

IMPROVING WRITING ABILITY OF GRADE VII STUDENTS THROUGH CLUSTERING TECHNIQUE

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Abstract

The objective of this research was to find out whether or not the use of clustering technique improved writing ability of grade VII students at SMP Negeri 1 Sindue in writing descriptive text. This research was an intact group research design that involved two groups; they were experimental group and control group. The population of this research was grade VII students of SMP Negeri 1 Sindue. It was selected by using purposive sampling technique. The sample was VII B as the experimental group and class VII C as the control group. In collecting the data, the researcher used test (post-test). The data were analyzed statistically. The results of data analysis showed that there was a significant difference between the achievement of experimental and control groups. In other words, the t_{counted} (9.22) was greater than t_{table} (2.015). In this case, the research hypothesis was accepted. In short, the use of clustering technique can improve writing ability of grade VII students' at SMP Negeri 1 Sindue in writing mechanics and vocabulary.

Keywords: Improving; Writing Ability; Clustering Technique.

INTRODUCTION

In Indonesia, English has been taught to the students of Elementary Schools (SD), Junior High Schools (SMP), Senior High Schools (SMA), and Universities. It is expected that by learning English, they will be able to communicate in English with International communities.

The most important thing in human being life is communication. By using language communication among human being can be done. Language is an important part in human social life. As a tool of communication, language is conveyed through four skills. There are listening, speaking, reading, and writing. To maintain the four skills, English learners also learn the language components such as grammar, vocabulary, mechanics and pronunciation.

The aim of teaching English to the students is to improve their English ability. The students are expected to be able to communicate both in oral and written forms. Anyhow, learning English makes the students bored, particularly in writing.

According to the researcher's preliminary research at SMP Negeri 1 Sindue, the grade VII students still have problems in learning English, particularly in writing. There were several problems that students faced in their writing, such as they cannot express their ideas easily in written form because they did not have enough vocabulary. Besides, they did not know how to use mechanics as well, like punctuation and capitalization. By looking at the situation, the researcher restricted her research in vocabulary, punctuation, and capitalization.

To solve these problems, the researcher used clustering technique. The application of clustering technique can help the students to find out the ideas as many as possible. Rico (2001:1) explains, "Clustering technique is a technique for quickly making explicit the idea and associations we have about the topic". Therefore, teaching descriptive text using clustering technique is appropriate to use. According to DePorter and Hernacki that was cited in Hermansyah thesis (1999:181) emphasize that clustering is the way to classify the ideas and share into a piece of paper by making the connection with the core of the idea. Clustering is a powerful tool in freewriting to generate the ideas from mind. This technique is simple to be applied by the students. It means that, they were easy to find a word as a keyword related with the topic.

The researcher used clustering technique in order to make the students easier to get their idea in writing. Therefore, the researcher expected that by applying this technique the students are more creative in making sentences, particularly in descriptive text. A descriptive text is one type of the texts which is fun to write. It makes students' writing more interesting to readers because they use their words to help readers see, or to visualize people, places, or things.

The subject of this research was grade VII students at SMP Negeri 1 Sindue. Considering that problem, the researcher formulated the research question as follows: "*Can the writing ability of grade VII students at SMP Negeri 1 Sindue be improved through clustering technique?*". The objective of this research was to improve the students' writing ability of grade VII students at SMP Negeri 1 Sindue through clustering technique.

METHODOLOGY

In this research, the researcher applied intact group design. Intact group design is a part of pre experimental research. In intact group design, the researcher used two groups consisting of experimental group and control group. These two groups were given the same

test which only post-test while the treatment was given only for experimental group. The design of this research proposed by Hatch and Farhady (1982: 21) as follows:

G1	X	T2
G2		T2

Where:

- G1 : experimental group
- G2 : control group
- X : treatment
- T1 : post-test for experiment/control group

Arikunto (1983: 102) defines, “population as a set of elements possessing one or more attributes of interest”. In this research, the population was grade VII students’ at SMPNegeri1 Sindue which consists of five classes. The total number of population is 128 students. They spread out in 5 parallel classes from VII A up to VII E.

