



## The influence of animation video media on the interests and learning outcomes of elementary school students

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### ABSTRACT

This study aims to determine the effect of using animated video content on the learning outcomes and interests of SD Negeri Parebon 03 fourth-grade students. The research methodology used is a quantitative approach. In this study, student involvement and learning outcomes are the dependent variables, while animated video content is the independent variable. The sample used in this study was 28 fourth-grade students. The data collection method used was a multiple-choice learning outcome questionnaire that had been validated for validity, an interest questionnaire, and observation. Using basic linear regression tests, descriptive and inferential analysis techniques were used to analyze the data. The average score before therapy was 52. After treatment, the average score increased to 84 for descriptive statistical analysis. Examining inferential statistics of animated video content on test-based learning interest tests showed increased learning interest. At the same time, animated video content showed increased learning outcomes. In conclusion, the interest and learning outcomes of SD Negeri Parebon 03 fourth-grade students on plant breeding material were significantly influenced by animated video content.

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### ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh penggunaan konten video animasi terhadap hasil dan minat belajar siswa kelas IV SD Negeri Parebon 03. Metodologi penelitian yang digunakan adalah pendekatan kuantitatif. Dalam penelitian ini keterlibatan siswa dan hasil belajar menjadi variabel terikat, sedangkan konten video animasi menjadi variabel bebas. Sampel yang digunakan dalam penelitian ini adalah siswa kelas IV sebanyak 28 siswa. Metode pengumpulan data yang digunakan adalah angket hasil belajar pilihan ganda yang telah tervalidasi validitas, angket minat, dan observasi. Dengan menggunakan uji regresi linier dasar, teknik analisis deskriptif dan inferensial digunakan untuk menganalisis data. Skor rata-rata sebelum terapi adalah 52, dan setelah perlakuan, skor rata-rata meningkat menjadi 84 untuk analisis statistik deskriptif. Pemeriksaan statistik inferensial konten video animasi pada tes minat belajar berbasis tes menunjukkan peningkatan terhadap minat belajar. Sedangkan konten video animasi menunjukkan peningkatan terhadap hasil belajar. Kesimpulannya, minat dan hasil belajar siswa kelas IV SD Negeri Parebon 03 terhadap materi pemuliaan tanaman dipengaruhi secara signifikan oleh konten video animasi.

**Kata Kunci:** hasil belajar; minat belajar; video animasi

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## INTRODUCTION

In this modern era, the development of Science and Technology (IPTEK) is increasingly sophisticated. This has a significant impact on human life both directly and indirectly. One aspect that significantly influences science and technology to improve the progress of human life is the educational aspect. Education is important to students' character formation and intellectual development, especially at the elementary school level. To improve educational aspects, teachers are also required to create innovative and engaging learning that can make it easier for students to learn optimally both in classroom learning and independent learning, one of which is by using media (Ghory & Ghafory, 2021).

Media can be used to convey material in the learning process. Based on the KBBI, media is a tool for conveying information. Therefore, media can be used to convey material in the learning process. Meanwhile, according to the KBBI, learning is the process, method, making, and becoming a living-learning creature. Arsyad, in a book entitled "*Media Pembelajaran*" explains that learning media can be used to convey information in the learning process to stimulate students' attention and interest in learning. Using media in the learning process can help educators by making it easier for students to convey and understand the material. Students' interest in learning can increase if they apply media during learning because learning becomes less monotonous and boring. Therefore, in learning, educators must be able to determine suitable and varied media. Animated video media can be a choice for educators to apply to learning. KBBI defines animation as a film consisting of a collection of paintings and images that are slightly different from each other so that they appear to move when played. Animated video media is an audio-visual media that combines animated images that can move, followed by audio according to the animated characters. Thus, it can be concluded that animated video media is a medium that combines audio and visual aspects in the form of animation.

The development of the natural sciences, often associated with a methodological approach to learning about nature, has become a mandatory component in the curriculum. Natural science controls knowledge through concepts, facts, principles, and discovery. Science is one education component that significantly influences improving educational standards (Ismah & Ernawati, 2018). Science teaching must provide students with opportunities to learn more about nature and themselves, as well as opportunities to advance the use of science in everyday life (Septiawan et al., 2017). To achieve the best learning outcomes for students, teachers must be able to use creative learning technology to present science content in a fun and interesting way.

