



Implementation of Animation Video Media with the help of the Animeker Application to Improve Student Learning Outcomes

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Abstract

This study aims to improve student learning outcomes through the application of animation media with the help of animeker applications in Science Subject class X-TPM 1 SMK Negeri 1 Nganjuk. This research is a classroom action research consisting of the stages of planning, action, observation and reflection. Data collection was carried out using test techniques. Test techniques were carried out by giving assignments at the end of the learner. Data were analyzed descriptively and quantitatively to compare the completeness of each cycle. The results showed that student learning outcomes increased from cycle I to cycle II after using animated video media. Based on the test results in the first cycle, the classical average is 82.72%. Whereas classically, that is 90% of students who must reach a grade level of 70 or more. As for the achievement of the average value in cycle II of 94.12% of students have scores above the KKM. The results showed that student learning outcomes increased from Cycle I to Cycle II after using animated video media assisted by the animeker application.

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INTRODUCTION

Education is a program from the government that is carried out starting from kindergarten, elementary, junior high, high school and even up to the undergraduate level. Education is also a challenge for educators along with technological developments. The development of the world of education is always closely related to existing technological developments. Therefore, there must be a willingness to face these challenges, and teachers in particular must be equipped with skills such as creativity and critical thinking to facilitate their approach to technology-based learning (Paud et al., 2020).

One of the most important challenges for educators is the teacher's technical ability which is still relatively low, so that students pay less attention to the teacher when explaining (Suhendra, 2016). Learning activities that are still controlled by the teacher do not make students think (Khanafiyah, 2017). The state of the learning process that seems monotonous becomes boring for SMK N 1 Nganjuk students and prevents them from remembering most of the material. If this happens continuously, it will result in poor student learning outcomes (Alfrida, 2019). The teacher as a learning facilitator must be creative so that learning is more meaningful for students and not boring (Ridlo et al., 2020).

The development of learning models is very necessary because it has a positive impact on the skills and activities of students. Because the learning model is a part that influences the

acquisition of learning objectives (Dalimunthe et al., 2022). According to (Satriawan et al., 2020) Advances in current technological developments can be found in many areas of life, especially in the field of education. Using technology as a management tool and choosing learning media can also be an alternative. Modern technology has made it possible to power on in a simpler and cheaper way than previous technologies. Teachers don't need special skills to create animations, and teachers can create educational media that are cheap, interesting, and fun (Nasution et al., 2021).

As is known, the learning process that takes place in SMK N 1 Nganjuk, especially science subjects, is less familiar to Vocational students, but still uses media such as powerpoint. The majority of teachers still provide material in front of the class by means of lectures, and students take notes and listen when the teacher delivers the material, so students do not understand the content of the material, take notes, concentrate only on listening. In fact, this method is not efficient and effective in carrying out the teaching and learning process. Therefore, a solution is needed to solve the problems of the Nganjuk 1 SMK students. One of them is an animation video media application.

Animaker is one of the popular video learning media with an animation platform among teachers and students. This learning media is very good because it allows us to create different teaching materials in fields of study (mathematics, biology, languages, etc.) from the PAUD level to the high school level, depending on the needs of each person (Mashuri & Budiyo, 2020). Animaker has a product called Animaker Whiteboard. The Animaker app also offers free and paid services. For this app, the required background and characters already exist. Animaker was founded in 2014 by CEO and founder R.S. Raghavan (Ika & Irianto, 2021). The animaker have been used was free.

An important part of using Animaker as a learning medium is its ability to visualize modules that students cannot observe or ponder. Learning media using the Animaker application makes it easier for teachers to deliver modules. Some of the advantages of using the Animaker app are that you can download finished videos for free, you can take advantage of some interesting features, and you can save your resulting media as videos up to 30 minutes long. Apart from being telling, the Animaker application has drawbacks. This means that the application is still web-based, users use internet quota, and the free features available are limited (Natalia & Reflina, 2022.)

This study aims to improve student learning outcomes of class X TPM 1 SMK Negeri 1 Nganjuk. In relevant research studies, previously similar research had been conducted by (Nining Sariyyah, 2022) who applies animated videos to improve science learning outcomes in fifth grade students at SDI Malalaja. Based on the explanation of the problem, theoretical studies and relevant research above, animated video media is applied with the help of the animaker application to improve student learning outcomes in the Science subject class X-TPM 1 SMK Negeri 1 Nganjuk.

METHODS

This type of research is Classroom Action Research (PTK) which has II Cycles 4 stages in each cycle, namely planning, action, observation, and reflection. The research was conducted at SMK Negeri 1 Nganjuk. The research subjects were students of class X-TPM-1 consisting of 35 students. The object of research is student activity and student learning outcomes. This research was carried out in semester 1 of the 2022/2023 Academic Year in the science and chemistry project learning the materials "interactions between ecosystem components" and "environmental pollution".

