan dan memaksimalkan penggunaan media pembelajaran. Penelitian ini bertujuan untuk mengetahui ada atau tidaknya pengaruh penggunaan media video pembelajaran berbasis animaker terhadap hasil belajar IPS peserta didik kelas VII SMP N 1 Cikarang Selatan. Penelitian ini menggunakan metode kuasi eksperimen dengan pendekatan kuantitatif, dengan rancangan non-equivalent control group design. Teknik pengumpulan data menggunakan tes hasil belajar dan angket yang disebarkan pada sampel penelitian. Sampel dalam penelitian ini yaitu kelas VII.3 sebagai kelas eksperimen dan VII.4 sebagai kelas kontrol. Teknik analisis yang digunakan yaitu uji hipotesis dengan teknik uji wilcoxon atau uji mann whitney,dengan menggunakan uji statistik berbantuan IBM SPSS Statistics Versi 25. Hasil olah dan uji data penelitian menunjukkan bahwa terdapat perbedaan yang setidaknya meningkat pada hasil belajar peserta didik kelas eksperimen setelah diterapkan perlakuan, dengan nilai Asymp. Sig. (2-tailed) 0,000 < 0,05. Hasil ini sejalan dengan data angket respons siswa terhadap penggunaan media video pembelajaran berbasis animaker yang mendapat penerimaan positif sebagai media dalam pembelajaran IPS dengan persentase sebesar 81%.

https://doi.org/ 10.35719/hrtg.v3i2.87

Introduction

Already during this period, the Covid-19 Pandemic has occurred in Indonesia. The pandemic started in a city in China at the end of 2019. This pandemic has affected various activities in human life, starting from the socio-economic sector, transportation, and, no doubt, education. In response to this, to prevent the spread of Covid-19, the world of education has made adjustments by carrying out bold learning (Yudiawan, 2020). The application of this dare learning is by Circular Letter or SE Number 4 of 2020 regarding the Implementation of Education Policy in the Emergency Period of the Spread of Coronavirus

Disease (covid-19). By implementing online learning, students and students can study anywhere without having to enter class together with a teacher or lecturer.

With the contribution of ICT or information and communication technology, the limitations of space and distance during brave learning can be overcome; the use of ICT technology can be in the form of hardware and also maximize the use of software, with the help of these students and teachers. Able to communicate and still be able to carry out learning well. As reinforced by Sandi (Syarifudin, 2020) That ideal learning during the brave learning period can be proven if the teacher can present appropriate learning material and shape students to participate in teaching and learning activities; the teacher can also use relevant learning media to facilitate the learning process. Thus, the teacher's creativity and innovation in daring learning are crucial to implementing brave learning. So by paying attention to these concepts, the change in learning from engaging learning to being bold during the Covid-19 pandemic is not a problem to be afraid of.

However, the reality on the ground is different, a study shows (Utami & Utami, 2020) found that during the pandemic, during the learning process, students were considered less active and included a massive number of students who also received learning outcomes below the KKM standard (minimum completeness criteria). the school has set that. A study reinforced this argument (Ula et al., 2021) and it was found that there was a decrease in learning outcomes for most students; the problem was caused by a lack of understanding of the material being taught, signal constraints, and boredom during learning.

According to the results of the researchers' discussions with the social studies teacher for class VII, the low learning outcomes were due to students feeling they had barriers to digesting learning content, as well as the lack of activeness of students in class, resulting in less than optimal absorption of the information obtained. One effort that can overcome difficulties in understanding learning material is by maximizing the use of learning media—considering that most social studies teachers in schools usually use the lecture method with the help of social studies textbooks. Moreover, current junior high school students are included in generation Z; the current generation is more inclined to like fun and practical things (Andarwati, 2019). Therefore, learning requires a combination of models, including approaches, methods, and effective learning media, so learning experiences can have more character and not be monotonous. Added to this is the stigma that is firmly attached to social studies subjects as learning that is boring and full of memorization. Furthermore, Yafie and Sutama (2019) Also, mention that the application of the lecture method is classified as a traditional learning method because it has been used for a long time in the teaching and learning process. So, there is a need for development and renewal in learning methods assisted by applying appropriate learning media. So that the result of the world of education

will be even better because it pays attention to the needs of students and keeps abreast of the times. Therefore, learning requires a combination of models, including approaches, methods, and effective learning media, so learning experiences can have more character and not be monotonous. Added to this is the stigma that is firmly attached to social studies subjects as learning that is boring and full of memorization.

The use of media in learning is also very important to note because according to Ali (Supriyono, 2018) there are several essential components in learning, such as learning purpose, lesson content, strategy, teaching media, and learning assessment. These materials are essential and interconnected. If part of the material is ignored, achieving the learning objectives won't be easy. Learning media is part of the components of learning and has a vital role to attract students' interest in learning (Tobamba, E. K., Siswono, E., & Khaerudin, 2019). A good interest in learning will, of course also help students digest the content of teaching materials so that this will also have a good impact on the final assessment.

To strengthen the information, the researcher conducted a preliminary study at one of the State Middle Schools in South Cikarang; after interviewing one of the social studies teachers at the school, we concluded that students had difficulty understanding the learning material. In this pandemic situation, teachers find it challenging to package social studies material that is much more concise, engaging, and easy to understand. According to the social studies teacher, he added that this problem also occurs in many other schools. Social studies subjects are known to have a stigma as being dull and full of rote topics, moreover, the current junior high school students belong to Generation Z, Andarwati (2019) says this generation tends to like things that are practical and fun. So that in this case, learning media are needed that are interesting, not monotonous, and make it easier for students to understand the learning material.

Researchers try to provide alternative solutions, namely by using learning video media. There has been a lot of research discussing the positive impact of using learning video media on student learning outcomes. One of the media that can be used in making learning video media is Animaker-based learning video media. Fajar (2017) and Khasanah (2019) research showed that Animaker-based learning video media had a good influence on students.

Therefore, from these problems, the researcher raised the research title "The Effect of Using Animaker-Based Learning Videos on Social Studies Learning Outcomes for Class VII at SMP Negeri 1 Cikarang Selatan".