Science is a discipline that students often find challenging. Student learning outcomes are still poor. The continued domination of teachers in the classroom through lecture techniques and assignments is one of the causes of low science learning outcomes. As a result, the learning process in class did not go according to plan (Alda et al., 2022). Teachers play a key role in this situation. How do teachers help students develop their skills? Science is still challenging because of its repetitive delivery and incomprehensible learning methodology, impacting student learning outcomes.

Students often experience difficulties during the learning process, such as understanding concepts, which impacts their interests and learning outcomes. In this situation, the teacher's role is significant in providing support, direction, and resources needed to achieve learning goals. Instructors should encourage more student participation in class so that students can concentrate and improve learning outcomes. Interviews with class IV teachers at SDN Palebon 03 supported this, showing that students' science learning outcomes were still very low. Fifty-four percent of class IV students have not met the Completeness Criteria according to the UTS scores in the science class. Students' attention and interest in learning are also not restrained by the learning provided by the teacher. Students become bored, lose focus, fail to socialize with their friends, become passive, and only a few concepts of learning material stick in their minds due to

the teacher's one-way learning style and continuing to use the lecture method. These problems affect the interest and academic achievement of class IV students.

Another obstacle is the lack of learning materials that attract attention; Therefore, active learning is needed to foster student involvement. To increase student engagement and learning outcomes, media must be able to foster a positive learning environment. Apart from the fact that learning media is very beneficial for children's mental growth, using media to disseminate experiences can also provide valuable experiences for students (Supriyono, 2018). Apart from functioning as a means for teachers to transmit knowledge, using educational media in the teaching and learning process can increase students' learning motivation (Khomariyah, 2018). Learning activities, especially learning media, must be supported to ensure an efficient and successful learning process.

Learning media are all sources, settings, and activities designed to increase knowledge, change attitudes, or instill user skills. To attract students' attention, animated visual effects are produced by changing the shape. Understanding can be made easier, interesting memories can be strengthened, and material relevant to everyday life can be learned through animated video media in the classroom (Adiati et al., 2023).

This research will use animated video content to aid learning. Using interesting educational materials can simplify previously challenging science learning (Affeldt et al., 2018). Watching videos can also help students reduce boredom while studying. Learning through animated films is very interesting and authentic for children, increasing understanding and motivation. Through animated videos, children can see visually instead of imagining abstractly.

Researchers will use animated video media to study plant reproduction material concerning the abovementioned problems. Teachers and students can more easily meet learning objectives when animated video content is used in the classroom. Animated videos can be used to distribute learning evenly. The impact of animated video content on plant reproduction on the attention and academic achievement of elementary school students makes this research important to conduct. This research aims to analyze the effectiveness of using animated video media on plant propagation on students' interest in learning and on student learning outcomes and to determine the effect of implementing the use of animated video media on plant propagation on the learning outcomes of class IV students at SD Negeri Palebon 03.

## LITERATURE REVIEW

### Education

The quality of education in Indonesia is increasingly being demanded to improve so that education in Indonesia can keep up with existing developments. Learning media is essential in learning and can be used as a bridge to convey information about specific materials. Media use in learning can positively impact and have extraordinary benefits in making student learning easier. Apart from that, learning media is an indispensable foundation that complements and becomes an integral part of the success of the learning process. Education is a learning process that aims to develop personal potential or the quality of the mindset and knowledge of an individual or group. Mother is a general term for a woman or woman who is married and has children. Gross motor skills are movements that use large muscles or most or all of the body parts influenced by the child's maturity (Arqiya & Khairunnisa Ramadani, 2023).

Education aims to determine the problems and needs of the person concerned, with existing resources to be able to understand what the person can do about the problem plus external support, and decide what activities are most appropriate to improve the standard of healthy living and welfare of the community (Rosyidah, 2021). Education, or what can be called education, is a process of dynamic behavior change,

where the change is not just a process of transferring material or theory from one person to another and is not a series of procedures. However, the change occurs because of awareness within the individual, group, or society (Iksal et al., 2024).

Education aims to determine the problems and needs of the person concerned, with existing resources to understand what the person can do about the problem plus external support, and decide what activities are most appropriate to improve the standard of healthy living and welfare of the community. Itself (Rosyidah et al., 2021). The benefits that can be felt from this educational activity for society include providing people with extensive knowledge, developing people's personalities for the better, instilling positive values in people, and training people to develop the talents they have for other things positive things (Iksal et al., 2024). Based on the explanation above, it can be concluded that education is a process that educates a person whose aim is that the person can have a good quality of life and be useful for himself, other people, and the environment around him.

