

THE EFFECT OF CONCEPT MAPPING STRATEGY ON THE ABILITY OF THE SECOND YEAR STUDENTS OF SMA PGRI PEKANBARU IN WRITING EXPLANATION TEXT

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Abstract: *The research was aimed to find out wheteher there is an effect of concept mapping strategy on the ability of the second year students of SMA PGRI Pekanbaru in writing explanation text. In conducting the research, pre- experimental research with one group pre-test post- test design was used. The sample of this research was the students of class XI IPA II which consist of 22 students. The pre- test was administered before the treatment. After the treatment was applied for five meetings using concept mapping strategy, the post test was administered. The data were analyzed using t-test formula. From the calculation, the writer found that the value of t-test was 22.363 while the t-table was 2.079. Since the t-test was larger than t-table, alternative hypothesis of this research was accepted and null hypothesis was rejected. It means that there was a significant effect of concept mapping strategy of the ability of the second year students of SMA PGRI Pekanbaru in writing explanation text.*

Key Words: *Writing, Writing Ability, Concept Mapping Strategy, Explanation Text.*

PENGARUH DARI STRATEGI *CONCEPT MAPPING* TERHADAP KEMAMPUAN SISWA TAHUN KEDUA SMA PGRI PEKANBARU DALAM MENULIS *EXPLANATION TEXT*

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Abstrak: Penelitian ini ditujukan untuk mengetahui pengaruh dari *concept mapping* strategi terhadap kemampuan siswa tahun kedua SMA PGRI Pekanbaru dalam menulis *explanation text*. Dalam melaksanakan penelitian, pre-experimental dengan one group pre-test post-test design digunakan. Sample dari penelitian ini adalah siswa-siswi dari kelas XII IPA II yang berjumlah 22 orang. Pre-test dilaksanakan sebelum treatment. Post-test dilaksanakan setelah treatment diaplikasikan selama lima pertemuan menggunakan strategi *concept mapping*. Data yang di dapatkan dianalisa menggunakan t-test formula. Berdasarkan hasil dari kalkulasi, nilai dari t-test adalah 22,363 sedangkan hasil dari t-table adalah 2,079. Alternatif hipotesis dari penelitian ini di terima sedangkan null hipotesis ditolak karena t-test lebih besar dari pada t-table. Hal ini dapat di artikan bahwa terdapat efek yang signifikan dari *concept mapping* strategi terhadap kemampuan dari siswa tahun kedua SMA PGRI Pekanbaru dalam menulis *explanation text*.

Kata Kunci: Kemampuan Menulis, Strategi Concept Mapping , Explanation Text.

INTRODUCTION

Receptive skill (listening and reading) and productive skill (writing and speaking) are four important skills that should be mastered by the foreign language learners as the basic competency in English skill achievement. These skills complement and affect each other in terms of the acquisition of a language. Through integration, these four separate skills are comprehensively strengthening the desire to attend the communicative competence.

As cited in Javed, Juan & Nazli (2013). Writing is a skill that requires a well-structured way of presentation of thought in organized and planned way (Braine & Yorozu, 1998). Even if someone is proficient in a language, writing is not a spontaneous skill or something that can be easily learned. As cited on Javed, Juan & Nazli (2013), in fact, Writing is one of the basic skills in English language that is generally considered one of the most difficult rather than other language skills for foreign students. Even native speakers feel difficulty in showing a good command of writing (Johnstone, Ashbaugh, & Warfield, 2002).

An English teacher of SMA PGRI Pekanbaru said teaching writing is harder than teaching the other language skills. The students often got confused on how to express their ideas and start writing. Based on the writer's observation while doing teaching practice, the students could understand the language features of the text quite well. On the other hand, there are several problems faced by the students when they were asked to write a text on their own.

The first problem is lack of vocabularies. Since English is not the students' native language, most of them used to write the text in Indonesian language first and then translated it into English. In the translation process, they often translated the text word by word. It caused several mistakes such as using the same words several times or could not use the appropriate words for their writing. The second problem is lack knowledge about grammar. The basic grammar helps students to compose a text. Creating good sentences are important to make good paragraphs. Meanwhile, the students often got confused to choose the right grammar for the sentences. The third problem is in the organization (form) of the text. To make sure all of the paragraphs in the writing discuss about one main idea, the writing has to have good organization of paragraphs. On the other hand, some students often wrote the paragraphs in bad organization. They didn't know how to express their ideas well and arrange the good organization of the paragraphs.

