

## The Effectiveness of Comic Strip in Improving Students' Vocabulary and Reading Comprehension

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### Abstract

The purpose of this study was to discover there was a substantial effect of using comic strips on students' vocabulary and reading comprehension in the tenth grade at SMK Lab Business School Kota Tangerang. The researcher used a quantitative method. In this study, pre-experimental research one-group pre-test post-test was used with 40 students as the sample, which was taken at non-random. The instruments for data collection were vocabulary and reading comprehension tests. The data distribution was not normal, so the researcher used Wilcoxon Signed Rank to analyze it. The Wilcoxon Signed Rank Test vocabulary and reading comprehension results of the above pre-test and post-test data were 0.000 less than 0.05. The mean score for the pre-test vocabulary was 58.12 and the mean score for the post-test vocabulary was 78.63. Meanwhile, the pre-test reading comprehension score was 58.12 and the post-test score was 78.63. It revealed a significant increase from the first to the second mean score. As a result, the findings of this study, which used comic strips to improve students' vocabulary and reading comprehension in the tenth grade at SMK Lab Business School Kota Tangerang had a significant effect. This suggests that comic strips can be used as an alternative media in the process of teaching vocabulary and reading comprehension.

Keywords: Comic Strip, Reading Comprehension, Vocabulary

### Introduction

English teaching as a foreign language in Indonesia should be incorporated into four skills in order to communicate language learners' sociocultural and strategic competences (Dukut, 2018). Reading is one of these four skills, (Rabiner et al., 2016) defines reading is one of the most essential educational qualification related to long-term academic outcomes. Each student who is learning English at a certain stage might have some difficulty. As stated, to (Kelley et al., 2015) "Reading is a development process that involves the combination of many cognitive and

affective skills". When reading the things to be considered in the text, recognize, analyze, and absorb all readings, so that the content of a text can be comprehended.

Reading comprehension is one of the most widely discussed problems in the field of applied linguistics, because along with the skills that children and adolescents should develop, it is an important gateway for acquiring and learning more knowledge (Arabmofrad et al., 2020). In Indonesia, reading comprehension tests are often found in exam questions. It is not easy for students to read material in foreign language. These skills are difficult to learn as students need to get a sufficiently long process to acquire. Students are forced to face new vocabulary and grammar. (Ricketts et al., 2020) claims that vocabulary would be essential for successful reading comprehension.

All previous research discussed the effect of using graphic novels on vocabulary and reading comprehension. Cook, (2016), (Aldahash & Altalhab, 2020) and (Roberts et al., 2020) focused on the effect of graphic novels on reading comprehension. Meanwhile, (Brugar et al., 2017) and (Basal et al., 2016) discuss the effect of graphic novels on vocabulary. All the above studies used quantitative methods to find out how the influence of visual graphic novel media on improving vocabulary and reading comprehension. All previous research has concluded that using media visual graphic novels can improve vocabulary and reading comprehension.

Then another problem, the students have limited vocabulary. According to Dylman et al., (2020) vocabulary education also proved successful as a way to help the development of reading in general and especially to weak readers and children at risk of reading difficulties. Besides on vocabulary and comprehend text, there another factors of reading comprehension such as the teacher use monotonous teaching methods. The problem might well have occurred because the teaching media made students bored and did not even pay full attention to the teacher. It was indeed difficult for the teacher to find out another media that the teacher would have used to transfer knowledge. Therefore, the researcher developed comic strip to improve students' vocabulary and reading comprehension at tenth grade of SMK Lab Business School Kota Tangerang. The fundamental role played by teachers in teaching and learning is to encourage teachers in learning processes. Meanwhile, teachers have often used a textbook without using any visual media in the classroom. Visual use has been one of the positive outcomes of the methodologies previously applied that have never disappeared in language teaching.

In this research, researcher using comic strips as a medium to improve vocabulary and reading comprehension. Quantitative method was used to analyze

relationships between the variables and to test objective theories. The researcher used pre-experimental research to know the real data from respondents.

Based on the explanation above, the researcher concerned using Comic Strip to improve vocabulary and reading comprehension. Through these concepts the learners are particularly motivated to learn to reading comprehension. Therefore, the researcher decided to undertake pre-experimental research with a one-group pre-test post-test design.

