



## THE INFLUENCE OF MARBLE SCIENCE'S AUDIO-VISUAL MEDIA: HUMAN ANATOMY ON ELEMENTARY SCHOOL STUDENTS' LEARNING INTEREST

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## PENGARUH MEDIA AUDIO-VISUAL MARBEL SCIENCE: ANATOMI TUBUH TERHADAP MINAT BELAJAR SISWA SD

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### ABSTRACT

**Abstract:** This paper discusses the influence of the use of Marble Science's audio-visual media on Anatomy on elementary school students' learning interests. The research used pseudo-experimental research with a nonequivalent comparison-group design. Data collection was carried out with a questionnaire of students' learning interests that had been tested for validity and reliability. Data analysis used Univariate Analysis of Variance with a significance level of 5%. The research results indicate that the difference in the average score of the pre-test was 66.00 while the average post-test score of students' learning interest was 89.50. Marble Science's Audio-Visual Media of Human Anatomy has a significant and positive effect on students' interest in learning seen from the  $T_{count}$  of 14.85 and  $P$  of 0.000, which means  $P = 0.000 < 0.05$ . Researchers recommend the use of Marble Science's Audio-Visual media on human Anatomy can be used to improve the students' learning outcomes, learning motivation, and critical thinking skills.

**Keywords:** audio-visual media, marble science, students' learning interest

**Abstrak:** Tulisan ini membahas pengaruh penggunaan media audio visual Marbel Sains pada Anatomi Tubuh terhadap minat belajar siswa SD. Penelitian menggunakan penelitian eksperimen semu dengan desain nonequivalent comparison-group. Pengumpulan data dilakukan dengan kuesioner minat belajar siswa yang telah diuji validitas dan reliabilitasnya. Analisis data menggunakan Univariate Analysis of Variance dengan taraf signifikansi 5%. Hasil penelitian menunjukkan bahwa perbedaan nilai rata-rata pra tes 66,00 sedangkan untuk nilai rata-rata post-test minat belajar yaitu 89,50. Media Audio-Visual Marbel Sains Anatomi Tubuh berpengaruh signifikan dan positif terhadap minat belajar siswa dilihat dari  $T_{hitung}$  sebesar 14,85 dan  $P$  sebesar 0,000;  $P = 0,000 < 0,05$ . Rekomendasi dari peneliti bahwa penggunaan media audio visual Marbel Sains pada Anatomi Tubuh dapat digunakan untuk meningkatkan hasil belajar, motivasi belajar, dan kemampuan berpikir kritis.

**Kata Kunci:** media audio-visual, marbel sains, minat belajar siswa

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### INTRODUCTION

The coronavirus dease (Covid-19) outbreak is making changes to various fields and human activities. One of the fields that has undergone significant changes is the field of

education. Changes in the education system from basic education to the university level. This change in the education system also occurred at the elementary school level. Changes in the learning climate during the

pandemic and the transition period after the pandemic have made students' interest in learning tend to fall. Interest in learning is the most important element in achieving learning success. Interest in learning has an impact not only on the acquisition of student learning outcomes but also on the achievements that students will get.

Learning activities during this transition period are carried out online and outside the network. Learning activities like this require learning resources that can accommodate the learning system today. In addition to being able to accommodate learning during a transition period like now, learning resources can also affect students' interest in learning. Students' interest in learning at this time, tends to decrease. Research conducted by Sultan and Riyani in 2021 explained that students' interest in learning in learning today is in the low category, this can be seen from the lack of students who lack participation and responsiveness in learning (sultan & Riyani, 2021).

In line with the results of research related to the lack of interest in learning students in the current transition period. The results of the observations carried out concluded that students tend to be passive in learning and lack of enthusiasm of students in learning and discussion activities. In addition to the observations carried out by low student interest in learning, it is also supported by the results of interviews that have been carried out with class teachers, it was concluded that students' interest in learning in the transition period has decreased when compared to student interest in learning in the pre-pandemic period, the student's interest in learning can be seen from student learning outcomes, because student interest in learning greatly impacts student learning outcomes.

