THE EFFECTIVENESS OF CLUSTERING TECHNIQUE TOWARDS STUDENTS' READING COMPREHENSION OF EXPLANATION TEXT

Gangan Ganda Somantri
somantribing@gmail.com

Tasya Audry Rahim
tasyaaudryrahim27@gmail.com

ABSTRACT

The research paper entitled "The Effectiveness of Clustering Technique Towards Students' Reading Comprehension of Explanation Text". It is a quasi experimental research conducted at twelve grade students of SMA Al Qona'ah Baleendah. The aims of the research is to find out whether or not the clustering technique is effective to improve students' reading comprehension of the explanation text in SMA Al Qona'ah Baleendah. The sample of the research is 20 students of XII MIPA I for experimental group and 20 students of XII MIPA II for control group. The instruments are pre test and post test. The pre test was administered to know the students' reading ability before the treatments and the post test was administered to students to measure whether or not there was progress in students' reading comprehension. The result of the research showed that the students who taught by using the clustering technique get a higher score than the students who taught by using conventional method. It can be concluded that the result was proven by t-test calculation, where the t-observe is bigger than t-table. As the derived $t = 3.252$ exceeds the table critical value of $t = 2.021$, at $p = 0.05$ with $Df = 38$ ($3.252 > 2.021$). Therefore, the alternative hypotheses (Ha) is accepted, stating that there is significant difference in result between clustering technique and the conventional method in reading comprehension to the twelve grade of SMA Al Qona'ah Baleendah and the null hypotheses (Ho) is rejected. Thus it can be concluded the Clustering Technique is effective in improving students' reading comprehension on explanation text.

Keywords: Reading, Explanation Text, Clustering Technique.

ABSTRAK

Penelitian ini berjudul "Efektivitas Teknik Clustering Terhadap Pemahaman Membaca Siswa Pada Teks Eksplanasi". Penelitian ini merupakan penelitian quasi yang dilakukan pada siswa kelas dua belas di SMA Al Qona'ah Baleendah. Penelitian ini bertujuan untuk mengetahui apakah teknik clustering efektif untuk meningkatkan pemahaman membaca siswa teks eksplanasi di SMA Al Qona'ah Baleendah. Sampel penelitian ini adalah 20 siswa kelas XII MIPA I untuk kelompok eksperimen dan 20 siswa kelas XII MIPA II untuk kelompok kontrol. Instrumen yang digunakan adalah pre test dan post test. Pre test diberikan untuk mengetahui kemampuan membaca siswa sebelum diberikan perlakuan dan post test diberikan kepada siswa untuk mengukur ada tidaknya kemajuan dalam pemahaman membaca siswa. Hasil penelitian menunjukkan bahwa siswa yang diajar dengan teknik clustering memperoleh nilai yang lebih tinggi dibandingkan siswa yang diajar dengan metode konvensional. Dapat disimpulkan bahwa hasil tersebut dibuktikan dengan perhitungan t-tes, dimana t-observasi lebih besar dari t-tabel. Karena t yang diturunkan = 3,252 melebihi nilai kritis tabel t = 2,021, pada p = 0,05

dengan Df = 38 (3,252 > 2,021). Oleh karena itu, hipotesis alternatif (Ha) diterima, yang menyatakan bahwa terdapat perbedaan hasil yang signifikan antara teknik clustering dan metode konvensional dalam membaca pemahaman siswa kelas dua belas SMA Al Qona'ah Baleendah dan hipotesis nol (Ho) ditolak. Dengan demikian dapat disimpulkan Teknik Clustering efektif dalam meningkatkan pemahaman membaca siswa pada teks eksplanasi.

Kata kunci: Membaca, Teks Eksplanasi, Teknik Clustering.

INTRODUCTION

Reading is one of the important skills in language learning. Although reading is not only a part of language learning, but all learning activities for all subjects involve reading. Students need to read textbooks related to the subjects studied, reading assignments given by the teacher, and even to read their own writing. Rudell (2007, p.31) states that when transacting with texts, reading is an activity of seeking and constructing meaning. Through a combination of prior knowledge and experience, the reader will acquire the information available in the text, which then takes a stand in relation to the text; and immediate, remembered, or anticipated social interactions and communications.

