

# ***THE EFFECT OF CLUSTERING TECHNIQUE ON THE ABILITY OF THE SECOND YEAR STUDENTS OF MTS HASANAH PEKANBARU IN WRITING DESCRIPTIVE TEXTS***

**Ade Yunita, Fadly Azhar, Eliwarti**

Email: ade.yunita10@yahoo.com, fadlyazhar57@gmail.com, elieliwarti@gmail.com

Phone number: 082285533106

*Student of English Study Program  
Language and Arts Department  
Faculty of Teachers Training and Education  
Universitas Riau*

**Abstract :** *This pre-experimental study is aims at finding out if there is a significant effect of Clustering Technique on the ability of the second year students of MTs Hasanah Pekanbaru in writing descriptive texts. The design of the study is one group pre-test post-test design. 33 students of class VIII.1 were chosen as the sample by using cluster random sampling technique. The instrument of the study was a writing test in the form of free writing. The students' scores were analyzed by using SPSS (Statistical Package for the Social Sciences) 23.00 for windows. The result of the data analysis showed that the mean score of pre-test was 51.87 and the mean score of post-test was 73.08. In other words, the mean score of post-test was higher than the mean score of pre-test. The result showed that the value of t-test was higher than t-table ( $17.136 > 2.037$ ) at the significant level of 5%. Therefore, alternative hypothesis is accepted and null hypothesis is rejected. It can be concluded that there is a significant effect of Clustering Technique on the ability of the second year students of MTs Hasanah Pekanbaru in writing descriptive texts.*

**Key Words:** *Effect, Clustering Technique, Writing Ability, Descriptive Text*

# **PENGARUH TEKNIK CLUSTERING PADA KEMAMPUAN SISWA KELAS DELAPAN MTS HASANAH PEKANBARU DALAM MENULIS TEKS DESKRIPTIF**

**Ade Yunita, Fadly Azhar, Eliwarti**

email:ade.yunita10@yahoo.com, fadlyazhar57@gmail.com, elieliwarti@gmail.com

phone number: 082285533106

Mahasiswa Program Studi Bahasa Inggris  
Jurusan Bahasa Dan Seni  
Fakultas Keguruan dan Ilmu Pendidikan  
Universitas Riau

**Abstrak:** Penelitian pre-eksperimental ini bertujuan untuk mengetahui apakah ada pengaruh yang signifikan dari teknik clustering pada kemampuan siswa kelas delapan MTs Hasanah Pekanbaru dalam menulis teks deskriptif. Rancangan penelitian ini yaitu terdapat satu kelompok pre-test post-test. 33 siswa kelas VIII.1 terpilih sebagai sampel dengan menggunakan teknik cluster random sampling. Instrumen penelitian ini yaitu tes menulis dalam bentuk menulis bebas. Nilai-nilai siswa dianalisa menggunakan SPSS (*Statistical Package for the Social Sciences*) 23.00. Hasil analisis data menunjukkan bahwa rata-rata nilai pre-test adalah 51.87 dan rata-rata nilai post-test adalah 73.08. Dengan kata lain, nilai rata-rata post-test lebih tinggi dari nilai rata-rata pre-test. Hasil penelitian ini juga menunjukkan bahwa nilai t-test lebih tinggi dari nilai t-tabel ( $17.136 > 2.037$ ) pada tingkat signifikan 5%. Oleh karena itu, alternative hipotesis diterima dan nol hipotesis ditolak. Dapat disimpulkan bahwa ada pengaruh yang signifikan dari teknik Clustering terhadap kemampuan siswa kelas delapan MTs Hasanah Pekanbaru dalam menulis teks deskriptif.

**Kata Kunci :** Pengaruh, Teknik Clustering, Kemampuan Menulis, Teks Deskriptif

## INTRODUCTION

Language is used as a means of communication in society. According to Hornby (2000), language is the system of sounds and words used by humans to express their thoughts and feelings. It means language can be used as a medium of communication to deliver human thoughts and feelings. Based on the 2013 curriculum (Permendikbud), students are expected to master the four language skills of English, namely, listening, speaking, reading and writing and the aim of teaching English is to enable students to communicate not only in spoken but also in written form.