## **Learning Media**

Learning media conveys learning messages concerning the direct learning model through the teacher acting as a provider of information. In this case, the teacher must use various appropriate media. Learning media is a means of teaching and learning. Everything can be used to stimulate students' thoughts, feelings, attention, and abilities or skills to stimulate the learning process. Learning media is an intermediary that conveys messages or information for educational purposes or contains learning purposes between the source and recipient (Ramadani et al., 2023).

Learning media are tools teachers use to help clarify the subject matter they convey to students and prevent verbalism from occurring in students. Teachers often mention terms that students have never heard in the learning process. Without media, students cannot imagine or even know what they have just heard, ultimately making them unable to understand the material thoroughly. Therefore, learning media is very helpful in preventing verbalism in students (Lubis et al., 2024).

Learning media is a tool in the teaching and learning process. Learning media is a means of conveying learning messages where the teacher plays the role of conveying information, and in this case, the teacher should use various appropriate teaching media (Nurhikmah et al., 2023). This statement follows the opinion of other researchers, who explain that learning media can provide learning information to students to help the learning process progress. In addition, Mashuri, in a book entitled "*Media Pembelajaran Matematika*" states that learning media is anything used in learning activities that functions as a channel for messages/information that can stimulate students' thoughts, feelings, interests, and attention so that the communication interaction process regarding education between teachers and students can take place effectively.

Learning methods become more varied if the learning process does not only use formal communication delivered orally. That way, students will not feel bored while learning. If the teacher chooses to use learning media in a teaching and learning process, then learning time can be shortened because most media only use a few moments to deliver a message. With the existence of learning media, the benefits of using it can influence students' needs and material (Ramadani et al., 2023). Some advantages of learning media include arousing students' interest in learning, increasing learning effectiveness, and making it easier to deliver material. Meanwhile, the disadvantages include dependence on technology, lack of flexibility, and less development of student creativity.

It can be concluded that learning media is an educational tool that can be used to help the teaching and learning process, as well as foster students' learning motivation, and everything that is used, both objects and the environment around students, that students can use in the learning process.

## **Animation Video**

Animated video media is audio-visual media that combines animated images that can move, followed by audio using animated characters (Muhibbah & Iba, 2022). Video is an image in a frame, where the image frame is projected mechanically through a projector lens so that a live image appears on the screen (Ariandhini & Anugraheni, 2022; Rahayu et al., 2024). Meanwhile, the animation is a series of images arranged one after another. If the image sequence is displayed at sufficient speed, then the image sequence appears to move. Animation comes from English, from the word anime, meaning to start. Animated video media means learning media that uses moving image elements accompanied by complementary sounds, such as a video or film.

This is where animation as a technology-based learning medium can significantly contribute (Cahyani, 2020). Animation has strong visual and audio appeal and can arouse students' imagination and creativity. With the proper use of animation, complex or abstract learning material can be presented in a way that is easier for students to understand. Animation can also present information interactively, allowing students to participate actively in the learning process. Previous research has revealed the benefits of using animation in increasing student learning motivation (Yuliansah, 2018). Animation provides an interesting and enjoyable learning experience, increasing student involvement and interest in the learning material (Winastiti et al., 2012). In addition, animation can motivate students by conveying relevant and contextual content, presenting stories or scenarios that provoke students' emotions, and providing immediate feedback (Susilo & Widiya, 2021).

Various research studies in the literature show that animation as a technology-based learning medium can increase students' learning motivation. Attractive and interactive animations can arouse student interest, spark curiosity, and create a fun learning experience. Animation also provides variety in teaching methods, which can prevent boredom and monotony in learning (Haris, 2018).

Animation as a technology-based learning medium has great potential to increase students' learning motivation and understanding of concepts. Literature studies also show the newness of animation as a learning tool that is increasingly sophisticated and relevant to technological developments (Cahyani, 2020). The use of animation as a technology-based learning medium has become a topic that has attracted the interest of educators and researchers in recent years. The results of the literature study show that animation has excellent potential to increase student learning motivation (Barut Tugtekin & Dursun, 2022).

In conclusion, animation as a technology-based learning medium can significantly increase student motivation. Animation can enrich students' learning experiences through explicit, interactive, interesting visual representations. It can also increase student engagement, creativity, and personalized learning. However, content quality and technical challenges must be addressed to ensure effective animation implementation in learning.

