



Animaker Media On Student Learning Outcomes in Class VII Science Subject of Smp Negeri 1 Watang Pulu

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ABSTRACT

This study uses a quantitative method with the type of experimental research that aims to determine the effectiveness of using *Animaker media* on learning outcomes in class VII science at SMP Negeri 1 Watang Pulu, Sidenreng Rappang Regency. The population of this study were all 192 students of class VII at SMP Negeri 1 Watang Pulu, and 26 samples were taken. Data collection techniques were carried out based on Slavin's theory (2000), namely observation techniques, documentation techniques, test techniques, and questionnaire techniques. This indicator consists of four, namely the quality of learning, the suitability of the level of learning, intensity, and time. After the data was collected, the data was analyzed and found that the four indicators of the effectiveness of a strategy were passed and had an impact on student learning outcomes in class VII science subjects at SMP Negeri 1 Watang Pulu. Testing the research hypothesis of the data obtained on average from the higher *posttest results*, namely 81.8 %, while the *pretest results* were 50.8%. The results of this study indicate that the use of *Animaker media* in learning science class VII at SMP Negeri 1 Watang Pulu, Sidenreng Rappang Regency, is declared effective.

Keywords: *Effectiveness, Media Animaker, Learning Outcomes*

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INTRODUCTION

Education is a process of forming individual personality, meaning that everyone has the right to get the same opportunity to continue to develop in order to become an educated person who is useful for the nation and state (Azizah et al., 2022; Nicholas et al., 2023; Putri et al., 2023). Education is the solution in preparing students who are state assets through counseling and teaching activities as well as education.

According to Law no. 20 of 2003 concerning the National Education System "education is awareness and planned in liven up the atmosphere and the learning process for students can actively increase their potential in order to grow spiritual religion, self-control, personality, intelligence, noble character, and the skills needed by themselves, society, nation and state " (Kemendiknas, 2003).

As we know, technological developments are increasing every year. Thus, professional teachers are required to develop their skills according to the development of science and technology (IPTEK) with the need for quality human resources who are able to compete at the national and state level (Widiyanto et al., 2020). Teacher creativity is the main thing that is very influential in student learning achievement (Lamalla & Hanafi, 2019). As a teaching planner, the teacher is expected to be able to use a variety of atats and various media.

According to the National Education Association (1969), educational media includes hardware technology and educational media positions. Educational media can be in the form of audiovisual or written communication (Holly et al., 2023; Levan's et al., 2022; Vicky et al., 2023). Because the educational process is essentially a communication that takes place in one system, for that educational media has a very important position as the single most important component in the educational process. Without media, communication cannot occur and the learning process related to communication cannot run smoothly. An important component of the education system is the media (Ekayani, 2017).

Animaker is an application used to design moving effects and can add sound from one movement to another according to learning material so that it becomes interesting (Fajrianti & Meilana, 2022). This media will be an interesting teaching material that is used to foster students' enthusiasm for learning.

The effectiveness of using *Animaker* media on student learning outcomes in class VII Science Subject at SMP Negeri 1 Watang Pulu. is a research that the author is interested in doing in class VII students of SMP Negeri 1 Watang Pulu .

RESEARCH METHOD

This study uses quantitative research with experimental types. The design forms used are *one group pretest and posttest* to test the effectiveness of using *Animaker* media on student learning outcomes in class VII Science Subject at SMP Negeri 1 Watang Pulu. The dependent variable in this study is the science learning outcomes of class VII students at SMP Negeri 1 Watang Pulu, while the independent variable is *Animaker media*.

The following is an overview of *the one group pretest and posttest design research*

Table 3.1 *One Group Research Design*

O ₁	X	O ₂
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Information:

O₁: *Pre-test* group

O₂: Group *Post-test*

X: Treatment of the experimental group using Animaker *media*.