Yates (2000), states that writing skill is an important part of communication. It is a means of developing, organizing and communicating ideas. According to Richards and Renandya (2002), writing is the most difficult skill for second language learners to master. The difficulty lies not only in generating and organizing ideas, but also in translating these ideas into readable texts. It means the process of writing is complicated, especially in how to get ideas and express the ideas into a text which is understandable for readers.

In the 2013 curriculum (Permendikbud), students in Junior High School including MTs Hasanah Pekanbaru, are asked to write various types of text, and one of which is descriptive text. According to Tompkins (1994), descriptive text is painting picture with words. It means by reading a descriptive text, readers can see, feel, hear, or touch the things that is described by the writer directly. Based on the researcher's interview (2018), the second year students of MTs Hasanah Pekanbaru have difficulties in writing descriptive texts because they are not interested in writing, they do not know how to start writing, they have difficulties to get ideas, they have limited vocabulary and the difficulties in organizing one sentence with other sentences.

To solve these problems, the teacher should choose an appropriate technique to make the students interested in learning writing, especially in writing a descriptive text. Reid (1993) mentions that the invention of Clustering Technique helps the writer to generate, develop, and arrange their ideas. In writing a descriptive text, students are required to be able to develop ideas and imagination. By using Clustering Technique students are expected to be able to generate their ideas. So, the purpose of descriptive text can be achieved.

## METHODOLOGY

This is a pre-experimental research. According to Price and Oswald (2006), pre-experimental research is a type of evaluation which aimed to determine whether a treatment has the intended effect on the participants. This research was conducted by using one group pre-test post-test design. The one group pre-test post-test involves a single group that was pre-test ( $O_1$ ), exposed to a treatment ( $X$ ), and then post-test ( $O_2$ ).

**Tabel 1. The Research Design**

<b>O<sub>1</sub></b>	<b>X</b>	<b>O<sub>2</sub></b>
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(Gay et al., 2009)

The population of this research is the second year students of MTs Hasanah Pekanbaru. There are four classes. The total of the population in this research is 127 students. Below is the population of the second year students of MTs Hasanah Pekanbaru.

**Tabel 2. The Population of the Second Year Students of MTs Hasanah Pekanbaru**

<b>No.</b>	<b>Class</b>	<b>Total of Students</b>
1.	VIII.1	33
2.	VIII.2	32
3.	VIII.3	31
4.	VIII.4	31
<b>Total</b>		<b>127</b>

Source: Teachers' office of MTs Hasanah Pekanbaru

The sample was selected by using cluster random sampling. According to Fraenkel and Wallen (2006), cluster random sampling is the selection of groups or clusters of subjects rather than individual. As the result, class VIII.1 was chosen as the sample of the research which consisted of 33 students.

The instrument in this study was a writing test about descriptive text in the pre-test and post-test. The students' writing score were assessed using scoring rubric that is adapted from Brown (2007). The aspects that were measured in the test include content, organization, grammar, vocabulary and mechanics.

Pre-test was given to the students before the treatment. The purpose of pre-test was to find out the score of the students' ability in writing descriptive text before the treatment. There were six meetings conducted after the pre-test. The time allocation for each meeting was 90 minutes. In the treatment, students wrote descriptive texts using Clustering Technique. After applying the treatment, the post-test was given after the sixth meeting. Post-test was used to measure whether there is a significant effect of Clustering Technique on the ability of the second year students of MTs Hasanah Pekanbaru in writing descriptive text.

Three raters were asked to assess the students' writing in both pre-test and post-test. The score was calculated from the raters to find out the real score. Then, the data were analyzed statistically by using paired sample t-test in SPSS 23.00 to compare the mean score of pre-test and post-test and to analyze the hypothesis. The criteria of testing the hypothesis according to Schervish (1996) are if the p-output (sig.2-tailed) is lower than 0.05 and t-value is higher than t-table (2.021) on significant level 5%, the null hypothesis ( $H_0$ ) was rejected and the alternative hypothesis ( $H_a$ ) was accepted and if the mean scores of pre-test was higher than post-test, the null hypothesis ( $H_0$ ) was accepted and the alternative hypothesis ( $H_a$ ) was rejected.