### **Methodology**

This research was steered at SMK Lab Business School Kota Tangerang. According to Mishra & Alok, (2017) in the term research methods is all techniques and methods used to conduct research are included. In this research, the type of this research was the quantitative research. Pre-experimental research design was used in this study, which included pre-test and post-test for one group.

Pre-experimental one-group pre-test-post-test design has a single group experimental without control group to be observed before and after treatment (Fraenkel et al., 2012). The researcher chose this design because the researcher intended to recognise the effect of using comic strip to improve students' vocabulary and reading comprehension. The research design are represented on the Table 1:

**Table 1. The Research Design**

Class	Pre-Test	Treatment	Post-Test
R1	O1	X	O2

Source: (Reichardt, 2019)

Description:

R1 : The sample of the experiment class

O1 : The pre-test observation.

X : The treatment.

O2 : The post-test observation.

The population for this research was the tenth grade of SMK Lab Business School Kota Tangerang in Academic Year 2021/2022, with a total of 220 students divided in to the 6 classes. The sampling technique in this research used purposive sampling, because the researcher selected the sample based on expertise and the

sample was appropriate for the data collection procedure. The researcher chose class X OTKP 1 as the experimental class with totalling 40 students. This reason was based on interviews with English teachers and an evaluation of the researcher effectiveness during the pandemic, the researcher concluded that X OTKP 1 was the lowest score in English lessons.

The technique of collecting data in this study were in the form of test scores. The researcher took two tests namely a pre-test and a post-test. A test was conducted both before and after the treatment. Researcher was using comic strips for treatment to students in this study. The researcher used test of instrument validity by using SPSS 26 version to conduct a validity test on the instruments to determine validity.

The validity test was conducted to 40 respondents, who have been questioned 15 questions about vocabulary and 15 questions about reading comprehension in the form of multiple-choice questions. The validity test results, all vocabulary and reading comprehension questions are valid. The of reliability test showed that reliability result of vocabulary test was ( $0,760 > 0,50$ ) and the result reliability of reading comprehension test was ( $0,814 > 0,50$ ). It can be concluded that the instrument was reliable.

## **Findings**

In this research, the sample consisted of 40 students from class X OTKP 1 divided into 2 males and 38 females. The statistical data description of experimental class was mean, standard deviation, minimum, and maximum.

Based on the vocabulary that was given to the tenth-grade students at SMK Lab. Business School Kota Tangerang, the researcher examined the data of the scores of the students' vocabulary by statistical result SPSS 26 of pre-test and post-test there was difference 6963 the data was taken from students' answer in the pre-test which has initiate the minimum score was 40 and maximum score was 80 with mean 58,12, and standard deviation 9.798. Meanwhile, the post-test which was found the minimum score was 40 and the maximum score was 90 with mean 78.63 and standard deviation 7.827.

The researcher also examined the data of the scores of the students' reading comprehension by statistical result SPSS 26 of pre-test and post-test there was difference the data was taken from students' answer in the pre-test which has found the minimum score was 40, maximum score was 75 with mean 59.18 and standard deviation 9.964. Meanwhile, the post-test which was discovered the minimum score was 47 and the maximum score was 100 with mean 81.92 and

standard deviation 9,582. It can be seen in the table of descriptive statistics as follows:

**Table 2. Descriptive Statistics Vocabulary**

Descriptive Statistics					
	N	Min	Max	Mean	Std. Dev
Pre-Test	40	40	80	58.12	9.798
Post-Test	40	60	90	78.63	7.827
Valid N (listwise)	40				

Source: Statistical Result SPSS 26

**Table 3. Descriptive Statistics Reading Comprehension**

Descriptive Statistics					
	N	Min	Max	Mean	Std. Dev
Pre-Test	40	40	75	59.18	9.964
Post-Test	40	47	100	81.92	9.582
Valid N (listwise)	40				

Source: Statistical Result SPSS 26

Researchers have data after giving a test first to students. From the score of vocabulary pre-test, the results showed that the minimum score was 40 and the maximum score was 80. Meanwhile, for vocabulary post-test, the results showed that the minimum score was 60 and the maximum score was 90. The score of pre-tests, in reading comprehension test showed that the minimum score was 40 and the maximum score was 75. While, for post-test, the results showed that the minimum score was 47 and the maximum score was 100. It can be concluded that the students' scores have improve vocabulary and reading comprehension after using comic strip because the students' post-test scores were higher than the pre-test scores.

