

THE EFFECT OF INTERACTIVE IMAGE MEDIA ON STUDENTS' LEARNING INTEREST IN LEARNING SCIENCE IN GRADE IV SD BINA TARUNA JAYA

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ARTICLE INFO	ABSTRACT
<p>Article History</p> <p><i>Accepted : 15-01-2025</i></p> <p><i>Approved: 20-10-2025</i></p> <p><i>Published: 28-02-2025</i></p>	<p>Interest has a great influence on learning outcomes, because if the learning material is not in accordance with the interest, students will not learn well because it is not interesting to them. It can be concluded that interest in learning is a sense of preference and interest in one thing or activity, without anyone telling you to. The low interest of students in learning natural sciences is due to the lack of use of learning media that suits the needs of students. The purpose of this study is to determine the influence of Interactive Image Media on Students' Learning Interest in Science Learning in Grade IV of SD Bina Taruna Jaya Medan. This study uses an experimental model quantitative research method with subjects namely grade IV elementary school students totaling 24 students. The results in this study show that the percentage of student learning interest has increased in each cycle, namely in the pre-cycle 58.33%, then in the first cycle it is 75% and 96% in the second cycle. So it can be concluded that there is an increase in interest in learning science subjects of grade IV students after using Interactive Image Media.</p>
<p>Keywords</p>	<p>Learning Interest, Science, Median, Interactive.</p>

1. INTRODUCTION

The Father of Indonesian National Education, Ki Hajar Dewantara, defines the meaning of Education; "Education is a demand in the life of growing children, as for the meaning, education guides all the natural forces that exist in the children, so that they as human beings and as members of society can achieve the highest safety and happiness". Education is a humanime process which is further known as humanizing. Therefore, we should be biased towards respecting the human rights of every human being. In the world of education, a learning method can be presented by using learning aids or often referred to as learning media. However, sometimes the props used are

still not interesting because they are less interactive and monotonous. One of the learning methods that can now be developed is by utilizing computer technology, as this learning medium can convey learning material textually, audio and visually.

Indonesia's national education system has shifted from using the curriculum at the unit level to the 2013 curriculum. This new curriculum has set a new standard in the world of education, where the goal of learning is not just a value in the form of numbers, but more directed to the learning process. As stated in the Regulation of the Minister of Education and Culture Number 65 of 2013 concerning Standards for the Primary and Secondary

Education Process, which states: The learning process in educational units is held in an interactive, inspiring, fun, challenging, motivating students to actively participate, and providing sufficient space for initiative, creativity, and independence in accordance with students' talents, interests, and physical and psychological development. For this reason, each educational unit carries out learning planning, the implementation of the learning process and the assessment of the learning process to increase the efficiency and effectiveness of graduates. The use of interactive multimedia departs from constructivistic theory. Where in the constructivistic theory emphasizes that good learning comes from the initiative of students. In learning, students must construct their own knowledge through meaningful experiences.

The recommended principles to achieve learning objectives based on constructivistic theory are: (a) emphasizing learning rather than teaching, (b) emphasizing students to think and act rather than teachers, (c) emphasizing active learning, (d) using discovery approaches or discovery guides, (e) encouraging students to build information and projects, (f) using cooperative or collaborative learning activities, (g) using meaningful learning activities, (h) involving students to choose and nominate learning goals, strategies, and ways of evaluating learning, (i) encourage personal autonomy as part of the student, (j) support student learning reflection (k) encourage students to accept and reflect on real-world complexities, and (l) use personal assessments and activities that are relevant to the student. Constructivist views have influenced the development of interactive multimedia.

In this case, interactive learning media that can be used and developed in the learning process, one of which is by use of Quizizz with the Lesson feature. According to Zhao (in Batista & Junior, 2020) Quizizz is an education-based webtool that allows all students in the class to participate in learning activities to play together. Quizizz has two main features, namely the Lesson Feature and the Quiz Feature. The Lesson feature has a different advantage from other interactive media because the Lesson

feature is equipped with text, images, sounds, and videos to create teaching materials and can be combined with giving feedback in the form of quizzes in the form of material slides in the form of multiple choice, polls, short answers, open-ended questions, and drawing. This interactive Quizizz media can make students interested in learning, can make students understand the relationship between mathematics and their daily lives through the pictures presented, so that abstract mathematical objects that are difficult to imagine, can be imagined easily. According to Maspupah & Wulan (in Rulismi, et al., 2024) the Quiz Feature can be used as an evaluation medium by holding a question quiz at the end of learning from the material that has been taught. Interactive learning media is a learning method based on information and communication technology. Interactive learning media is a tool in the learning process to meet the target learning objectives by using audio-based, visual, audio-visual, or print media-based methods (Hakim & Haryudo, 2014). These tools can be televisions, books, radios, magazines, newspapers, and so on. It is said to be interactive because this media is designed by actively involving the user's response (Setyowati, et al., 2020). According to Prastowo (in Gunawan, 2020), interactive teaching materials are learning media that combine (audio, video, text, or graphics) that are interactive and can control a command or natural behavior of a learning process. Thus, a two-way relationship arises, namely learning media with students and teachers only as connectors or intermediaries in the learning process, it is hoped that with a learning process like this, students can be more active.