## RESULTS AND DISCUSSIONS

### Result

This research was conducted to the second year students of MTs Hasanah Pekanbaru class VIII.1 which consisted of 33 students. The data were collected by giving a written test in pre-test and post-test. The results of this research are presented by showing the result of students' ability in each aspect of writing.

#### The Result of Pre-test

At the beginning of the research, the pre-test was given to obtain the base score as the comparison of the data on post-test after the treatment. The result of the pre-test was evaluated by three raters. After the score from three raters were collected, the researcher calculated the score to know the students' ability in writing descriptive texts.

**Table 3. Students' Ability in Each Aspect of Writing in Pre-test**

No.	Aspects Of Writing	Average (R1+R2+R3)
1.	Content	58.08
2.	Organization	49.49
3.	Grammar	37.88
4.	Vocabulary	54.55
5.	Mechanics	59.34
Average Total Score		<b>51.87</b>

Table 3 Shows that the average scores of the pre-test is 51.87. The highest score of the pre-test is in Mechanics aspect (59.34). The score of content aspect is 58.08, the score of vocabulary is 54.55, and the score of organization aspect is 49.49. Then, the lowest score of the pre-test is in grammar aspect (37.88). It shows that the students still difficult to write a good descriptive text by the following components of writing.

#### The Result of Post-test

Post test was conducted after treatment. It was held to find out whether there is a significant effect of using Clustering Technique while teaching and learning process in writing descriptive texts. The result of the post-test was also obtained from the three raters before being analyzed by the researcher. The result of each aspect of writing is presented in Table 4.

**Table 4. Students' Ability in Each Aspect of Writing in Post-test**

No.	Aspects Of Writing	Average (R1+R2+R3)
1.	Content	81.31
2.	Organization	74.49
3.	Grammar	64.65
4.	Vocabulary	73.74
5.	Mechanics	71.21
Average Total Score		<b>73.08</b>

Writing ability of the second year students of MTs Hasanah Pekanbaru improved after the treatment was applied. It can be seen from the result of post-test. Table 4 shows that the highest score of the post-test is in the content aspect (81.31). The score of organization aspect is 74.49, the score of vocabulary is 73.74, and the score of mechanics is 71.21. Then, the lowest score in the post-test is the grammar aspect (64.65). The table also indicates the average score (73.08). The increase of students' score on pre-test and post-test indicate that the treatment given has significant effect on the students writing ability in writing descriptive text.

### **The Comparison between Pre-test and Post-test Score**

The finding of this research shows positive result of the use of Clustering Technique in students' writing ability. The improvement in the students' writing ability was shown through the pre-test and post-test result. The comparison of the pre-test and post-test score in each aspect of writing can be seen in Table 5.

**Table 5. The Comparison between Pre-test and Post-test Score**

No	Aspects of Writing	Pre-test	Post-test	Score Differences
1.	Content	58.08	81.31	23.23
2.	Organization	49.49	74.49	25.00
3.	Grammar	37.88	64.65	26.77
4.	Vocabulary	54.55	73.74	19.19
5.	Mechanics	59.34	71.21	11.87

As shown in Table 5, the score of each aspect of writing increased. The biggest score difference is in the grammar aspect (26.77). The organization aspect increased 25.00, followed by content aspect (23.23) and vocabulary aspect (19.19). The lowest score difference is in mechanics aspect (11.87). These score differences proved that there is a significant effect of using Clustering Technique on students' writing ability.

### **The Result of Paired Sample T-Test**

In this research, t-test was used to compare pre-test and post-test result in determining whether the hypothesis could be accepted or rejected. The t-test was also used to measure whether or not the treatment gave a significant effect on the ability of

the second year students of MTs Hasanah Pekanbaru in writing descriptive texts. The pre-test and post-test scores were analyzed by using paired t-test in SPSS version 23.