Based on the results of the identification of problems encountered during learning in the transition period, one of the alternatives used to attract students' interest in

learning is through the use of audio-visual media. Audio-visual media is a medium in which there are elements of sound and images. Audio-visual media can make it easier for children to learn. The use of audio-visual media can heighten children's attention with an attractive appearance (Fujiyanto et al., 2016). With an attractive appearance, audio-visual can affect students' interest in learning. Audio-visual media that displays material and learning evaluations attract their own learning power for students. Students not only read texts from books but also read and practice with a quiz system integrated with the material.

Based on the problems described above, this study aims to determine the influence of audio-visual media *Marbel Science: Body Anatomy* on the learning interests of elementary school students.

## **THEORETICAL SUPPORT**

### **Media Audio Visual**

Learning media is a means of learning with the delivery of teaching materials that are tailored to student needs. Media is a learning resource that supports successful learning. Learning media are all tools and materials that can be used for educational purposes such as radio, television, books, newspapers, magazines and so on (I. D. Lestari et al., 2018). The use of media in learning has an important function that is the point of success of learning objectives. Media in learning plays an important role where media is a tool that can be done by teachers to achieve a good learning goal according to the plan that has been compiled by the teacher (Cookson & Stirk, 2019). The use of media not only makes it easier for students to find information and knowledge but also makes it easier for teachers to learn. Teachers must be able to make good use of media in the learning process. The use of learning media is not only an entertainment tool that complements the learning process and attracts students' attention (Hasan, 2021). Media is used not only as an entertainment tool

in learning but also makes it easier for students to achieve learning goals.

Audio visual media is a combination of audio and visual that presents teaching materials to students completely and optimally (Gabriela, 2021). Audio-visual media is a combination of sound and image, making it easier for students to learn. This learning media has more than one component so that it is an integration of several elements so that it can display sound and moving images simultaneously has been planned carefully, systematically and logically in accordance with the objectives (Ramli, 2012). Audio-visual media is supported by elements that make it easier for students to learn. The participation of teachers in learning as facilitators and the media acts as a source of learning. Through learning media, it can be implemented properly so that students' interest in learning also increases. Learning media not only facilitate learning, but can also provide abstract experiences into concrete (Fujiyanto et al., 2016). Students not only look for learning resources through text and do evaluation

questions according to those in the textbook, but also students can do evaluation questions through audio-visual media used by the teacher. Audio-visual media projected with infocus / LCD Projector can activate students, facilitate the delivery of material in the learning process and increase students' interest in learning (Hayati & Harianto, 2017). Audio-visual media not only makes it easier for students to learn because something abstract becomes real but also the delivery of learning content. The purpose of using audio-visual media is to develop cognitive abilities by providing stimuli in the form of moving images and sounds, as well as conveying messages to influence attitudes and emotions (Fitria, 2020)

### Marbel Science: Anatomy of the Body

Marbel Science: Body anatomy is a game that helps children to learn the order, functions and relationships between body members. Here's an overview of the science marbel game.

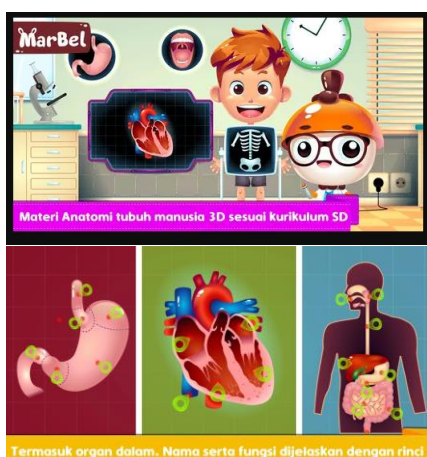


Figure 1. Marbel Science: Body Anatomy

### Interest in Learning

Interest in learning is an individual's drive to learn without coercion or pressure. Interest is an element that moves a person's motivation so that the person can concentrate

on a certain object or activity (Sholehah et al., 2018). An individual's interest in learning is possessed when the individual wants to gain understanding, pleasure, and ability from learning outcomes. A person's interest in

learning can arise due to the feeling of pleasure felt and encourage the implementation of learning activities (Riyani et al., 2021). Interest in learning arises due to the encouragement that makes a person happy in learning.

