



Effect of the Use of Graphic Media on the Learning Outcomes of Indonesian Language Subjects Instructional Text Material of Class IV Students MI Almunazomah Caringin District, Bogor Regency

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ABSTRACT

Background: The use of media in the learning process can facilitate the process of communication or delivery of messages from teachers to students. Students can clearly understand the instruction meaning or message that the teacher conveys.

Purpose: This study aims to determine the learning outcomes of students using graphic media and the effect of using graphic media on student learning outcomes in Indonesian subjects for class IV instructional texts at MI Almunazomah, Caringin District, Bogor Regency.

Design and methods: This research is an experimental research. The subjects of this study were all fourth-grade students, totalling 20 people. The test instrument used to determine student learning outcomes is a multiple choice test in the form of *pre-test* and *post-test*.

Results: The results of this study indicate that the experimental group taught using graphic media obtained an average *pre-test* average value *post-test* of 77 with a standard deviation of 16.36. Changes in learning outcomes are 42 by using graphic media. While the mean value of the *pre-test* in the control group was 37 with a standard deviation of 13.37 and the average value of the *post-test* was 52 with a standard deviation of 14.76. Changes in learning outcomes are 15 without using graphic media. Based on the hypothesis testing criteria at $\alpha = 0.05$, $t_{\text{observe}} = 3.59$ and $t_{\text{table}} = 2.10$ so that $t_{\text{observe}} > t_{\text{table}}$ or $3.59 > 2.19$ then H_a is accepted and H_0 is rejected. It can be concluded that there is a significant effect of the use of graphic media on the learning outcomes of fourth grade students in the Indonesian subject of instructional text material at MI Almunazomah, Caringin District, Bogor Regency.

Keywords: Instructional Text, Bahasa Indonesia, Experiment

Introduction

Education and learning are an interconnected unit. Education will succeed if it is supported by a good learning process (Ifenthaler & Yau, 2020). Learning is a manifestation of the implementation of education. Learning is a series of interaction processes of students to achieve learning objectives under the guidance, direction and motivation of teachers. According to the Law of the Republic of Indonesia number 20 of 2003 concerning the National Education System, learning is a process of interaction between educators, students, and learning resources that takes place in the learning environment. This shows that learning is a student activity that causes changes in behavior or skills to become a better person.

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In learning, educators facilitate students so that they can learn well and produce an effective learning process (Duarte, 2013). Even after the teacher completes his teaching activities, there are still many students who do not understand the material that has been explained by the teacher. This can happen due to the lack of accurate learning media that is applied during teaching and learning activities. Teachers need to think creatively and never give up to meet all the needs of students. Therefore, when carrying out learning activities, all teachers must have everything related to learning. The goal is for learning activities to be effective and efficient (Urh et al., 2015).

Indonesian language learning is the process of presenting information to the media designed to help students improve their oral and written communication skills, as well as assessing students' creativity in speaking Indonesian. Standard Indonesian language competence standards, namely the minimum competence of students who explain the knowledge of Indonesian language and literature, language skills, and the achievement of positive attitudes. In addition, learn to express ideas and emotions, participate actively using Indonesian, discover and use analytical and imaginative skills in it. Most of the Indonesian language learning patterns are still transparent. That is, the teacher conveys the concepts contained in the textbook directly to students, who passively absorb knowledge (Trianto, 2011:18).

Teachers who teach without using media will find it more difficult to present learning materials and can affect learning outcomes and students' understanding (Chun et al., 2016). The use of media in the learning process can facilitate the process of communication or delivery of messages from teachers to students. Therefore, students can clearly understand the meaning or message that the teacher conveys. So that the use of media can improve students' understanding and learning outcomes. It can be concluded that in the teaching and learning process in the classroom, the media is used as a means to channel the teacher's message to students.

In the learning process, of course, there are goals that must be achieved as a result of student learning. Learning outcomes are described as students' skills in understanding learning materials, measured by formative tests given to students at the end of the lesson program. Its function is to find out how well students are working on certain topics according to their learning objectives.

The value of the Minimum Completeness Criteria (KKM) set by the MI-Almunazhomah school for Indonesian subjects in class IV is 70. The researcher conducted interviews with fourth grade teachers regarding the data on the grade IV Indonesian language learning outcomes which consisted of 20 people. From the results of these interviews, it is known that the value of learning outcomes for fourth grade students is a small number of students who have scores close to the minimum completeness criteria. From the value data obtained, it can be said that the learning outcomes of class IV MI-Almunazomah students are still relatively low. To avoid the occurrence of verbalism in delivering Indonesian language subject matter, tools or media are needed to improve understanding of the subject matter that will be delivered by the teacher. Another thing behind the research at MI-Almunazhomah is the low learning outcomes of students on Indonesian subjects.

