THE USE OF CLUSTERING TECHNIQUE IN IMPROVING STUDENTS' ABILITY IN WRITING DESCRIPTIVE TEXT AT THE FIRST GRADE OF SMAN 1 SUKAU

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Abstrak: Tujuan penelitian ini adalah melihat apakah kemampuan menulis siswa meningkat setelah mereka diajar menulis melalui teknik *Clustering* dan aspek manakah yang paling meningkat setelah mereka diajar dengan menggunakan teknik *Clustering*. Pendekatan penelitian ini adalah kuantitaif. Sasaran penelitian ini mencakup 30 siswa kelas X MIPA 1 di SMA Negeri 1 Sukau Tahun Akademik 2018/2019. Tes menulis yang mencakup pretest dan posttest digunakan sebagai alat untuk mengumpulkan data. Tes tersebut digunakan untuk melihat sejauh mana peningkatan kemampuan menulis siswa setelah diadakan perlakuan. Data yang diperoleh dianalisis menggunakan *t-test* dengan tingkat signifikan level p<0.05 menggunakan SPSS versi 17.00. Hasil penelitian menunjukan bahwa kemampuan menulis siswa meningkat secara signifikan setelah diajarkan menulis menggunakan teknik *Clustering*. Hasil ini menunjukan bahwa teknik *Clustering* dapat diterapkan untuk meningkatkan kemampuan siswa dalam menulis teks descriptive.

Abstract: The objectives of this research were to find out whether students' writing improved after they taught by using clustering technique and which aspects of writing improved the most after they have been taught by using clustering technique. The approach of the research was quantitative. The subjects of the research were 30 students of X MIPA 1 class at SMA Negeri 1 Sukau in academic year 2018/2019. The writing tests consisted of pretest and posttest to collect the data. The tests were given to see how far the students improve their descriptive writing ability after the treatment. The data were analyzed by using T-test with the significant level p<0.05 through SPSS 17.0. The result showed that there is a significant improvement of students' writing ability after they had been taught by using clustering technique. This suggests that teaching writing by using clustering technique can be applicable to improve students' ability in writing descriptive text.

Keywords: writing, descriptive text, clustering technique

INTRODUCTION

According to the English Curriculum 2013, one of the goals of teaching English at senior high school is to enable students to communicate in written forms. As one of skills which need to master, writing also takes important role as the indicators of academic success since it is an active and productive skill. Writing is one of indirect communication tools. Using English orally is not the only way to communicate; people can also use in written form, mainly in narrative, recount, procedure, descriptive, discussion, commentary and review by stressing on the interpersonal complex meaning and variety of textual meaning. As noted by Celce (1991), writing in second or foreign language with good accuracy and coherence is a great achievement.

In addition, Raimes (1983: 3) stated that writing helps the students to learn since it reinforces the grammatical structures, idioms, and vocabulary that the teachers have been teaching the students. Besides, when the students write, they also have a chance to be courageous in using the new language, to go beyond what they have just learned to say, to take risks. When they write, they necessarily become very involved with the new language, the effort to express ideas and the constant use of eye, hand, and brain is a unique way to reinforce learning. Furthermore, Harris (1979) states that writing skill is the most complex language skill to master because writing skill involves knowledge of sentence structure, diction, realities, organization of ideas and mechanics.

In fact, the students' writing achievement is still low. Based on the researchers' interview with an English teacher in SMAN 1 Sukau, it was found that most of students got several problems in writing such as developing ideas. In addition, the teacher also added that the students might have ideas in their mind, but they often felt confused in expressing, developing or stating their thoughts in words and in a good writing. This condition is caused by several factors such as, lack of vocabulary and insufficient grammar understanding. Besides, low motivation also becomes one of factors which makes the students don't want to write. It is supported by Pangarimbun and Manik (2017), during their teaching practice program in Nommensen HKBP University Economy Department, they found that most of the students were not able to formulate ideas from their mind into a written language. As a result, they got low score in writing. It seemed that it is derived from the fact that they did not use the prewriting techniques to express their ideas before the real writing.

In addition, Diharyono (1990: 1) said that the students know or have the ideas they are going to write, but they do not know how to put them into words. Finally, they cannot build an effective sentence. The students' low capability of writing happened due to a number of aspects. One of them is that writing is complex skill to be learnt. It can be concluded that the students are difficult in elaborating their ideas in writing that are related to the aspects of writing which consists of content, organization, grammar, vocabulary, and mechanics.