Based on the experience while conducting *Program Pengalaman Lapangan (PPL)* at SMA Al Qona'ah Baleendah, many students have problems in reading comprehension and they are also confused in understanding one of the texts they study in grade twelfth, namely explanation text. The students also have low motivation. Yayu & Susi (2019, p.43) states that this lack of motivation is due to the inappropriate method used by the teacher in teaching. From those problems, they will have an opinion that learning English is difficult, in particular reading comprehension. In this research, the researchers choose a technique that is expected to improve the students' ability in reading comprehension, that is using clustering.

Clustering according to Lunsford (2010, p.57) is a technique used by writers prior to writing to generate ideas using a visual chart or chema. This technique also helps students who like to think visually because this technique uses squares, arrows, circles, and lines to show the relationship between ideas and details. The advantage of this technique is that students can find as many words, ideas, related concepts as possible from the given text.

RESEARCH QUESTION

There is a research questions that should be answered by the researchers, the research questions in this research is as follows:

Does clustering technique as means of reading comprehension to the twelve grade of SMA Al Qona'ah Baleendah have significantly better results than the conventional method?

RESEARCH DESIGN

The research design of this research is quantitative design and quasi-experimental is used in this research. This type of experimental design contains two groups, those are

Experimental Group, that is a treatment of contemporary formulation, and Control group who does not receive a treatment of contemporary formulation.

The design is represented as illustrated by Creswell (2012, p.310)

Time →

Select Control Group	Pre – Test	No Treatment	Post - Test
Select Experimental Group	Pre – Test	Treatment	Post - Test

Data Collecting Technique

Data collecting is part of research methodology that should be done by the researcher, those are:
1. Giving The Pre-Test
The pre-test is administered to the student at the beginning of the study for research data and for knowing the students' knowledge before giving the treatment in the experimental group and the control group.
2. Giving The Treatment
The treatments in this research are three times which lasts for 60 minutes for each meeting. The experimental group using clustering technique and the control group using conventional technique. The lesson plans use the 2013 curriculum, that is implemented from 2013 curriculum and Standard Competence and Basic Competence (SK-KD).
3. Giving The Post-Test
The post-test is administered at the end of the study. It aims to investigate the effectiveness of teaching reading explanation text by using clustering techniques in students' reading comprehension. This test is to determine students' knowledge after the treatment.

Data Analysis Technique

The data collected through pre-test and post-test in experimental class and control class is analyzed using t-test. According to Hatch & Lazaraton (1991, p.272) t-test meant to compare two means, the comparison of terms is a proof whether the hypothesis is rejected or accepted. Independent t-test is used to compare the means from two different groups. The formula that is used in quasi-experimental research for independent sample according to Arikunto (2006, p.315) is:

$$t = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{\left(\frac{\Sigma X_1{}^2 - \frac{(\Sigma x_1)^2}{N_1} + \Sigma X_2{}^2 - \frac{(\Sigma x_2)^2}{N_2}}{N_1 + N_2 - 2}\right) \cdot \left(\frac{1}{N_1} + \frac{1}{N_2}\right)}}$$

Where :

$\overline{X_1}$ = the mean of the scores of the experiment group

$\overline{X_2}$ = the mean of the scores of the control group

$\Sigma X_1{}^2$ = the sum of the squares of the experiment group

$\Sigma X_2{}^2$ = the sum of the squares of the control group

$(\Sigma x_1)^2$ = the square of the sum of the scores of the experiment group

$(\Sigma x_2)^2$ = the square of the sum of the scores of the control group
N_1 = the total number of scores in the experiment group
N_2 = the total number of scores in the control group

To make decision whether the null hypothesis is rejected or accepted or the alternative hypothesis is accepted or rejected, the t-test obtained is compared to t-table at p=0.05 level of significance of two-tailed test where df= $N_1 + N_2$ - 2 following criteria:
- If *t*-table >t (t-obtained), so the null hypothesis is accepted and the alternative is rejected.
- If *t*-table <t (t-obtained), so the null hypothesis is rejected and the alternative is accepted.