To deepen this research, a definition of the term is formulated as follows:

1. *Animaker* (Free variable) is an *online* -based animation *platform* or *software* (Delila, 2020)
2. Learning outcomes (the dependent variable) are student achievement results that describe mastery of indicators about the material after the learning process. population Can be seen in the following table.

Table 3.2 State of the Population

Class	Man	Woman	Amount
VII A	12	15	27
VII B	12	15	27
VII C	12	14	26
VII D	14	15	29
VII E	13	15	28
VII F	12	17	28
VII G	12	14	26
Total	87	105	192

Data source: State Middle School 1 Watang Pulu

According to Sugiyono (2018) The sample is a factor in the number and characteristics of that population (Fathia et al., 2022; Maryati et al., 2022; Saputra et al., 2022). This research uses the method *cluster random sampling* by means me random to groups, random is called taking by randomizing the existing population and not distinguishing one subject from another (Jiang et al., 2022; Syafi'ah et al., 2021). Therefore the researchers drew l one sample class from a total population of 192 students in class VII junior high school Country 1 Watang Pulu. A complete description of the sample can be seen as follows.

Table 3.3 Sample Conditions

Class	Population
VII C	26
Amount	26

Data source: State Middle School 1 Watang Pulu

To obtain technical data used are:

1. Observation

observation aims to directly observe learning in the classroom.

2. Test

To obtain data, researchers used tests in the form of *multiple choice* which is taken into account beforehand, before and after using the *Animaker media*.

3. Documentation

This technique is used to obtain data on the number of active students in class VII SMP Negeri 1 Watang Pul.

4. Questionnaire

According to Sugiono (2018) a questionnaire is a method of obtaining data by giving questions or written statements.

Data analysis is a research process that is carried out when all the data obtained in solving the problem to be researched and obtained in full (Amrina et al., 2022; Liam et al., 2023; Saskia et al., 2023). The ability criteria set, namely a percentage of 75% with a value of 70 is declared successful or reaches the criteria. The following steps can be used to carry out the analysis:

1. Converting scores to grades:

$$N = \frac{SP}{SM} \times 100$$

Information:

N : Value

SP : Acquisition score

SM : Maximum score

100 : Highest score

2. The formula used to manage data is as follows:

$$P = \frac{F}{N} \times 100$$

Information :

Q: Percentage

F: Frequency

N: Total

RESULT AND DISCUSSION

The results of research conducted using data collection techniques based on effectiveness indicators from Slavin (2000), namely the quality of learning, the right level of learning, incentives and time.

1. Quality of learning

The quality of learning discusses the data derived from the tests given to class VII C students of SMP Negeri 1 Watang Pulu, which includes 26 students identified as samples. Students will receive about 30 numbers related to multiple choice (Auliani et al., 2023; Mustafiyanti et al., 2023). According to the rumors that have been understood, the test results

will be counted. Rating Weight 1 with the sum of points from 30 different topical multiple ballots will result in a minimum score of 70. For further information, please see the following table:

Table 4.1 scores and *pretest values*

No	Student's name	Score	Mark
1	Ainur Ridho A. Talib	15	50
2	Amelia Indah Sari	12	40
3	Annisa Oktaviani	14	47
4	Arwin	21	70
5	Arwin Alfaritgi	20	67
6	Asadel Dzakwan	12	40
7	Cindi Aulia H	21	70
8	Fadillah	20	67
9	Fikran	14	47
10	Fitrah Dhea Lathifah H	13	44
11	Imeri	11	37
12	Irwansyah Setya N	19	64
13	Kamal Aprianto	17	57
14	Khumairah Arsita A	14	47
15	Milda Yanti M	13	44
16	Muh. Ridho	14	47
17	Nur Haliza Amalia	19	64
18	Nurfaiz Masyam	20	67
19	Nurafni Sumar	14	47
20	Pradito Putra	15	50
21	Rahman Syahputra	8	27
22	Ririn Dwi Aryani	14	47
23	Salsabila F	17	57
24	Knight	12	40
25	Sayyida Khalifah	12	40
26	Sitti Nurhasizah M	13	44
Amount			1,321

Data Source: Test Results

It can be seen in the table above that none of the students got a score of 100 and the average score for the highest student acquisition was 70, while the lowest was 27.