Literature Review

Social Science Education Learning

The definition of IPS according to the National Committee for Social Studies (NCSS) (Nasution, 2011) is as follows. “Social studies is the integrated study of the

sciences and humanities to promote civic competence. Within the school program, social studies provide coordinated, systematic study drawing upon such disciplines as anthropology, economics, geography, history, law, philosophy, political science, psychology, religion, and sociology, as well as appropriate content from the humanities, mathematics, and natural sciences", which means that IPS is an integrated study of social sciences and humanities to develop citizen competence. Within the school program, IPS coordinates systematic studies that describe various disciplines such as Anthropology, Archeology, Economics, History, Law, Philosophy, Political Science, Psychology, Religion, and Sociology, as well as appropriate material from the Humanities, Mathematics, and Natural Sciences".

Udin (in Endayani, 2018) added the definition that IPS is a collection of social studies groups that have been simplified with the aim of education and teaching at elementary and middle school levels. Trianto (2012) Also, Social Sciences (IPS) is the result of integrating various branches of social science (sociology, geography, history, economics, politics, law, and culture). Thus, it can be understood that IPS is the result of the alignment and simplification of the branches of social science to teach both at the level of learning phases A to F. In discussions abroad, IPS is known by many different terms, such as social studies, citizenship education, and social science education. In the Indonesian curriculum, the subject of Social Sciences (IPS) must be studied at the elementary and secondary levels by Law No. 20 of 2003 Article 37. IPS itself is not included in scientific disciplines, as in other social sciences such as Sociology, Geography, History, etc. By Following what was conveyed by Sapriya (2017) that in social science disciplines there has not been found any IPS or Social Studies as a part of the scientific discipline. (Hadi Wiyono & Andriyanto, 2021) explains this because IPS is an educational program developed specifically for purposes in the world of education, not with the aim of scientific development. Based on this description, it can be understood that IPS is not included in a scientific discipline but rather a simplified form of the social sciences that has a purpose in education.

Definition of Learning Media and Functions of Using Learning Media

Media in the teaching and learning process is an introduction to information with recipients of information and can stimulate thoughts, feelings of concern, feelings, and desires so that it can encourage involvement in learning activities (Hamid et al., 2020). This is in line with the view. Lestari (2019) learning media are facilities or tools in the form of print, sound, or a combination of them which are intended as communication tools to students in conveying material that helps students to be more

effective in learning. Based on this understanding, it can be concluded that learning media are all the tools used during the process of learning and teaching activities.

The use of learning media also makes it easier for teachers to achieve learning objectives. In using instructional media there are several functions, in outline Sanjaya (2016) S mentions several functions of auxiliary media, including the following:

1. The communicative function, using learning media is utilized for the effectiveness of conveying information between the messenger and the receiver
2. The function of motivation, the use of learning media does not only contain elements of visual art alone but also makes it easier for students to understand learning material so that they can foster their motivation in learning.
3. Meaningful function, using learning media not only to facilitate the delivery of messages but also to assist students in analyzing and understanding lesson content.
4. The function of equalizing perceptions, and using media in learning can assist teachers in creating the same perception for each student so that all students have the same understanding of the material presented.
5. The function of individuality, and the use of learning media can help and complement the needs of every student who has diverse interests and learning patterns.

Principles of Choosing Learning Media

In choosing learning media, many things need to be considered, choosing the right media so that it can meet the needs of students, by the conditions of the student learning environment and effectively fostering student enthusiasm for learning (Batubara, 2020). The reference for determining or choosing learning media in the book Teaching in Digital Age by Bates (in Sudrajat, 2020) can use the "SECTIONS" model. According to Bates, there are eight consideration factors in determining learning media.

S = Student (students)

E = Ease of use (easy to use)

C = Cost (cost/time required)

T = Teaching (characteristics of the media and learning methods used)

I = Interaction (an interaction that occurs)

O = Organization Issue (regarding problem management)

N = Network (network)

S = Security and Privacy (security and privacy)

Furthermore, Sudjana (2010) responds to several criteria that must be considered in determining learning media including:

1. The suitability of the media with learning objectives.
2. Support for teaching content.
3. Ease of obtaining media.
4. Teacher skills in using the media.
5. Availability of time in using the media
6. Adjusted to the child's level of thinking.

From the description above it can be understood that several things must be considered in determining learning media. Innovation in learning is also very important to note, success in learning is also supported by the selection of innovative and varied learning media.

Understanding and Privileges of Learning Video Media

There are many types of learning media, animaker-based learning video media belongs to the audio-visual media type. Riyana (in Arifin, 2018) reveals that learning video media is media that displays visuals and has audio that contains learning information related to concepts, principles, procedures, and theories of implementing science in helping to understand learning material. So, it can be concluded that learning video media is a message delivery tool consisting of visual and audio elements that function in understanding learning material so that learning objectives can be achieved.

According to Sahil et al (2021), there are several advantages when using learning video media, including:

1. Costs incurred for production and maintenance are cheaper.
2. Practical in operating it.
3. Able to display sound, image, and movement at the same time.
4. Objects or objects that are too big, small, or even rare and dangerous objects can be presented in class.
5. Can display objects that only exist in very far places.

In social studies subjects, there is a lot of material that is abstract or imaginative (Widiastuti, 2020). Of course, this makes it quite difficult for students to understand the abstract and imaginative subject matter. So media is needed to present through interactive learning simulations.

Understanding Animaker and its advantages and disadvantages

Animaker is a tool in the form of software that is used to create animated videos. Animated videos made can be used as promotional media, and marketing and are no

exception as learning media. Animaker has free and paid services, animation creation on this animaker is done online, while the videos that have been made can later be downloaded and viewed offline.

After researchers used and made learning videos with Animaker and according to (Nisa, 2021), there are several advantages and disadvantages of using animaker media, including:

a. Proof Animaker

1. Videos can be made with a duration of up to 30 minutes with a choice of full HD, HD, and SD video quality.
2. Can be downloaded for free.
3. Provide animated templates according to the theme desired by the video maker, making it more practical in making learning videos.

b. Animaker's Weaknesses

1. Users must create videos when connected to a network (online).
2. The features used are limited if not a premium account.