The unattractive and monotonous way of presenting material causes students to not be able to follow the lesson properly, which has an impact on achieving the Minimum Completeness Criteria (KKM). In the 2013 Curriculum student textbooks, materials are available in various types of texts. This is related to the 2013 curriculum, which is known as a text-based curriculum. Text is defined as a linguistic unit used as an expression of social activities, both orally and in writing. In text-based learning, students are expected to be able to understand and use texts according to their social goals and functions. As stated by

Dariman (2019), that the ultimate goal of text-based learning is to make students understand and use the text in accordance with the social objectives of the text being studied.

In this study, students are required to understand an instructional text contained in the fourth grade student book Theme 2 Sub-theme 2. The instruction text contains directions for doing something. Instruction text aims to explain the use or manufacture of something. Sentences used in the text instructions in the form of a command sentence. Therefore, it is necessary to make efforts in learning that can make it easier for students to understand the instruction text. Based on the background of the problem, the researcher can formulate the hypothesis of this experimental research as follows: By using graphic media, it is suspected that it can have an influence in understanding the instructional text for the fourth-grade students of MI - Almunazomah in 2020/2021.

This research is supported by several previous research journals which are used as references or guidelines that can strengthen the theory and research results so that they can prove the compiled hypothesis. The research journals are as follows

First, a research conducted by (Kristin & Rahayu, 2016) This study aims to determine the effect of the use of discovery learning models on social studies learning outcomes in grade 4 SD Negeri Koripan 01. This type of research is a quasi *-experimental design*. The subjects in this study were fourth grade students of SD Negeri Koripan 01 as the experimental class and grade 4 students of SD Negeri Koripan 04 as the control class. Data collection techniques through observation and tests to measure social studies learning outcomes. Based on the results of research and data analysis, it was concluded that the use of the discovery learning model had an effect on the social studies learning outcomes of 4th grade students of SD Negeri Koripan 01. This was indicated by the t-observe results on the independent sample t-test that had been carried out after treatment, the significance of 0.000 was smaller than 0. 05 ($0.000 < 0.05$), because the 2-tailed significance of the independent sample t test is less than 0.05, H_0 is rejected and H_1 is accepted.

Next, a research conducted by Audina et al., (2018) This study aims to 1) find out the differences poetry writing skills among students who are taught by the picture and picture learning model and the concept sentence learning model; 2) knowing the differences in poetry writing skills between students who have high reading interest and low reading interest; and 3) knowing the interaction of learning models and reading interest on poetry writing skills. This study used a quasi-experimental research method with a 2 x 2 factorial design. The population of this study were all fifth grade students of SD Negeri in the district of Laweyan Surakarta in the 2017/2018 academic year. Samples were taken using the Cluster Random Sampling technique. The data analysis technique used is Two Way Variance Analysis. The results showed that 1) there were differences in poetry writing skills between students who were taught using the Picture and Picture learning model and students who were taught using the *Concept Sentence*, indicated by $F_A = 22.38 > F_{0.05}; 1.57 = 4.01$; 2) there are differences in poetry writing skills between students who have high reading interest and students who have low reading interest, indicated by $F_B = 44.07 > F_{0.05}; 1.57 = 4.01$; and 3) there is an interaction between learning model and reading interest on poetry writing skills, indicated by $F_{AB} = 4.14 > F_{0.05}; 1.57 = 4.01$. The conclusions of this study are: (1) the Picture and Picture learning model is better than the Concept Sentence learning model in poetry writing skills, (2) the writing skills of students who have high reading interest are better than students who have low reading interest, and (3) there is an interaction between the learning model and reading interest on poetry writing skills.

The purpose of this study was to determine the learning outcomes of students by using graphic media and to determine whether or not there was an effect of using graphic media

on student learning outcomes in Indonesian language subjects to understand instructional texts for class IV at MI – Almunazomah, Caringin District, Bogor Regency.

Methods

This research is an experimental research. Experimental research aims to investigate the effect on causal relationships, by giving different treatments to the experimental group and providing controls for comparison. This type of research is a quasi-experimental research (*Quasi Experimental Design*). This research was conducted in class IV MI- Almunazomah. The subjects of this study were students of class IV MI- Almunazomah which consisted of 20 people. Determination of the experimental group through lottery and obtained 10 students as the experimental group and 10 students as the control group. This study involved two groups, namely the experimental group which was given treatment using graphic media and the control group which was given treatment without using graphic media. Both groups were given the same material.

The data in this study used test and observation techniques. The test technique in this study was used to measure the learning outcomes of the experimental group and the control group, the test given was in the form of *multiple-choice* (multiple choice) with four answer choices which were validated using the Pearson validity formula in the excel application. Observations were made by researchers during the learning process to observe the learning process that took place carefully and monitor student development from time to time, so the observation instrument sheet was used. The analysis technique used in this research is the data hypothesis test using the excel application. This analysis was used to determine the significance of the difference between the control class and the experimental class before and after treatment.