The definition of interest is a sense of preference, a sense of interest (Charli, et al., 2019), focused attention, perseverance, effort, knowledge, skills, motivation (Krapp, et al., 1992), behavior regulators (Wang & Adesope, 2016), and the result of a person's or individual's interaction with certain content or activities. Interest has a positive influence on academic learning, knowledge domains and specific fields of study for individuals (Loviyani Putri & Rifai, 2019). Interest has a very important role in students' lives and has a great impact on attitudes and behaviors (Nisa,

2015). Students who are interested in learning activities will try harder than students who are less interested in learning. Interest has a great influence on learning outcomes, because if the learning material is not in accordance with the interest, students will not learn well because it is not interesting to them. It can be concluded that interest in learning is a sense of preference and interest in one thing or activity, without anyone telling you to.

Learning in the classroom will feel fun if you use interactive learning media, so that students' interest in learning increases, so it is hoped that students will be able to fully understand the material being taught by the teacher. This is evidenced by previous research that has been conducted by Amalia, et al. (2024) with the title "The Influence of Interactive Media on Students' Learning Interest in Science Learning in Grade 4 Elementary School".

Based on the results of the analysis using qualitative methods in the study, it shows that students who are involved with interactive media tend to be more interested and motivated in the learning process. In addition, the research that conducted by Rofi'ah, et al. (2023) entitled "The Influence of the Talking Stick Learning Model Assisted by Picture Media on Students' Learning Interest in Islamic Religious Education Subjects at SMP Negeri 1 Garum" shows that learning by applying the Talking Stick learning model with the help of image media In the learning process, it can increase students' interest in learning. Another research that also shows that media can increase students' interest in learning was carried out by Safitri (2020) entitled "The Use of Image Media in Increasing the Learning Interest of Grade IV Students at SD Negeri 3 Ranomeeto" showed the results that the use of image media in learning can increase students' interest in learning. Based on the three previous studies, it can be concluded that learning media can increase students' interest in learning, one of which is picture media learning media. Therefore, image media can be used as a solution to overcome the unattractiveness of learning, in this study, the image media in question is image media using Quizizz.

2. RESEARCH METHOD

The approach used in this study is a quantitative approach. The quantitative approach is an approach in the research proposal, process, hypothesis, going to the field, data analysis and data conclusion until the writing using aspects of measurement, calculation, formula and certainty of numerical data (Nabawi, 2019). The research that the author will carry out is titled "The Influence of Interactive Image Media on Students' Learning Interest in Science Learning in Grade IV of SD Bina Taruna Jaya Medan" using a quantitative approach because the purpose of this study is to determine the influence between Interactive Learning Multimedia and Students' Learning Interests.

With the author conducting this research, it is hoped that he will be able to make new innovations that Interactive Multimedia can increase students' interest in learning, so that students will be more active and enthusiastic in participating in the learning process. This research was carried out at SD Taruna Jaya Medan, The subjects in this study are all grade IV students of SD Bina Taruna Jaya Medan which consists of 24 students. The instruments used in this study are in the form of observation, tests and documentation.

The data collection techniques used in this study are observation or observation techniques, tests and documentation (Sugiyono, 2021). Data Analysis techniques are seen during the learning process of each cycle and recorded on the observation sheet. Meanwhile, student learning outcomes can be measured by looking at the tests that have been given. To measure students' interest in Natural Sciences subjects, the indicator of research success is that students achieve KKM >75 learning outcomes. In this case, there are categories with the following intervals:

Table 1. Categories Learning Interest Score

As for how to calculate the percentage of learning interest. The formula used is as follows :

$$\text{Presentase} = \frac{\text{jumlah siswa pada kategori}}{\text{jumlah siswa keseluruhan}} \times 100\%$$

NO	Kategori	Rentang
1	Sangat Rendah	20-39
2	Rendah	40-59
3	Tinggi	60-79
4	Sangat Tinggi	80-100

The increase in interest in learning through Interactive Image Media in Science Learning in Grade IV of SD Bina Taruna Jaya Medan can be measured by comparing the percentage of cycle I and cycle II.