Table 4.2 *Posttest scores* and scores

No.	Student's name	Score	Mark
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1	Ainur Ridho A. Talib	25	83
2	Amelia Indah Sari	25	83
3	Annisa Oktaviani	25	83
4	Arwin	23	76
5	Arwin Alfaritgi	28	93
6	Asadel Dzakwan	26	86
7	Cindi Aulia H	28	93
8	Fadillah	25	83
9	Fikran	24	80
10	Fitrah Dhea Lathifah H	25	83
11	Imeri	23	76
12	Irwansyah Setya N	24	80
13	Kamal Aprianto	22	73
14	Khumairah Arsita A	23	76
15	Milda Yanti M	23	76
16	Muh. Ridho	25	83
17	Nur Haliza Amalia	25	83
18	Nurfaiz Masyam	27	90
19	Nurafni Sumar	22	73
20	Pradito Putra	25	83
21	Rahman Syahputra	21	70
22	Ririn Dwi Aryani	25	83
23	Salsabila F	28	93
24	Knight	24	80
25	Sayyida Khalifah	25	83
26	Sitti Nurhasizah M	25	83
Amount		2.128	

Data Source: Test Results

In the table above it can be seen that the highest score obtained is 93, while the lowest is 70.

Based on tables 4.1 and 4.2, compared to see the differences from the two tables:

Table 4.3 Comparison of the maximum score of *the pretest* and *posttest results*

No.	Test	N	F	P
1	<i>Pretest</i>	26	1,321	50,8
2	<i>Posttest</i>	26	2.128	81.8

Source of data: Processed in Tables 4.1 and 4.2.

The results of the analysis in Table 4.3 are that there is a comparison of the scores produced by students in *the posttest* and *pretest* (Mulyasari et al., 2023; Wanti et al., 2023).

Based on the results of the analysis, it shows $50.8 > 81.8$. so that it can be concluded that there is effectiveness in the use of *Animaker media* on student learning outcomes in Science Subject Class VII SMP Negeri Watang Pulu.

2. Learning Level Suitability

Students learn the material seen from the level of student readiness. When a student has completed their course and is ready to receive their materials, they should use Animaker, which is a reliable learning resource.

This can be proven by the fact that 26 students were registered as active, then 26 of them submitted their assignments, which means that all students have completed their assignments (Al Maarif et al., 2023; Noer et al., 2023; Utami et al., 2023). In filling out the questionnaire, several statements were given regarding their enthusiasm and motivation for learning. It can also be seen from the questionnaire that most students chose the answer YES rather than NO, which means they agree with the statement given.

Based on this explanation, it can be concluded that *Animaker media* is effectively used to develop learning outcomes.

3. Incentive

That is to provide motivation in the form of giving encouragement to students' enthusiasm for learning. provide encouragement to learn and develop student interest for effectiveness in learning (Fadiyah et al., 2023; Ranal et al., 2023). This can be seen in the questionnaire where the percentage of student incentives is 100% so it can be concluded that students prefer to use *Animaker media* and students do not give negative responses.

4. Time

The time set for the learning process is carried out in 2 meetings every Saturday with an allocation of 3 x 40 minutes. In each learning process, the first is to take student attendance and conduct the opening of learning (Fiqih et al., 2023; Hermansyah et al., 2023). At the first meeting the introduction stage accompanies the teacher in learning and gives multiple choice questions or tests. In the following week, learning is carried out by showing videos from *Animaker* and then continuing (*posttest*). This can also be seen in the questionnaire, where students can understand the material with the learning period that has been carried out.

