

Boosting EFL Vocational Students' Reading Comprehension Through Graphic Novels

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ABSTRACT: This study aims to examine the effectiveness of using graphic novels to improve students' reading comprehension of EFL vocational students. Graphic novels were chosen because they combine text and visuals that can capture students' attention and facilitate a deeper understanding of the content through engaging narratives and visual elements.

The method employed in this research was a pre-experimental, applying One Group Pre-test and Post-test design. The samples were second grade students at SMK Muhammadiyah 1 Central Halmahera, North Maluku which is consisting of 30 students. The instrument is multiple choice questions to assess reading comprehension while reading graphic novels. Data analysis involved normality testing and a t-test using SPSS-26 software to examine the differences of students' scores before and after the treatment. The results showed a significant improvement of students' reading comprehension after using graphic novels. The average score on the pre-test was 49.00 and after being given treatment, there was an increase in the post-test score to 72.83. The t-test indicated a significance value of $0.01 < 0.05$ and the post-test value shows that the t-test value is 3.72 which is greater than the t-table 2.04, confirming that the use of graphic novels was effective and as an innovative learning media for enhancing students' reading comprehension because it can motivate students' interest in learning reading skill. Graphic novels did not only display long reading texts, but also display image or visual elements so that students did not get bored. Therefore, it can be recommended as an innovative and engaging tool for English language instruction.

KEYWORD: Boosting, Reading Comprehension, Graphic Novels.

INTRODUCTION

Reading is an activity where a person tries to understand the content information of the text in order to increase students' quality of knowledge as well as insight. According to Snow (2002) reading involves three interrelated elements: the reader, the text, and the activity or reading task, all situated into a broader sociocultural context. To comprehend a text, a reader must be equipped with a host of abilities (e.g., attention, memory, and inference), motivation (e.g., reading goals and interest) and knowledge (e.g., domain knowledge and linguistic knowledge), all of which are influenced by the specific texts used and the activity the reader is engaging in. As Sofyan & Basyarewan (2025: 270) said that reading comprehension is the central pillar in the context of reading text. Comprehension is the aim of reading. It enables the reader to catch the point of reading text. When they read, they gain information from the text. Therefore, they have to pay more attention to reading comprehension.

Gilakjani and Sabouri (2016) also defined reading comprehension as the process of creating meaning from text. The purpose is to get an understanding of the text rather than to acquire meaning from individual words or sentences. The outcome of reading comprehension is the mental representation of a text meaning that is combined with the readers' previous knowledge.

In relation to the importance of reading activities in enhancing literacy and critical thinking skills, the types of reading materials used must also be considered. Two significant forms of reading that contribute to the development of this skill are novels and graphic novels. Traditional novels offer rich narratives and complex language structures, while graphic novels present stories through a combination of text and visual illustrations, which can help readers better understand the plot in a more engaging and contextual way. Both forms of reading not only broaden readers' perspectives but also enhance reading motivation and students' interpretive abilities.

Graphic novels are stories that use images and text to tell ideas with the aim of combining visual and text elements to achieve a stronger story effect. Graphic novels are almost the same as comics, but graphic novels present longer stories. Furthermore, Gumelar (2011: 3) viewed that comics were previously specifically for jokes and tended to be for children's segmentation, it is starting to transform into reading segmentation teenagers and adults. Its name in several other countries has also changed from comics become graphic novels. A comic can be called a graphic novel if published in one volume serially. So, graphic novel in its

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definition is a "novel" which refers to literary ambition which is expressed in the plot, storytelling style, language style and characterization, while the word graphic refers to the high artistic power of a visual which is expressed in the drawing style, composition and color.

There is a research from Naura, W & Daulay, S. H. (2024) about Graphic novels as a tool for boosting reading comprehension in EFL education inferred that the outcomes of both the first assessment and final assessment revealed improvements in all aspects of reading comprehension. The paired sample t-test revealed a significant improvement in students' reading comprehension after the administration of treatment, with a p-value of $0.000 < 0.05$. The results of this study provide concrete evidence to support the idea that including graphic novels into reading may significantly enhance pupils' reading comprehension abilities.