**Table 6. T-test Table**

**Paired Samples Test**

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
PairPosttest - 1 Pretest	21.21212	7.11113	1.23789	18.69062	23.73362	17.136	32	.000

Tabel 6 shows that the value of the t-test is 17.136. Meanwhile, the values of t-table on the df (degree of freedom) 32 is 2.037 with the level of significance ( $\alpha$ ) = 5%. The level of significance is  $17.136 > 2.037$ . Moreover, the Sig. (2-tailed) is .000 which is lower than 0.05. From the data analysis, it could be identified that if the p-output (sig.2-tailed) is lower than 0.05 and t-value is higher than t-table on significant level 5%, the null hypothesis ( $H_0$ ) is rejected and alternative hypothesis ( $H_a$ ) is accepted. So, it can be concluded that Clustering Technique has a significant effect on the ability of the second year students of MTs Hasanah Pekanbaru in writing descriptive texts.

## Discussion

This research was conducted to find out whether Clustering Technique has a significant effect when it used in teaching writing, especially in teaching writing descriptive texts. It involved three steps. The first step was administering a pre-test to measure the students' ability in writing descriptive text. Based on the findings, the mean score of the students was 51.87. Then, the next step was applying the treatment which is Clustering Technique in. The treatment was conducted in six meetings. The last step was administering a post-test to measure the students' ability after the treatment. The mean score of the post-test was 73.08.

Based on the research findings, the researcher concludes that applying Clustering Technique is effective in teaching writing descriptive texts on the second year students of MTs Hasanah Pekanbaru. The students' ability in writing has improved in all aspects of writing which includes content, organization, grammar, vocabulary and mechanics. The highest score in post-test is content. In line with the result, Langan (2006) states that Clustering Technique is another strategy that can be used to generate material for a paper. Along with the content aspect, organization, grammar, vocabulary and mechanics aspects also improved. Clustering Technique can help the students to produce the related details of the topic and also the students can easily write a descriptive text by looking at the cluster diagram that they made.

## **CONCLUSION AND RECOMMENDATIONS**

### **Conclusion**

The research findings show that there is a significant effect of using Clustering Technique on the ability of the students' writing ability especially in writing descriptive texts. The improvement of students' writing ability in descriptive texts after being taught by clustering technique can be seen through the difference in the pre-test and post-test score. Students' mean score on the pre-test is 51.87 while on the post test is 73.08. The mean score increases 21.21. The improvement is also revealed through the t-test calculation where t-test is higher than t-table, the level of significance is  $17.136 > 2.037$ . From these findings, it can be concluded that Clustering Technique has a significant effect on the ability of the second year students of MTs Hasanah Pekanbaru in writing descriptive texts.

### **Recommendations**

Based on the research findings, Clustering Technique has a significant effect on students' writing ability. Therefore, the researcher suggests using Clustering Technique in teaching and learning process to improve students' writing ability. The teacher may use Clustering Technique as an alternative technique to improve students' writing ability especially in writing descriptive texts. Before doing the activity, the teacher needs to prepare an effective lesson plan because a well-organized lesson plan will support the teaching and learning process to progressing well.

In addition, the teacher should be aware of the students' needs of mastering all of the aspects of writing, namely, content, organization, grammar, vocabulary, and mechanics. Based on the research findings, the lowest improvement is in mechanics aspect. Thus, the teacher needs to pay more attention on the mechanics aspect without ignoring other aspects.

The students may use Clustering Technique to improve their writing ability. As Oshima and Hogue (2007) state, Clustering Technique can help the students to organize and generate their ideas. Moreover, the students need to pay attention to the teacher's explanation so that they can understand the social function, generic structure and language feature of the text very well. The students also need to read more to increase their vocabulary mastering.

Furthermore, the researcher would like to invite other researchers to conduct the research to other levels of students in various contexts. The researchers, who are interested in carrying out this research in the similar topic of discussion and understanding of concepts, hopefully will be able to improve the students' writing ability.



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