Data on learning outcomes are collected using test techniques that aim to determine student learning outcomes in each cycle. Learning activity data is recorded through the observation process. Performance indicators in this study are whether the proficiency of learning outcomes reaches 90% and whether student activities reach the "active" or "very active" category.

The research procedure consists of the stages of planning, observation and reflection. The action planning stage is carried out by compiling learning tools that will be implemented including the Teaching Module (MA) components, Animation video media, Teaching material sheets (learning materials) and Student worksheets (LKS). The implementation stage of the action is carried out by a) Conditioning the study room for students, b) carrying out learning and research using learning devices according to learning scenarios in MA, c) Carrying out assessments or first cycle tests, and d) Final activities to draw conclusions, assign assignments and further information on learning materials. The action stage is carried out simultaneously with observation (observation) simultaneously during the learning process, the observer evaluates or implements learning in class. Meanwhile, the reflection stage is carried out by assessing the quality of the learning process in class and discussing with colleagues to find out the strengths and weaknesses of the learning process.

RESULTS AND SISCOSSION

This research was conducted in two cycles, namely through the stages of planning, action, observation and reflection. The application of this animated video media is carried out by preparing the animated video media in advance. The animated video is a video made using the animaker application. The Animaker application is an application that has various types of animations or images that can be used to make videos for free. Animation consists of animated characters that are depicted, written, and can be according to what we want. In addition, we can add animations such as fade, fly-in, and shape animations to switch from one slide to another. The Animaker app can also add images and symbols such as light bulbs, houseplants, cupboards, trees, sun, clouds, earth and many other symbols (Natalia & Reflina, 2022.).

The making of this animated video is adjusted to the learning outcomes designed in the Teaching Module. As for the application of animated video media to students in class X TPM consisting of 35 students 1 SMK Negeri 1 Nganjuk through the stages: 1) The teacher explores students' prior knowledge regarding the material, 2) The teacher shows an animated video; 3) The teacher divides students into 5 groups and asks students to work on LKS; 4) The teacher guides students in carrying out activities according to the LKS instructions; 5) The teacher appoints a representative for each group to present the results of the discussion; 6) The teacher and students conclude the experimental results and provide confirmation regarding the learning concept; 7) The teacher gives a test to find out the increase in student learning outcomes with 4 indicators and 5 questions. The student learning outcomes in cycle I and cycle II can be seen in Table 1.

Table 1. Data on Student Learning Outcomes

Keterangan	Cycle I	Cycle II
Average	82.72	94.12
Number of students who completed	28	34
Number of students who have not completed	7	1

Completeness percentage	80%	97%
Percentage of Incomplete	20%	3%

Based on the test results in cycle I, individually there were 7 students who scored below 70. Based on the test results in cycle I, the classical average was 82.72%. Whereas classically, that is 90% of students who must reach a grade level of 70 or more. It can be seen that classically it has not succeeded in achieving the success criteria, so it is planned for the implementation of cycle II. In cycle II, after the learning outcomes test was carried out, data was obtained that 1 student had received a minimum score of 70 and there were 34 students who scored above 70. The average score achievement in cycle II was 94.12%. This means that it can be concluded from the test data in cycle II that it meets the success criteria and does not need to carry out the next cycle.

Analysis of student learning outcomes data when using animated video media assisted by the Animeker application showed an increase from cycle I to cycle II, namely where in cycle I there were 7 students whose learning outcomes were below the KKM with a completeness percentage of 80% and an incomplete percentage of 20%. Data presentation can be seen in the bar chart in Figure 1.