## **METHODS**

The method used in this research is a quantitative approach. According to Sugiyono in a book entitled "*Metode Penelitian Kuantitatif, Kualitatif, dan R&D*" quantitative research methods can be interpreted as research methods based on the philosophy of positivism, which is used to research on specific populations or samples. Sampling techniques are usually carried out using the entire population as a sample. The

sample used in this study amounted to 28 fourth-grade children of SDN Palebon 03 in the 2024-2025 school year.

This study used a tool in the form of a questionnaire. Questionnaires about learning interests and initial learning outcomes will be distributed at the first meeting. In the second meeting, participants received treatment in the form of plant reproduction education with animated video media. Furthermore, a survey of learning interest and learning outcomes was conducted at the third meeting. After the data is collected, researchers use regression analysis techniques to test the data obtained.

## RESULTS AND DISCUSSION

### Results

Learning is a term that is often heard, seen, and used to describe processes and results. Learning is a series of activities that involve many of a person's senses, especially the five senses, thus influencing the benefits of the process for the individual. An activity or activities that have the potential to influence change, such as information, attitudes, and abilities, can also be considered learning. Several elements influence student motivation in learning, including internal and physical factors, such as each student's health or physical condition; good physical health encourages learning success and can influence interest in learning. Mental and psychological factors include attention, observing, responding, fantasizing, remembering, thinking, talent, and motivation (Al Fuad, 2016). The family is the first educational institution for children, so parents must always be ready to help, offer the necessary learning resources, and provide a comfortable environment to facilitate learning. This is an example of an external variable. Educational institutions include teaching strategies, curriculum, academic facilities and infrastructure, educational materials, educational media, student-teacher and school staff relations, and other academic activities. It is better if academic activities are combined with extracurricular activities that better reflect community context, which includes friendships, community activities, and housing arrangements.

A learning interest questionnaire with four selected statement items was used to collect interest data. Each statement item is added to determine the findings of the learning interest data displayed in **Table 1** below.

**Table 1.** Description of Learning Interests

Data	Average
Interest in Learning Before Treatment	55,5
Interest in Learning After Treatment	73,5

*Source: Research, 2024*

This research examined how fourth-grade students at SD Negeri Palebon 03 were influenced by animated video content about plant reproduction concerning their interest in science education. The science education carried out is centered on breeding material. Data from the interest in learning questionnaire shows that students' enthusiasm for learning in class has increased.

Before receiving treatment, the students' average level of interest in learning was 55.5, according to computational findings. The average level of student interest before and after watching an animated video about plant reproduction was used to determine the increase. The average student interest score before watching the animated film on plant reproduction was 54,5, but it increased to an average of 73.5 after watching the video.

After receiving treatment, the learning interest score was 73.5. **Table 2** shows statistical results related to completing the initial questionnaire.

**Table 2.** Description of Learning Outcomes Questionnaire

Statistical	Statistical Value
Number of Samples	28
Minimum	32
Maximum	72
Average	52
Deviation Standard	10,693

*Sources: Research, 2024*

Based on the conversation findings, the initial learning outcomes questionnaire showed that from a sample size of 28 students, the lowest score obtained was 32, and the highest was 72. On the other hand, the average score was 52, while the standard deviation was 10,693.

Based on the results of direct regression research,  $Y = 35.459 + 0.450X$  is the variable for animated videos of plant reproduction (X) on interest in learning (Y1). Animated videos about plant breeding have a positive impact of 20% on students' enthusiasm for learning. Apart from that, using learning materials that students have never encountered during the learning process is the cause of increased interest in learning. Students' learning activities are greatly influenced by their level of interest in the material. Students will be more interested in learning new topics if they are interested (Marwa et al., 2020).

**Table 3.** Description of Learning Outcomes Questionnaire

Statistical	Statistical Value
Number of Samples	28
Minimum	72
Maximum	100
Average	84
Deviation Standart	8,526

*Sources: Research, 2024*

Based on known computational findings, the learning outcomes questionnaire from a sample of 28 students produced an average score of 84 with a standard deviation of 8.526, a minimum score of 72, and a maximum score of 100.

Based on the test results, a correlation coefficient value of 0.450 was obtained. The correlation coefficient interpretation table shows that the medium-level (very strong) group has a value of 0.450. Thus, the

relationship between interest in learning (Y1) and plant reproduction animation video media (X) can be quite high.