3. RESULT

Based on the results of the formative test of pre-cycle learning for 24 students, the results were far from expected, because there are still many students who have an interest in learning science subjects with a low category. In this pre-cycle, the method used is a conventional learning method without using learning media. The results of the pre-cycle formative test can be seen from Table 2.

Table 2. Increase in Student Learning Interest Score in Pre-cycle

After learning in pre-cycle, in cycle I and cycle II, the following are the results of students' learning interests in cycle I and cycle II with the application of the Interactive Image Media learning method.

Tabel 3. Peningkatan Skor Minat Belajar IPA Siswa Kelas IV Pada siklus I

Deskripsi	Siklus I
Number of students who took the test	2 4

The number of students with very high categories	7
Number of Students with high categories	1 1
Number of Students with low categories	6
Percentage of Students with Very High Categories	29,16 %
Percentage of students with high categories	45,84 %
Percentage of Students with Low Categories	25%
Total Score	1.538
Grade Average Score	64,08

Table 4. Increasing Science Learning Interest Score of Grade IV Students in Cycle II

Deskripsi	Pra-siklus
Number of students who took the test	24
Number of Students with high categories	10
Number of Students with low categories	14
Percentage of students with high categories	47,27 %
Percentage of Students with Low Categories	58,33 %
Total Score	1.417
Grade Point Average	59,04

deskripsi	Siklus II
Number of students who took the test	24
The number of students with very high categories	16
Number of Students with high categories	7
Number of Students with low categories	1
Percentage of Students with Very High Categories	66,66%
Percentage of students with high categories	29,34%
Percentage of Students with Low Categories	4%
Total Score	1.981
Grade Average Score	82,54

The following is the increase in the Science Learning Interest score of grade IV students in Pre-Cycle, Cycle I, and Cycle II, which are as follows:

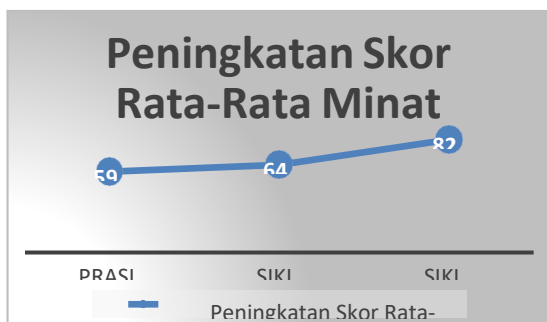


Figure 1. Diagram of Increase in Average Score of Science Learning Interest of Grade IV Students

Apart from the average score of learning interest, the increase in learning interest can also be reviewed from the percentage of the student learning interest category, which is as follows:



Figure 2. Comparison of Percentage of Students' Learning Interest

Figure 2. Comparison of Percentage of Learning Interest The class action research carried out in grade IV in Science Learning at SD Bina Taruna Jaya Medan showed that there was an increase in student learning interest in each cycle. The increase in students' interest in learning is inseparable from the use of Interactive Image Media media which can increase students' interest in learning and enthusiasm for learning. Some of the advantages of interactive media can explain learning materials or objects that are abstract into concrete (real). Providing a real and direct experience because students can interact with learning media directly, as well as attracting students' attention so as to increase their interest, motivation, activities, creativity, and level of focus in learning. Student

In this case, before the cycle action is carried out, the researcher conducts a pre-cycle/pre-cycle to find out the initial condition of students' interest in learning Natural Sciences. In the pre-cycle, it was found that Students' Interest in Science Learning in Grade IV of SD Bina Taruna Jaya Medan in participating in learning was in the low category. This is evidenced by the average score of students' learning interest reaching 59.04. Then from the data obtained, there were 14 students who had a low category of interest in learning. This data can be said that there are 58.33% of students who have low interest in learning. While the rest, namely 10 students have a high learning interest category with a percentage of 47.27%.

After the pre-cycle, then cycle I is carried out with two meetings. Cycle I begins with action planning which is carried out by compiling learning tools and research instruments. Then continued with the implementation of learning carried out in accordance with the plan that has been made, including opening, core, and closing activities which are applied using the Interactive Image Media model. The results of the first cycle reflection stated that the elimination of groups consisting of 5-6 students was still inappropriate because some students had not been seen active and were still crowded by themselves; the display of image media, LKPD, and teaching materials is still not attractive, especially LKPD and teaching materials still use black and white and little animation; there are some students who are not active in discussing to do LKPD; the giving of interactive quizzes is less varied; and the results of the evaluation of the first cycle obtained an average score that has not reached the success indicator.