Concerning to the problems that faced by the students, it is very important for the teacher to apply the best way in teaching writing descriptive text. Clustering is a kind of technique which can be used in pre-writing strategy. It is introduced by Gabriele Lusser Rico, a professor of English and Creativity at San Jose State University, California in 1980s. According to Rico (1983), clustering is a technique to divide some related ideas and write down in a blank of paper without evaluating the truth or value of ideas themselves. Hogue (1996:91) states that clustering like the listing is another way to get ideas to write about something and write them in circles or bubbles around the topic. Similarly, Langan (2006: 25) says that clustering which is also known as diagramming, or mapping, is a strategy that can be used to generate material for a paragraph. This technique is helpful for people who like to think in a visual way. In clustering, writers can use lines, boxes, arrows, and circle to show relationship among the ideas and details that occur to them.

To strengthen this research, the researcher provides some previous studies that are related to this research. Hapsari (2013) conducted the research in the first year of senior high school to find the improvement of vocabulary achievement through clustering technique. The finding showed that clustering technique improved students' vocabulary achievement. In line with the research above, Inal (2014) aimed to find out the improvement of narrative students' writing skill of Dokuz Eylul University in Turkey through clustering technique. As the result, he found that clustering technique gives a contribution in motivating students in writing activity because it allows them for more creative response in learning the material. And, the final works also showed that there was a significant different from the pretest because they wrote more specific and well-organized. The other research was conducted by Rahmani (2014) there was a significant difference in students' writing achievement after they taught by using a clustering technique. Similar research which focused on the use of clustering technique for improving writing description text of the third semester students of Unindra also had been conducted by Widyawati (2018). The result of using clustering technique showed that there was good effect of clustering technique in improving the third semester students' ability in writing descriptive text.

Based on the background of the study described above, clustering technique is regarded effective to help the students to improve their writing skill. Therefore, the researcher is interested in investigating the study related to the implementation of clustering as a technique. The difference between this research and those previous studies lies on focus. The focus of this researcher is to see whether clustering technique can improve students' ability in writing descriptive text at the first grade of senior high school. Hopefully, it will ease the students in writing descriptive text clearly and communicatively.

METHODS

The approach of the research was quantitative. This study applied *one-group pretest-posttest design of experimental design* (Setiyadi: 2013). In this research, the students were given pretest before treatment to find out the students' basic ability in writing descriptive text and were given posttest after treatment to see the students' increase in writing descriptive text. This research was conducted in five meetings. Each meeting took two lesson hours (2x45 minutes). The first meeting was pre-test session, then the next day was the treatment for the students which was conducted three times and the last day was post-test session.

According to Hatch and Farhady (1982: 281) there are two basic types of validity; content validity and construct validity. The test was considered valid since the test was tested about writing and also the material was chosen based on 2013 English curriculum and the syllabus for the first grade of senior high school students in SMAN 1 Sukau. In this research, the researcher asked students to write a descriptive text to measure their writing ability. The researcher classified the score using writing descriptive scoring rubric by Jacobs et al (1981). The scoring technique was based on five aspects of writing, namely content, organization, language use, vocabulary, and mechanic. Moreover, to make sure that data collection instruments were reliable, the researcher used *inter-rater reliability*. The students' scores from pretest and posttest were analyzed by using t-test of SPSS 17 program. The gained data were analyzed using repeated measure T-test.

RESULTS AND DISCUSSION

Results

After conducting the research, the researcher gathered the result of pretest and posttest as follows:

In order to see whether the objectives of the research can be achieved or not, the researcher analyzed the test result of pretest and posttest which is displayed in the following table.

Table 1. The Differences of Students' Writing Score in the Pretest and Posttest

Statistics

	Pretest	Posttest	
N Valid	30	30	
Mean	58.57	71.63	
Minimum	50	64	
Maximum	69	82	
Std. Deviation	5.456	4.355	

Table 1 shows that there is an improvement score of students' writing after the implementation of clustering technique in five meetings. We can see that the mean score of the pretest is 58.57 and the mean score of the posttest is 71.63. The gain of both tests are 31.06.