Based on the results above, it can be concluded that the hypothesis which states that "the effectiveness of using *Animaker media* on student learning outcomes in science subjects class VII SMP Negeri 1 Watang Pulu" is declared **accepted** (Pamuji & Limei, 2023). While the hypothesis which states that: " the use of *Animaker media* is not effective for student learning outcomes in science subjects class VII SMP Negeri 1 Watang Pulu " was declared **rejected**.

CONCLUSION

Based on the results of this study, it was concluded that there was an effectiveness of using *Animaker media* on science learning outcomes for class VII SMP Negeri 1 Watang Pulu. analyzed from 4 (four) indicators of effectiveness that meet the requirements according to Slavin (2000), namely the Quality of Learning, this can be seen in the difference in scores before and after using Media *Animaker*. The results of data analysis obtained from the results

of the initial test score (Y) were lower than the results of the final test score (X), namely $Y = 50.8 < X = 81.8$. The suitability of the learning level seen from *the posttest* or after using the *Animaker media* was 81.8. In addition, it can also be seen in the learning level suitability questionnaire where more students answered yes than no. Incentives, which can be seen in the questionnaire with a result of 100 %. And time, the use of time required in this study was 60 minutes and the number of meetings was 1 x 2 weeks. Besides that, it can also be seen in the questionnaire with the results of 100% of students in enough time.

REFERENCE

- Ekayani, P. (2017). *The Importance of Media Use*. march.
- Fajrianti, R., & Meilana, SF (2022). *The Effect of Using Animaker Media on Student Learning Outcomes in Elementary School IPS Subjects*. *Basicedu Journal*, 6 (4), 6630–6637. <https://doi.org/10.31004/basicedu.v6i4.3325>
- Ministry of National Education. (2003). *Regulation of the Minister of National Education of the Republic of Indonesia No. 22 of 2003*.
- Lamalla, B., & Hanafi, M. (2019). *The effect of using the Spaarkol VideoScribe application on students' listening abilities*. 5151 (2), 9–12.
- Sugiono, 2018. *Quantitative, Qualitative and R&D Research Methods*. Bandung Alfabeta Publisher
- Al Maarif, M. F., Afifah, R. A. N., Choirunnisa, A., Jannah, A. M., Zanuar, M. Y., Saddhono, K., & Yingxiang, S. (2023). Integrating and Strengthening National Vision in the Community as an Effort to Prevent Radicalization and Foster Love for the Motherland. *Pengabdian: Jurnal Abdimas*, 1(1), 20–29. <https://doi.org/10.55849/abdimas.v1i1.151>
- Amrina, A., Akhiri, I., Lee, C., & Jansee, J. (2022). Using of Visual Application in Arabic Language Learning Class X MAN 1 Kuantan Singingi. *Sciencetechno: Journal of Science and Technology*, 1(1), 1–14. <https://doi.org/10.55849/sciencetechno.v1i1.1>
- Auliani, R., Suprawihadi, R., & Avinash, B. (2023). Application of Appropriate Technology for Clean Water. *Pengabdian: Jurnal Abdimas*, 1(1), 30–39. <https://doi.org/10.55849/abdimas.v1i1.152>
- Azizah, W., Oktavia, N. A., & Mudinillah, A. (2022). The Use of The Canva Application in The Learning of Maharah Kitabah at The Islamic Boarding School Prof. Hamka Maninjau Class VII. *Sciencetechno: Journal of Science and Technology*, 1(1), 15–24. <https://doi.org/10.55849/sciencetechno.v1i1.2>
- Ekayani, Putu. (2017). (2017). *Pentingnya Penggunaan Media*. March.
- Fadiyah, F., Fuadi, A., Nurjannah, N., Irmayanti, I., & Lita, W. (2023). Quizizz Application-Based Interactive Learning Media Development Workshop for Junior High School Teacher. *Pengabdian: Jurnal Abdimas*, 1(2), 59–65. <https://doi.org/10.55849/abdimas.v1i2.157>
- Fajrianti, R., & Meilana, S. F. (2022). Pengaruh Penggunaan Media Animaker Terhadap Hasil Belajar Peserta Didik pada Mata Pelajaran IPS Sekolah Dasar. *Jurnal Basicedu*, 6(4), 6630–6637. <https://doi.org/10.31004/basicedu.v6i4.3325>
- Fathia, W., March, J., & Sie, P. (2022). Utilization of Design Application for Mufradat Class