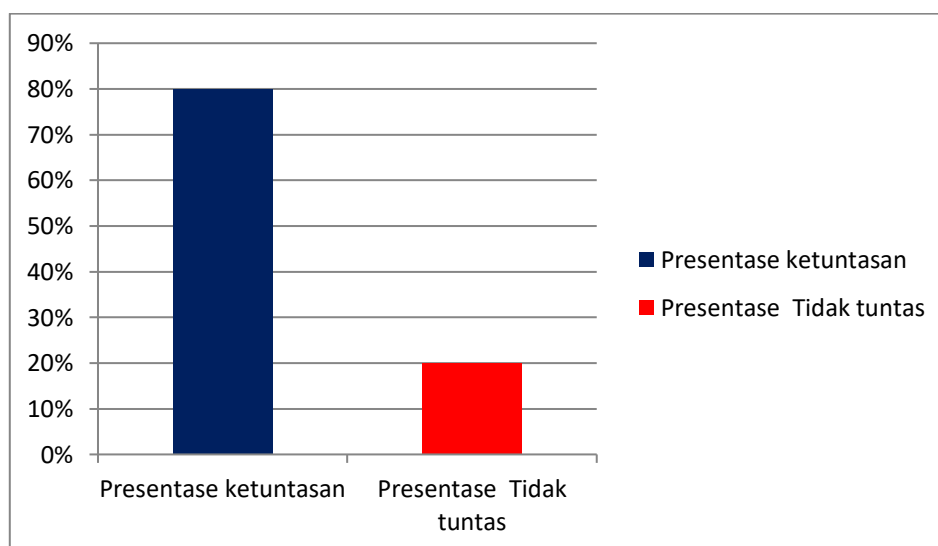


Figure 1. Percentage of Completeness of Cycle I students

Cycle I

a) Learning Planning

At this stage the researcher carried out planning in the form of: (1) identifying learning achievements and learning objectives, (2) compiling teaching modules (MA), (3) making learning videos assisted by the animeker application with learning material for interaction between ecosystem components created and edited in the animeker application which has lots of animated teaching features and backgrounds that match the theme of the material we teach. Implementation of learning.

During the implementation of learning, namely through several stages, namely: (1) The initial activity consists of stage 1 creating a situation (stimulation) greeting prayers as the

implementation of spiritual competence, the teacher asks the presence of students, the teacher gives appreciation by recalling past lessons: abiotic and biotic components, the interaction between living things and the environment, students listen to the apperception conveyed by the teacher, namely linking the previous subject matter to the ecosystem components with the material to be studied the interactions between ecosystem components, the teacher provides motivation, the teacher conveys learning objectives. (2) The core activity of observing consists of stage 2 observing, the teacher divides and forms discussion groups, the teacher shows an animated video of interactions between ecosystem components and interactions between biotic and abiotic components, the teacher gives student worksheets (LKS) for each student, the teacher explains how work on worksheets by first observing the pictures and videos that contain explanations of the interactions between the components of the ecosystem, biotic and abiotic components. (3) Asking consists of stage 3 discussing tasks and identifying problems. (4) Trying consists of Stage 4 of collecting data and analyzing individual students and gathering information about interactions between ecosystem components and interactions between biotic and abiotic components. (5) Reasoning Stage 5 Data processing (7) Closing activities students collect worksheets.

b) Observation

All learning processes were observed using observation sheets that had been prepared previously, regarding student behavior during planned learning and student daily assessment recap data at that time.

c) Reflection

Based on the analysis of the results of the observations made, there are several things that become reflections for further action so that the implementation of science learning using animated videos assisted by the animaker application can increase. Several things to reflect on include: 1) The duration of the learning video is still too short due to poor network quality. 2) The variation of animated images in the video is still limited, so more interesting variations need to be added.



Ecosystem Component



Description of Ecosystem



Stage of Ecosystem

Type of Ecosystem

Figure 2. Video Animation

Data analysis of student learning outcomes when using animated video media assisted by the Animeker application shows an increase from cycle II, where in cycle II there is a decrease in students whose learning outcomes are below the KKM, namely there is 1 student with a completeness percentage of 97% and an incomplete percentage of 3%. Data presentation can be seen in the bar chart in Figure 3.