Findings & Discussion

This research began on January 11, 2022 as an initial observation asking the principal for permission to be allowed to conduct research at MI-Almunazomah and interviewing fourth grade teachers. On January 13, 2022 researchers began to enter the classroom to provide a different learning treatment between the experimental group and the control group. The material taught in this study is the text of instructions. Experimental research involving two classes that were given different treatments. Each group consists of 10 students.

Learning Outcomes Data Pre-test and Post-test Experiment Class

1) Pre-test Experiment Class

Hasil Pre-test Kelompok Eksperimen															
NO	NAMA	Butir soal										Skor	X	X ²	Rumus
		1	2	3	4	5	6	7	8	9	10				
1	M. Ramdan	1	1	0	0	0	0	0	0	0	1	3	30	900	
2	M. Barkah	0	1	0	0	0	1	0	1	0	1	4	40	1600	
3	M. Ruslan	1	0	1	0	0	0	0	0	0	0	2	20	400	
4	M. Tegar	0	0	0	1	0	0	0	1	1	3	30	900		
5	Robi	1	1	0	0	0	0	0	1	1	0	4	40	1600	
6	Deri Ardiansyah	0	1	0	1	1	0	0	1	1	5	50	2500		
7	Nuna	0	0	0	1	1	1	0	0	0	3	30	900		
8	Santi Nurfadiah	1	0	0	0	0	0	0	1	0	2	20	400		
9	Nova Aura Putri	1	1	1	0	0	1	0	1	0	6	60	3600		
10	Siri Haya	0	0	0	0	1	1	0	1	0	3	30	900		
Jumlah (Σ)												350	13700	$\sum X \& \sum X^2$	
Rata-rata												35		$\bar{X} = \frac{\sum X}{N}$	
Sandar Deviasi (S)												12,69		$S = \sqrt{\frac{n \cdot \sum X^2 - (\sum X)^2}{n(n-1)}}$	
Varians (S ²)												161,11		S^2	

2) Post-test Experiment Class

Hasil Post-test Kelompok Eksperimen															
NO	NAMA	Butir soal										Skor	X	X ²	Rumus
		1	2	3	4	5	6	7	8	9	10				
1	Egi Septiadi	1	1	1	1	1	1	1	1	1	1	10	100	10000	
2	Acun	1	1	0	1	1	1	1	1	1	1	9	90	8100	
3	M. Galuh Purnama	1	1	1	1	1	0	0	1	1	1	8	80	6400	
4	Abdul Aziz	1	1	1	0	1	1	1	0	1	1	8	80	6400	
5	Fauzi	1	1	0	0	0	0	0	1	1	0	4	40	1600	
6	M. Yusto	1	1	0	1	1	1	1	1	1	1	9	90	8100	
7	M. Arfan Maulana	1	1	1	0	1	1	1	0	0	1	7	70	4900	
8	Esa Al-Ghifari	1	0	0	1	1	1	0	1	1	1	7	70	4900	
9	Siti Syaifa	1	1	1	0	1	1	1	0	1	8	80	6400		
10	Nisa	1	1	0	1	1	1	1	0	1	0	7	70	4900	
Jumlah (Σ)												770	61700	$\sum X \& \sum X^2$	
Rata-rata												77		$\bar{X} = \frac{\sum X}{N}$	
Sandar Deviasi (S)												16,36		$S = \sqrt{\frac{n \cdot \sum X^2 - (\sum X)^2}{n(n-1)}}$	
Varians (S ²)												267,78		S^2	

Learning Outcomes Data Pre-test and Post-test Control Class

1) Pre-test Control Class

2) Post-test Control Class

Hasil Pre-test Kelompok Kontrol															
NO	NAMA	Butir soal										Skor	X	X ²	Rumus
		1	2	3	4	5	6	7	8	9	10				
1	Egi Septiadi	1	1	0	1	0	0	1	1	1	0	6	60	3600	
2	Acun	0	0	0	0	0	0	1	0	0	1	2	20	400	
3	M. Galuh Purnama	1	0	0	1	0	1	1	0	0	0	4	40	1600	
4	Abdul Aziz	1	1	0	0	0	0	0	0	1	1	3	30	900	
5	Fauzi	1	0	1	0	1	0	0	0	0	0	3	30	900	
6	M. Yusto	1	0	0	1	0	1	1	0	0	0	4	40	1600	
7	M. Arfan Maulana	0	1	0	0	0	0	0	1	0	2	20	400		
8	Esa Al-Ghifari	1	1	0	0	1	1	1	0	0	5	50	2500		
9	Siti Syaira	0	0	1	0	1	0	0	0	1	3	30	900		
10	Nisa	0	1	1	1	0	0	0	1	1	5	50	2500		
Jumlah												370	15300	$\sum X & \sum X^2$	
Rata-rata													37	$\bar{X} = \frac{\sum X}{N}$	
Standar Deviasi												13,37	$S = \sqrt{\frac{n \cdot \sum X^2 - (\sum X)^2}{n(n-1)}}$		
Varians												178,89	S^2		