- X MTS Baabusalam Learning. *Sciencetchno: Journal of Science and Technology*, 1(1), 58–70. <https://doi.org/10.55849/sciencetchno.v1i1.5>
- Fiqih, M., Thaha, A., Shidiq, S., Nafis, Moch. A., & Martin, W. (2023). The Concept of Internal Quality Assurance in Madrasah Diniyah PP. Al-Hidayah Tanggulangin Sidoarjo. *Pengabdian: Jurnal Abdimas*, 1(1), 40–45. <https://doi.org/10.55849/abdimas.v1i1.150>
- Hermansyah, S., Nasmiilah, N., Pammu, A., Saleh, N. J., Huazheng, H., & Congzhao, H. (2023). Socialization Making Media Learning Interactive E-Module based Flippbook in Elementary School 4 Maiwa. *Pengabdian: Jurnal Abdimas*, 1(1), 1–7. <https://doi.org/10.55849/abdimas.v1i1.117>
- Holly, S., Maulik, B., & Samuel, I. (2023). Use of Whatsapp as A Learning Media to Increase Students' Learning Interest. *Sciencetchno: Journal of Science and Technology*, 2(1), 35–48. <https://doi.org/10.55849/sciencetchno.v2i1.57>
- Jiang, R., Chen, Q., Cai, Z., Fan, Z., Song, X., Tsubouchi, K., & Shibasaki, R. (2022). Will you go where you search? A deep learning framework for estimating user search-and-go behavior. *Neurocomputing*, 472, 338–348. <https://doi.org/10.1016/j.neucom.2020.10.001>
- Kemendiknas. (2003). *Peraturan Menteri Pendidikan Nasional RI No. 22 Tahun 2003*.
- Lamalla, B., & Hanafi, M. (2019). *PENGARUH PENGGUNAAN APLIKASI SPARKOL VIDEOSCRIBE TERHADAP KEMAMPUAN MENYIMAK SISWA*. 5151(2), 9–12.
- Levan's, O., Tanucan, J. C. M., & Garzozzi-Pincay, R. F. (2022). Used Learning at Al-Irsyad Bulaan Kamba Islamic Boarding School. *Sciencetchno: Journal of Science and Technology*, 1(1), 71–85. <https://doi.org/10.55849/sciencetchno.v1i1.6>
- Liam, L., Hui, H., & Carsten, L. (2023). Utilization of ICT in Learning the History of Islamic Culture. *Sciencetchno: Journal of Science and Technology*, 2(1), 64–79. <https://doi.org/10.55849/sciencetchno.v2i1.49>
- Maryati, A., Ameer, A., & Egie, J. (2022). Utilization of Animiz Animation Application in Arabic Class 2 Madrasah Tsanawiyah Lessons at Diniyyah Pasia Modern Islamic Boarding School. *Sciencetchno: Journal of Science and Technology*, 1(1), 25–45. <https://doi.org/10.55849/sciencetchno.v1i1.3>
- Mulyasari, D., Noer, R. M., Sari, N., Ermawaty, E., Triharyadi, F., Tampubolon, D., & Catherine, S. (2023). Improving Health Status in The Elderly Through Health Checks and Education at Nuriah Nursing Homes in Karimun. *Pengabdian: Jurnal Abdimas*, 1(2), 75–81. <https://doi.org/10.55849/abdimas.v1i2.183>
- Mustafiyanti, M., Putri, M. P., Muyassaroh, M., Noviani, D., & Dylan, M. (2023). A Form of Independent Curriculum, an Overview of Independent Learning at State Elementary School 05 Gelumbang Muaraenim. *Pengabdian: Jurnal Abdimas*, 1(2), 82–96. <https://doi.org/10.55849/abdimas.v1i2.185>
- Nicholas, T., James, G., & Robert, K. (2023). Moral Aqidah Learning Using Video-Based Technology. *Sciencetchno: Journal of Science and Technology*, 2(1), 1–16. <https://doi.org/10.55849/sciencetchno.v2i1.65>
- Noer, R. M., Silalahi, A. D., Mulyasari, D., Sari, N., Ermawaty, E., Triharyadi, F., Tampubolon, D., & Bevoor, B. (2023). Improving the Degree of Health in the Elderly

