

## VISUAL LEARNING: STRENGTHENING READING COMPREHENSION WITH PICTURES

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### ABSTRAK

Penelitian ini bertujuan untuk menguji apakah gambar dapat meningkatkan pemahaman membaca siswa kelas VIII di SMP Negeri 1 Banawa. Penelitian ini menggunakan desain pra-eksperimental dengan pre-test dan post-test yang dilakukan pada 29 siswa dari Kelas VIII B. Sampel penelitian ini dipilih dengan menggunakan teknik purposive sampling. Pemahaman membaca siswa dinilai sebelum dan sesudah intervensi dengan menggunakan analisis statistik deskriptif dan inferensial. Hasil penelitian menunjukkan adanya peningkatan yang signifikan dalam kemampuan membaca pemahaman siswa, yang dibuktikan dengan peningkatan nilai rata-rata dari 47,14 pada pre-test menjadi 57,90 pada post-test. Uji-t sampel berpasangan menunjukkan perbedaan yang signifikan antara skor pre-test dan post-test ( $p = 0,000$ ), yang mengindikasikan bahwa penggunaan gambar memiliki dampak yang signifikan secara statistik terhadap pemahaman membaca siswa. Temuan ini menunjukkan bahwa penggunaan gambar dapat meningkatkan pemahaman membaca siswa kelas delapan di SMP Negeri 1 Banawa.

**Kata Kunci:** Gambar, Pemahaman Membaca.

### ABSTRACT

*This research aimed to examine whether pictures could improve the reading comprehension of eighth-grade students at SMP Negeri 1 Banawa. This research used a pre-experimental design with a pre-test and post-test conducted on 29 students from Class VIII B. The samples of this research were selected using a purposive sampling technique. The reading comprehension of the students was assessed before and after the intervention using descriptive and inferential statistical analyses. The results showed a significant improvement in the students' reading comprehension, as evidenced by an increase in the mean score from 47.14 in the pre-test to 57.90 in the post-test. The paired sample t-test showed a significant difference between the pre-test and post-test scores ( $p = 0.000$ ), indicating that the use of pictures had a statistically significant impact on the students' reading comprehension. The findings suggested that the use of pictures could improve the reading comprehension of eighth-grade students at SMP Negeri 1 Banawa.*

**Keywords:** Pictures, Reading Comprehension.

### INTRODUCTION

English is an international language used in various fields, such as business, technology, and science, in the current era of globalization. According to Sari et al., (2024), Knowledge of English is necessary to compete in the era of globalization. Therefore, mastering English is very important for every individual, including students. When learning English, four main skills need to be mastered: listening, speaking, writing, and reading.

Reading is a process of obtaining information and knowledge from the text. According to Lumbantoruan & Sirait (2022), Reading is an activity that does not just take words from the text but requires the reader to interpret what is happening in the text. It is not simply reading words but also involves understanding the ideas, information, and messages

contained in the text. Favorita et al. (2023) mentioned that readers can convey and gather information through reading comprehension. This understanding is derived from the dynamic interaction between the written words and the knowledge they evoke beyond the immediate text or message {Formatting Citation}. This process is the essence of reading comprehension. Putra and Supatmi (2022) defined reading comprehension as the ability to understand information presented in written form. Reading comprehension involves the ability to identify main ideas, understand details, make inferences, and evaluate the content of the text.

In the Merdeka Curriculum, students are expected to be able to identify the purpose of the text and begin to make inferences to understand the implied information in a text. Students are asked to find and evaluate the main idea and specific information in various types of text, including recount, narrative, descriptive, and procedural texts. Furthermore, with the ability to understand, use, and select texts according to their purpose, students can develop their knowledge and potential to participate in the community.

However, the learning objectives have not been fully achieved. After conducting pre-observations at SMP Negeri 1 Banawa, the researcher found several problems among the eighth-grade students, especially in reading skills. Many students still have difficulty understanding the content of reading texts and have limited vocabulary. The students read English texts thoroughly, but they only recognize words without really understanding their meaning in context. Furthermore, textbook-centered learning methods have not been able to overcome this obstacle. Therefore, a more interactive and contextual approach to learning is needed to improve the students' reading comprehension.

The integration of visual aids, mainly pictures, presents a promising approach to addressing these challenges. Silalahi (2023) argued that using pictures to teach reading helped students overcome the difficulties they encountered in developing their comprehension of reading texts. Pictures offer a multi-dimensional representation of textual content, facilitate deeper understanding, and increase engagement through visual cues. Pictures can help students visualize abstract concepts in reading texts. With visualization, students can more easily understand the meaning of complex words, sentences, and paragraphs. In addition, pictures can also make learning more meaningful and memorable.