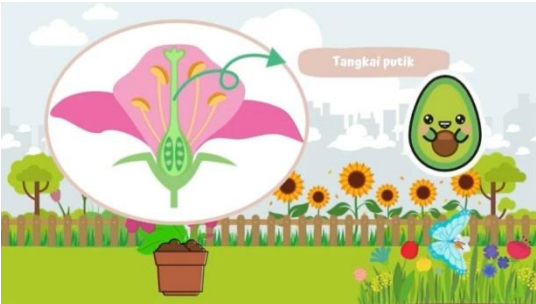

## Discussion

Using media in the learning process can help make it easier for educators to convey and provide students with an understanding of the material. By using media during learning, students will be motivated, and students' interest in learning can increase because learning will not be monotonous and boring. Students will also be more motivated to learn, encouraging students to write, speak, and stimulate their imagination (Tafonao, 2018). Interactive has proven to be effective in increasing student interest and providing good learning outcomes so that it can help fulfill 21st-century competencies so that they can compete (Putra & Salsabila, 2021). Therefore, in learning, educators must be able to determine suitable and varied media.

Animation media is designed to improve student learning outcomes. It aims to stimulate students' audio, visual, and audio-visual content. Using this media will attract students' attention and help them focus more on learning because they are faced with new and more interesting media.

Research conducted in class IV provides questionnaire data. With variable X content being an animated video about plant reproduction, researchers concentrated on three factors. Learning motivation becomes variable Y1, and student cognitive learning outcomes become variable Y2. Researchers are studying the impact of animated plant video content on fourth-grade elementary school students' learning outcomes and attention levels. A summary of the animated video content about plant reproduction is in **Table 4** as follows.

**Table 4.** Learning Video Views

Views	Information
	<p>Plants reproduce through pistils, stamens, and flowers, both perfect and imperfect. In one flower, you can find the pistil and stamens. This is known as the ideal flower. However, in particular flowers, the pistil and stamens are different. This is known as imperfect flowering.</p>
<p><b>Penyerbukan Sendiri</b></p> 	<p>Through self-pollination, pollen is transferred from the anther to the stigma of the same or another flower on the same plant.</p>



**Views**

**Information**

Penyerbukan Tetangga



"Neighbor pollination" occurs when pollen from one flower lands on the stigma of another flower but remains on the same plant. Another name for neighbor pollination is geitonogamy.



Wind-assisted pollination is known as exogamous pollination. To complete the pollination process, nagin flies spread pollen from one flower to another. Rice is one of the plants that benefit from wind pollination.



The terms hydrogamous and hydrophilic pollination refer to air-assisted pollination. The process begins when pollen is carried in the air and reaches the flower pistil. Pollination with the help of water occurs because the flowers are exposed to rainwater and submerged in water. Lotus and other aquatic plants are plants whose water helps pollination.



Zoidiogy is the term for pollination assisted by animals. Bees, beetles, flies, moths, butterflies, birds, bats, and snails are some examples of animals known as pollinators that function as intermediaries for pollination.



We call this anthropogamy human-assisted pollination. Usually, this pollination is carried out on flowers that show the following characteristics:

Not in the same flower stand can there be stigma and pollen.

To prevent pollen from entering, the stigma is closed. Humans help pollinate vanilla plants because the membrane covers the stamens and stigmas of vanilla flowers.

Sources: Research, 2024

## **The Effect of Using Plant-Breeding Animation Video Media on Cognitive Learning Outcomes**

Influence is a force that radiates or exists within an individual and shapes that person's views, actions, or character (Adiati et al., 2023). The main subject of this research is the influence of animated video content on plant reproduction on the academic achievement of class IV students at SD Negeri Palebon 03. Based on questionnaire data, there are variations in the scores obtained by students regarding cognitive learning outcomes. Animation media is a medium designed to improve student learning outcomes, and it aims to stimulate students' audio, visual, and audiovisual content. Using this media will attract students' attention and help them focus more on learning because it presents new and more interesting media. The results of descriptive analysis show that student learning outcomes have increased after therapy compared to before treatment. The mean scores on the pre-and post-therapy questionnaires were 52 and 84, respectively, indicating this. Based on the results of basic regression research, the variable plant reproduction animation video (X) on learning outcomes (Y2) is  $Y = Y = 47.052 + 0.883X$ , which shows a positive relationship between animated video media and learning outcomes of 78%.

In addition, using learning materials that students have never encountered during the educational process leads to increased learning outcomes. Animated video content on plant reproduction makes learning exercises more focused, thereby helping students remember the information better. Since students become more engaged when presented with a combination of audio and images, learning activities focused on plant reproduction using animated video media help them understand the content better. Using learning movies as media can improve student learning outcomes (Amri & Kartono, 2023). Learning exercises become more interesting and potentially increase students' understanding of plant breeding material.