Hasil Post-test Kelompok Kontrol															
NO	NAMA	Butir soal										Skor	X	X ²	Rumus
		1	2	3	4	5	6	7	8	9	10				
1	M. Ramdan	1	1	0	1	0	0	1	1	1	1	7	70	4900	
2	M. Barkah	1	0	1	0	0	0	1	0	0	1	4	40	1600	
3	M. Ruslan	1	0	1	1	0	1	1	0	0	0	5	50	2500	
4	M. Tegar	1	1	0	0	1	1	0	0	0	1	5	50	2500	
5	Robi	1	0	1	0	1	0	1	0	1	1	6	60	3600	
6	Deri Andriansyah	1	0	0	1	0	1	1	0	0	1	5	50	2500	
7	Nuna	0	1	0	0	0	0	0	1	0	2	20	400		
8	Santi Nurfadilah	1	1	0	0	0	1	1	1	1	0	6	60	3600	
9	Novo Akura Putri	0	0	1	0	1	0	1	0	1	1	5	50	2500	
10	Siti Haya	0	1	1	1	0	1	1	0	1	1	7	70	4900	
Jumlah (Σ)												520	29000	$\sum X & \sum X^2$	
Rata-rata													52	$\bar{X} = \frac{\sum X}{N}$	
Standar Deviasi (S)												14,76	$S = \sqrt{\frac{n \cdot \sum X^2 - (\sum X)^2}{n(n-1)}}$		
Varians (S ²)												217,78	S^2		

Based on the results of data analysis that has been carried out, it shows that there are differences in student learning outcomes in the control group and the experimental group. The mean value of the pre-test for the control group was 37 and the experimental group was 35. After the pre-test was carried out in both classes, the students were then given different learning treatments for the instructional text material. In the control group the material is taught without using graphic media, while in the experimental class the material is taught using graphic media. After being given different treatment in the control group and the experimental group, students were given a post-test at the end of the meeting to determine the students' learning outcomes in understanding the instructional text material. After the post-test was carried out in both groups, the average post-test score in the experimental group was higher than the control group, where the average value of the experimental group was 77 while that of the control group was 52.

The experimental class compared to the control class shows that learning media has several advantages, namely:

- 1) Learning media can clarify the presentation of messages and information so that they can facilitate and improve learning processes and outcomes,
- 2) Learning media can increase and direct students' attention so that it can lead to learning motivation. , more direct interaction between students and their environment.
- 3) Learning media can overcome the limitations of the senses, space, and time.

To determine the effect of using graphic media on student learning outcomes, it is necessary to test the hypothesis.

From the results of hypothesis testing that has been carried out, the results show that Ha is accepted and Ho is rejected. At the significant level = 0.05 and dk = n1 + n2 – 2 = 2.10, the t table observe = 3.59. Furthermore, by comparing t observe with t table, it is obtained that t observe > t table is 3.59 > 2.10. Thus Ha is accepted and Ho is rejected, the acceptance of Ha shows that there is a significant influence between the use of graphic media on the learning outcomes of fourth grade students in Indonesian subjects at MI-Almunazomah, Caringin District, Bogor Regency. Based on the description above, it can be concluded that the use of graphic media can affect the learning outcomes of fourth grade students in the subject of Indonesian language instructional text materials at MI-Almunazomah, Caringin District, Bogor Regency.

Conclusion

Based on the results of the research that has been carried out, the following conclusions are obtained the learning outcomes of fourth grade students of MI-Almunazomah in Indonesian subjects with instructional text materials at MI-Almunazomah, Caringin District, Bogor Regency. The average pre-test value in the experimental group was 35 with a standard deviation of 12.69 and the post-test average value of 77 with a standard deviation of 16.36.

Changes in learning outcomes are 42 by using graphic media. While the average value of the pre-test in the control group was 37 with a standard deviation of 13.37 and the average value of the post-test was 52 with a standard deviation of 14.76. Changes in learning outcomes are 15 without using graphic media.

There is a significant effect of the use of graphic media on the learning outcomes of fourth grade students of MI-Almunazomah, Caringin District, Bogor Regency. Based on the hypothesis testing criteria at $\alpha = 0.05$, $t_{\text{observe}} = 3.59$ and $t_{\text{table}} = 2.10$ so that $t_{\text{observe}} > t_{\text{table}}$ or $3.59 > 2.10$ then H_a is accepted and H_0 is rejected.

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