Many researchers have researched the use of pictures and reading comprehension. Paputungan et al. (2022) conducted research using tests and found that students' reading comprehension improved after using picture stories. Bander et al. (2023) stated the use of pictures can improve students' reading comprehension. Furthermore, Arifin (2019) discovered that the use of pictures has improved the students' reading comprehension.

Based on the previous paragraph, the researcher decided to explore the use of pictures to improve reading comprehension. This research aimed to find out whether Pictures can improve the reading comprehension of eighth-grade students at SMP Negeri 1 Banawa or not.

## **METHODS**

This research used quantitative research with a pre-experimental design. The researcher used a one group pre-test and post-test. This research aimed to determine the effectiveness of using pictures in improving the students' reading comprehension. The researcher focused on one group of students, with the design was illustrated as follows:

Table 1. Research Design

Pre-test	Treatment	Post-test
T <sub>1</sub>	X	T <sub>2</sub>

(Hatch and Farhady, 1982:20)

Where:

T1 = Pretest

T2 = Post-test

X = Treatment by using Pictures.

## Population and Sample

### Population

Population is employed to denote a group of subjects that are characterized by specific criteria, as delineated by the investigative objectives of the research. According to Sugiyono (2013), the concept of population refers to a group of subjects that have been determined to be the focus of research by a researcher, and it is a generalized area. The population of this research was the eighth-grade students of SMP Negeri 1 Banawa, which consisted of four parallel classes. Each class consisted of 29 to 32 students. The total population was 120 students.

Table 2. Population of the Research

No	Classes	Number of Students
1	VIII A	32
2	VIII B	29
3	VIII C	28
4	VIII D	31
Total		120

### Sample

The sample is a segment of the population that has been selected for research. According to Sugiyono (2013), the sample is representative of the population in terms of the characteristics it possesses. To determine the sample of this research, the researcher used a purposive sampling technique. The sample of this research was class VIII B. Based on the result of the interview with the English teacher at SMP Negeri 1 Banawa, the researcher chose the class because the class had difficulties in reading comprehension.

### Research Variables

The variables in this study consisted of dependent and independent variables. In experimental research, the independent variables are commonly referred to as the 'treatment' or 'manipulated' variables. John and David (2023) asserted that independent variables are those variables that affect other variables within a study. The dependent variable, as previously defined, is the result that is affected by the independent variable. In the context of this study, the dependent variable was the students' reading comprehension, and the independent one was pictures.

### Research Instrument

The instrument of this research was a reading test conducted before and after the treatment. The reading test was given before the treatment namely the pre-test, while the post-test was given after the treatment to determine whether the independent variable had a significant

effect on the dependent variable or not.

### Techniques of Data Collection

To collect the data, the researcher used tests to measure the students' reading comprehension before and after treatment. As stated by Kaplan and Saccuzzo (2017), tests can take many forms, including written questionnaires, performance measures, physiological measures, or observation techniques. In this study, researchers employed a written test that utilized the same scoring rubric in both tests. Each test comprised ten multiple-choice and five essay questions. The following was the scoring rubric for each test.

Table 3. Scoring System

No	Types of the test	Number of items	Score of each item	Total score
1	Multiple Choice	10	1	10
2	Essay	5	4	20
Total				30

*(Adopted from the 2013 Curriculum Kemendikbud)*

Table 4. Scoring Rubric for Essay Test

No	Criteria	Score per item	Score range	Category	Qualification
1	Correct Content, Correct Grammar	4	90 – 100	Very good	Successful
2	Correct Content, Incorrect Grammar	3	80 – 89	Good	Successful
3	Correct Grammar, Incorrect Content	2	70 – 79	Fair	Successful
4	Incorrect Content and Grammar	1	40 – 69	Poor	Failed
5	No answer	0	0 – 39	Very poor	Failed

*(Adapted from the 2013 Curriculum Kemendikbud)*

Table 5. Scoring Rubric for Multiple Choice

No	Description	Score
1	Correct answer	1
2	Incorrect answer	0

*(Adapted from the 2013 Curriculum Kemendikbud)*

### Pre-test

A pre-test was a test that was given before treatment in the classroom. This test was conducted to measure the students' abilities before receiving the treatment, and it was given during the first face-to-face meeting. The researcher gave a reading comprehension test on a narrative text containing multiple-choice questions and essays. The test questions focused on the students' understanding of literal and inferential meaning related to the given text.

### Post-test

After the treatment, the students were given a post-test to find out whether the use of pictures could improve their reading comprehension or not. In the post-test, the researcher asked the students to answer multiple-choice and essay questions related to the given text. The post-test questions have the same level of difficulty as the pre-test, so the scoring rubric that was used was the same.

