The graphic organizer’s effect on the students’ writing achievement in argumentative paragraph

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ABSTRACT

The Graphic organizer strategy is visually mapped to organize the general into a particular idea in an argumentative paragraph to develop students’ writing scores. The purpose of this research is to enrich theoretical and practical strategies in writing paragraph argumentatively. This research is a quasi-experimental study with a Pretest-post-test non-equivalent group and non-random sampling technique to determine the experimental group consisting of 23 participants and the control group consisting of 23 participants. The expert who validated the test was senior English lecturers. And the researcher used Cronbach’s Alpha to measure the reliability, and the result was 0.721 (acceptable). As the result, graphic organizer strategy significantly affected the students’ writing achievement in argumentative paragraphs, especially on the organization aspect. Additionally, this strategy also allowed them to explore their ideas independently and unconsciously builds some connecting words up.

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1. Introduction

Some previous studies on the implementation of graphic organizer strategy have intentionally been conducted to test its effect on writing skills. Statistically, there are various results that researchers academically reported in the points of view research-based. For instance, the graphic organizer effectively encouraged a process of selecting, organizing, and integrating cognitively in concluding (Ponce & Mayer, 2014), it can be an effective strategy in argumentative texts in computer-based instruction application (Boykin et al., 2019), and also in narrative texts without technology’s support (Aswita et
al., 2018). In addition, the graphic organization specifically promotes students to be able to distinguish the main type of each text (Torres, 2015) and influence the students’ writing aspects, namely vocabulary (Dau, 2015), content, and mechanics (Styati & Irawati, 2020).

The graphic organizer strategy is a conceptual form of knowledge to manage systematically each part of an idea in a paragraph sequentially (Anggrainy et al., 2016; Pratama et al., 2017) which consists of content, organization, grammar, and mechanics (Styati & Irawati, 2020) in language learning of writing. In this case, a graphic organizer is an intensive attempt or technique to run down the students’ argumentative idea from general information to specific one by structuring a mean, controlling, supporting, and concluding idea (Lasaka et al., 2018). Besides, some factors also support the students’ process of writing argumentative paragraphs including interest, self-confidence, topic, and media (Aswita et al., 2018). It means that graphic organizer aids the students to arrange descriptive and informative knowledge, appropriate technique, particularly map the idea, and ensure the students write a paragraph freely (Anggraini, 2017).

Practically, the procedure of graphic organizer strategy is by warming the students’ up to access the previous opinion, outlining it into the real pattern of paragraph structure, drafting the sentences into an outlined paragraph, evaluating each aspect of paragraph by correcting and revising, finishing the submitted texts, and publishing on the site (Pratama et al., 2017). This procedure was digitally conducted in paragraph writing learning by using Learning Moodle System (LMS). Students not only write the paragraph in free writing technique or explore their ideas in written texts, but also unidentified academic paragraph (Anggrainy et al., 2016).

In addition, most of the previous researchers investigate the graphic organizer in the descriptive and narrative paragraph. Thus, this current research conducted to know the effectiveness of the graphic organizer strategy in the argumentative paragraph by formulating the research questions “is there any significant effect of graphic organizer strategy on students’ writing achievement in the argumentative paragraph?”. The hypothesis testing is the alternative hypothesis (Ha) that the graphic organizer strategy significantly affects students’ writing achievement in the argumentative paragraph, which means Ha is accepted. Contrastly, the null hypothesis (Ho) that the graphic organizer strategy does not significantly affect students’ writing achievement in the argumentative paragraph, means Ho is rejected.

2. Method

In this research, the researcher used quantitative research to find out the significant differences between participants who used a graphic organizer strategy and those who had free writing in writing an argumentative paragraph. The population was 123 students. The researcher used a non-random sampling technique to determine the experimental group consisting of 23 participants and the control group consisting 23 of participants. The researchers selected whole groups using convenience sampling or available samples to be taught (Fraenkel et al., 1993). This research used a quasi-experimental with Pretest-post-test non-equivalent group design (Cohen et al., 2007). In this type, pre-tests were given before treatment to know the real ability of the two groups. The treatment was given to
the experimental group by using graphic organizer strategy as the independent variable, then the
control group used freewriting to train participants’ writing skills. The last, both groups were also
tested after conducting the treatment.

Additionally, the test was only one question which distributed to participants by making an
argumentative paragraph by using the graphic organizer strategy and it takes 50 minutes to complete
the test, then researcher analyzed the data from the pre and post-test score, the scoring rubric of
writing skills developed by Oshima and Hogue (2007).