Considering the grade students at SMK Muhammadiyah 1 Central Halmahera still show significant difficulties in reading comprehension and in understanding visual texts, it is important for researchers to incorporate more learning materials that involve graphic novels in their teaching and learning process. That is why the researchers conducted this study with the following simple problem statement; "Does graphic novels can improve students' reading comprehension? While, the objectives of this research are: firstly, to examine the extent of using graphic towards students' reading comprehension. Second, to analyse the effect of graphic novels on students' reading comprehension. Third, to determine the contribution of using graphic novels in enhancing students' reading interest. Then the last is to compare students' learning outcomes before and after the implementation of graphic novels through pre-test and post-test.

RESEARCH METHDO

This research employed a quantitative approach with pre-experimental methods of one group Pre-test & Post-test design which is carried out treatment for only one class where it did not use a control or comparison class. It means that the treatment given can be known more accurately because it can be compared with the situation before the treatment was given. (Sugiyono, 2010: 110).

$$O_1 \quad X \quad O_2$$

Where :

O1= Initial test before students were given treatment (pretest score). A pre-test is administered to capture the student's reading ability.

X= Treatment. It was called as the teaching stage using graphic novels in order to improve students' reading comprehension.

O2 = Final test after students were given treatment (posttest score). The post-test was carried out to determine whether there was an improvement of students' reading abilities or not.

This research conducted at SMK Muhammadiyah 1 Central Halmahera, North Maluku province, Indonesia. The samples were second grade students, the total numbers of sample were 30 students consisting of 17 females and 13 males. The study utilizes a pre-test and post-test tool that includes multiple choice questions to assess reading comprehension while reading graphic novels.

1. Validity Test

The instrument of validity test assesses the validity of its content, and the resulting output is considered valid. According to Sugiyono (2017: 19), the degree of accuracy between the data what actually happens to the object with the data collected by researcher. This validity test is carried out to measure whether the data is valid or not obtained after the research. The following is the validity test formula:

$$r \text{ count} = \frac{n \sum XY - (\sum X \sum Y)}{\sqrt{\{n \sum X^2 - (\sum X)^2\} \{n \sum Y^2 - (\sum Y)^2\}}}$$

Where :

r XY = Correlation- coefficient

n = Number of sample

$\sum X Y$ = of variable multiplications

$\sum X$ = Number of values of variable X

$\sum Y$ = Number of values of variable Y

$\sum X^2$ = The sum of the powers of the variable value X

$\sum Y^2$ = The sum of the powers of the variable value Y

This validity test was carried out using the SPSS-26 for Windows with the following criteria:

1. If r count > r table then the statement is declared valid.
2. If r count < r table then the statement is declared invalid.
3. The calculated r value can be seen in the corrected item total correlation column.

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2. Reliability Test

Reliability is an index that shows the extent of a tool measure can be trusted or relied upon (consistent). To see reliably whether or not a measuring instrument uses a statistical approach, namely through the reliability coefficient and if the reliability coefficient is more greater than 0.06 then the overall statement is stated reliable or reliable . Sugiyono (2019).

The reliability of the test was evaluated using SPSS (Statistical Package) software tools For Social Sciences). The following is the formula for reliability testing:

$$r_n = \frac{K}{K-1} \left(1 - \frac{\sum ab^2}{a^2 t} \right)$$

Where:

r_n = Instrument reliability

k = Many statements

$\sum a_b^2$ = Number of item variants

$a^2 t$ = Total variance.

3. Inferential Analysis

The researchers apply SPSS-26 to measure data that had been collected in determining the means score, standard deviation, test of significance. The researcher calculated it by using SPSS-26 and used table distribution to choose the score.

a. Hypothesis Test

Hypothesis is a temporary conclusion to an ongoing problem is presumptive because it still has to be proven true. Hypothesis will be rejected if it is wrong, and will be accepted if it is right. Rejection and acceptance Hypotheses really depend on the results of investigations into existing facts collected.