In the first cycle action, the average learning interest of students reached 64.08. Based on this average learning interest, it can be said that the average interest in learning Indonesian of grade IV students is in the high and very high category. Based on the data, it was found that there were 6 students who were still in the low category, with a percentage of 25%. Meanwhile, there were 11 students with a high learning interest category with a percentage of 46% and 7 students with a very high learning interest category with a percentage of 29%. Based on these results, learning interest has increased from pre-cycle activities but has not reached the success indicator so the research is continued to cycle II.

Cycle II was held twice. In the first cycle begins with planning, this planning stage is carried out by adjusting the results of reflection in the first cycle to improve and overcome the problems that occurred in the first cycle. designing the display of interactive image media, LKPD, and teaching materials to be more attractive with full color and adding varied and unique images; In drawing conclusions,

students discuss each other between friends; As well as giving more varied quizzes accompanied by talking sticks and singing regional songs so that students are more active and enthusiastic. Then continued with the implementation of learning that was carried out in accordance with the planning and improvements that had been made. During the learning process, observations were also made to find out the learning process that took place. The results of the first cycle of reflection stated that students were more enthusiastic, enthusiastic, and active in the learning process using the Interactive Image Media model.

This is in line with the research conducted by explaining that the average interest in learning does not use interactive image learning media using canva is included in the low interest category, the average interest of students who use canva learning media is in the high category. In addition, the formation of small groups makes students more active, focused, and learning is packaged more interactive and interesting.

In the second cycle action, the average interest in learning natural sciences was obtained. students reached 82.54. Based on the average interest in learning science of Class IV students, it can be said that the average interest in learning is in a very high category. Based on the data, it was found that there was 1 student who had a low learning interest category, which reached 4%. Then there are 7 students who have a high learning interest category, which reaches 29.34% and 16 students who have a very high learning interest category, which reaches 66.66%. Based on the acquisition of this data, it can be concluded that as many as 23 Class IV students of SD Bina Taruna Jaya Medan already have a high and very high interest in learning, reaching 96%. In the acquisition of this data, it can be said that all students.

Grade IV of SD Bina Taruna Jaya Medan already has a high interest in learning Natural Sciences. Based on these results, students' interest in learning Indonesian got better results and continued to increase from pre-cycle, cycle I, and cycle II.

4. DISCUSSION

In the second cycle action, the average interest in learning natural sciences was obtained. students reached 82.54. Based on the average interest in learning science of Class IV students, it can be said that the average interest in learning is in a very high category. Based on the data, it was found that there was 1 student who had a low learning interest category, which reached 4%. Then there are 7 students who have a high learning interest category, which reaches 29.34% and 16 students who have a very high learning interest category, which reaches 66.66%. Based on the acquisition of this data, it can be concluded that as many as 23 Class IV students of SD Bina Taruna Jaya Medan already have a high and very high interest in learning, reaching 96%. In the acquisition of this data, it can be said that all students

5. CONCLUSION

Based on the results of the above research and discussion, it can be concluded that the Influence of Interactive Image Media on Students' Learning Interest in Science Learning in Grade IV of SD Bina Taruna Jaya Medan can increase students' interest in learning natural sciences (IPA). The use of interactive gambat media can increase students' interest in learning natural sciences can be evidenced by an increase in students' interest in learning starting from the initial condition (precycle), cycle I, and cycle II. In the pre-cycle, there were 58.33% of students who had a high interest in learning. In the first cycle, there were 75% of students who had high and very high learning interests, and in the second cycle there were 96% of students who had high and very high learning interests.

The suggestion for the agency is that it is expected to support all digital-based learning processes to make it easier for educators in the teaching and learning process so that they can maximize existing elements to improve student learning outcomes. Suggestions for Educators are expected to be more careful in understanding the characteristics of their students so that educators can find out what kind of learning media can be used according to the conditions or characteristics

of their students as well as the use of Canva as a learning medium in this study.

ACKNOWLEDGEMENTS

The researcher thanked God Almighty for his grace so that this research could be completed properly. The researcher also expressed his sincere appreciation to the teachers and principals, for accepting the researcher to conduct testing and research at the school for the support of the facilities and resources that have been provided. We are grateful to our colleagues who have helped in this research process as well as to our family and friends who have always given encouragement and prayers. Hopefully this research can make a useful contribution to the development of science.