The interest in learning will give the student encouragement to get what he wants. Students who are said to be interested in learning mean that the student is active and responsive in learning activities. Students who are interested in learning, tend to be serious in learning, on the contrary, students who are less interested in learning tend not to follow the learning process well (Reski, 2021). In addition, students tend to be more enthusiastic and relaxed in following the lessons they are interested in. Students will follow the lesson enthusiastically and without any burden in themselves (Nurhasanah & Sobandi, 2016). The existence of an interest in learning fosters good achievements for students. There is an interest in learning, students will always have the urge to study hard so that they are able to get good results (Dalimunthe, R. et al., 2021)

## METHOD

This research uses a quantitative approach with a type of quasi-experimental research (quasy experiment) with a nonequivalent control group design.

Pretests are held in experimental classes and control classes. Then a difference test is carried out to obtain the same initial conditions. At the end of the treatment, differences in the achievement of the pretest and posttest of the experimental group were seen. The results of the student learning interest questionnaire scale in each group were compared or tested for differences. If between the test and the scale between the two groups there is a difference, it will be known the effect of the treatment given. The instruments used in this study were a student learning interest scale with student respondents and an observation sheet on the use of audio-visual media Marbel Science: Body Anatomy. The form of the scale used uses 4 answer choices, along with alternative answers for each item along with scores for its positive and negative statements.

**Table 1. Score Answer Alternatives**

Answer Alternatives	Score Answer Alternatives to Statements	
	<i>Favorable</i>	<i>Unfavorable</i>
Always	4	1
Often	3	2
Sometimes	2	3
Never	1	4

(Azwar, 2010)

The stages carried out in this study are: 1) conducting pre-surveys and applying for permits to schools, 2) instrument making, instrument validation and instrument trials, 3) conducting research surveys, 4) coordinating with teachers, 5) distributing initial questionnaires. The initial questionnaire was conducted to see students' learning interests, 6) carried out learning with audio-visual media of science marbel: body anatomy, and 7) carried out the final questionnaire in both groups.

## RESULTS AND DISCUSSION

Based on the results of descriptive analysis used to describe the learning interest scale data before and after treatment. A brief description of the learning interest data of control class and experimental class students can be seen in the following table

**Tabel 2. Descriptive Analysis Test Result**

Description	Pre-test		Post-test	
	KK	KE	KK	KE
Mean	65,00	66,00	73,00	89,50
Median	68,00	70,00	75,00	89,00
Dev. Standard	5,01	4,51	4,08	3,52
Minimum Value	55,00	58,00	71,00	80
Maksimum Value	77,00	80,00	80,00	97

Information:

KK : Control class

TO : Experimental class

Based on the descriptive analysis data of learning interest in table 2, it shows that the average pre-test results in the control class (without the implementation of audio-visual media: marbel science) 65.00, while the average pre-test results of the experimental class (implementation of audio-visual media: marbel science) is 66.00. The average post-test score in the control class was 73.00 and the experimental class was 89.50.

### Normality Test

Determination of the normality of the data using the kolmogorov-smirnov test. Test decisions and conclusions are taken at the level of signifakation 0.05, if the probability value of pre-test or post-test data is greater than 0.05 then H0 is accepted, so that the data is normally distributed, while if the probability value of the signifkan pre-test or post-test is smaller than 0.05 then Ha is accepted and the data is not normally distributed. Normality test results can be seen in the following table:

**Tabel 3. Normality Test Result**

Variabel	Sig. <i>Kalmogorov-Smirnov</i>	
	Control Class	Eksperimen Class
<i>Pre-test</i> Interest in Learning	0,125	0,172
<i>Post-test</i> Interest in Learning	0,058	0,145

Based on the data in table 3, information was obtained that the signification of kolmogorov-smirnov in students' learning interest in the pre-test or post-test was greater than 0.05 so that it can be concluded that the data contributed normally.