Definition of Learning Outcomes

Learning outcomes are used as a benchmark or reference in improving a teacher's performance when carrying out the learning process (Mirdanda, 2018). The purpose of having an assessment of learning outcomes is to be able to see and observe and evaluate the learning process, interest in learning, and also improve these learning outcomes on an ongoing basis (Prihantini et al., 2021). So, a teacher needs to be able to pay attention to the assessment of learning outcomes, so that learning objectives can be achieved.

In the assessment of learning outcomes, it can be declared complete if students have been able to meet the minimum completeness criteria (KKM). The KKM score is determined by the subject teacher or determined by the school. Supriyadi (2021) emphasizes that each student must be able to achieve the KKM score, if it has not been achieved then the student is declared unsuccessful and must take the exam again. Based on the explanation above, it can be understood that learning outcomes can be a reference in improving one's performance. Changes in learning can include cognitive, affective, and psychomotor domains.

Slameto (in Tasya Nabillah & Abadi, 2019) explained that several factors can affect student learning outcomes which are described in two parts, namely:

a. Internal factors, are factors that come from within the students themselves. Some of the things that are included in the internal factors include:

1. Health factors, students whose health is impaired can also interfere with the learning process. Healthy students will study well, and not get tired easily.
2. Interest, is a person's tendency to be able to pay close attention to an activity.
3. Talent, talent is part of the ability to learn. This ability can be carried out well when accompanied by practice and study. Teaching materials that are by the talents of determined students can be easier to understand. So talent also affects learning outcomes.
4. Someone who has strong motivation will certainly find it easier to approach his goals. Likewise, students who have good learning motivation will try their best in learning so that it indirectly also affects their learning outcomes.

b. External factors, are factors that come from outside the learner, some of the following external factors include:

1. Family factors, relating to the way parents educate, the atmosphere in the house, the relationship between parents and children, and economic conditions can affect the way a child learns.
2. School factors, in this case, related to the teaching methods, applied, the curriculum used, the relationship between students and teachers, the relationship between students and their friends, school regulations, the condition of the school building, the duration of the class, and assignments from the teacher.
3. Community factors, students are in the community, so the community influences the learning process of students.

Use of Learning Media to Improve Learning Outcomes

Using learning media of any type in general can provide convenience to teachers in the learning and teaching process. The media plays a role in helping deliver messages to students so that students can understand the learning material well. According to Nurrita (2018), there are several benefits of learning media on student learning outcomes, including:

1. Learning and teaching activities will become more practical and interesting
2. The learning efficiency of students can increase
3. Helping to maintain the level of student learning concentration
4. Increase student learning motivation
5. Provide a thorough experience in learning
6. Learners are actively involved in the learning process

The application of ICT Learning Media in teaching and learning is known as the TPACK (Technological Pedagogical and Content Knowledge) approach. This TPACK

approach has been known since 2016 by Mishra and Koehler, containing a framework to be able to digest and illustrate teaching content in the classroom by the references to the concept of pedagogical skills and connected to technology and the professional mastery of teachers in the classroom (Mustika & Temarwut, 2022). The use of this approach is by the times in the 21st century, where technological developments are increasingly sophisticated, of course, the world of education must also be able to adapt to these increasingly rapid changes. During this pandemic, the use of the TPACK approach in social studies learning is also a solution to implementing ideal learning, because technology is needed in implementing distance learning.

Research methods

Location and Research Subjects

Locus of tracing and collecting data, the researchers decided on SMP Negeri 1 Cikarang Selatan which is located at Jalan. Cikarageman, Sukadami Village, South Cikarang District, Bekasi Regency, West Java Province.

Research methods

The experimental method with a quantitative approach is the choice of the researchers in this study. Quantitative research is a structured search in a study that produces findings obtained through statistical procedures from a measurement result (Jaya, 2020). The experimental research method is research that is testing in nature, what is tested is the effect of one variable on other variables (Hermawan, 2019). The experimental research method can also be interpreted as a method carried out with an experiment, using a quantitative approach to determine the effect of the independent variable (treatment/treatment) on the dependent variable (outcome) in a controlled condition (Sugiyono, 2021). In this case, Hermawan (2019) emphasized that all the variables tested in this study must be able to be measured using measurement tools or tests that have been tested for validity beforehand.

Types and Research Design

This study has a research concept in the form of a non-equivalent pretest-posttest control group (the non-equivalent pretest-posttest control design). Later, students will be given a pretest first so that researchers can find out in advance about the initial stages. During this activity, the experimental group will be given treatment using Animaker-based learning video media, and the control class will be given a different treatment, namely, using PowerPoint media. After being given different media and treatments, the next step is to give a posttest.

Research procedure

This research was carried out at SMPN 1 Cikarang Selatan, the research stages were described as follows:

1. Observations and interviews in the first phase and application for permission from SMPN 1 Cikarang Selatan.
2. Creating learning outcomes test instruments, and consulting with supervisors.
3. Collaborate and communicate with IPS subject teachers at SMPN 1 Cikarang Selatan in preparing lesson plans.
4. Conduct a final assessment test at the beginning of learning so that students can interpret the assessment before conducting research.
5. Start carrying out research activities.
6. Conduct a test of learning outcomes at the end of learning so that you can find out the learning outcomes of students after being given treatment (treatment).
7. Perform data analysis.

Population, Sampling, and Sampling Techniques

The population is a crucial thing to pay attention to in a study because it is the target of researchers to conduct research. The population can be understood as the whole of the part to be studied (Kurniawan, A. Widhi and Puspitaningtyas, 2016). The population in the research activity carried out by the researcher was class VII students at SMPN 1 Cikarang Selatan. The purposive sampling technique is the technique used in this study sample. Purposive sampling is a strategy for selecting research samples based on predetermined criteria (Sugiyono, 2021). So in selecting class samples later in this study, they were chosen based on the considerations of the researcher. Specifically, the sample from this search was based on students in classes VII.3 and VII.4. This was decided based on considerations by the researcher and the social studies teacher for class VII SMPN 1 Cikarang Selatan.

