

# Improving Reading Comprehension through Self-made Graphic Organizers

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**Abstract:** This study aimed to improve the reading comprehension of selected students in Tangos National High School, Philippines. The teacher used localized, self-made reading comprehension pre-test and post-test to evaluate the effectiveness of the proposed learning strategy. Using Paired T-test, the comparison of pre-test and post-test results exhibited significant improvement in the comprehension of students in the text read.

**Keywords:** Reading comprehension, pre-test and post-test, localized reading material, Paired T-test.

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## I. INTRODUCTION

When learners obtain quality education, they find great life opportunities such as employability, economic stability, healthy lifestyle, and active involvement in socio-political concerns. Reading is among the fundamental skills that equip learners with knowledge to accomplish almost everything in life. Therefore, the need for effective strategies to improve reading competence will always be one of an educator's goals.

It is difficult for readers to recall specific details like character's name, setting, specific event, terms, and concepts, especially from lengthy texts and transform information into meaningful clusters, which is also a convenient way for the brain to process information presented in written forms of any text (Kılıçkaya, 2019). The use of graphic organizers is one of the known strategies that help students understand and retain information from a text read. Graphic organizers are visual representation of knowledge that structures information by arranging important aspects of a concept or topic into a pattern using labels (Bromley, DeVitis & Modlo, 1999). On a study of Mann (2014), two groups of students, which include special education class, demonstrated improvement in a reading test using graphic organizers.

The Filipino learners' difficulty in reading comprehension manifests in PISA (Program for International Student Assessment) 2018 results when the Philippines ranked last, making literacy programs a top priority of the Department of Education. If used flexibly, graphic organizers can help a learner read more effectively. However, conventional graphic organizer templates are not always accessible. For instance, students may not be allowed to bring these templates during examinations. Also, different text types require a large collection of these templates so they may not always be convenient. By educating students about a variety of graphic organizers, they learn different strategies to organize ideas. This knowledge enables them to make their own cognitive organizers without relying on templates, thus resulting to more efficient comprehension of texts, especially during examinations.

## II. METHODOLOGY

A total of 40 grade 9 students participated in the study. To gather data, the researcher administered a localized, self-made reading comprehension test (pre-test). Various graphic organizer templates for different text types were then introduced and taught to the students in their reading class. After familiarization with the templates and their use, the participants were instructed to create their own cognitive organizers instead of using the conventional templates they used before. To assess

whether this technique improved students' reading comprehension or not, students took a post-test. Paired t-test was used to evaluate if there was a significant difference between pre-test and post-test scores.

### III. RESULTS AND DISCUSSION

TABLE I

	POST TEST	PRETEST
Mean	6.05	4.825
Variance	2.253846154	4.455769
Observations	40	40
Pearson Correlation	0.714855837	
df	39	
t Stat	5.248712699	
P(T<=t) two-tail	0.000056979	
t Critical two-tail	2.02269092	

\*p<.05

TABLE I displays the data taken from the pre-test and post-test analysed using paired T-test. Since the computed T-value of 5.249 is greater than the critical value of 2.023, the t-test results show that there is a significant difference in the pre-test and post-test mean scores within the subjects. Furthermore, the calculated p-value is less than 0.05.

### IV. CONCLUSION AND RECOMMENDATIONS

The purpose of the study is to explore the effectiveness of student-made cognitive organizer in improving reading comprehension in different settings. Although the study's results are preliminary, it yielded substantial information that provides support to the efficiency of utilizing student-made graphic organizer in various reading activities, especially during this Covid-19 pandemic, when one is encouraged to learn independently. It is important to be reminded that the present study has limitations, so the findings should be interpreted with caution. Teachers and future researchers are encouraged to adopt the use of self or student-made cognitive organizer. In doing so, schools should provide relevant trainings or seminars to teachers to increase their knowledge and improve their teaching strategies in using different graphic organizers. Teachers and researchers may conduct another research about systematic crafting of graphic organizers with the use of digital platforms.

### REFERENCES

- [1] Kılıçkaya, F. (2019). A Review of Studies on Graphic Organizers and Language Learner Performance. eric.ed.gov. <https://files.eric.ed.gov/fulltext/ED602371.pdf>
- [2] Mann, M. L. The Effectiveness of Graphic Organizers on the Comprehension of Social Studies Content by Students with Disabilities. core.ac.uk. <https://core.ac.uk/download/pdf/232720025.pdf>
- [3] Iqbal, Mubashir & Noor, Mehwish & Muhabat, Fakhrah & Kazemian, Bahram. (2015). Factors Responsible for Poor English Reading Comprehension at Secondary Level. Communication & Linguistics Studies. 1. 1-6. 10.11648/j.cls.20150101.11.
- [4] Campbell, D. (2006) What Is Education's Impact on Civic and Social Engagement? In: Measuring the Effects of Education on Health and Civic Engagement: Proceedings of the Copenhagen Symposium, OECD, Paris, 25-126.
- [5] PISA 2018 Results. oecd.org. [https://www.oecd.org/pisa/Combined\\_Executive\\_Summaries\\_PISA\\_2018.pdf](https://www.oecd.org/pisa/Combined_Executive_Summaries_PISA_2018.pdf)
- [6] GraphicOrganizers.iris.peabody.vanderbilt.edu.[https://iris.peabody.vanderbilt.edu/wp-content/uploads/pdf\\_activities/independent/IA\\_Graphic\\_Organizers.pdf](https://iris.peabody.vanderbilt.edu/wp-content/uploads/pdf_activities/independent/IA_Graphic_Organizers.pdf)
- [7] Letendre, R. C. (n.d.). Mini-Grant Graphic Organizers and How to Use Them. www.education.nh.gov. [https://www.education.nh.gov/sites/g/files/ehbemt326/files/inline-documents/graphic\\_organizers.pdf](https://www.education.nh.gov/sites/g/files/ehbemt326/files/inline-documents/graphic_organizers.pdf)