REFERENCES

- Amalia, M., Pelita Bangsa Muhamad Virgi Pratama, U., Pelita Bangsa Niken Ayu Pratiwi, U., Pelita Bangsa Ari Fujiarti, U., & Pelita Bangsa, U. (2024). Pengaruh Media Interaktif Terhadap Minat Belajar Siswa Pada Pembelajaran IPA Kelas 4 SD. *Jurnal Jendela Pendidikan*, 4(01).
- Batista, J., & Junior, B. (2020). Assessment For Learning With Mobile Apps: Exploring The Potential Of Quizizz In The Educational Context. *IJDR: International Journal of Development Research*, 10(1). <https://quizizz.com/about>
- Charli, L., Ariani, T., & Asmara, L. (2019). Hubungan Minat Belajar terhadap Prestasi Belajar Fisika. *Science and Physics Education Journal (SPEJ)*, 2(2), 52–60. <https://doi.org/10.31539/spej.v2i2.727>
- Gunawan, D. (2020). Pengaruh Media Video Interaktif Terhadap Hasil Belajar Kognitif Kelasa Iv Sd Negeri 2 Karangrejo Trenggalek. *Eduproxima (Jurnal Ilmiah Pendidikan IPA)*, 2(1).

- Krapp, A., Hidi, S., Renninger, K. A., Valsiner, J., & Deci, E. L. (1992). *General Questions In The Study Of Interest. The Role of interest in Learning and Development.*
- Loviyani Putri, Y., & Rifai, A. (2019). Pengaruh Sikap dan Minat Belajar terhadap Motivasi Belajar Peserta Didik Paket C. *Journal of Nonformal Education and Community Empowerment*, 3(2), 173–184. <https://doi.org/10.15294/pls.v2i1.23448>
- Nabawi, R. (2019). Pengaruh Lingkungan Kerja, Kepuasan Kerja dan Beban Kerja Terhadap Kinerja Pegawai. *Maneggio: Jurnal Ilmiah Magister Manajemen*, 2(2), 170–183. <https://doi.org/10.30596/maneggio.v2i2.3667>
- Nisa, A. (2015). Pengaruh Perhatian Orang Tua Dan Minat Belajar Siswa Terhadap Prestasi Belajar Ilmu Pengetahuan Sosial. *Faktor Jurnal Ilmiah Kependidikan*, 11(1).
- Rahman Hakim, B., & Teknik Elektro, J. (2014). Pengembangan Media Pembelajaran Interaktif Animasi Flash Pada Standar Kompetensi Memasang Instalasi Penerangan Listrik Bangunan Sederhana Di Smk Walisongo 2 Gempol Subuh Isnur Haryudo. *Jurnal Pendidikan Teknik Elektro*, 3(1), 15–21.
- Rofi'ah, N., Ardiansyah, A., & Mustafida, F. (2023). Pengaruh Model Pembelajaran Talking Stick Berbantuan Media Gambar Terhadap Minat Belajar Siswa Pada Mata Pelajaran Pendidikan Agama Islam Di Smp Negeri 1 Garum. *Vicratina: Jurnal Pendidikan Islam*. <http://riset.unisma.ac.id/index.php/fai/index>
- Rulismi, D., Sahil, A., & Dali, Z. (2024). Effectiveness of the Use of Quizizz Media on Students' Learning Interest. *Futurity Education*, 4(2), 245–262. <https://doi.org/10.57125/fed.2024.06.25.13>
- Safitri, A. (2020). Penggunaan Media Gambar Dalam Meningkatkan Minat Belajar Siswa Kelas Iv Di Sd Negeri 3 Ranomeeto. In *Jurnal Pendidikan dan Ilmu Pengetahuan* (Vol. 20, Issue 1).
- Setyowati, E., Hidayati, I. S., & Hermawan, T. (2020). Pengaruh Penggunaan Multimedia Interaktif Terhadap Pemahaman Konsep Dalam Pembelajaran Matematika Di Mts Darul Ulum Muhammadiyah Galur. *Intersections: Jurnal Pendidikan Matematika Dan Matematika*, 5(2).
- Sugiyono. (2021). *Metode Penelitian Kuantitatif kualitatif dan R&D* (3rd ed.). Sutopo.
- Wang, Z., & Adesope, O. (2016). Exploring the effects of seductive details with the 4-phase model of interest. *Learning and Motivation*, 55, 65–77. <https://doi.org/10.1016/j.lmot.2016.06.003>
- Christenson, S. L., Reschly, A. L., & Wylie, C. (Eds.). (2012). *Research on student engagement*. New York, NY: Springer.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behaviour*. New York: Plenum. <https://jabar.bps.go.id/publication/2019/08/26/db8f40b62e53f995a676cd19/master-filedesa-provinsi-jawa-barat-2019.html>, retrieved on March 10, 2020.
- <http://www.uky.edu/~kdbrad2/EPE619/Handouts/SurveyResearchReading.pdf>, retrieved on March 10, 2020.