Research Instruments

Learning result tests and questionnaires on learning media responses were used by researchers as data collection instruments. The use of the outcome assessment of the teaching and learning process obtains information about the students' digestibility level during the teaching and learning process on social studies subject content before the provision of Animaker-based learning video media, which is called the pretest, and after using the media, which is called postets. The use of a questionnaire in this research was used to explain the responses of class VII students of SMP N 1 Cikarang Selatan regarding the use of animaker-based instructional video media and PowerPoint media. This questionnaire was prepared using the Likert scale research criteria. Respondents were asked to provide answer choices on a predetermined measuring scale, namely strongly agree (SS), agree (S), neutral (N), disagree (TS), and strongly disagree (STS).

Results and Discussion

Analysis of Research Results and Discussion

This comprehensive search also aims to describe the differences in social studies learning outcomes with the experimental class that uses maker-based video capture media and the control class that uses PowerPoint differently in social studies subjects. The results of the statistical analysis data showed that in the normality test, the experimental and control classes' pre-test was normally distributed. In contrast, the experimental and control classes' post-test had the opposite distribution. Judging from the homogeneity test shows that the data is homogeneous. Furthermore, it can be seen in the discussion of the results of the study as follows:

Questionnaire Analysis of Student Responses to the Application of Animaker-Based Video Learning Media

This questionnaire analysis of student responses aims to be able to find out how much the student's response is to the utility of Animaker-based video learning media as IPS media learning, especially in class VII.3, the experimental class in this study; this questionnaire was given after students received treatment using video and maker-based learning media. Following are the results of the descriptive analysis of the student's response questionnaire to using Animaker-based learning video media.

Table 1. Statistical Descriptive Analysis of Student Responses to the Use of Animaker Based Learning Video Media

Descriptive Statistics					
	N	Minimal	Maximal	Rerata	Std. Deviasi
Question_1	40	1	5	4.18	.903
Question_2	40	1	5	4.00	.934
Question_3	40	1	5	3.98	1.000
Question_4	40	1	5	4.10	1.105
Question_5	40	1	5	4.28	.905
Question_6	40	1	5	4.30	.939
Question_7	40	1	5	4.18	.958
Question_8	40	1	5	4.15	.921
Question_9	40	1	5	4.03	1.025
Question_10	40	1	5	3.97	1.025
Question_11	40	1	5	4.13	.966
Question_12	40	1	5	3.90	1.008
Question_13	40	1	5	4.03	1.000
Question_14	40	1	5	3.90	1.008

Descriptive Statistics					
	N	Minimal	Maximal	Rerata	Std. Deviasi
Question_15	40	1	5	3.90	.900
Question_16	40	1	5	3.85	1.027
Question_17	40	1	5	4.03	1.025
Tptal	40	17,00	85,00	68,88	16,65
Valid N (listwise)	40				

(Source: researchers, 2022)

Based on the table, it is known that the results of the descriptive statistical analysis regarding student responses from the use of Animaker-based video learning media resulted in an overall mean total of 68.88. To be able to find out the percentage of students' responses to the use of Animaker-based learning video media, the next step is to calculate the percentage of the questionnaire with the following formula:

$$P = n/N \times 100$$

(Lestari, 2017)

Information:

P = percentage rating (100%)

n = result achievement score

N = maximum score in total

The following is the result of calculating the percentage of student response questionnaires to the use of animaker-based learning video media:

It is known that the data from the student response questionnaire to the media are:

$$P= 100\%$$

$$n = 2755$$

$$N = 3400$$

$$P=2755/3400 \times 100$$

$$P= 81\ (\%)$$

Based on the following results, it can be seen that the student's response to the utility of Animaker-based video learning media is 81%. The percentage results can be understood in the chart below:

Table 2. Interpretation of the Percentage of Student Response Questionnaires on the Use of Learning Media

Percentage(%)	**Criteria**
81,25 -100	Very good
62,5-81,25	Good
43,75—62,5	Not good

Referring to the questionnaire percentage interpretation table above, the calculation results above are included in the suitable criteria so that it can be known or interpreted if the use of Animaker-based learning video media gets a good response with a percentage of 81%, especially in class VII.3 as a class experiment using Animaker-based learning video media in social studies learning.

Questionnaire Analysis of Control Class Students' Responses to the Use of Powerpoint Media

This questionnaire analysis of student responses aims to determine how much the student's responses regarding the application of Powerpoint are to be used as social studies learning media, especially in class VII.4 as the control class in this study. This questionnaire was given after students used PowerPoint media in social studies learning. The results of the descriptive analysis of the student's response questionnaire using PowerPoint media follow.

Table 3. Statistical Descriptive Analysis of Student Responses to the Use of Powerpoint Media

Descriptive Statistics					
	N	Minimal	Maximal	Rerata	Std. Deviasi
Pernyataan 1	40	1	5	4,08	0,829
Pernyataan 2	40	2	5	3,88	0,853
Pernyataan 3	40	1	5	4,35	0,864
Pernyataan 4	40	3	5	3,98	0,577
Pernyataan 5	40	2	5	4,15	0,770
Pernyataan 6	40	1	5	4,05	1,037
Pernyataan 7	40	3	5	4,10	0,778
Pernyataan 8	40	3	5	4,30	0,758
Pernyataan 9	40	2	5	3,90	0,900
Pernyataan 10	40	2	5	3,85	0,893
Pernyataan 11	40	2	5	3,93	0,859
Pernyataan 12	40	2	5	3,88	0,757
Pernyataan 13	40	2	5	3,95	0,932
Pernyataan 14	40	1	5	3,70	0,883
Pernyataan 15	40	2	5	3,73	0,751
Pernyataan 16	40	1	5	3,60	1,057
Pernyataan 17	40	1	5	3,93	0,888
Total	40	31,00	85,00	67,33	14,39

(Source: researchers, 2022)

Based on the table above, it is known that the results of the descriptive statistical analysis regarding students' responses to the use of PowerPoint media resulted in an overall average of 67.33; in each statement, it can be seen that the mean in the table illustrates that students

tend to give answers that agree. Furthermore, to be able to find out the percentage of students' responses to the use of Powerpoint media, the next step is to calculate the percentage of the questionnaire concerning the calculations below:

$$P = n/N \times 100$$

(Lestari, 2017)

Information:

P = percentage rating (100%)

n = result achievement score

N = maximum score in total

$$P=2693/3400 \times 100$$

$$P= 79 (\%)$$

Based on the calculation results above, it can be seen that the student's response to the use of PowerPoint media is 79%. Referring to the interpretation of the percentage of the questionnaire, the calculation results above are included in the excellent category. Hence, PowerPoint video media also received a positive response with a percentage of 79% of students.