### Treatment

The treatment was administered after the pre-test and before the post-test. The researcher implemented the use of pictures over six meetings.

### Techniques of Data Analysis

Data analysis in this research was conducted using SPSS version 25 with several stages, namely descriptive statistics, normality test, and paired sample t-test to test the difference in pretest and posttest scores. Before hypothesis testing, descriptive statistical analysis was conducted to determine the distribution of pretest and posttest data. Descriptive statistics used include the minimum score, maximum score, mean, and standard deviation of student scores on the pre-test and post-test. This analysis aimed to provide an initial description of the tendency of the data before further testing was carried out.

After obtaining the descriptive statistics, the researcher conducted a normality test to determine whether the data were normally distributed or not. The normality test was carried out using Kolmogorov-Smirnov or Shapiro-Wilk, with the conditions:

- 1) If the significance value (p-value)  $> 0.05$ , then the data were normally distributed and can be analysed using parametric tests.
- 2) If the significance value (p-value)  $\leq 0.05$ , then the data were not normally distributed and was analysed with non-parametric tests.

After finding the data were normally distributed, the researcher conducted a paired sample t-test. Field (2024) asserts that a paired sample t-test is used to compare two related samples, matched samples, or repeated measurements on a sample to assess whether the population means are different. This test was appropriate when two different conditions, such as pre-test and post-test scenarios, were used with the same group of subjects.

## RESULTS AND DISCUSSION

### Results of the Research

The researcher calculated the mean, minimum, and standard deviation after determining the standard score for class VIII B using SPSS version 25. The results of the descriptive statistical analysis were presented in Table 6.

Table 6. Descriptive Statistics

		Means	N	Std. Deviation	Std. Error Means
Students' Learning Outcomes	Pretest	47.14	29	15.014	2.788
	Posttest	57.90	29	16.543	3.072

As illustrated in Table 6, the data set presented a comparison of the students' learning outcomes before and after treatment. The means pre-test score of the students was 47.14, while in the post-test, it was 57.90. The means score of the students increased significantly from 47.14 in the pre-test to 57.90 in the post-test. This indicated an improvement in student learning outcomes following the implementation of the treatment.

The number of samples in this research remained constant at 29 students in both tests, ensuring the validity of the comparison of the pre-test and post-test results, which would not be compromised by bias resulting from differences in the number of participants. The standard deviation in the pre-test was recorded at 15.014, while in the post-test, it increased to 16.543. This increase indicated that following the administration of the treatment, there was a greater variation in scores among the students, suggesting that some students exhibited higher learning outcomes than others.

In addition, the standard error of the means increased from 2.788 in the pretest to 3.072 in the posttest. This increase in the standard error value indicated that there was slightly more variation in the distribution of scores after the treatment.

Overall, the descriptive statistics showed an increase in the means score from pre-test to post-test. This may indicate that the treatment had a positive effect on the students' learning outcomes. Nevertheless, the increase in standard deviation also indicated that not all the students experienced the same level of improvement, as there was greater variation in scores after the treatment.

### Normality Test

The normality test was employed to ascertain if the collected data were normally distributed or not. This research used Shapiro-Wilk because the sample size was 29 or the sample was below 100. As stated in the previous paragraph, if the significance value was greater than 0.05, the data were considered normally distributed. Conversely, the data were not normally distributed if the significance value was less than 0.05. The normality test is shown below.

Table 7. Test of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.107	29	.200*	.983	29	.914
Posttest	.123	29	.200*	.953	29	.222

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on Table 7, the significance value of the data in each student's learning outcomes was greater than 0.05. The pre-test significance value was 0.914, which was greater than 0.05. The post-test significance value is 0.222, which was also higher than 0.05.

### Testing Hypothesis

This research was justified by testing the hypothesis to decide whether it was accepted or not. In testing the hypothesis, the paired sample t-test was carried out by the researcher. The paired sample t-test was used to examine whether there was a significant difference in learning outcomes between the pre-test and post-test within the same group. The researcher used SPSS version 25.

Table 8. Paired Samples Test

Paired Differences						t	Sig. (2-tailed)
		Means	Std. Deviation	Std. Error Means	95% Confidence Interval of the Difference		
					Lower	Upper	
Pair 1	Pretest - Posttest	-10.759	11.041	2.050	-14.958	-6.559	-5.247
							28.000

Based on the statistical result above, the researcher found that the significance value was lower than 0.05. This was shown from the sig. (2-tailed) 0.000, which was less than 0.05. Thus, it can be concluded that the alternative hypothesis ( $H_a$ ) was accepted, and the null hypothesis ( $H_0$ ) was rejected. The findings of this study indicated that there was a significant increase in the students' reading comprehension scores following the implementation of the picture treatment. This finding supported the hypothesis that the use of pictures had a statistically significant impact on the reading comprehension of eighth-grade students at SMP Negeri 1 Banawa.