Table 1
Class Distribution

No.	Class Name	Number of Students
1.	VII A	27
2.	VII B	24
3.	VII C	24
4.	VII D	27
5.	VII E	26
Total		128

Sample is a chosen part of a population which is as the object of the research. Best (1981: 81) states, “sample is a small proportion of a population selected for observation and analyses”. In choosing the sample of this research, the researcher used purposive sampling technique. As the result, class VII B was chosen as the experimental group while class VII C was the control group.

In this research, the researcher applied two variables, independent and dependent variables. Independent variable of this research was clustering technique while the dependent variable was improving writing ability of grade VII students’ at SMP Negeri 1 Sindue in descriptive text.

Instrument is the way which is used by the researcher to collect data. In this research, the researcher used a test in collecting data. The test only consisted of posttest

which was given to both experimental group and control group. Before the researcher gives a posttest, the treatment was given only for experimental group while control group was not.

To know the individual score of each student, the researcher used formula proposed by Purwanto (2008: 44) as follows:

$$NP = \frac{R}{SM} \times 100$$

Where:

- NP = students' score
- R = score obtained
- SM = maximum score of the test
- 100 = constant number

After knowing the individual score of each student, then the researcher counted the mean score of the students for both experimental and control group which is proposed by Hatch and Farhady (1982:55) as follows:

$$\bar{X} = \frac{\sum X}{N}$$

Where:

- \bar{X} = mean score
- $\sum X$ = total of the individual scores
- N = total of students

After that, the researcher analyzed the data in order to know individual deviation of students' score for both experimental and control group that is proposed by Hatch and Farhady (1982:59) as follows:

$$x = X - \bar{X}$$

Where:

- x = individual deviation
- X = student's score
- \bar{X} = mean score

After getting the individual deviation of students' score, the researcher squared the standard deviation of students score for both experimental class and control class. The researcher used the formula which is recommended by Hatch and Farhady (1982:59):

$$S = \frac{\sqrt{\sum x^2}}{N-1}$$

Where:

- s = standard deviation
- $\sum x^2$ = sum of individual deviation squared
- N = total of students

After getting the standard deviation, the researcher calculated the standard error first by using the formula which is proposed by Hatch and Farhady (1982:112) in order to know the value of t_{value} :

$$S_{\bar{x}_e - \bar{x}_c} = \sqrt{\left(\frac{s_e}{\sqrt{n_1}}\right)^2 + \left(\frac{s_c}{\sqrt{n_2}}\right)^2}$$

Where:

- $S_{\bar{x}_e - \bar{x}_c}$ = standard error of differences between means
- s_e = standard deviation of experimental class
- s_c = standard deviation of control class
- n_1 = total students of experimental class
- n_2 = total students of control class

Finally, the writer calculated the t_{value} by using the formula stated by Hatch and Farhady (1982: 111):

$$t_{obs} = \bar{x}_e - \bar{x}_c \frac{\bar{x}_e - \bar{x}_c}{s(\bar{x}_e - \bar{x}_c)}$$

Where:

- t_{obs} = significant result between experimental and control class
- \bar{X}_e = mean score of experimental group
- \bar{X}_c = mean score of control group
- $s(\bar{x}_e - \bar{x}_c)$ = standard error of differences between means

FINDINGS

In collecting the data, the researcher analyzed the data taken from posttest of experimental and control groups, while the treatment was only applied in experimental group before the researcher conducted the test. Besides, the treatment was conducted from 4th of August 2015 until 2nd of September 2015 by administering the posttest in order to prove whether or not the use of clustering technique can give a good contribution in

teaching English to the students, particularly in improving students' writing ability. The posttest was given to experimental group (VII B) on Tuesday, 1st of September 2015 while control group (VII C) on Wednesday, 2nd of September 2015. The result of the posttest in the table 2 and 3 can be seen.