LITERATURE REVIEW

To avoid a big problem and helped the researcher to focus on the research, the researcher needs to clarify and explains some of the term as follows:

Reading

Reading is one of the fundamental skills of English, this is categorized as an input talent. It means whilst humans read something they will get statistics or information from it. Rudell states that (2007, p.31) when transacting with texts, reading is an activity of seeking and constructing meaning. Through a combination of prior knowledge and experience, the reader will acquire the information available in the text, which then takes a stand in relation to the text; and immediate, remembered, or anticipated social interactions and communications.

Explanation Text

Explanation text is one of the parts of texts that deals with something happen that elaborate about how and why a phenomenon or event happened in scientific and technical terms. Explanation text according to Anderson and Anderson (1997, p.80) is a type of clarifying content that explains how or why something happens. It takes a gander on means, not things. The purpose of the explanation text is to tell each progress of the procedure and give reasons.

Clustering Technique

Clustering according to Lunsford (2010, p.57) is a technique used by writers prior to writing to generate ideas using a visual schema or chart. Clustering is also a creative activity because when someone does this technique, he or she will try to find things related to the topic using a visual schema or chart. It is helpful to understand the relationships between parts of a broad topic and to develop subtopics. Maya & Ayuni (2020, p. 10) states that by using clustering technique, the students can easily find ideas.

FINDINGS

This research used a quasi-experimental method to achieve the goal. The data was collected from conducting pre test and post test with two different classes employed two different teaching techniques: the experimental class with 20 sample of students and control class also with 20 sample of students.

Pre - Test

       The pre test was used to know the students' score at the beginning of the study for research data and for knowing the students' knowledge before giving the treatment. The pre test contained reading test and the students were assigned to do the test by answering twenty questions of explanation text in form of multiple choice and true or false with the text entitled 'Recycling'. When the pre test held, some of students looked seriously but almost all of them looked confused.

       The formula to calculate the pre test score:

$$\text{Score} = \frac{total\ of\ correct\ answer}{2} \text{ x } 10$$

       The data of pre test is shown in the following table:

No	Experimental Group		Control Group	
	Sample	X_1	Sample	X_2
1	Students 1	65	Students 1	50
2	Students 2	50	Students 2	60
3	Students 3	60	Students 3	40
4	Students 4	65	Students 4	35
5	Students 5	50	Students 5	60
6	Students 6	45	Students 6	65
7	Students 7	50	Students 7	60
8	Students 8	70	Students 8	65
9	Students 9	45	Students 9	55
10	Students 10	70	Students 10	50
11	Students 11	45	Students 11	50
12	Students 12	50	Students 12	40

13	Students 13	60	Students 13	60
14	Students 14	55	Students 14	50
15	Students 15	65	Students 15	60
16	Students 16	45	Students 16	65
17	Students 17	65	Students 17	60
18	Students 18	50	Students 18	50
19	Students 19	70	Students 19	50
20	Students 20	65	Students 20	55
$\overline{X_1} = \frac{\Sigma X1}{N_1} = \frac{1140}{20} = 57$			$\overline{X_2} = \frac{\Sigma X2}{N_2} = \frac{1080}{20} = 54$	

Table the students' pre test score

Notes :

$\overline{X_1}$ = the mean of the scores of the experiment group

$\overline{X_2}$ = the mean of the scores of the control group

From the table above, the highest score of the experimental group in pre test was 70 which was got by three students and lowest score is 45 which was got by four students. While the highest score of the control group in pre test was 65 which was got by three students and lowest score is 35 which was got by one students. The mean score of the experimental group was 57 and control group was 54. In the other hand it can be said that the study had not reached the minimal standard criteria of the students' reading ability based on the KKM in SMA Al Qonaah Baleendah. So it means that the students reading skill of explanation text is needed to be improved. Therefore, the researcher gave the treatment using clustering technique for experimental group and conventional method for control group.