## **The Influence of Using Plant-Breeding Animation Video Media on Interest and Cognitive Learning Outcomes**

Innovative learning activities that use learning technology to deliver content aim to increase student engagement and learning outcomes. The use of educational media is expected to have a positive impact on understanding the content offered. The test used to observe this effect is known as the Multivariate Analysis of Variance (MANOVA) test. It is known that Sig. < 0.05 based on results. Thus, animated video content has an impact on plant reproduction (X), learning interest (Y1), and learning outcomes (Y2) both separately and in combination.

Using animated visual media will improve the learning experience because animated visual effects are designed to attract students by changing shapes, colors, or other characteristics. In addition, using media helps develop instructors' technology learning skills. Utilizing animated video content for plant reproduction learning activities can simultaneously influence learning outcomes and interests, not just one or the other. Apart from that, learning activities on plant growth material usually only take the form of lectures, making students bored. The presence of animated displays allows students to visualize their fantasies. The learning process becomes more concentrated, and the animated video content used to organize the content becomes more enjoyable and productive. So that it can display the process steps clearly and systematically, it is hoped that students can achieve the expected learning outcomes throughout the learning process (Harefa et al., 2023).

Using animated video content on plant reproduction in the classroom can support science objectives because the material is intended to help students understand nature. This shows that using animated video content about plant reproduction as a teaching tool is appropriate and can improve learning outcomes and benefit student learning. Using learning media can foster students' interest in learning new things in the learning material presented by the teacher so that it can be easily understood (Nurfadhillah et al., 2021). It was further stated that if students' learning interests are high, their learning difficulties will

decrease. Conversely, if students' learning interests are low, then students' learning difficulties will increase.

Thus, students with a high interest in learning can overcome learning difficulties, positively affecting learning outcomes. Students' perceptions of the application of animated video media are very good. This is in line with research that revealed that the implementation of learning by teachers was assessed as very good, while student activities in learning were assessed as suitable (Kusumawardani et al., 2022). Students' responses to using Animaker-based audiovisual animation videos in learning received high ratings. In this way, animated videos can be used as learning media that helps teachers optimize the learning process.

The use of animated video media influences student learning outcomes. This explains that using animated video media really helps the learning process be more interesting, effective, efficient, and easier for students to understand. Animated video media is very effective as a complete medium in teaching and learning (Laksmi et al., 2021). Interactive videos can be considered accessible, exciting, and motivating for elementary school students to learn (Wibowo et al., 2024). The advantage of the animated video media developed is that this video contains examples that can clarify the message so that students can easily understand the learning material. The reason for choosing to develop animated videos is that animation is exciting and practical in helping convey the information in the learning material. In line with that, this animated video media is very supportive, so it can be used as a learning support media to influence students' interest in learning. In line with that, this animated video media is very supportive and can be used as a learning support media to influence student learning outcomes. The results of this research align with the results of other research that show that the use of animated videos affects student learning outcomes (Tullah et al., 2022). Based on the results of previous studies, animation media influences students' interest in learning. Several other studies have proven that animation media influences students' interest in learning more than image media because both media provide the same interest, meaning there is no difference between image media and animation media.

## CONCLUSION

The following conclusions were obtained from the research results: For fourth-grade students at SD Negeri Palebon 03, animated animations about plant reproduction influenced their enthusiasm for learning science. The analysis findings show that animated video content about plant reproduction increases students' interest in learning, for fourth-grade students at SD Negeri Palebon 03, animated video content about plant reproduction influenced their science learning outcomes. The analysis shows that animated video content about plant reproduction improves student learning outcomes. Giving students access to animated video content allows teachers to use it as an interactive teaching tool. In addition, animated video content is believed to help students understand the information being studied. Teachers may find it easier to communicate assigned subjects using this medium.

Based on these findings, researchers suggest that educators are required to develop interesting, fun, and varied or diverse material in the use of learning media such as animated video media. Meanwhile, the advice is for students to be more enthusiastic and diligent in studying and not be embarrassed to ask teachers, friends, parents, or relatives if the lesson material is challenging to understand. Moreover, for future researchers who want to research the same theme, it is hoped that they can create even more varied animated video media to update the resulting data and media.