Table 2
Students' score on Post-test in Experimental Group

No	Initial Name	Vocabulary (3)	Punctuation (3)	Capitalization (3)	Total Score	Overall Score
1	AAS	2	2	3	7	78
2	AHL	2	2	2	6	67
3	AKP	2	2	2	6	67
4	ALN	3	3	2	8	89
5	ANG	2	2	2	6	67
6	ANZ	2	2	2	6	67
7	ARU	2	2	1	5	56
8	ASH	3	2	2	7	78
9	DWS	3	3	3	9	99
10	FAF	2	3	2	7	78
11	FIF	3	3	3	9	99
12	GIA	3	2	2	7	78
13	HER	2	1	2	5	56
14	ICA	3	2	3	8	89
15	ICN	2	2	2	6	67
16	JNM	2	3	3	8	89
17	NFJ	2	2	2	6	67
18	NJS	3	3	3	9	99
19	RAY	2	3	3	8	89
20	SYN	2	3	3	8	89
21	TRN	2	2	2	6	67
22	TZM	3	3	3	9	99
23	UAQ	3	2	3	8	89
24	WAR	3	2	1	6	67
Total		58	56	56	170	1890

The posttest result of experimental class shown in table 2 above indicated that the higher score was 99 and the lowest score was 56. After computing the students' on posttest, the researcher calculated the students' mean score on posttest in experimental group by adding the standard score and dividing by the number of the students which can be seen as follows:

$$\bar{X} = \frac{\sum X}{N}$$

$$\bar{X} = \frac{1890}{24} = 78.75$$

Table 3
Students' Score on Post-test in Control Group

No	Initial Name	Vocabulary (3)	Punctuation (3)	Capitalization (3)	Total Score	Overall Score
1	ANL	1	2	0	3	33
2	ANR	2	2	2	6	67
3	ANU	1	1	0	2	22
4	ARD	2	2	1	5	56
5	FAI	2	1	1	4	44
6	FAR	1	1	1	3	33
7	IRM	1	2	1	4	44
8	KEF	2	1	1	4	44
9	LIN	2	1	1	4	44
10	LUA	2	1	1	4	44
11	MIE	2	1	1	4	44
12	MIZ	1	1	1	3	33
13	MOY	1	1	1	3	33
14	MUI	0	0	0	0	0
15	NIS	0	0	0	0	0
16	NRH	1	1	2	4	44
17	NUR	2	2	1	5	56
18	RAM	2	1	0	3	33
19	RES	2	2	2	6	67
20	RIS	2	2	2	6	67
21	SIN	2	2	1	5	56
22	SOF	2	1	1	4	44
23	ULO	2	2	1	5	56
24	YUF	2	2	2	6	67
Total		37	32	23	93	1031

By looking at the posttest result of the control class, it was obviously found that the higher score was 67 and the lowest score was 0. After calculating the posttest score in control group, the researcher computed the students' mean score. The mean computation is presented as follows:

$$\bar{X} = \frac{\sum X}{N}$$

$$\bar{X} = \frac{1031}{24} = 42.95$$

From the counted data above, it showed that the posttest mean's score of experimental and control groups was different. The mean score of the experimental group was 78.75 while the control group was 42.95. It proved that the progress of students' achievement in experimental group after getting the treatment was greatly improved.

The researcher computed the deviation and square deviation of the students' scores in the posttest (both in experimental and control groups) after calculating the mean score. The result is presented in the following table:

Table 4
Deviation Post-test in Experimental group

No	Initial Name	Post-test (Xx)	Mean Score (X)	Deviation (Xy)	Square Deviation (x2)
1	AAS	78	78.75	-0.75	0.56
2	AHL	67	78.75	-11.75	138.06
3	AKP	67	78.75	-11.75	138.06
4	ALN	89	78.75	10.25	105.06
5	ANG	67	78.75	-11.75	138.06
6	ANZ	67	78.75	-11.75	138.06
7	ARU	56	78.75	-22.75	517.56
8	ASH	78	78.75	-0.75	0.56
9	DWS	99	78.75	20.25	410.06
10	FAF	78	78.75	-0.75	0.56
11	FIF	99	78.75	16.13	410.06
12	GIA	78	78.75	-0.75	0.56
13	HER	56	78.75	-22.75	517.56
14	ICA	89	78.75	10.25	105.06
15	ICN	67	78.75	-11.75	138.06
16	JNM	89	78.75	10.25	105.06
17	NFJ	67	78.75	-11.75	138.06
18	NJS	99	78.75	20.25	410.06
19	RAY	89	78.75	10.25	105.06
20	SYN	89	78.75	10.25	105.06
21	TRN	67	78.75	-11.75	138.06
22	TZM	99	78.75	20.25	410.06
23	UAQ	89	78.75	10.25	105.06
24	WAR	67	78.75	-11.75	138.06
Total		1890		91	4412.44

After computing mean deviation on posttest of experimental group, the researcher calculated the deviation score of posttest in experimental group. It is presented as follows:

$$\begin{aligned}
 S &= \sqrt{\frac{\sum x^2}{N-1}} \\
 &= \sqrt{\frac{4412.44}{24-1}} \\
 &= \sqrt{\frac{4412.44}{23}} \\
 &= \sqrt{191.84} = 13.85
 \end{aligned}$$

Table 5
Deviation Post-test in Control Group

No	Initial Name	Post-Test (Xx)	Mean Score (X)	Deviation (Xy)	Square Deviation (x2)
1	ANL	33	42.95	-9.95	99.00
2	ANR	67	42.95	24.05	578.40
3	ANU	22	42.95	-20.95	438.90
4	ARD	56	42.95	13.05	170.30
5	FAI	44	42.95	1.05	1.10
6	FAR	33	42.95	-9.95	99.00
7	IRM	44	42.95	1.05	1.10
8	KEV	44	42.95	1.05	1.10
9	LIN	44	42.95	1.05	1.10
10	LUA	44	42.95	1.05	1.10
11	MIE	44	42.95	1.05	1.10
12	MIZ	33	42.95	-9.95	99.00
13	MOY	33	42.95	-9.95	99.00
14	MUI	0	42.95	0	0
15	NIS	0	42.95	0	0
16	NRH	44	42.95	1.05	1.10
17	NUR	56	42.95	13.05	170.30
18	RAM	33	42.95	-9.95	99.00
19	RES	67	42.95	24.05	578.40
20	RIS	67	42.95	24.05	578.40
21	SIN	56	42.95	13.05	170.30
22	SOF	44	42.95	1.05	1.10
23	ULO	56	42.95	13.05	170.30
24	YUF	67	42.95	24.05	578.40
Total		1031		128	3937.5

Then, after finding the mean deviation on post-test of control group, the researcher calculated standard deviation of post-test in control group which is presented as follows:

$$\begin{aligned}
 S &= \sqrt{\frac{\sum x^2}{N-1}} \\
 &= \sqrt{\frac{3937.5}{24-1}} \\
 &= \sqrt{\frac{3937.5}{23}} \\
 &= \sqrt{171.19} \\
 &= 13.08
 \end{aligned}$$

Having counted the deviation both experimental group and control group, the researcher then computed the standard error of difference between means which is presented below:

$$\begin{aligned}
 S_{\bar{x}_e - \bar{x}_c} &= \sqrt{\left(\frac{S_e}{\sqrt{n_1}}\right)^2 + \left(\frac{S_c}{\sqrt{n_2}}\right)^2} \\
 &= \sqrt{\left(\frac{13.85}{\sqrt{24}}\right)^2 + \left(\frac{13.08}{\sqrt{24}}\right)^2} \\
 &= \sqrt{\left(\frac{13.85}{4.89}\right)^2 + \left(\frac{13.08}{4.89}\right)^2} \\
 &= \sqrt{(2.83)^2 + (2.67)^2} \\
 &= \sqrt{8.00 + 7.12} \\
 &= \sqrt{15.12} \\
 &= 3.88
 \end{aligned}$$