Differences in social studies learning outcomes before and after using animaker-based learning video media in the experimental class

Table 4. Hypothesis Test 1 Wilcoxon Test

Test Statistics[a]	
	Post test - Pre test
Z	-5.524[b]
Asymp. Sig. (2-tailed)	.000

(Source: researchers, 2022)

The basis for concluding the Wilcoxon test are:

1. If the final result is Asymp. Sig. (2-tailed) < 0.05 which means Ha accepted, H0 rejected.
2. If the final result is Asymp.Sig. (2-tailed) > 0.05 which means Ha rejected, H0 accepted.

Based on the chart above, the Asymp score is displayed. Sig. (2-tailed) the number is 0.000 indicating less than 0.05, so it means that the hypothesis Ha is accepted and H0 is rejected. There is a gap in student learning outcomes during each treatment period in the experimental class that uses Animaker-based learning video media. That way, the application of Animaker-based video learning media changes student learning outcomes in social studies subjects.

These findings are following a study that was conducted by (Lisnawati et al., 2022) that the application of Animaker-based instructional video media has been proven to help

students understand learning content and get better learning results. These results were also emphasized by Pranata, Dewi, and Zulherman (2022) The use of Animaker-based learning video media can attract students' learning interest and help them understand the material presented by their teacher. This statement is supported by the findings that the researchers obtained through distributing student response questionnaires to the application of Animaker-based learning videos, following statement number 9, that students feel that they become easy to use and understand through the visual application of Animaker-based learning videos. Furthermore, it was also found based on questionnaire statements 10, 11, and 15, which stated that it became easier for students to concentrate on learning using Animaker-based learning video media.

This Animaker-based learning video media also qualifies as learning media that is easy to operate and practical to use anytime and anywhere, as long as you already have the video downloaded or connected to the internet if the video is available online. The statements in the media response questionnaire in statements 1 and 7 indicate that students feel that Aniamker-based video learning media is easy and practical to use anytime and anywhere. When learning has been completed, the learning video media can still be watched again by students, and this media can also be used in learning offline and online. This practicality and convenience also help researchers in teaching material to students when conducting research; even though there are obstacles in showing videos during online learning due to internet network constraints, students can still watch the video in its entirety outside of study hours through links researchers share with students.

In the ability to deepen social studies subjects, concentration is also needed efficiently and effectively, Mayasari (2017) emphasized that good student learning concentration has a superior boost in terms of the student's assessment. Based on questionnaire data from statements numbers 10, 11, and 15, the researcher found that the use of learning video media was able to help students concentrate and pay attention to learning correctly so that this could contribute positively to student learning outcomes.

Part of the trigger that also influences the final student assessment is learning motivation; as previously explained that internal factors such as learning motivation are one of the factors that have a good influence on learning outcomes, according to the findings of researchers on Animaker-based learning video media response questionnaires, in statements number 12, 13, 14, 16, and 17 states that the use of Animaker-based learning video media can increase self-motivation to digest subject content from social studies. This was confirmed by Maheswari and Pramudiani (2021) that the use of Animaker-based learning video media has proven to be able to increase student interest and encouragement in studying.

Video learning media based on Animaker also has a character appearance, an eye-catching appearance, and spoils the video; of course, it will be able to attract students' interest to pay attention to the learning material presented. This follows the researcher's findings, in statements number 2, 3, and 6, that students agree with these statements. The material presented in this video is delivered concisely and packaged with a series of animations that can move. The animations in this video can be selected and determined according to the theme of the material being taught; these animations can also be made manually or using animation templates contained in this Animaker platform.

Furthermore, students also feel that the use of Animaker-based learning video media is suitable for use as a medium in social studies learning because it can describe learning material well, and this media is also to the needs and developments of the times. The following questionnaire statements, numbers 4, 5, and 8, show that most students agree with the statement.

Gaps in Social Studies Learning Assessment between Before and After the Application of Powerpoint Media in the Control Class

Table 5. Hypothesis Test 2 Wilcoxon Test

Test Statistics[a]	
	Post test - Pre test
Z	-5.518[b]
Asymp. Sig. (2-tailed)	.000

(Source: researchers, 2022)

The basis for concluding the Wilcoxon test are:

1. If the final result is Asymp. Sig. (2-tailed) < 0.05 which means Ha accepted, H0 rejected.
2. If the final result is Asymp.Sig. (2-tailed) > 0.05 which means Ha rejected, H0 accepted.

Based on the chart above, the Asymp score shows. Sig. (2-tailed) the data is 0.000, which shows less than 0.05, thus indicating that the hypothesis Ha is accepted and H0 is rejected. So, there is a gap in student learning outcomes before and after being given treatment in the control class that uses PowerPoint media in social studies learning. In this way, it can be understood that PowerPoint changes student learning outcomes in social studies teaching subjects.

In line with the research conducted by Susanti, Ritonga, and Bambang (2020) that PowerPoint media can also have a positive influence on increasing student learning outcomes, this statement is also supported by research conducted by Elpira and Ghufron (2015) Namely, the use of PowerPoint media has been proven to positively influence the increase in student learning outcomes. This explanation is supported by the data that the researchers

found through a questionnaire on students' responses to the use of PowerPoint media; in statement number 9, students feel that the use of PowerPoint media can help students to process information received from teaching content topics.

Submission of material on PowerPoint is delivered concisely by presenting the essential points of the material; the presentation of slides in PowerPoint can be arranged according to the teacher's needs and creativity. Based on the researchers' findings on the media response questionnaire, students stated that the appearance of PowerPoint media was attractive. This follows statements number 2, 3, and 6, in which most students agree that PowerPoint has an attractive appearance.

In addition, PowerPoint media is also considered a comprehensive utility that is applied as learning media in social studies teaching subjects; it is capable of presenting learning material well. Powerpoint is also considered according to the needs and developments of the times because it is included in digital learning media. This is based on statements 4, 5, and 8, in which the responses show that students agree.