Table 2. The differences of Students' Writing Score in the Pretest and Posttest

No	Score	Fi-Pretest	Percentage	Fi-Posttest	Percentage	
1	50-53	8	26.67	0	0	
2.	54-57	6	20	0	0	
3.	58-61	5	16.67	0	0	
4	62-65	8	26.67	2	6.67	
5	66-69	3	10	8	26.67	
6	70-73	0	0	12	40	
7	74-77	0	0	5	16.67	
8	78-81	0	0	2	6.67	
9	82-85	0	0	1	3.33	
	Total	30	100	30	100	

It can be seen in Table 2 that the students' improvement in writing skill after they have been taught by using clustering technique.

It can be concluded that there are four students in pretest (26.67%) who get score 50-53. It means that students' could not gather ideas well and their writing was not suitable with the instruction or topic while in the posttest there is no student who get score 50-53(0%). Then, there are six students who get score 54-57 (20%) while in the posttest there is no students who get score 54-57 (0%). In the third stages, there are five students who get score 58-61 (16.67%) while in the posttest there is no student who get score 58-61(0%). There are eight students who get score 62-65 (26.27%) while in the posttest there are only two students who get score 62-65(6.67%). And, there are 3 students who get score 66-69 (10%) while in the posttest there are eight students who get score 62-69 (26.67%). There is no student in the pretest who get score 70-73(0%), while in the posttest there are twelve students who get score 70-73 (40%). And also, there is no student who get score 74-77 (0%) while in the posttest there are five students get score 74-77 (16.67). There is no student who get score 78-81 (0%) in the pretest while in the posttest there are two students who get score 78-81 (6.67%). Last, there is no student in the pretest who get score 82-85 (0%) while in the posttest there is one student who get score 82-85 (3.33).

Table 3. T-test Results of the Hypothesis Analysis

Hypothesis used in Paired Sample Test are as follows:

 H_0 : There is no improvement of the students' writing ability after they were taught by using clustering technique. H_0 is accepted if significant level is higher than 0.05 (P-value>0.05)

 $H_{\rm I}$: There is an improvement of the students' descriptive text writing ability after they were taught by using clustering technique. $H_{\rm I}$ is accepted if significant level is lower than 0.05 (P-value<0.05)

Paired Samples Test

		Paired Differences							
			Std. Deviatio	Std. Error	95% Confidence Interval of the Difference				Sig. (2-
		Mean	n	Mean	Lower	Upper	Т	df	tailed)
Pair 1	postest - pretest	13.067	4.076	.744	11.545	14.589	17.55 7	29	.000

Table 3 shows that the result of the computation of the value of significance is 0.000. It means that *H1* accepted since 0.00<0.05. It proves that there was an improvement of students' writing achievement from pretest to posttest after being taught by using *Clustering* technique for writing descriptive text. Then, if t-value (17.55) compared with t-table (2.042), it can be seen that the students' writing was increase since t-value>t-table. It can be concluded that there was a significant improvement of students' writing descriptive text after they had been taught by using *Clustering* technique for the first grade students of SMAN 1 Sukau.

Table 4. The Increase of Students Achievement of Each Aspect of Writing

The researcher scored the students' writing based on the writing aspect and the scoring criteria adopted from Jacobs (1981). The improvement of the students' writing ability are presented as follows:

Aspects of writing	Mean score of pretest (PrS)	Mean score of posttest (PoS)	Maximum Score (Ms)	Increase (PoS-PrS)	Percentage (100/Ms) x (Pos-PrS)
Content	16.13	20.05	30	3.92	13.07 %
Organization	13.13	15.63	20	2.5	12.5%
Vocabulary	13.07	15.27	20	2.2	11 %
Language use	13.02	16.80	25	3.78	15.12 %
Mechanic	2.88	3.35	5	0.47	9.4. %

It can be seen in Table 4. that there was an improvement in all aspects of writing including content, organization, vocabulary, language use and mechanic after the use of clustering technique for three times where the highest improvement was on the language use aspect.

Finally, according to the results above, it is concluded that the implementation of clustering technique can improve students' writing descriptive text. In other words, the result proved that clustering technique made improvement on the students' writing especially in terms of language use.

DISCUSSION

In the pretest, the researcher found out the capacity of the students. They still have lack of English. In this pretest, it was found that students made mistakes even in simple sentences. Most of students were confused to start writing. They did not have a good idea and felt difficulty in stating their thought and developing it in sentences. Those were line with Cakraverty and Gautum (2000) who stated further that the one of students' problems is that they have difficulty in arranging information or ideas logically to achieve coherence in their writing. The students just used simple words and sometimes they made mistakes in choosing the right words in a sentence. Besides, they were also confused to organize their paragraph coherently and they made some mistakes in mechanic aspect.