- Through Health Checks and Education. *Pengabdian: Jurnal Abdimas*, 1(1), 8–13. <https://doi.org/10.55849/abdimas.v1i1.139>
- Pamuji, S., & Limei, S. (2023). The Managerial Competence Of The Madrasa Head In Improving Teacher Professionalism And Performance At Mi Al-Maarif Bojongsari, Cilacap District. *Pengabdian: Jurnal Abdimas*, 1(2), 66–74. <https://doi.org/10.55849/abdimas.v1i2.158>
- Putri, N. A., Kamaluddin, K., & Amrina, A. (2023). TikTok Application on Achievement and Learning Motivation at Influence Colleges. *Sciencetchno: Journal of Science and Technology*, 2(1), 80–96. <https://doi.org/10.55849/sciencetchno.v2i1.62>
- Ranal, A., Husniyah, H., Fienti, Y., Putri, S. A., Lenin, F., Musrika, M., Diana, D., & Xin, D. (2023). Physical Activity Training Education for the Elderly at Nursing Homes. *Pengabdian: Jurnal Abdimas*, 1(1), 14–19. <https://doi.org/10.55849/abdimas.v1i1.143>
- Saputra, A. G., Rahmawati, T., Andrew, B., & Amri, Y. (2022). Using Canva Application for Elementary School Learning Media. *Sciencetchno: Journal of Science and Technology*, 1(1), 46–57. <https://doi.org/10.55849/sciencetchno.v1i1.4>
- Saskia, R., Okuda, M., & Cooney, B. (2023). Utilization of Google Form as a Quiz for Learning Fiqh. *Sciencetchno: Journal of Science and Technology*, 2(1), 49–63. <https://doi.org/10.55849/sciencetchno.v2i1.45>
- Syafi'ah, N., Nambo, H., & Tahyudin, I. (2021). User Satisfaction Analysis Model of Google Classroom for Online Lectures in COVID-19 Pandemic. *2021 4th International Conference on Information and Communications Technology (ICOIACT)*, 35–40. <https://doi.org/10.1109/ICOIACT53268.2021.9564008>
- Utami, L. D., Amin, M., Mustafiyanti, M., & Alon, F. (2023). Masjid Friendly: Mosque Based Economic Empowerment. *Pengabdian: Jurnal Abdimas*, 1(2), 97–106. <https://doi.org/10.55849/abdimas.v1i2.186>
- Vicky, D., Adrianna, H., & Phan, B. (2023). Use of Gadgets by Early Childhood in the Digital Age to Increase Learning Interest. *Sciencetchno: Journal of Science and Technology*, 2(1), 17–34. <https://doi.org/10.55849/sciencetchno.v2i1.58>
- Wanti, L. P., Romadloni, A., Somantri, O., Sari, L., Prasetya, N. W. A., & Johanna, A. (2023). English Learning Assistance Using Interactive Media for Children with Special Needs to Improve Growth and Development. *Pengabdian: Jurnal Abdimas*, 1(2), 46–58. <https://doi.org/10.55849/abdimas.v1i2.155>
- Widiyanto, F. T., Sofyan, A., & Mastur. (2020). *PENGEMBANGAN VIDEO PEMBELAJARAN PADA MATA PELAJARAN IPA KELAS III UNTUK MENINGKATKAN MOTIVASI BELAJAR SISWA*. 1(2), 75–80.

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