Considering the problem faced by the students in writing, the teacher needs to find an effective strategy to help the students to improve their writing ability. According to Novak & Growin (1984) as cited in Zwaal & Otting (2012), a concept map is a useful tool to organize and memorize knowledge. According to Youngjin (2013) in the initial stage of Concept Mapping process, students are expected to focus more on their memorized vocabulary and cultural knowledge related to the given topic rather than on complete sentence structures. This strategy could help the students to organize their ideas and write good paragraphs. Furthermore, the Concept Mapping activity has students feel less concerned about making mistakes, and provoke students to develop ideas, words, concepts or statements of the topic.

RESEARCH METHODOLOGY

In this research, pre-experimental with one group pre-test – post-test design was used. One group pre-test – post-test design involved a single group that was pre-test, exposed treatment, and post-test. One class involved in this research. The writer compared the scores from the results of pre-test and post-test to see whether the treatment was effective or not on the students' writing ability.

This research was conducted in SMA PGRI Pekanbaru which is located at No. 44 Brig. Jend. Katamso street Tangkerang Pekanbaru. The reason of choosing this school is to know whether concept mapping strategy could help the second year students of SMA PGRI Pekanbaru to improve their writing, especially in writing explanation text. The population of this study was the second year students of SMA PGRI Pekanbaru. Based on the silabus of senior high school, the second year students are required to learn explanation text. Furthermore, based on some interview with an English teacher and the students of SMA PGRI Pekanbaru, the students found that writing was quite hard for them and they have low ability in writing especially in organization, vocabulary and grammar.

Table 1. The Population of the Second Year Students of SMA PGRI Pekanbaru

Classes	Total of Students
XI IPA LOBAK	12
XI IPA 1	22
XI IPA 2	20
XI IPS 1	32
XI IPS 2	32
Total	117

Since the total population of the first year students of SMA PGRI was large enough to be taken as sample, it was necessary to choose how to select the sample. The sample was selected by using cluster random sampling technique. To get the sample, five pieces of rolled up small paper was provided, one piece of paper was written the word "sample" and the rest were blank. Then, the chairman of each class took one paper randomly. Finally, the class of the chairman who got the paper with the word "sample" was chosen as the sample of the research. Class XI IPA 1 was chosen as the sample with the total number 22 students. The instruments of this study was in writing tests (a pre-test and a post-test). The pre-test was administered to find out the writing ability of the students before the treatment. After that, the treatment was applied for 5 meeting using concept mapping strategy. Then, the post-test was administered to find out the writing ability of the students after the treatment.

RESULTS AND DISCUSSION

Results

In this research, t-test formula was used to compare the results of the pre-test and post-test and to determine whether the hypothesis could be accepted. The result of the t-test was also used to find out whether there was a significant effect of concept mapping on the ability of the students in writing explanation text.

The finding of this research shows a positive result of concept mapping strategy on the ability of the students in writing explanation text. The results of pre-test and post-test showed the improvement of the students' ability in each component of writing.

Table 2 The Improvement of Students' Writing Ability for each Components of Writing on Pre-test and Post-test

TEST	Components of Writing				
	G	V	M	F	O
Pre-test	52.27	59.85	57.58	55.30	58.59
Post-test	67.93	74.24	76.26	70.96	75.00
Improvement	15.66	14.39	18.69	15.66	16.41

Table 2 shows the differences of students' writing ability in each component before and after the treatment was applied. The score of each component of writing was increased. The mechanic component increased for **(18.69)**. The organization component increased for **(16.41)**, followed by fluency and grammar components which increased for **(15.66)**. Then, the vocabulary component increased for **(14.39)**. The scores proved that the students' writing ability in each component of writing had been successfully improved.