PowerPoint media is also felt to be easy to operate and practical to use anywhere; this is under questionnaire statements number 1 and 7; in the questionnaire that was distributed, students gave an affirmative response to the statement. This also helps researchers in researching because the use of PowerPoint is easy and practical, and the relatively smaller file size makes this media not too difficult to display in online learning; even though online service conditions are relatively active during learning, participants students can still reopen learning material in PowerPoint through the files that researchers share.

PowerPoint media also has a good impact on the level of student learning motivation, based on the findings of researchers in questionnaire statements number 12, 13, 14, 16, and 17, students stated that they enjoyed social studies learning using PowerPoint media, students also liked the way the teacher taught by PowerPoint, of course, with a sense of fun and increased learning motivation of students, it will have a good impact on the results of student assessments, as stated earlier that learning motivation brings goodness to learning outcomes.

Differences in IPS Learning Outcomes After the Use of Animaker-Based Learning Video Media in the Experiment Class with the Application of Powerpoint Media in the Control Class

Table 6. Hypothesis Test of Posttest Differences in Learning Outcomes of Participants Between the Experimental Class and the Control Class

Test Statistics[a]	
	Hasil Belajar IPS
Mann-Whitney U	636.000

Wilcoxon W	1497.000
Z	-1.587
Asymp. Sig. (2-tailed)	.113

(Source: researchers, 2022)

The basis for concluding the Mann-Whitney test are:

1. If the Asymp. Sig. (2-tailed) < 0.05 then Ha is accepted, H0 is rejected.
2. If the Asymp.Sig. (2-tailed) > 0.05 then Ha is rejected, H0 is accepted.

The table shows that the value of asymp. Sig. (2-tailed) is 0.113, which indicates that the score is 0.113 > 0.05, then Ha is rejected, and H0 is accepted. So there is no contrast in student assessment between the experimental class after treatment using video learning media based on Animaker and the control class with treatment with access to PowerPoint media.

Student Responses to Media Use

After the treatment was carried out in the experimental and control classes, the researcher collected students' responses in each class through a questionnaire. This questionnaire measures students' responses to the use of learning media after the utilization process. Based on the questionnaires after being distributed, it was found that the percentage level was in the same classification range, namely included in the excellent category, with 81% of the experimental class using Animaker-based video learning media and 79% of the control class using PowerPoint applications. So, based on the media use response questionnaire data, it illustrates that the use of Animaker and PowerPoint-based video learning media is equally well received and brings a positive response to students in the sample class that the researcher uses.

Analysis of Differences in Learning Outcomes of Experiment Class and Control Class

Based on the results of the hypothesis testing described above, insignificant differences in the results of the learning assessment in the experimental and control classes can occur because of other factors that also influence it. The researcher predicts that the factors underlying this can occur because the media used in the experimental and control classes emphasize aspects of visualization with their uniqueness. This argument is reinforced by the views of Permatasari, Degeng, and Adi (2019) learning videos have visual advantages in transferring teaching content, streamlining the introduction of material topics, and helping to achieve learning objectives. Likewise, PowerPoint media, (Kamil, 2018) tates that PowerPoint can make it easier to understand learning because it has a form of visualization that is characterized and not mainstream. This is to the studies and findings of researchers on the media response questionnaire described earlier that learning video media based on

Animaker and PowerPoint media has an attractive appearance and makes it practical for students to digest the content of teaching materials in class.

Apart from being that both media have advantages in the visualization aspect, there are other external factors that the researchers cannot control, namely when online learning took place in the experimental class at the second meeting, the internet network was not suitable due to weather factors, thus disrupting the playback of learning videos. When learning takes place. Research conducted by Rohmah (2020) a weak or lousy internet signal due to weather factors or being in an area with a weak internet network is a natural challenge for teachers to experience in implementing online learning. Whereas when the network was not good in the control class, it did not have too much impact when sharing screen media PowerPoint in online learning. According to the researcher, the network disturbance also impacted the less-than-optimal use of Animaker-based learning video media. To support this statement, researchers found another study conducted by Dindin et al., (2020) regarding barriers to online learning. They surveyed 265 FTK students at UIN Gunung Jati, divided into four study programs. The results of the survey stated that there were three main problems in online learning including, 21.5% of respondents answered that obstacles during online learning were inadequate availability of internet packages, then 23.4% of respondents answered that obstacles during online learning were inadequate internet networks. Stable, and 30.6% of respondents answered that the obstacles in online learning were piling up tasks. Based on these findings, fluctuating active network connections are also a challenge experienced in the online learning process. In the research survey, it was the number 2 most obstacle experienced by respondents. A stable internet network can be a crucial part of online learning because it is directly related to the success of teaching and learning in class.

Researchers' predictions about network interference as a factor causing the learning assessment scores of the experimental class and control class to be insignificant is the presence of data from student response questionnaires related to learning media. Table 1 and Table 3 show a marked difference in statement number 3. Statement 3 relates to the quality of media display, the mean in statement 3 of the experimental class is 3.98, while that of the control class is 4.35. Both statements are based on data distribution, stating that the two media have good display quality, but the mean value of statement 3 from PowerPoint media is superior to the mean from Animaker-based learning video media. When the network interruption occurred, many students in the experimental class also complained about the video show, which was unclear, and the video playback, which was not smooth. The disturbance is enough to disturb students' attention and make the class less conducive. However, learning continues until class time is over, unlike the case with the control class, which is relatively smooth in displaying the display from PowerPoint.

Based on the explanation above, it can be seen that although Animaker-based learning video media in several previous studies often showed more significant results when compared to PowerPoint media, this research was different. In this regard, Widowati (2008) said that no media is the best for all learning materials because it needs to adapt to the needs and conditions of the target students. So each media has different details of its superiority preferences; even though these media are classified as sophisticated and more modern learning media, these media still have drawbacks, and other learning media can overcome these deficiencies.

Conclusion

Based on the discussion regarding the effect of using Animaker-based video learning media on social studies learning outcomes for class VII students, it was found that after testing the hypothesis, it was concluded that there were differences in the initial measurement assessment (pretest) and the final assessment (posttest) in the experimental class. It was using Animaker-based learning video intermediaries in social studies learning. Furthermore, after testing the hypothesis, it was concluded that there was a difference in the pretest and posttest in the control class using PowerPoint media in social studies teaching and learning. Finally, after testing the hypothesis, it was concluded that there was no contrast increase in the results of student assessments between the experimental class using Animaker-based learning video media and the control class using PowerPoint media.