After obtaining data using comic strip, researchers conducted a test of data analysis prerequisites first, namely the test for normality and homogeneity. The first test was normality test, serves to determine whether the data obtained are normally issued or not. The researcher used Shapiro-Wilk for normality test because the data sample less than 50. It can be noticed from the table below:

**Table 4. Test of Normality Vocabulary**

	Tests of Normality					
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest Vocab	.150	40	.024	.941	40	.037
Posttest Vocab	.170	40	.005	.924	40	.011

a. Lilliefors Significance Correction

Source: Statistical Result SPSS 26

**Table 5. Test of Normality Reading Comprehension**

	Tests of Normality					
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest Vocab	.15	40	.014	.934	40	.022
Posttest Vocab	.213	40	.000	.891	40	.001

a. Lilliefors Significance Correction

Source: Statistical Result SPSS 26

Based on data test of normality vocabulary, the significance value in the Shapiro-Wilk test for the pre-test variable was 0.037 ( $p < 0.05$ ). Likewise, the Post-test variable obtained  $\text{sig} = 0.011 < 0.05$ . For test of normality reading comprehension the significance value ( $p$ ) in the Shapiro-Wilk test for the pre-test variable was 0.022 ( $p < 0.05$ ), while the Post-test variable obtained a  $\text{sig} = 0.001 < 0.05$ . It can be concluded the result test of normality vocabulary and reading comprehension showed that  $H_0$  was rejected, and  $H_a$  was accepted, so the data was not normally delivered.

Therefore, to test data of homogeneity, the researcher used the t-test in SPSS 26 version. Likewise, homogeneity test serves to determine whether the data obtained are homogeneous or not. The result of the test of homogeneity could were obtained as shown in the table below.

**Table 6. Test of Homogeneity Vocabulary**

<b>Test of Homogeneity of Variances</b>					
		Levene Statistic	df1	df2	Sig.
Pretest Posttest RC	Based on Mean	1.978	1	78	.164
	Based on Median	1.807	1	78	.183
	Based on Median and with adjusted df	1.807	1	75.561	.183
	Based on trimmed mean	2.099	1	78	.151

Source: Statistical Result SPSS 26

**Table 7. Test of Homogeneity Reading Comprehension**

<b>Test of Homogeneity of Variances</b>					
		Levene Statistic	df1	df2	Sig.
Pretest Posttest RC	Based on Mean	1.208	1	78	.275
	Based on Median	.902	1	78	.345
	Based on Median and with adjusted df	.902	1	72.140	.346
	Based on trimmed mean	1.175	1	78	.282

Source: Statistical Result SPSS 26

In the table test of homogeneity vocabulary and reading comprehension show that Sig. > 0.05. This shows that the data is homogeneous or has a same variant, because the data is normally distributed and homogeneous, then the test and analysis of the hypotheses used non-parametric by Wilcoxon Signed Rank Test.

After being examined for normality and homogeneity, the data normality was not normally delivered. Furthermore, the researcher testing of hypothesis used non-parametric statistics by Wilcoxon Signed Rank Test to find out the effect of using comic strip to improve students' vocabulary and reading comprehension at the tenth grade. The purpose of these tests as to compare the pre-test and post-test score. The result of Wilcoxon Signed Rank Test in non-parametric of hypothesis about students' vocabulary and reading comprehension by using comic strip as follows:

**Table 8. Wilcoxon Signed Rank Test Vocabulary**

Test Statistics	
	Post-test Vocab – Pre-test Vocab
Z	-5.450 <sup>b</sup>
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test  
b. Based on negative ranks.

Source: Statistical Result SPSS 26

**Table 9. Wilcoxon Signed Rank Test Reading Comprehension**

Test Statistics	
	Posttest RC – Pretest RC
Z	-5.448 <sup>b</sup>
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test  
b. Based on negative ranks.

Source: Statistical Result SPSS 26

Based on the calculation statistical above, the researcher used Wilcoxon Signed Rank Test in non-parametric statistical method. It used because the data was not normally distributed. The basic of Wilcoxon Signed Rank Test is: if the Asymp. Sig. (2 tailed) is less than 0.05, so  $H_a$  is accepted, and  $H_o$  is rejected. Otherwise, if Asymp. Sig. (2 tailed) is higher than 0,05, so  $H_a$  is rejected, and  $H_o$  is accepted. It is known the Asymp.sig (2 tailed) of the pre-test and post-test data above was 0.000 less than < 0,05.