To carry out a t test, you can use the following formula:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

Where:

t = t Test value

r = Correlation coefficient

r = Coefficient of determination

n =Number of samples

Sumber: Sugiyono (2017)

b. Normality Test

The normality test was carried out to find out whether the research data that had been obtained were normally distributed or not. The normality test can be seen from the data from the pre-test and post-test results. after the normality test was carried out using the Shapiro-Wilk test and it was stated that the data were normally distributed, then it was continued with a two-variance homogeneity test on the results of the pre-test and post-test data using the Levene test with the IBM Statistical Package for Social Sciences (SPSS) 26 software application for windows.

4. Descriptive Analysis

The data analysis technique used is a descriptive technique with percentages. To analyze the data that has been collected, the next step is process the data using several techniques as follows: In accordance with the problem rose, to examine or determine the level accuracy of the problem in this research used percentage analysis, namely calculation of average percentages based on instruments determined by formula:

$$P = \frac{f}{N} \times 100\% \quad \text{Anas Sudijono (2008)}$$

Where : P = Percentage

F = Student frequency

N = Sample Size or Number of Sample

100% = Fixed Number for Percentage

Tabel 2.1.the classification score and Categorization

No	Score	Category
1	85-100	Excellent
2	76-80	Very good
3	71-75	Good
4	66-70	Fairly Good
5	60-65	Fair
6	50-55	Poor

Sumber : Sugiyono (2009)

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RESEARCH RESULT

Researchers conducted field research by taking student test scores (pre-test and post-test) from the experimental class. The pre-test was given before the researcher carried out treatment in the form of teaching related to reading and graphic novels and the post-test was given after carrying out the treatment. Below is the result of each test:

1. Descriptive Analysis

Table 3.1. Frequency Distributive Pre-Test of Experimental Class

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 15	1	3,3	3,3	3,3
25	1	3,3	3,3	6,7
30	1	3,3	3,3	10,0
35	3	10,0	10,0	20,0
40	2	6,7	6,7	26,7
45	4	13,3	13,3	40,0
50	5	16,7	16,7	56,7
55	7	23,3	23,7	80,0
60	2	6,7	6,7	86,7
65	1	3,3	3,3	90,0
70	2	6,7	6,7	96,7
75	1	3,3	3,3	100,0
Total	30	100,0	100,0	

Table 3.1. presents the frequency distribution of pre-test scores obtained by students in the experimental class prior to receiving the instructional treatment. A total of 30 students participated in the pre-test. The lowest score recorded was 15, achieved by 1 student (3.3%), while the highest score was 75, also achieved by 1 student (3.3%). The most frequently occurring score (mode) was 55, with the highest frequency of 7 students, accounting for 23.3% of the total participants.

From the cumulative percentage, it is evident that 56.7% of students scored 50 or below. This indicates that a majority of the students had relatively low pre-test scores prior to the treatment. This distribution provides an initial overview of students' understanding of the subject matter before the treatment was applied.

Table 3.2. Frequency Distributive Post-Test of Experimental Class

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 50	1	3,3	3,3	3,3
55	1	3,3	3,3	6,7
60	3	10,0	10,0	16,7
65	4	13,3	13,3	30,0
70	5	16,7	16,7	46,7
75	8	26,7	26,7	73,3
80	2	6,7	6,7	80,0
85	4	13,3	13,3	93,3
95	2	6,7	6,7	100,0
Total	30	100,0	100,0	

From the post-test results, previously can be summarized as follows: 2 students got score 95 with a percentage 6,7% categorized as *excellent*, 4 students got score 85 with a percentage 13,3 categorized as *excellent*, 2 students got a score 80 with a percentage 6,7% categorized as *very good*, 8 students got a score of 75 with a percentage 26,7% categorized as *good*, 5 students got a score 70 with a percentage 16,7% categorized as *fairly good*, 4 students got a score 65 with a percentage 13,3% and 3 students got a score 60 with a percentage 10,0 categorized as *fair*, 1 student got a score 55 with a percentage 3,3% and 1 student got a score 50 with a percentage 3,3% categorized as *poor*. Thus, it can be concluded that experienced a significant improvement in their English reading comprehensions.