Table 1. writing rubric

| Aspect | Maximum Score |
|--------|---------------|
| Format – 5 Points |             |
| There is a title. | 1 |
| The title is centered. | 1 |
| The first line is indented. | 1 |
| There are margins on both sides. | 1 |
| The paragraph is double-spaced. | 1 |
| Total | 5 |
| Punctuation and Mechanics-5 points |         |
| There is a period after every sentence. | 1 |
| Capital letters are used correctly. | 1 |
| The spelling is correct. | 1 |
| Commas are used correctly. | 2 |
| Total | 5 |
| Content-20 points |       |
| The paragraph fits the assignment. | 5 |
| The paragraph is interesting to read. | 5 |
| The paragraph shows that the writer used care and thought. | 10 |
| Total | 20 |
| Organization-35 points |          |
| The paragraph begins with a topic sentence that has both a topic and a controlling idea | 10 |
| The paragraph contains several specific and factual supporting sentences that explain or prove the topic sentence, including at least one example. | 20 |
| The paragraph ends with an appropriate concluding sentence. | 5 |
| Total | 35 |
| Grammar and Sentence Structure-35 points |     |
| Estimate a grammar and sentence structure score | 35 |
| Total | 35 |
| Grand Total | 100 |

The expert who validate the test are senior English lecturer which focus on language assess-
ments. And the researcher used SPSS 23 to measure the reliability by using Cronbach’s Alpha which
the result was 0.721 (acceptable).
3. Results and discussion

This study statistically explains the results of collecting data through descriptive statistics, the test of normality, paired sample statistics and paired sample t-test to answer the research question.

Table 2. Descriptive Statistics

|                      | N   | Minimum | Maximum | Mean   | Std. Deviation |
|----------------------|-----|---------|---------|--------|----------------|
| Pre-test Experimental| 23  | 33      | 58      | 45.52  | 6.775          |
| Post-test Experimental| 23  | 62      | 81      | 69.17  | 5.158          |
| Pre-test Control     | 23  | 34      | 57      | 44.09  | 6.735          |
| Post-test Control    | 23  | 55      | 81      | 65.13  | 6.483          |

The lowest score of student’s pre-test in experimental class was 33 and the highest was 58 which the mean was 45.52 and standard deviation was 6.775. For the students’ post-test score, the lowest was 62 and the highest one was 81 which its mean was 69.17 and standard deviation was 5.158. In control group, student’s free writing score in pre-test score was 34 as the lowest and the highest was 57 which its mean is 44.09 and standard deviation is 6.735. And the post-test score was 55 the lowest and the highest one was 81 which its mean was 65.13 and standard deviation was 6.483.

Table 3. Tests of Normality

|                      | Kolmogorov-Smirnova | Shapiro-Wilk |
|----------------------|----------------------|--------------|
|                      | Statistic | df | Sig.   | Statistic | df | Sig.   |
| Pre-test Experimental (GO) | .124  | 23  | .200* | .970  | 23  | .699  |
| Post-test Experimental (GO) | .098  | 23  | .200* | .959  | 23  | .449  |
| Pre-test Control (FW)    | .102   | 23  | .200* | .960  | 23  | .473  |
| Post-test Control (FW)   | .151   | 23  | .192  | .961  | 23  | .486  |

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

The statistical result of Kolmogorov-Smirnov proved that the significance (sig.) value of both pre and post-test in graphic organizer tests are .200 and .192 in post-test of free writing. it means that the significance value is higher than the probability value or standard of statistics value (> 0.05). As a result, the tests are normally distributed and uses paired sample t-test and independent t-test to analyze this research.
The data presents the result of the level of significant effect of graphic organizer technique on students’ writing skill in the argumentative paragraph which the mean of the pre-test is 45.52 and the post-test 69.17. Thus, the level of significant effect of graphic organizer technique on students’ writing skill in the argumentative paragraph is 23.65.

The result of paired sample t-test explains that the significance (2 tailed) value is .000 which is lower than .5. It can be conclude that there is a different mean between the pre-test and post-test score of graphic organizer technique on students’ writing skill in argumentative paragraph and also in free writing technique.

4. Discussion

The result of paired sample t-test points out that the graphic organizer strategy increased the students’ writing skill in argumentative paragraph especially on organization aspects of writing. It is statistically proven after conducting a treatment in an experimental class, the mean of post-test score is higher than the mean of pre-test score. The effectiveness of graphic organizer as effective as the previous research that the implementation of teaching increases students’ vocabulary, mechanics and content (Aswita et al., 2018; Boykin et al., 2019; Ponce & Mayer, 2014; Styati & Irawati, 2020; Torres, 2015).

The implementation of graphic organizer also well applied based on the procedure which encourages the students to think independently, outline the line on each paragraph such as a main idea,
controlling idea, supporting idea, and concluding idea (Lasaka et al., 2018), revising the incorrect word, sentences, and grammar, and submitting on LMS (Anggraini, 2017; Pratama et al., 2017). In addition, it also motivates the students to write an argumentative paragraph because it is a new strategy to direct their idea to academic writing (Anggrainy et al., 2016). In line to this, studies mention the use of an interesting strategy proved to be increased students’ achievement and motivation (such as Lailiyah & Setiyaningisih, 2020; Lutviana & Mafulah, 2018; Shaumiwaty, 2020). In conclusion, the researcher identified the chronological words to connect between one paragraph to the next ones which support the coherence of the whole texts.