It can be concluded that  $H_a$  was accepted, and  $H_o$  was rejected. It means there was substantial and has a positive effect between pre-test and post-test using comic strip to improve students' vocabulary and reading comprehension at the tenth grade of SMK Lab Business School Kota Tangerang. Therefore, comic strip to improve students' vocabulary and reading comprehension at the tenth grade of SMK Lab Business School Kota Tangerang.

## Discussion

In this research the researcher has obtained results from the effect of using comic strip to improve students' vocabulary and reading comprehension at tenth grade of SMK Lab Business Kota Tangerang. In addition, researcher have given pre-test, treatment 4 times and post-test to determine the improvement in students' vocabulary and reading comprehension.

The results of teaching using Comic Strip as media were good, because there was an improvement in the post-test score. In addition, the post-test score was higher than the pre-test. In statistical calculations using Wilcoxon Ranked, it is



known that Sig. 0.000 less than 0.05. Shows that  $H_a$  is accepted, and  $H_o$  is rejected. That is, there is a significant difference between the pre-test and post-test. This shows that there is an improvement in students' vocabulary and reading comprehension.

Based on the results and theory above, (Cook, 2016) stated that the data from this study show some advantages of using graphic novels in middle school, students were much better than who only read traditional texts. In addition, (Basal et al., 2016) states that in this study can be concluding, using of graphic novels to teach vocabulary is more effective than traditional activities. Meanwhile, the results of this study are like several previous studies, namely an improvement in students' vocabulary and reading comprehension using comic strip. However, it differs in the implementation of the research. This research was conducted online with a time limit.

## **Conclusion**

Based on findings and discussion, the following conclusions can be concluded that: (1) The hypothesis data was examined using Wilcoxon Signed Rank Test in non-parametric, the comparison between pre-test and post-test. The results of Wilcoxon Signed Rank Test vocabulary and reading comprehension the Asymp.sig (2 tailed) of the pre-test and post-test data above was  $0.000 < 0,05$ . It means there was a significant effect between pre-test and post-test using comic strip on vocabulary and reading comprehension at the tenth grade of SMK Lab School Kota Tangerang in Academic Year 2021/2022. (2) There was a significant effect of using comic strip to improve students' vocabulary and reading comprehension at the tenth grade of SMK Lab School Kota Tangerang.

Students' vocabulary and reading comprehension score of pre-test and post-test were increased but many students' still have the score under KKM. It can be caused almost all of students have minim prior knowledge about comic strip, because of the comic strip is new way as tool media to improve students' vocabulary and reading comprehension. The short of time to learn vocabulary and reading comprehension by using comic strip. The lack of awareness of students to learn to use the Comic Strip and the difficulty of paying attention to students one by one because online learning was also one of the reasons students cannot achieve the KKM score.

As a result, learning to use the comic strip as a tool can be an alternative in learning a foreign language. Students' interest in language learning especially in

reading comprehension could be enhanced by comic strips. A significant proportion of the students' responses to the comic strip were positive per the research study. Furthermore, the research concluded that there was a significant difference between pre-test and post-test. It had to be a wonderful experience for students to learn English because students were felt enjoyed and happy.

Theoretically, for the next researcher related with the research of used comic strip as media to improve students' vocabulary and reading comprehension the next researchers can apply this media in other level of students. And the next researchers are suggested to make more detail explanation and more complete in conducting the research with the longer time.

Practically, for the students in using comic strip to improve vocabulary and reading comprehension give accurate information about students' achievement. Students can start by practicing the language with a simple one. Students do not need to be afraid of making mistakes and mistakes in language use because making mistakes are part of learning and students can learn from what students have done.

For the English teacher are suggested to give more attention toward the process of teaching and learning because the successful and learning depended on the strategy and applied by the teacher. One of the media the English teachers can use is comic strip to help the teacher understand and solve the problem about students' lack of vocabulary and weakness in reading comprehension.

The suggestions can give the benefit for the researcher, this study give an experience in doing the research as one of ways to apply the knowledge got in the university and in working with other people as well.