After the students were taught by using clustering technique, the finding of this research showed that the use of clustering technique improves the students' writing in a descriptive text. The factor which could support this finding was that clustering technique helped the students to learn, generate, arrange and store information in their brain. Additionally, in clustering the students could write the keywords, clues, or phrases. After that, the students' task was to develop sentences from the clues that were made before. This might be related to Reid's statement (1993) who argued that clustering technique helps the students to generate, develop, and arrange their ideas. Besides, the process of making controlling ideas helped them to organize the words into good sentence. It could be inferred that the problems which the students faced in the pretest were decreased by the use of clustering technique.

Besides analyzing the students' performance after being taught by clustering technique, this study also analyzed the improvement of each aspect of writing; they were language use (15.12%), content (13.07%), organization (12.5%), vocabulary (11%) and mechanics (9.4%). By comparing the mean score of the pretest and the posttest in each aspect, it could be stated that aspect with the highest increase was language use. This happened because in the pretest there were many students still low in grammar. During the implementation of clustering technique the researcher gave the students an example of descriptive text about the topic that has been made based on the clustering technique. After that, the teacher asked the students to identify the language use from the text and made it into the sentences by their own words in simple present tense. After making a sentence, some students were invited to write their sentences on the white board. The sentences that made by the students were corrected together. Besides, they were assigned to compose other examples of the language features and then it was discussed with the researcher and all of the students. Furthermore, in this study the lowest improvement among the other aspect

was mechanic. This occurred because in the pretest most of students had been able to use punctuation and capitalization properly. So, it becomes the reason why there is no significant improvement in mechanic aspect, even it becomes the lowest improvement compared to other aspects.

The finding was supported by the previous study which was conducted by Hapsari (2013). The result showed that clustering technique improved the students' vocabulary achievement. Then, Inal (2014) aimed to find out the improvement of narrative students' writing skill of Dokuz Eylul University in Turkey through clustering technique. As the result, he found that clustering technique gives a contribution in motivating students in writing activity because it allows them for more creative response in learning the material. The final works also showed that there was a significant different from the pretest because they wrote more specific and well-organized. According to Rahmani (2014) there was a significant difference in students' writing achievement after they taught by using a clustering technique. While, the aspect of writing increased the most was content. At last, according to Widyawati (2018) there was good effect of clustering technique in improving the third semester students' ability in writing descriptive text.

According to the findings of the previous research above and this research, it is concluded that the students gained much improvement after the implementation of clustering technique for their writing. Interestingly, the improvement of students' scores happened in other types of text and skills as it had been tested in the previous studies.

From the explanation above, it approves that clustering technique is an effective technique to improve students' writing especially in terms of language use.

CONCLUSION AND SUGGESTIONS

Referring to the discussion of the research findings on the previous chapter, the researcher comes to these following conclusions. First, the implementation of clustering technique could improve the students' descriptive text writing ability. It happened because clustering technique can stimulate the students' ideas, generate the ideas and store information in their brain before they write in a descriptive text. It makes students' writing in descriptive text increased significantly. Second, the implementation of clustering technique also improved the students' skill in five aspects of writing namely, content, organization, vocabulary, language use, and mechanic. The highest aspect that improves the most is language use aspect because during the implementation of clustering technique the researcher gave the students an example of descriptive text about the topic that has been made based on the clustering technique. After that, the teacher asked the students to identify the language use from the text and made it into the sentences by using their own words in simple present tense.

Based on the research findings, several implications for English teachers are proposed. First, the English teachers are suggested to use clustering technique as a technique that can be used to improve students' writing ability in descriptive text because the researcher found that through clustering technique, students become more active and autonomous in learning process. Second, since clustering technique can develop and generate students' creativity in writing, the teachers should not limit the students in developing their ideas.

There are several suggestions for further researcher. This study was conducted in senior high school level. Therefore, the further researchers can try to find out the effect of using clustering technique in different level of school. In this study, descriptive text was employed as the media to measure the improvement of students' writing ability after the implementation of clustering technique. In this case, the researcher suggests other researcher to apply clustering technique in another kind of text, such as analytical exposition, procedure and hortatory exposition text.

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