3. Conclusion and Suggestions

The graphic organizer strategy is an effective teaching strategy in improving students’ writing achievement of an argumentative paragraphs. The most influenced aspect of writing is organization of main idea, supporting idea, and concluding idea. Other than that, it is also unconsciously relates to the paragraph with the connecting words, such as the first, the second, therefor, and addition. It also stimulates students to be more interested and challenged to explore their idea in writing paragraph argumentatively. As suggestions, the researcher suggests for the future researchers or practitioners to determine a specific topic and generic structure of paragraph before conducting graphic organizer strategy and using qualitative research design to gain more detail description of graphic organizer strategy.

References

Anggraini, D. (2017). The Effect Of Applying Web Graphic Organizer On The Students’ Achievement In Writing Descriptive Text.

Anggrainy, S., Diem, C. D., Vianty, M., & Sugandi, B. (2016). The Effect of Graphic Organizers, Guided Writing Strategies, and Reading Levels on the Writing Achievement of The Fourth Semester Students of PGMI Program at IAIN Raden Intan Lampung. Sriwijaya University Learning and Education International Conference, 2(1), 1029–1052.

Aswita, D., Ramadhlan, S., & Taufik, T. (2018). Development of Teaching Material for Narrative Writing Using Graphic Organizer Type Circle Organizer in Elementary School. International Conference on Language, Literature, and Education (ICLLE 2018). https://doi.org/https://dx.doi.org/10.2991/iclle-18.2018.42

Boykin, A., Evmenova, A. S., Regan, K., & Mastropieri, M. (2019). The impact of a computer-based graphic organizer with embedded self-regulated learning strategies on the argumentative writing of students in inclusive cross-curricula settings. Computers & Education, 137, 78–90. https://doi.org/https://doi.org/10.1016/j.compedu.2019.03.008

Cohen, L., Manion, L., & Morrison, K. (2007). Research Methods in Education (Sixth). Routledge.

Dau, D. L. (2015). Graphic Organizers–Effective Tools for Teaching Vocabulary. The 2nd International VietTESOL Conference Hanoi (Hal. 7). Vinh: Research Get.

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (1993). How to design and evaluate research in education (Vol. 7). McGraw-hill New York.
Laiiyah, M., & Setiyaningsih, L. A. (2020). Students' perception of online communication language learning through Instagram. *EnJourMe (English Journal of Merdeka): Culture, Language, and Teaching of English*, 5(2), 188–195. https://doi.org/10.26905/enjourme.v5i2.5202

Lasaka, C. O., Jamiluddin, J., & Erniwati, E. (2018). Effect of using paragraph hamburger strategy on students writing achievements. *E-Journal of ELTS (English Language Teaching Society)*, 8(1).

Lutviana, R., & Mafulah, S. (2018). The Use of Video and TPR to Improve Students' Vocabulary Mastery. *EnJourMe (English Journal of Merdeka): Culture, Language, and Teaching of English*, 2(2), 89–97. https://doi.org/10.26905/enjourme.v2i2.1970

Oshima, A., & Hogue, A. (2007). *Introduction to academic writing*. Pearson/Longman.

Ponce, H. R., & Mayer, R. E. (2014). An eye movement analysis of highlighting and graphic organizer study aids for learning from expository text. *Computers in Human Behavior*, 41, 21–32. https://doi.org/https://doi.org/10.1016/j.chb.2014.09.010

Pratama, S., Rahmawati, I. N., & Irfani, B. (2017). Graphic Organizer as One Alternative Technique to Teach Writing. *English Education: Jurnal Tadris Bahasa Inggris*, 10(2), 334–357. https://doi.org/https://doi.org/10.24042/ee-jtbi.v10i2.1755

Shaumiwaty, S. (2020). Learning Journal Strategy to enhance students' writing ability. *EnJourMe (English Journal of Merdeka): Culture, Language, and Teaching of English*, 5(1), 65–74. https://doi.org/10.26905/enjourme.v5i1.4238

Styati, E. W., & Irawati, L. (2020). The Effect of Graphic Organizers on ELT Students' Writing Quality. *Indonesian Journal of EFL and Linguistics*, 5(2), 279–293. https://doi.org/http://dx.doi.org/10.21462/ijefl.v5i2.283

Torres, D. B. (2015). Effectiveness of the use of graphic organizers and summaries: A case study of adult EFL students in a reading comprehension course. *Revista de Lenguas Modernas*, 22. https://doi.org/https://doi.org/10.15517/rlm.v0i22.19685