The Computation Process of the Pre-Test Data

After getting the data, the researcher calculated the students' pre test scores by using t-test formula. To make the calculation easier, the data scores of pre test was tabulated and arranged in the following table:

No	Experimental Group			Control Group		
	Sample	X_1	$X_1{}^2$	Sample	X_2	$X_2{}^2$
1	Students 1	65	4225	Students 1	50	2500
2	Students 2	50	2500	Students 2	60	3600

3	Students 3	60	3600	Students 3	40	1600
4	Students 4	65	4225	Students 4	35	1225
5	Students 5	50	2500	Students 5	60	3600
6	Students 6	45	2025	Students 6	65	4225
7	Students 7	50	2500	Students 7	60	3600
8	Students 8	70	4900	Students 8	65	4225
9	Students 9	45	2025	Students 9	55	3025
10	Students 10	70	4900	Students 10	50	2500
11	Students 11	45	2025	Students 11	50	2500
12	Students 12	50	2500	Students 12	40	1600
13	Students 13	60	3600	Students 13	60	3600
14	Students 14	55	3025	Students 14	50	2500
15	Students 15	65	4225	Students 15	60	3600
16	Students 16	45	2025	Students 16	65	4225
17	Students 17	65	4225	Students 17	60	3600
18	Students 18	50	2500	Students 18	50	2500
19	Students 19	70	4900	Students 19	50	2500
20	Students 20	65	4225	Students 20	55	3025
	Σ	$\Sigma X_1 = 1140$	$\Sigma X_1{}^2 = 66650$	Σ	$\Sigma X_2 = 1080$	$\Sigma X_2{}^2 = 59750$

Table the computation of students' pre test score

Notes :

$\overline{X_1}$ = the mean of the scores of the experiment group

$\overline{X_2}$ = the mean of the scores of the control group

$\Sigma X_1{}^2$ = the sum of the squares of the experiment group

$\Sigma X_2{}^2$ = the sum of the squares of the control group

$(\Sigma x_1)^2$ = the square of the sum of the scores of the experiment group

$(\Sigma x_2)^2$ = the square of the sum of the scores of the control group
N_1 = the total number of scores in the experiment group
N_2 = the total number of scores in the control group

From the data above, the researcher did some steps to compute the data using t-test formula, the steps are:

Step 1 : Calculate the $\overline{X_1}$ (the sum of mean of experimental group)

$\overline{X_1} = \dfrac{\Sigma X1}{N_1}$

$\overline{X_1} = \dfrac{1140}{20}$

$\overline{X_1} = 57$

Step 2 : Calculate the $\overline{X_2}$ (the sum of mean of control group)

$\overline{X_2} = \dfrac{\Sigma X2}{N_1}$

$\overline{X_2} = \dfrac{1080}{20}$

$\overline{X_2} = 54$

Step 3 : Calculate the $\Sigma X_1{}^2$ (the sum of square of experimental group)

$\Sigma X_1{}^2 = 66650$

Step 4 : Calculate the $\Sigma X_2{}^2$ (the sum of square of control group)

$\Sigma X_2{}^2 = 59750$

Step 5 : Calculate the $(\Sigma X_1)^2$ (the square of sum of the score of experimental group)

$(\Sigma X_1)^2 = 1140^2$

$(\Sigma X_1)^2 = 1299600$

Step 6 : Calculate the $(\Sigma X_2)^2$ (the square of sum of the score of control group)

$(\Sigma X_2)^2 = 1080^2$

$(\Sigma X_2)^2 = 1166400$

Step 7 : Calculate Df (sum the number of experimental and control group)