This distribution reflects an improvement in students' understanding of the learning material. These findings serve as preliminary evidence that the instructional treatment had a positive impact on students' reading comprehension.

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Table 3.3. Descriptive of Pre-test and Post-test in Experimental Class

	N	Minimum	Maximum	Mean	Std. Deviation
Pre-Test	30	15	75	49,00	13,4
Post-Test	30	50	95	72,83	10,7

Table 3.3. presents the descriptive statistics of the pre-test and post-test results in the experimental class consisting of 30 students. In the pre-test, the minimum score obtained by students was 15, while the maximum score was 75. The mean score was 49.00 with a standard deviation of 13.4. This indicates that students' initial performance before the treatment was relatively low, with a wide range of scores.

After the treatment, the post-test results show a noticeable improvement. The minimum score increased to 50 and the maximum to 95. The mean score significantly increased to 72.83 with a standard deviation of 10.7. The decrease in standard deviation from pre-test to post-test also suggests that students' scores became more homogeneous after the treatment.

Based on these results, it can be concluded that there was an improvement in students' reading comprehension after the treatment. The increase in the mean score from 49.00 to 72.83 indicates that after implementing graphic novel in the experimental class was effective in enhancing students' Reading skill.

2. Inferential Analysis

a. Normality Test

This normality test was conducted to determine whether the data used in this study are normally distributed. Testing for normality is crucial in order to decide the appropriate statistical test for further data analysis.

Table 3.4. Normality Test of Pre-test and Post-test in Experimental Class

Students' Result	Shapiro-Wilk		
	Statistic	Df	Sig
Pre-test	,971	30	,568
Post-test	,969	30	,510

Based on the Shapiro-Wilk test results, the significance value (Sig.) for pre-test is 0.568, and for post-test is 0.510. Since both significance values are greater than 0.05, it can be concluded that the pre-test and post-test data are normally distributed. With these results, the data can be analyzed using parametric statistical tests in the next stage of analysis, such as one sample t-test to examine the difference between pre-test and post-test scores. A normal data distribution is one of the key assumptions in parametric testing; therefore, this test result strengthens the validity of subsequent data analysis steps.

b. T-test

The purpose of this test was to determine whether there is a statistically significant difference between the mean scores and zero, which in this context represents the effect of a given treatment.

Table 3.5. One Sample t test

	test value = 0					
	t	df	Sig	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Pre-test	2,0	29	<,001	49,000	43,99	54,01
Post-test	3,72	29	<,001	72,833	68,83	76,84

Based on table 3.5 above, the t-test result for the pre-test shows 2.0 with a (df) of 29 and in the post-test increase to 3.72 with the same (df) of 29. The significance values are less than ($0.01 < 0.05$), indicating that H_0 is rejected and H_1 is accepted, it means that there is significant improvement on students' reading comprehension through graphic novel.

The t-test of post-test is $3.7 > 2.04$ t-tables, which is indicated that there was an improvement after graphic novels applied as learning media in order to improve students' reading comprehension. On the other hand, the post-test t-test is higher than the t-table, clearly showing a highly significant difference after the treatment. Therefore, it can be said that Graphic Novels can improve students' reading comprehension, especially to the second grade students at SMK Muhammadiyah 1 Central Halmahera because the treatment had a positive effect on increasing the test scores from pre-test to post-test.

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DISCUSSION

The research has been clearly demonstrated positive results. The utilization of graphic novels proved to be quite effective in improving students' reading comprehensions. Based on the calculations in the experimental class, 30 students participated in the pre-test with an average score of 49.00. After the treatment using graphic novels, the post-test students showed an increased average score of 72.83.