## References

- Aldahash, R., & Altalhab, S. (2020). The Effect of Graphic Novels on EFL Learners' Reading Comprehension. *International Journal of Applied Linguistics and English Literature*, 9(5), 19. <https://doi.org/10.7575/aiac.ijalel.v.9n.5p.19>
- Arabmofrad, A., Badi, M., & Rajae Pitehnoee, M. (2020). The Relationship among Elementary English as a Foreign Language Learners' Hemispheric Dominance, Metacognitive Reading Strategies Preferences, and Reading Comprehension. *Reading and Writing Quarterly*, 0(0), 1–12. <https://doi.org/10.1080/10573569.2020.1846005>
- Basal, A., Aytan, T., & Demir, I. (2016). Teaching Vocabulary with Graphic Novels. *English Language Teaching*, 9(9), 95. <https://doi.org/10.5539/elt.v9n9p95>
- Brugar, K. A., Roberts, K. L., Jiménez, L. M., Meyer, C. K., Brugar, K. A., Roberts, K. L.,

- Jiménez, L. M., & Meyer, C. K. (2017). More Than Mere Motivation : Learning Specific Content Through Multimodal Narratives More Than Mere Motivation : Learning Specific Content Through Multimodal Narratives. *Literacy Research and Instruction*, 00(00), 1–26. <https://doi.org/10.1080/19388071.2017.1351586>
- Cook, M. P. (2016). Now I “ See ”: The Impact of Graphic Novels on Reading Comprehension in High School English Classrooms Now I “ See ” : The Impact of Graphic Novels on Reading Comprehension in High School English Classrooms. *Literacy Research and Instruction*, 00(00), 1–33. <https://doi.org/10.1080/19388071.2016.1244869>
- Dukut, E. M. (2018). Popularizing Indonesian scenes through picturebooks and digital animation software : a World Englishes teaching idea Popularizing Indonesian scenes through picturebooks and. *Asian Englishes*, 8678(May), 1–16. <https://doi.org/10.1080/13488678.2018.1459071>
- Dylman, A. S., Blomqvist, E., Dylman, A. S., & Blomqvist, E. (2020). Reading habits and emotional vocabulary in adolescents. *Educational Psychology*, 40(6), 681–694. <https://doi.org/10.1080/01443410.2020.1732874>
- Fraenkel, J. et al. (2012). *How to Design and Evaluate Research in Education* (8th ed.).
- Kelley, M. F., Roe, M., Blanchard, J., Atwill, K., Kelley, M. F., Roe, M., Blanchard, J., Atwill, K., Influence, T., Kelley, M. F., Roe, M., & Blanchard, J. (2015). *The Influence of Spanish Vocabulary and Phonemic Awareness on Beginning English Reading Development : A Three-Year ( K – 2nd ) Longitudinal Study The Influence of Spanish Vocabulary and Phonemic Awareness on Beginning English Reading Development : A Three. 8543(June 2016).* <https://doi.org/10.1080/02568543.2014.973127>
- Mishra, Shanti B; Alok, S. (2017). *Handbook of Research Methodology. In Educreation Publishing* (Vol. 9, Issue 1). <https://doi.org/10.1097/00003465-199001000-00018>
- Rabiner, D. L., Godwin, J., & Dodge, K. A. (2016). Predicting academic achievement and attainment: The contribution of early academic skills, attention difficulties, and social competence. *School Psychology Review*, 45(2), 250–267. <https://doi.org/10.17105/SPR45-2.250-267>
- Ricketts, J., Lervåg, A., Dawson, N., Taylor, L. A., Ricketts, J., Lervåg, A., Dawson, N., Taylor, L. A., & Ricketts, J. (2020). Scientific Studies of Reading Reading and Oral Vocabulary Development in Early Adolescence Reading and Oral

Vocabulary Development in Early Adolescence. *Scientific Studies of Reading*, 24(5), 380–396. <https://doi.org/10.1080/10888438.2019.1689244>

Roberts, K. L., Meyer, C. K., Brugar, K. A., & Jimenez, L. M. (2020). Integrative and illustrative: Multimodal acquisition, comprehension, and composition. *Middle School Journal*, 51(4), 9–17. <https://doi.org/10.1080/00940771.2020.1787748>