## REFERENCES

- Adiati, C. C., Firdaus, R., & Nurwahidin, M. (2023). Efektivitas video animasi terhadap hasil belajar siswa. *Akademika*, 12(1), 69-81.
- Affeldt, F., Meinhart, D., & Eilks, I. (2018). The use of comics in experimental instructions in a non-formal chemistry learning context. *International Journal of Education in Mathematics, Science and Technology*, 6(1), 93-104.
- Al Fuad, Z. (2016). Faktor-faktor yang mempengaruhi minat belajar siswa kelas I SDN 7 Kute Panang. *Jurnal Tunas Bangsa*, 3(2), 42-54.
- Alda, P., Putra, M. J. A., & Erlisnawati, E. (2022). Pengaruh model pembelajaran kooperatif tipe team game tournament berbantuan media monopoli hidrosfer terhadap hasil belajar siswa kelas V sekolah dasar. *Primary: Jurnal Pendidikan Guru Sekolah Dasar*, 11(6), 1763-1772.
- Amri, A. F., & Kartono, K. (2023). The development of flash movie learning media with a SETS Vision to improve critical thinking skills and learning outcomes on environmental pollution material. *Jurnal Penelitian Pendidikan IPA*, 9(11), 9741-9749.
- Ariandhini, E., & Anugraheni, I. (2022). Pengembangan media video animasi berbasis animaker untuk meningkatkan hasil belajar materi puisi mapel bahasa Indonesia kelas 3 SD. *Jurnal Ilmiah Wahana Pendidikan*, 8(3), 242-252.
- Arqiya, S., & Khairunnisa Ramadani, C. (2023). Influence of children's motor development primary school age in the learning process . *International Journal of Students Education*, 1(2), 184-189.
- Barut Tugtekin, E., & Dursun, O. O. (2022). Effect of animated and interactive video variations on learners' motivation in distance Education. *Education and Information Technologies*, 27(3), 3247-3276.
- Cahyani, I. R. (2020). Pemanfaatan media animasi 3D di SMA. *Jurnal Teknologi Pendidikan: Jurnal Penelitian dan Pengembangan Pembelajaran*, 5(1), 57-68.
- Ghory, S., & Ghafory, H. (2021). The impact of modern technology in the teaching and learning process. *International Journal of Innovative Research and Scientific Studies*, 4(3), 168-173.
- Harefa, D., Sarumaha, M., Telaumbanua, K., Telaumbanua, T., Laia, B., & Hulu, F. (2023). Relationship student learning interest to the learning outcomes of natural sciences. *International Journal of Educational Research & Social Sciences*, 4(2), 240-246.
- Haris, V. S. D. (2018). Pengaruh penyuluhan dengan media animasi terhadap pengetahuan dan sikap tentang makanan bergizi, seimbang dan aman bagi siswa SD 08 Cilandak Barat Jakarta Selatan Tahun 2017. *Quality: Jurnal Kesehatan*, 12(1), 38-42.
- Iksal, I., Hayani, R. A., & Aslan, A. (2024). Strengthening character education as a response to the challenges of the times. *Indonesian Journal of Education (INJOE)*, 4(3), 761-774.
- Ismah, Z., & Ernawati, T. (2018). Pengaruh model pembelajaran kooperatif tipe Teams Games Tournament (TGT) terhadap hasil belajar IPA siswa kelas VIII SMP ditinjau dari kerjasama siswa. *Jurnal Pijar Mipa*, 13(1), 82-85.
- Khomariyah, S. (2018). Analisis penggunaan media video animasi terhadap efektivitas pembelajaran materi product life cycle. *Jurnal Pendidikan Tata Niaga (JPTN)*, 6(2), 123-129.