Table 3 Result of T-test Paired Sample Test

Paired Sample Test									
		Paired Differences					T	Df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	POST_T EST - PRE_T EST	15.90909	3,33679	.71141	14.42964	17.38854	22.363	21	.000

Based on the data analysis, it shows that the mean different was significant. The value of t-test was **22.363**. Meanwhile, the values of t table on the df (degree of freedom) **21** was **2.079** with the level of significance (α) = 5%. Then, according to the result, the t-test was larger than the t-table on significant level 5%. The level of significance was **22.363 > 2.079**. It means that the alternative hypothesis regarding the

effect of Concept Mapping was accepted and the null hypothesis was rejected. In other words, there is a significant effect of using Concept Mapping strategy on the ability of the second year students of SMA PGRI Pekanbaru in writing explanation text.

Discussion

In brief, the result indicated that using Concept Mapping as a strategy is effective to help the students to improve their writing ability, especially in writing explanation text. Concept Mapping strategy can help the students to express and organize their ideas by gathering their ideas regarding to the topic. This strategy help the students to feel less concerned about making mistakes and provoke students to develop ideas, words, concepts or statements of the topic.

During the implementation of the teaching technique, the brainstorming was started as soon as the topic was given. The students gathered some ideas related to the topic. Most of the students were enthusiastic during the lesson because they were allowed to mention any ideas related to the topic without worrying about making mistakes. Meanwhile in the beginning, the students were confused to find the right way to explain about the relationship between the concepts. By demonstrated several times on how to make a concept map and write an explanation text using concept map, the students started to understand on how to construct Concept Mapping and write an explanation text based on it.

At first, the teacher offered the suitable topic for the students. The topics were about how something is made, the life cycle of an animal and how a natural phenomenon happens. After that the students gathered their ideas related to the topic and discussed it with their friends. Then they were asked to construct a concept map based on the ideas that they have gathered. Then the students were asked to write an explanation text based on the Concept Mapping that has been constructed. While some students got stuck or confused in writing the explanation text, the teacher and other students gave some feedback to help them. This step applied 5 times. In those times, the students were practicing to write an explanation text using Concept Mapping strategy. So it helps the students to organize their ideas and write a good explanation text.

After doing all steps in treatment, the writer found strength and weakness of the Concept Mapping strategy during the treatment. The strength of this strategy is the students able to gather and organize their ideas, show the relationship between the concepts, and connect it with the linking words. This strategy also may help the students to write a good text. Novak & Growin (1984) as cited in Zwaal & Otting (2012) state that concept map is a useful tool to organize and memorize knowledge. The activation of prior knowledge is an essential part of learning because students learn more efficiently and effectively when they are able to connect and integrate new knowledge with already existing knowledge. However, the weakness of this strategy is the students sometimes got confused to find the relationship between the concepts of the idea.

CONCLUSION AND RECOMMENDATION

Conclusion

Based on the data analysis that has been explained, it can be concluded that Concept Mapping was effective to improve the students' writing ability especially in writing explanation text. It can be seen from the students' mean score on post-test (**72,72**) that was higher than on pre-test (**56,81**). This happens because Concept Mapping strategy helped the students to feel less concerned about making mistakes and provoke students to develop ideas, words, concepts or statements of the topic. It can help the students to organize their ideas and make a good writing

Recomendation

Based on the previous explanations, the writer would like to give some recommendations as for the following people. Firstly, the students may use Concept Mapping strategy to organize their ideas and find the relationship between the concepts before writing a text. They need to keep practicing writing to accustom their self. In addition, they need to pay attention to the teachers' explanation so they can understand the language feature and social function of the text. They also need to read more books to increase their vocabulary.

Secondly, the teachers may use Concept Mapping as an alternative strategy to improve the students' writing ability, especially in writing an explanation text. Then in the teaching and learning process, the teacher need to pay more attention, control and manage the students when they are working in groups or individually to get an effective learning. The teacher's role is important to train and guide the students. They teacher also can give the students any homework in different forms and kinds. In this way, the students can keep practicing to develop and improve their writing. Then, all of the students should be checked, corrected, and score, so, the students could get feedbacks and could practice more.

Lastly, considering the methodology of the research, the writer suggests the other researcher to use control group and experimental group as the samples. They also can use other experimental research design and conduct a study on the use of Concept Mapping strategy on the other kinds of writing. They also can use this strategy in other ability, for example on speaking or reading.

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