$N_1 = 20$

$N_2 = 20$

$Df = N_1 + N_2 - 2$

$Df = 20 + 20 - 2 = 38$

Step 8 : Enter the values obtained in steps 1 – 7 into the formula for the t test

$$t = \dfrac{\overline{X_1} - \overline{X_2}}{\sqrt{\left(\dfrac{\Sigma X1^2 - \frac{(\Sigma x_1)^2}{N_1} + \Sigma X2^2 - \frac{(\Sigma x_2)^2}{N_2}}{N_1 + N_2 - 2}\right) \cdot \left(\frac{1}{N_1} + \frac{1}{N_2}\right)}}$$

$$t = \dfrac{57 - 54}{\sqrt{\left(\dfrac{66650 - \frac{1299600}{20} + 59750 - \frac{1166400}{20}}{20 + 20 - 2}\right) \cdot \left(\frac{1}{20} + \frac{1}{20}\right)}}$$

$$t = \dfrac{3}{\sqrt{\left(\dfrac{66650 - 64980 + 59750 - 58320}{38}\right) \cdot \frac{1}{10}}}$$

$$t = \dfrac{3}{\sqrt{\left(\dfrac{1670 + 1430}{38}\right) \cdot \frac{1}{10}}}$$

$$t = \dfrac{3}{\sqrt{\left(\dfrac{3100}{38}\right) \cdot \frac{1}{10}}}$$

$$t = \dfrac{3}{\sqrt{81.57 \cdot \frac{1}{10}}} = \dfrac{3}{\sqrt{8.15}} = \dfrac{3}{2.85} = 1.052$$

T-test value = 1.052

Step 9 : Interpret the result of computation

From the calculation above, the researcher obtains the t-test value is 1.052, where t-table at p = 0.05 with $Df = N_1 + N_2 - 2 = 20 + 20 - 2 = 38$ at the level of significance 1.052 for two tailed is 2.021. Then the researcher can observe that the t-test is lower than t-table (1052 < 2.021), this means that there is no significance difference between experimental and control group at the beginning of the study or before the treatments were given. Then the researcher may take the next step for giving the treatment for the experimental group.

Post-Test

The post test is carried out after the students in the experimental and control class do the treatment. The instrument of post test were different from pre test but used the same type. It contained reading test with the text entitled 'Chocolate' and the students were assigned to do the test by answering twenty questions of explanation text in form of multiple choice and true or false with clustering section for experimental group and without clustering section for control group.

The formula to calculate the post test score:

$$\text{Score} = \frac{total\ of\ correct\ answer}{2} \times 10$$

The table below is the data scores which collected by the researcher and shown in the following table.

No	Experimental Group		Control Group	
	Sample	X_1	Sample	X_2
1	Students 1	75	Students 1	60
2	Students 2	85	Students 2	65
3	Students 3	65	Students 3	60
4	Students 4	60	Students 4	60
5	Students 5	70	Students 5	80
6	Students 6	60	Students 6	70
7	Students 7	75	Students 7	65
8	Students 8	85	Students 8	65

No	Sample	Score	Sample	Score
9	Students 9	75	Students 9	70
10	Students 10	70	Students 10	70
11	Students 11	85	Students 11	75
12	Students 12	70	Students 12	60
13	Students 13	70	Students 13	60
14	Students 14	80	Students 14	75
15	Students 15	85	Students 15	60
16	Students 16	80	Students 16	50
17	Students 17	70	Students 17	60
18	Students 18	70	Students 18	80
19	Students 19	80	Students 19	70
20	Students 20	70	Students 20	65
	$\overline{X_1} = \frac{\Sigma X1}{N_1} = \frac{1480}{20} = 74$		$\overline{X_2} = \frac{\Sigma X2}{N_2} = \frac{1320}{20} = 66$	

Table the students' post test score

Notes :

$\overline{X_1}$ = the mean of the scores of the experiment group

$\overline{X_2}$ = the mean of the scores of the control group

From the table above, the highest score of the experimental group in post test was 85 which was got by four students and lowest score is 60 which was got by two students. While the highest score of the control group in post test was 80 which was got by two students and lowest score is 50 which was got by one students. The mean score of the experimental group was 74 and control group was 66. On the other hand, it can be said that the students can understand and answer the question well because the means score of both of them is improved and reached the minimal standar criteria. It was the evidence of the success of treatments which the researcher done.