Finally, the researcher needed to analyze the data statistically in order to know the difference between the result of posttest in experimental and control groups. The computation is presented as follows:

$$\begin{aligned}
 t_{obs} &= \frac{\bar{x}_e - \bar{x}_c}{s(\bar{x}_e - \bar{x}_c)} \\
 &= \frac{78.75 - 42.95}{3.88} \\
 &= \frac{28.93}{3.88} \\
 &= 9.22
 \end{aligned}$$

DISCUSSION

In this part, the researcher discusses about the findings of the research. The researcher took a sample of her research in SMP Negeri 1 Sindue. The researcher conducted this research in those two classes, namely VII B as an experimental group and VII C as a control group because they still have problems in learning English particularly in writing. There were several problems that students faced in their writing, such as they cannot express their ideas easily in written form because they did not have enough vocabulary.

Besides, they did not know how to use mechanics as well, like punctuation and capitalization.

Based on the students' problems the researcher used clustering technique to solve the problems. For the first treatment the researcher taught the students about simple present tense because this tense is used to make descriptive text. After that, the researcher explained about the language features of descriptive text about using noun and adjective. Then, the researcher explained about descriptive text and generic structure itself. In every meeting, the researcher taught them the material through clustering technique. In applying this technique the researcher explained to them what clustering technique itself and how this technique is applied. Next, the researcher taught them to make an outline, it aimed them easier to list the words that they were going to make paragraph. The material in every meeting described about people, animals and things. When the researcher gave the example of clustering they were very interested and enthusiastic in the process of learning. They were so enthusiastic to mention words or phrases that came into their mind. Meanwhile, some students did not say anything or just keep silence. When they have ended their writing, they immediately questioned the researcher to know the revision of their own paragraph.

After doing the treatment to the students, the researcher organized the posttest to the students in experimental and control groups. The posttest aimed at knowing the improvement of students' writing descriptive text after the treatment. When the researcher took the posttest in experimental group the students showed the progress in writing. The result of posttest showed the significant progress of the students in experimental group than control group. Based on the result of the posttest for both groups, it was proved that there was a significant difference between the results of posttest in experimental group (78.75) which was greater than the result of posttest in control groups (42.95). The clustering technique was lead them to get the ideas and vocabulary. Finally, the researcher concluded that the use of clustering technique is effective to improve writing ability in descriptive text of grade VII Students at SMP Negeri 1 Sindue.

In related to this research, other researchers also proved that the use of clustering technique can improve the students' writing ability. The first research was conducted by Hermansyah (2012). The result of his research showed that the students' score were improved when conducting clustering technique in the classroom. It was proved by the results of students' pretest (48.1) and posttest (80.2). He said that teaching descriptive writing using clustering has significantly better result than using conventional method. Alawi (2011) also discussed about how to improve students writing ability using clustering

technique by applying classroom action research. The students' achievement in pretest and posttest showed a significant improvement. In the first cycle the mean score was 68.4%. Meanwhile in the second cycle was 74.3%, they got excellent score. By looking at the findings in this research and also in previous researchers, the researchers showed that clustering technique was effective to improve students writing ability.

CONCLUSIONS AND SUGGESTIONS

After collecting and analyzing the data statistically in the research, the researcher finally concluded that the use of clustering technique was effective in improving students' ability in writing descriptive text of grade VII students at SMP Negeri 1 Sindue. The result of data analysis showed that the t_{counted} (9.22) was greater than the t_{table} (2.015). By looking at the result of t_{counted} and t_{table} , it can be said that the writing ability of grade VII students at SMP Negeri 1 Sindue can be improved through clustering technique.

Based on the result of the research, the researcher would like to provides some suggestions for the students and those who are actively involved in the English teaching learning process. For the students, they should improve their ability in writing because they have to understand the topics/subjects that have been introduced by the teacher. The students should manage their time effectively in written form. They have to learn and rehearse writing using clustering technique in order to assist them easier to get idea. For the teachers, they should apply clustering in teaching writing particularly in descriptive text in order to the students are motivated and get many ideas and stock of vocabulary. The teacher should be creative to make the class alive, so the students do not get bored in teaching learning process.

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