Based on the overall findings of the research, it can be concluded that the use of graphic novels is effective in enhancing students' reading comprehensions, particularly in English language learning for EFL vocational students in the 2025/2026 academic year. Therefore, the teaching technique involving graphic novels can be recommended as an alternative and innovative strategy for English instruction in schools.

The improvement of students' scores after the post-test can be linked to the engaging and multi-sensory format of graphic novels. Unlike traditional reading materials, graphic novels combine images with text, which helps students especially those with reading difficulties or limited vocabulary better understand the content. As Sofyan & Amran, 2025 : 380) said that students' difficulties in learning English is lack of vocabulary and less mastery of grammar, and lack of confidence in speaking English, the method is not interesting, also less of support from families. So, by using both visual and textual clues, students can infer meanings and grasp concepts more effectively, leading to improved comprehension and memory.

The data also revealed that students who initially had low scores showed significant progress after being taught through graphic novels. This suggests that graphic novels are an inclusive learning tool that can support both advanced and struggling learners. Furthermore, it highlights the potential of graphic novels to help close the achievement gap among students with varying abilities in a typical classroom setting.

The study from Ng Li Min and Abdul Aziz (2025) also evaluated the impact of graphic novels on primary school ESL learners in Malaysia. Through experimental pre-test and post-test, the authors found that graphic novels significantly improved reading skills and increased reading motivation among students who were previously reluctant readers. Daeun Hwang et al. (2025). Although, it focused on interactive educational narratives, this study explores learner motivation in visual-based storytelling environments. They found that responsive content and diverse choices akin to visual narrative techniques in graphic novels significantly boost learner engagement and motivation.

Thus, it can be state that graphic novels effectively to improve reading comprehension of second-grade students at SMK Muhammadiyah 1 Central Halmahera. Students showed improvements in reading comprehension, vocabulary, and overall interest in the materials. The engaging visuals and easy to follow stories in graphic novels helped them to stay focused and actively participate in the reading process. Therefore, graphic novels are highly recommended as a reading learning tool, especially for students who are less motivated by traditional reading texts. This media not only enhances reading skill but also encourages students to learn in a more enjoyable and interactive way.

CONCLUSION

Based on the result of analysis, it can be concluded that: (1). The use of graphic novels has proved effectively in improving students' reading comprehensions. This is evident from the increase in the students' average score, from 49.00 on the pre-test to 72.83 on the post-test after the implementation of graphic novels as a teaching media. (2). The distribution of students' reading mastery after the treatment indicated that the majority of the students experienced a significant improvement. 16 out of 30 students showed noticeable progress in their English reading comprehensions. Furthermore, the results of the one sample t-test using SPSS-26 revealed a significance value (p-value) of $0.01 < 0.05$, which is indicating a statistically significant difference between pre-test and post-test scores.

This research also encountered some challenges; such as limited vocabulary and difficulties in interpreting visual elements within the graphic novels. Therefore, improving reading skills still requires time, effort, and appropriate instructional strategies. Thus, the conclusion is graphic novels can be considered an effective and innovative learning media for enhancing students' Reading comprehension, particularly in English language instruction for second grade students at SMK Muhammadiyah 1 Central Halmahera, North Maluku, Indonesia.

Recommendation.

Based on the findings of this study, students' improvement greatly depends on how the teacher delivers the material and motivates them. Continuous instruction and consistent exposure to a particular method can bring about positive changes in students' learning outcomes. Therefore, English teachers are expected to pay more attention to students' needs and provide a variety of learning methods. One such method is teaching reading through the use of graphic novels. Graphic novels have the potential to increase students' interest in learning English.