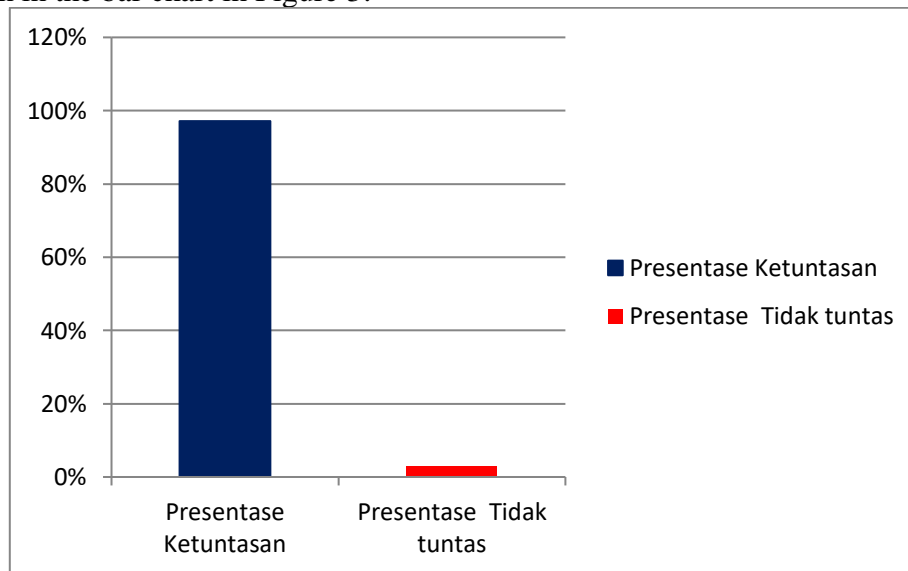


Figure 3. Percentage of Completeness of Cycle II students

Cycle II

a) Learning Planning

At this stage the researcher carried out planning in the form of: (1) Identifying learning achievements and learning objectives, (2) Developing Teaching Modules (MA), (3) Making learning videos assisted by animeker applications with environmental pollution learning materials.

b) Implementation of learning

Learning activities are as follows: (1) Initial activities, namely the opening of learning by the teacher, the teacher greets, asks how the students are, the class leader leads the prayer,

the teacher checks the attendance list by checking the student attendance list one by one and giving student motivation; (2) Asking at this stage the teacher invites students to recall yesterday's learning material. The teacher asks students to observe the condition of the surrounding environment which will be associated with environmental pollution, especially water pollution. Students answer the teacher's questions seriously, the teacher conveys the learning objectives of the material that will be discussed today, the teacher conveys the learning material presented in the animated video assisted by the animeker application to provide students with an understanding of environmental pollution material; (3) The main activity of the teacher is to give post-test questions to each student; (4) Closing activities students are asked to collect the results of their work.

c) Observation

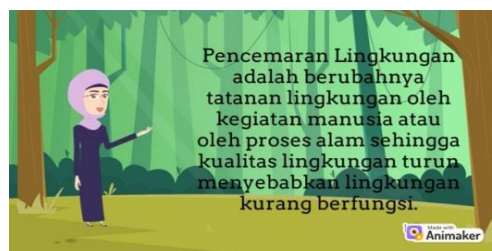
All learning processes were observed using observation sheets that had been prepared previously, regarding student behavior during planned learning and student daily assessment recap data at that time in cycle II student learning outcomes greatly improved after adding pictures and animations that were more interesting from cycle I .

d) Reflection

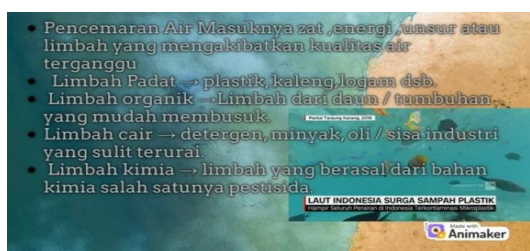
Based on the analysis of the observations made, there was an increase from cycle I to cycle II. Some of the things that become reflections include: 1) The duration of the learning video is made longer and accompanied by music that is more interesting for students to learn. 2) The variation of animated images in the video is more varied. The learning video display data is presented in table 3 as follows.



Title of Material Subjects



Description of Environmental Pollution



Description of Water Pollution



Description of Soil Pollution



Description of Air Pollution

Impact of Environmental Pollution

Figure 3. Video Animation

Based on previous researchers, the use of animated video media can improve science learning outcomes for students in class V SDI Malalaja (Nining Sariyyah, 2022). Comparison of the results of the learning evaluation of students at Nganjuk 1 Public Vocational School in terms of the test results of students who are seen classically has increased from cycle II, after the learning outcomes test was carried out it was obtained data that 1 student had received a minimum score of 70 and there were 34 students who get a value above 70. The achievement of the average value in cycle II was 94.12%. This can be interpreted that students have a high interest in learning science when using animated video media assisted by the animaker application so that it can improve student learning outcomes in class X TPM-1 at SMK Negeri 1 Nganjuk.

CONCLUSION

Based on the research that has been done, it can be concluded that the application of animated video media assisted by the animaker application can improve student learning outcomes in class X TPM-1 at SMK Negeri 1 Nganjuk. It can be seen from the results of observations in the first cycle that the classical average is 82.72% to the second cycle of 94.12. For student learning outcomes in the percentage of completeness student learning outcomes show an increase from cycle I to cycle II, namely where in cycle I there are 7 students whose learning outcomes are below the KKM with a percentage of completeness of 80% and a percentage of incompleteness of 20%, cycle II has the decline in students whose learning outcomes were below the KKM, namely that there was 1 student with a completeness percentage of 97% and an incomplete percentage of 3%.

SUGESTION

Teachers should be creative and innovative in the preparation and use of learning media in line with existing technological developments, especially in the Science Project subjects so that students remain enthusiastic about learning and don't get bored easily during the learning process.

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