Reference

Andarwati, M. (2019). Pembelajaran Sejarah Kontekstual, Kreatif, Menyenangkan di Kelas Dengan “Power Director” bagi Generasi Z. *Jurnal Pendidikan Sejarah Indonesia*, *2*(1), 64–81. https://doi.org/10.17977/um033v2i12019p064

Arifin, P. M. N. (2018). ANALISIS PENGEMBANGAN MEDIA VIDEO. *Jurnal. Pendidikan Ekonomi (JUPE)*, *6*.

Batubara, H. H. (2020). *Media Pembelajaran Efektif*. Fatawa Publishing. https://books.google.co.id/books?id=pBgJEAAAQBAJ

Dindin, J., Teti, R., Heri, G., & Epa, P. (2020). Pembelajaran Daring Masa Pandemik Covid-19 Pada Calon Guru : Hambatan, Solusi dan Proyeksi. *Karya Tulis Ilmiah UIN Sunan Gunung Djjati Bandung*, 1–10. http://digilib.uinsgd.ac.id/30518/

Elpira, N., & Ghufron, A. (2015). Pengaruh Penggunaan Media Powerpoint Terhadap Minat Dan Hasil Belajar Ipa Siswa Kelas Iv Sd. *Jurnal Inovasi Teknologi Pendidikan*, *2*(1), 94–104. https://doi.org/10.21831/tp.v2i1.5207

Endayani, H. (2018). Sejarah Dan Konsep Pendidikan Ips. *Ittihad*, *11*(2), 117–127.

Evania Yafie, S. P. M. P., Drs. I Wayan Sutama, M. P., & Nia Widyaningrum, S. S. (n.d.). *PENGEMBANGAN KOGNITIF (SAINS PADA ANAK USIA DINI)*. UNIVERSITAS NEGERI MALANG. https://books.google.co.id/books?id=qOAGEAAAQBAJ

Fajar, S. (2017). Pengaruh Penggunaan Media Powtoon Terhadap Hasil Belajar Siswa Pada Mata Pelajaran Ilmu Pengetahuan Sosial Terpadu. *Jurnal Pengajaran MIPA*, *3*(2), 101–114. http://ejournal.upi.edu/index.php/edutechnologia/article/view/8957

Hadi Wiyono, M. P., & Andriyanto, S. S. M. P. (2021). *PENDIDIKAN IPS*. Penerbit Lakeisha. https://books.google.co.id/books?id=QaBKEAAAQBAJ

Hamid, M. A., Ramadhani, R., Masrul, M., Juliana, J., Safitri, M., Munsarif, M., Jamaludin, J., Simarmata, J., & Limbong, T. (2020). *Media Pembelajaran*. Yayasan Kita Menulis. https://books.google.co.id/books?id=npLzDwAAQBAJ

Hermawan, Iwan. (2019). *Metodologi Penelitian Pendidikan (Kualitatif, Kuantitatif dan Mixed Method)*. Hidayatul Quran. https://books.google.co.id/books?id=Vja4DwAAQBAJ

Interaktif, M. P. B. M. (2019). *MEDIA PEMBELAJARAN Berbasis MULTIMEDIA Interaktif*. Penerbit Lakeisha. https://books.google.co.id/books?id=Rsr5DwAAQBAJ

Jailan Sahil, dkk. (2021). *Buku Panduan Guru Biologi Terintegrasi Nilai-Nilai Islam untuk SMA/MA Kelas XI*. Fatawa Publishing.

Jajat Sudrajat. (2020). Kompetensi Guru Di Masa Pandemi Covid-19. *Jurnal Riset Ekonomi Dan Bisnis*, *13*(1), 100–110. http://journals.usm.ac.id/index.php/jreb

Jaya, I. M. L. M. (2020). *Metode Penelitian Kuantitatif dan Kualitatif: Teori, Penerapan, dan Riset Nyata*. Anak Hebat Indonesia. https://books.google.co.id/books?id=yz8KEAAAQBAJ

Kamil, P. M. (2018). PERBEDAAN HASIL BELAJAR SISWA PADA MATERI SISTEM PENCERNAAN PADA MANUSIA DENGAN MENGGUNAKAN MEDIA POWER POINT DAN MEDIA TORSO (The Difference Of Student Learning Outcomes In The Study Of Human Body Anatomy In Human Digestion System Using Power Point And M. *Bioedusiana*, *3*(2), 64–68. http://jurnal.unsil.ac.id/index.php/bioed/index

Khasanah, R. K. (2019). *Pengaruh penggunaan media pembelajaran berbasis powtoon terhadap hasil belajar Akuntansi siswa kelas X Akuntansi SMK Negeri 1 Sukoharjo*. UNS.

Kurniawan, A. Widhi dan Puspitaningtyas, Z. (2016). *Metode Penelitian kuantitatif*. Pandiva Buku.

Lestari, K. S. (2017). *Penggunaan Media Laboratorium Virtual Untuk Meningkatkan Pengetahuan Prosedural Siswa Pada Pokok Bahasan Sistem Eksresi.* Universitas Pasundan.

Lisnawati et al. (2022). Jurnal Ilmiah Wahana Pendidikan. *Jurnal Ilmiah Wahana Pendidikan Https://Jurnal.Unibrah.Ac.Id/Index.Php/JIWP*, *8*(3), 178–183.

https://doi.org/10.5281/zenodo.6379004

Maheswari, G., & Pramudiani, P. (2021). Pengaruh Penggunaan Media Audio Visual Animaker terhadap Motivasi Belajar IPA Siswa Sekolah Dasar. *Edukatif : Jurnal Ilmu Pendidikan*, *3*(5), 2523–2530. https://doi.org/10.31004/edukatif.v3i5.872

Mayasari, F. D. (2017). Pengaruh Konsentrasi Belajar dan Motivasi Belajar Terhadap Hasil Belajar Siswa di SMK Negeri 1 Ngabang (Studi Kasus Siswa yang Tinggal Dengan Orang Tua Asuh). *Universitas Tanjung Pura*, 1–11.