REFERENCES

- 1) Airasian, Pw and M. Russell. (2008) *Classroom and assessment: concepts and application*. McGraw Hill-higher education. Boston College
- 2) Burn, (2018) *Characteristics of Reading Learning Difficulties in Lower Grade Elementary School Students*. Journal of Educational Science Perspectives, 32(2), 96.
- 3) Creswell, J.W. (2008). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. Pearson Merrill Prentice Hall, Singapore.
- 4) Damayanti and Chamida (2017). *The influence of the PQRSST reading method on learning outcomes in Solving story problems*.
- 5) Dennis (2016). "A Study of factors Affecting EFL Learners" Reading Comprehension Skill and the Strategies important". International journal of English linguistics, vol. 6. No. 5, (june september), 183.
- 6) Friantini (2019). *Analysis of Learning Interest in Learning Mathematics*. JPMI (Indonesian Journal of Mathematics Education), 4(1), 6. <https://doi.org/10.26737/jpmi.v4i1.870>
- 7) _____ (2019). *Effectiveness of Implementing Round Table and Expository Methods on Mathematics Learning Achievement* <https://doi.org/10.26737/jpmi.v4i1.870>
- 8) Gilakjani, A.P, & Sabouri, N.B. (2016). How Can Students Improve Their Reading Comprehension Skill? Journal of Studies in Education. 6(2), 229-240.
- 9) Gumelar (2011). *How to Make Comics*. West Jakarta: PT. Index.
- 10) Hodgson (2008). *Reading as a Language Skill*. Bandung. Space.
- 11) Hwang, Mott, and Lester (2025). *Exploring Player Motivation in Static and Dynamic Educational Interactive Narratives*. arXiv.
- 12) Klein (2018). *Reading is one thing process, Reading is strategic*, University Of Maryland, United States Of America.
- 13) Kridalaksana (2017). *Linguistic Dictionary*. Jakarta: Gramedia
- 14) Kurnia (2012). *The Concept of Play in Fostering Creativity in Children Early*. Journal. Vol 01.
- 15) Lamb and Arnold (2018). *Improved reading ability*. University Bakrie Repository
- 16) Listiyanto Ahmad (2010). *Speed Reading: Fast Reading Techniques and Methods*. Yogyakarta: A Plus Books.
- 17) Ng, L. M., and Abdul Aziz (2025). *The Effectiveness of Graphic Novels in Improving Primary School ESL Pupils' Reading Skills*. Research Gate.
- 18) Naura, W & Daulay, S. H. (2024). Graphic novels as a tool for boosting reading comprehension in EFL education. *Indonesian EFL Journal*, 10(2), 241-246. <https://doi.org/10.25134/ieflj.v10i2.10031>.
- 19) Patel and Jain (2008). Book: *English Language Teaching* Jaipur, p. 117-123.
- 20) Rahim (2018). *Teaching Reading in Elementary Schools*. Jakarta: Earth Script.
- 21) Soedarso (2015). *Comics: Illustrated Literary Works*. Humanities Journal Vol.6.
- 22) Sofyan, Nurlaily & Basyarewan, Farsha. 2025. *SQ3R Method as an Alternative Pedagogical Strategy to Enhance Students' Reading Comprehension*. Volume 9, No. 1, Page: 269 – 284.
- 23) Sofyan, Nurlaily & Amran, Karlina. 2025. *Mapping the Hurdles: A Comprehensive Study on Students' Difficulties in Learning English at SMP Muhammadiyah 1 Ternate City, North Maluku*. Vol. 02(07): 377-381.
- 24) Sugiyono (2010), *Educational Research Methods: Quantitative, Qualitative, and R&D Approaches*. Bandung: Alfabeta.
- 25) _____, (2017). *Research Methods: Quantitative, Qualitative, and R&D Approaches*. Bandung: Alfabeta.
- 26) _____, (2019). *Research Methods: Quantitative, Qualitative, and R&D Approaches*. Bandung: Alfabeta.
- 27) Snow, C.E, (2002). *Reading for understanding: toward a research and development program in reading comprehension*. Pittsburgh: RAND.
- 28) Zabus, V, & Nicoby. (2021). *Sophie's World: A graphic novel* (R. A. Lasmana, Trans.). Jakarta: Gramedia Pustaka Utama. (Original work published 2018).



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