The Computation Process of the Post-Test Data

To make the calculation easier, the data scores of post test was tabulated and arranged in the following table:

No	Experimental Group			Control Group		
	Sample	X_1	X_1^2	**Sample**	X_2	X_2^2

No		Experiment			Control	
1	Students 1	75	5625	Students 1	60	3600
2	Students 2	85	7225	Students 2	65	4225
3	Students 3	65	4225	Students 3	60	3600
4	Students 4	60	3600	Students 4	60	3600
5	Students 5	70	4900	Students 5	80	6400
6	Students 6	60	3600	Students 6	70	4900
7	Students 7	75	5625	Students 7	65	4225
8	Students 8	85	7225	Students 8	65	4225
9	Students 9	75	5625	Students 9	70	4900
10	Students 10	70	4900	Students 10	70	4900
11	Students 11	85	7225	Students 11	75	5625
12	Students 12	70	4900	Students 12	60	3600
13	Students 13	70	4900	Students 13	60	3600
14	Students 14	80	6400	Students 14	75	5625
15	Students 15	85	7225	Students 15	60	3600
16	Students 16	80	6400	Students 16	50	2500
17	Students 17	70	4900	Students 17	60	3600
18	Students 18	70	4900	Students 18	80	6400
19	Students 19	80	6400	Students 19	70	4900
20	Students 20	70	4900	Students 20	65	4225
	Σ	$\Sigma X_1 =$ 1480	$\Sigma X_1^2 =$ 110700	Σ	$\Sigma X_2 =$ 1320	$\Sigma X_2^2 =$ 88250

Table the computation of students' post test score

Notes :

$\overline{X_1}$ = the mean of the scores of the experiment group

$\overline{X_2}$ = the mean of the scores of the control group

ΣX_1^2 = the sum of the squares of the experiment group
ΣX_2^2 = the sum of the squares of the control group
$(\Sigma x_1)^2$ = the square of the sum of the scores of the experiment group
$(\Sigma x_2)^2$ = the square of the sum of the scores of the control group
N_1 = the total number of scores in the experiment group
N_2 = the total number of scores in the control group

From the data above, the researcher did some steps to compute the data using t-test formula, the steps are:

Step 1 : Calculate the $\overline{X_1}$ (the sum of mean of experimental group)

$$\overline{X_1} = \frac{\Sigma X1}{N_1}$$

$$\overline{X_1} = \frac{1480}{20}$$

$$\overline{X_1} = 74$$

Step 2 : Calculate the $\overline{X_2}$ (the sum of mean of control group)

$$\overline{X_2} = \frac{\Sigma X2}{N_1}$$

$$\overline{X_2} = \frac{1320}{20}$$

$$\overline{X_2} = 66$$

Step 3 : Calculate the ΣX_1^2 (the sum of square of experimental group)

ΣX_1^2 = 110700

Step 4 : Calculate the ΣX_2^2 (the sum of square of control group)

ΣX_2^2 = 88250

Step 5 : Calculate the $(\Sigma X_1)^2$ (the square of sum of the score of experimental group)

$(\Sigma X_1)^2 = 1480^2$

$(\Sigma X_1)^2 = 2190400$

Step 6 : Calculate the $(\Sigma X_2)^2$ (the square of sum of the score of control group)

$(\Sigma X_2)^2 = 1320^2$

$(\Sigma X_2)^2 = 1742400$

Step 7 : Calculate *Df* (sum the number of experimental and control group)

N_1 = 20
N_2 = 20
Df = $N_1 + N_2 - 2$
Df = 20 + 20 − 2 = 38

Step 8 : Enter the values obtained in steps 1 − 7 into the formula for the t test

$$t = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{\left(\frac{\Sigma X1^2 - \frac{(\Sigma x_1)^2}{N_1} + \Sigma X2^2 - \frac{(\Sigma x_2)^2}{N_2}}{N_{1} + N_2 - 2}\right) \cdot \left(\frac{1}{N_1} + \frac{1}{N_2}\right)}}$$

$$t = \frac{74 - 66}{\sqrt{\left(\frac{110700 - \frac{2190400}{20} + 88250 - \frac{1742400}{20}}{20 + 20 - 2}\right) \cdot \left(\frac{1}{20} + \frac{1}{20}\right)}}$$

$$t = \frac{8}{\sqrt{\left(\frac{110700 - 109520 + 88250 - 87120}{38}\right) \cdot \frac{1}{10}}}$$

$$t = \frac{8}{\sqrt{\left(\frac{1180 + 1130}{38}\right) \cdot \frac{1}{10}}}$$

$$t = \frac{8}{\sqrt{\left(\frac{2310}{38}\right) \cdot \frac{1}{10}}}$$

$$t = \frac{8}{\sqrt{60.78 \cdot \frac{1}{10}}} = \frac{8}{\sqrt{6.07}} = \frac{8}{2.46} = 3.252$$