Mirdanda, A. (2018). *Motivasi berprestasi & disiplin peserta didik serta hubungannya dengan hasil belajar*. Yudha English Gallery. https://books.google.co.id/books?id=PF_HDwAAQBAJ

Mustika, M., & Temarwut, R. (2022). Membangun TPACK Guru IPS Melalui Moodle berbasis Blended Learning dalam Pembelajaran Tatap Muka Terbatas. *Jurnal Jendela Pendidikan*, *2*(02), 313–323. https://ejournal.jendelaedukasi.id/index.php/JJP/article/view/215%0Ahttps://ejournal.jendelaedukasi.id/index.php/JJP/article/download/215/75

Nasution. (2011). *Kajian Pembelajaran IPS di Sekolah*. UnesaPress.

Nisa, khairun. (2021). Media Pembelajaran Berbasis Animaker Pada Mata Pelajaran Ips Di Kelas Iv Min 8 Aceh Besar. *Skripsi UIN Ar-Raniry Darussalam Banda Aeh*, 1–120.

Nurrita, T. (2018). Pengembangan Media Pembelajaran Untuk Meningkatkan Hasil Belajar Siswa. *MISYKAT: Jurnal Ilmu-Ilmu Al-Quran, Hadist, Syari'ah Dan Tarbiyah*, *3*(1), 171. https://doi.org/10.33511/misykat.v3n1.171

Permatasari, K., Degeng, I. N., & Adi, E. (2019). Pengembangan Suplemen Video Pembelajaran Adaptasi Makhluk Hidup untuk Siswa Tunarungu SLB-B YPLB Blitar. *JKTP: Jurnal Kajian Teknologi Pendidikan*, *2*(4), 268–277. https://doi.org/10.17977/um038v2i42019p268

Pranata, K., Dewi, H. L., & Zulherman. (2022). Efektivitas Video Animasi Berbasis Animaker Terhadap. *Jurnal Tunas Bangsa*, *9*(1), 11–17.

Prihantini, M. P., Tasdin Tahrim, S. P. M. P., Firman Patawari, S. P. M. P., Kanusta, M., Rani Febriyanni, M. P., Ali Nahruddin Tanal, S. P. I. M. P., Drs. H. Alinurdin, M. P., Heriadi, S. P., Nur Kholik, M. S. I., & others. (2021). *MANAJEMEN BERBASIS SEKOLAH*. EDU PUBLISHER. https://books.google.co.id/books?id=PdxBEAAAQBAJ

Rohmah, N. (2020). Implementasi Pembelajaran Jarak Jauh pada Masa Pandemi Covid-19. *Awwaliyah : PGMI*, *3*(2), 89–95.

Sanjaya, Wina. (2016). *Media Komunikasi Pembelajaran*. Prenada Media. https://books.google.co.id/books?id=wiBQEAAAQBAJ

Sapriya. (2017). *Pendidikan IPS Konsep dan Pembelajaran*. Rosdakarya.

Sudjana, N. (2010). *Dasar-Dasar Proses Belajar Mengaja*. Sinar Baru Algensindo.

Supriyadi. (2021). Penerbit NEM. https://books.google.co.id/books?id=HCEzEAAAQBAJ

Sugiyono. (2021). *Metode Penelitian Evaluasi: Pendekatan Kuantitatif, Kualitatif, dan RnD*. CV. Alfabeta.

Supriyono. (2018). Pentingnya Media Pembelajaran Untuk Meningkatkan Minat Belajar Siswa. *Pendidikan Dasar*, *II*, 43–48.

Susanti, E., Ritonga, M., & Bambang, B. (2020). Pengaruh Penggunaan Media Powerpoint Terhadap Minat Belajar Bahasa Arab Siswa. *Arabiyatuna : Jurnal Bahasa Arab*, *4*(1), 179. https://doi.org/10.29240/jba.v4i1.1406

Syarifudin, A. S. (2020). Impelementasi Pembelajaran Daring Untuk Meningkatkan Mutu Pendidikan Sebagai Dampak Diterapkannya Social Distancing. *Jurnal Pendidikan Bahasa Dan Sastra Indonesia Metalingua*, *5*(1), 31–34. https://doi.org/10.21107/metalingua.v5i1.7072

Tasya Nabillah, & Abadi, A. P. (2019). Faktor Penyebab Rendahnya Hasil Belajar Siswa. *Sesiomedika*, 659–663.

Tobamba, E. K., Siswono, E., & Khaerudin, K. (2019). Pengaruh Media Pembelajaran Terhadap Hasil Belajar Ips Ditinjau Dari Minat Belajar Siswa Sekolah Dasar. *Taman Cendekia: Jurnal Pendidikan*, *3*.

Trianto. (2012). *Model Pembelajaran Terpadu : Konsep, strategi, dan implementasinya dalam Kurikulum Tingkat Satuan Pendidikan (KTSP)*. Bumi Aksara.

Ula, S., Afifa, A. N., & Azizah, S. A. (2021). Pengaruh Penggunaan Teknologi Di Masa Pandemi Covid-19 Terhadap Hasil Belajar Pada Mata Pelajaran Biologi Di Man 2 Jember. *ALVEOLI: Jurnal Pendidikan Biologi*, *2*(1), 54–66. https://doi.org/10.35719/alveoli.v2i1.35

Utami, S., & Utami, P. (2020). Penggunaan Whatsapp Group dan Google Classroom untuk Meningkatkan Partisipasi dan Hasil Belajar Peserta Didik Teknik Audio Video. *Elinvo (Electronics, Informatics, and Vocational Education)*, *5*(1), 75–88. https://doi.org/10.21831/elinvo.v5i1.34254

Widiastuti, A. (2020). *Konsep Dasar dan Manajemen Laboratorium IPS*. UNY Press. https://books.google.co.id/books?id=iAgREAAAQBAJ

Widowati. (2008). *PEMILIHAN MEDIA PEMBELAJARAN*.

Yudiawan, A. (2020). BELAJAR BERSAMA COVID 19: Evaluasi Pembelajaran Daring Era Pandemi di Perguruan Tinggi Keagamaan Islam Negeri, Papua Barat. *AL-FIKR: Jurnal Pendidikan Islam*, *6*(1), 10–16. https://doi.org/10.32489/alfikr.v6i1.64