## Discussion

The purpose of this study was to identify whether the use of pictures could improve the students' reading comprehension or not. This research was conducted at SMP Negeri 1 Banawa, using a pre-test and a post-test as the research instrument. The test consisted of 15 questions with two types of tests, namely multiple-choice and essay questions. The pretest was given to the students on November 14, 2024. The researcher administered the pretest before the treatment to measure the students' initial ability in reading comprehension. The students were asked to read the text carefully and answer the questions provided.

During the treatment, the students responded positively. The students showed high engagement and motivation when reading text accompanied by pictures. Visual representations of information help maintain interest and reduce the students' cognitive load. The presence of pictures allows the students to focus on understanding the content rather than deciphering the words separately. This is in line with the previous research conducted by Paputungan et al. (2022), which suggested that the use of pictures increased students' attention in the learning process. The students felt more interested and enthusiastic in the reading process because they had equal opportunities to understand the text effectively.

The findings of this study indicated that the use of pictures significantly improved the reading comprehension of eighth-grade students at SMP Negeri 1 Banawa. The results support the alternative hypothesis ( $H_a$ ), which stated that pictures enhanced the students' ability to comprehend reading materials. Conversely, the null hypothesis ( $H_0$ ), which posited that pictures did not significantly affect reading comprehension, was rejected.

One of the key reasons for this improvement was that pictures provide contextual support, making it easier for the students to understand unfamiliar vocabulary and infer meaning from the text. This was because pictures provide the students with visual representations of words, ideas, and situations, facilitating their ability to establish connections between text and meaning. It aligned with previous research suggesting that visual aids served as effective tools for language learning, particularly in supporting comprehension and retention. Bander et al. (2023) found that using pictures as media was an efficient method for teaching reading comprehension. The reading materials became more easily understood, helping the students in answering and identifying responses to related questions. Hardiyanti (2020) argues that the use of pictures in teaching can help

students remember what they have learned by stimulating their imagination to arrange the order of the story or process. It means when the students use their imagination to put the events of a story or process in the correct order, the students are actively engaging with the material and creating a mental picture. As stated by Wright (1989), pictures can significantly contribute to the establishment of context within an educational context. Consequently, pictures play an important role in the learning process.

Despite these positive findings, challenges were identified in the use of pictures during the learning process. For instance, some students relied too heavily on pictures without paying attention to textual details, which hindered a deeper understanding of the content. This suggests that teachers should facilitate a balanced integration of visual and textual elements to ensure optimal learning outcomes. In addition, although pictures could attract the students' attention, their overall interest in reading remained relatively low. Therefore, further initiatives were necessary to enhance the students' learning motivation.

In conclusion, this research confirmed that pictures played a crucial role in improving the students' reading comprehension. These findings support the previous research by Magfira (2022), which demonstrated that using pictures was effective in enhancing the students' reading comprehension. Hidayati (2019) also stated that the use of pictures in learning had several advantages, such as helping students focus on the main idea, increasing their understanding of the material, and making the learning process more enjoyable.

## **CONCLUSION**

Based on the findings and discussion in the previous chapter, it can be concluded that the use of pictures can improve the reading comprehension of VI-grade students of SMP Negeri 1 Banawa. The t-test analysis yielded a value of 0.000, which is less than the significance level of 0.05. This outcome indicates that the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) is accepted. Thus, the use of pictures had a significant influence on the students' reading comprehension.

## **Suggestion**

Based on the findings of this research, the researcher would like to offer the following suggestions.

1. For students, it would be beneficial to engage proactively in the use of pictures to facilitate comprehension of reading materials, particularly in identifying keywords and main ideas. The students can discuss with friends or teachers the content of reading texts that use pictures to deepen their understanding and improve their reading skills. Moreover, the students must cultivate their vocabulary by frequently engaging with reading materials reinforced by pictures to ensure the enhancement of their comprehension.
2. For teachers, they must be mindful of the techniques and media employed in the teaching and learning process, as each technique and media possesses its own set of advantages and disadvantages. They can integrate pictures with other learning techniques, such as group discussions or presentations, thereby rendering the learning process more interactive and effective.
3. For future researchers, it is recommended to develop further research on the effectiveness of using pictures with more diverse methods, such as educational comics, infographics, or interactive multimedia. Such research can be conducted with a wider sample or at different educational levels to ascertain whether the same results apply in various learning contexts.

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