### Homogeneity Test

Homogeneity testing is carried out using the Levene homogeneity test with a

significance level of 0.05, if the probability value of the pre-test or post-test data is greater than 0.05 then H0 is received, so that the data comes from a homogeneous variant, while if the probability value of the pre-test or post-test is smaller than 0.05 then Ha is received and the data can be called heterogeneous. The results of the homogeneity test can be seen in the beirkut table:

**Tabel 4. Homogeneity Test Result**

Variable	Significant
<i>Pre-test</i> Interest in Learning	0,820
<i>Post-test</i> Interest in Learning	0,142

Based on table 4, information was obtained that the results of homogeneity tests in both research groups each produced significance values greater than 0.05. Based on this hasl, it can be concluded that the data obtained from the pre-test or post-test in the control class and the experimental class are homogeneous.

### Hypothesis Test Results

The results of the hypothesis test in this study used the T-test. Hypothesis testing can be seen from the results of the analysis of learning interest with learning using audio-visual media marbel science body anatomy in the following table.

**Table 5. Test Results –T Students' Learning Interests by Using Audio-Visual Media Marbel Science Body Anatomy**

Media Audio-Visual Marbel Sains Anatomi Tubuh	Mean	T-Hitung	P
<i>Pre-test</i> Interest in Learning	66,00		
<i>Post-test</i> Interest in Learning	89,50	14,85	0,000

Based on table 5, the average pre-test of students' learning interest using audio-visual media of Marbel Science Body Anatomy was 66.00 while the average post-test score of learning interest was 89.50. The data shows that the average interest in learning in pre-test and post-test using audio-visual media marbel science anatomy of the body has changed. The change is seen from the average value after the treatment has increased. This shows that there is an influence of the use of audio-visual media Marbel Science Body Anatomy on students' learning interests.

In addition, based on the output of data calculations, it is also known that Thitung is 14.85 and P is 0.000;  $P=0.000 < 0.05$ ; then  $H_0$  can be rejected, so it can be concluded that the Audio-Visual Media Marbel Science of Body Anatomy has a significant and positive effect on students' interest in learning. Thus the hypothesis stating that "The Use of Audio Visual Media Marbel Science Body Anatomy has a positive and significant effect on students' interest in learning" is accepted.

### DISCUSSION

The findings in this study show a significant and positive influence on the influence of audio-visual media in line with the opinions of Zalia Muspita, Abdul Aziz,

Abdullah, Saprudin Jauhari who stated that there is an influence of the use of audio-visual media on learning interests (Dasar, 2022). Students' interest in learning increases with the use of audio-visual media Marbel Science Body Anatomy. Increasing students' interest in learning can be involved from student activity in learning, enthusiasm and enthusiasm of students in learning. Another study stated that there is a significant relationship between the use of audio-visual learning media and the interests of students (Hayati & Harianto, 2017). Audio-visual media is used as an alternative that can be used in learning so that there is a change in student interest in learning, as can be seen from the results of the research on the change in student interest in learning from the average pre-test and post-test scores. This is also corroborated that learning media is able to improve and direct students' attention so that it can generate interest, more direct interaction between students and their environment and the possibility of students to learn individually with their abilities (D. E. Lestari et al., 2021). Through the use of audio-visual media Marbel Science:Anatomy The student body can get real learning so that students are more interested and active in learning.

## CONCLUSIONS

Based on the results of the study, it can be concluded that there is a significant and positive influence on the use of audio-visual media Marbel Science: Body Anatomy on students' interest in learning. It is clear that there is a difference in interest in learning between the control class students and the experimental class students. The difference in the average score of the pre-test is 66.00 while the average post-test score of interest in learning is 89.50. The influence of Thitung is 14.85 and P is 0.000;  $P=0.000<0.05$ ; so it can be concluded that the Audio-Visual Media Marbel Science Body Anatomy has a significant and positive effect on students' interest in learning.

## RECOMMENDATIONS

Recommendations that can be given regarding the use of audio-visual media marbel science: body anatomy that the use of audio-visual media marbel science: body anatomy can be used in learning to improve student learning outcomes, student learning motivation or students' critical thinking skills, so that they can be used as references in conducting research with different variables.

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