- Kusumahwardani, D., Pramadi, A., & Maspupah, M. (2022). Peningkatan hasil belajar siswa menggunakan video animasi audiovisual berbasis animaker pada materi sistem gerak manusia. *Jurnal Educatio FKIP Unma*, 8(1), 110-115.
- Laksmi, N. K. P., Yasa, I. K. A., & Mirayani, K. A. M. (2021). The use of animation video as learning media for young learners to improve EFL students' motivation in learning english. *Lingua*, 17(1), 42-52
- Lubis, D. M., Adrianto, I., Azizi, M. F., Lubis, S. I. A. R., Sidauruk, V. P., & Siregar, B. H. (2024). Pengaruh penerapan media pembelajaran interaktif desmos berbasis Realistic Mathematics Education (RME) terhadap hasil belajar siswa SMP Kelas IX SMP Swasta Utama Medan pada materi fungsi kuadrat. *JagoMIPA: Jurnal Pendidikan Matematika dan IPA*, 4(4), 655-663.
- Marwa, M., Munirah, M., Angriani, A. D., Suharti, S., Sriyanti, A., & Rosdiana, R. (2020). Peran guru dalam meningkatkan minat belajar peserta didik kelas IV pada masa pandemi COVID-19. *Auladuna: Jurnal Pendidikan Dasar Islam*, 7(2), 215-227.
- Muhibbah, F., & Iba, K. (2022). Pengaruh penggunaan media video animasi terhadap hasil belajar Matematika kelas IV SD. *Primary: Jurnal Pendidikan Guru Sekolah Dasar*, 11(4), 1022-1028.
- Nurfadhillah, S., Ningsih, D. A., Ramadhania, P. R., & Sifa, U. N. (2021). Peranan media pembelajaran dalam meningkatkan minat belajar siswa SD Negeri Kohod III. *Pensa*, 3(2), 243-255.
- Nurhikmah, A., Madianti, H. P., Azzahra, P. A., & Marini, A. (2023). Pengembangan media pembelajaran melalui game educandy untuk meningkatkan karakter belajar siswa di sekolah dasar. *Jurnal Pendidikan Dasar dan Sosial Humaniora*, 2(3), 439-448.
- Putra, A. D., & Salsabila, H. (2021). Pengaruh media interaktif dalam perkembangan kegiatan pembelajaran pada instansi pendidikan. *Inovasi Kurikulum*, 18(2), 231-241.
- Rahayu, D., Kusumastuti, R., Mangkuto, I. R., Nugraheni, A. I. D., & Wibowo, A. P. A. (2024). Ketepatan penerapan prinsip animasi staging dan timing pada video animasi 2d motion graphic. *Information System Journal*, 7(1), 11-19.
- Ramadani, A. N., Kirana, K. C., Astuti, U., & Marini, A. (2023). Pengaruh penggunaan media pembelajaran terhadap dunia pendidikan (studi literatur). *Jurnal Pendidikan Dasar dan Sosial Humaniora*, 2(6), 749-756.
- Rosyidah, M., Wisudawati, N., & Masruri, A. (2021). Edukasi informasi adaptasi era new normal bagi masyarakat. *Suluh Abdi*, 3(2), 123-130.
- Septiawan, I. M. A. E., Rati, N. W., & Murda, I. N. (2017). Pengaruh model pembelajaran kooperatif Tipe TGT berbantuan media audio visual terhadap hasil belajar IPA. *Mimbar PGSD Undiksha*, 5(2), 1-10.
- Supriyono, S. (2018). Pentingnya media pembelajaran untuk meningkatkan minat belajar siswa SD. *Edustream: Jurnal Pendidikan Dasar*, 2(1), 43-48.
- Susilo, A., & Widiya, M. (2021). Video animasi sebagai sarana meningkatkan semangat belajar mata kuliah media pembelajaran di STKIP PGRI Lubuklinggau. *Jurnal Eduscience*, 8(1), 30-38.
- Tafonao, T. (2018). Peranan media pembelajaran dalam meningkatkan minat belajar mahasiswa. *Jurnal Komunikasi Pendidikan*, 2(2), 103-114.
- Tullah, N. H., Widiada, I. K., & Tahir, M. (2022). Pengaruh penggunaan video animasi terhadap minat belajar siswa kelas IV SDN 3 Rumak Tahun Ajaran 2021/2022. *Jurnal Ilmiah Profesi Pendidikan*, 7(2), 821-826.

- Wibowo, S. A., Degeng, M. D. K., & Praherdhiono, H. (2024). Interactive video for learning Mathematics element of measurement in elementary school. *Inovasi Kurikulum*, 21(2), 723-736.
- Winastiti, D. D., Kurniawan, E. S., & Maftukhin, A. (2012). Peningkatan motivasi belajar fisika melalui pemanfaatan media pembelajaran animasi yang diproduksi Pustekkom pada siswa kelas VIII SMP Setya Budi Purworejo tahun pelajaran 2011/2012. *Radiasi: Jurnal Berkala Pendidikan Fisika*, 1(1), 28-33.
- Yuliansah, Y. (2018). Efektivitas media pembelajaran powerpoint berbasis animasi dalam meningkatkan motivasi dan prestasi belajar. *Efisiensi: Kajian Ilmu Administrasi*, 15(2), 24-32.