T-test value = 3.252

Step 9 : Interpret the result of computation

With the degree of freedom / $Df = N_1 + N_2 - 2 = 20 + 20 - 2 = 38$ at p = 0.05 of two tailed, the critical value of t is 2.021. As the value of t is bigger than that of the t-table (3.252 > 2.021), the Null Hypothesis (Ho) is rejected and the Alternative Hypothesis (Ha) is accepted, stating that there is significant difference in result between clustering technique and the conventional method in reading comprehension to the twelve grade of SMA Al Qona'ah Baleendah. This means that clustering technique as means of teaching reading explanation text to twelve grade of senior high school has significantly better result than conventional method. On the other hand, the clustering technique can improve students' ability in reading explanation text. This also means that this technique is effective.

Based on the result of data analysis of post test that there was significant difference between experimental and control group after the treatment are given. It means that in the same levels of both class, the treatments by using clustering technique is success. It can be seen from the average score that the experimental score was bigger (74) than control group (66)

DISCUSSION

The research investigated the effectiveness of clustering technique towards students' reading comprehension of explanation text. After the treatments done, the result of the study showed the score of experimental group increased. It can be seen the mean of experimental group was 74 and control group was 66. The t-test both groups was 3.252. The degree of freedom (Df) was 38 and the table of critical – t that is got from 38 and 0.05 level of significance was 2.021.

After got the result by did some tests to the students both to experimental and control group, the research showed teaching reading explanation text by using clustering technique improve students' reading comprehension. It means that the alternative hyphotheses (Ha) that said 'there is significant difference in result between clustering technique and the conventional method in reading comprehension to the twelve grade of SMA Al Qona'ah Baleendah' is accepted and the null hypotheses (Ho) is rejected. It can be concluded that the clustering technique as means of reading comprehension to the twelve grade of SMA Al Qona'ah Baleendah have significantly better results than the conventional method.

It also means that teaching reading of explanation text using clustering technique is effective to enhance students reading comprehension on explanation text to the twelve grade of SMA Al Qona'ah Baleendah. This is supported by evidence from statistical calculation

CONCLUSION

This research is concerned with the implementation of reading on explanation text through the clustering technique to students of twelve grade of senior high school. The aims of the research stated in the first chapter was to find out whether or not the clustering technique is effective to improve students' reading comprehension of the explanation text in SMA Al Qona'ah Baleendah. In this research pre test, treatment, and post test are administrated to the experimental and the control group to collected the data.

Based on the data that has been collected and analyzed, the result of the research showed that the students who taught by using the clustering technique get a higher score than the students who taught by using conventional method. Therefore, the alternative hypotheses (Ha) is accepted, stating that there is significant difference in result between clustering technique and the conventional method in reading comprehension to the twelve grade of SMA Al Qona'ah Baleendah and the null hypotheses (Ho) is rejected.

This means that the clustering technique as means of reading comprehension to the twelve grade of SMA Al Qona'ah Baleendah have significantly better results than the conventional method. It also means that the implementation of the clustering technique in improving students' reading comprehension on explanation text is effective.

BIBLIOGRAPHY

Anderson, M and Kathy, A. 2005. *Text Types in English*. South Yarra: Macmillan.

Arikunto, S. 2006. *Prosedur Penelitian Suatu Pendekatan Praktik.* Jakarta : Rineka Cipta.

Caroline T. Linse. 2005. *Practical English Language Teaching: Young Learners.* New York: McGraw-Hill Companies.

Hatch and Lazaraton. 1991. *The Research Manual Design and Statistics for Applied Linguistics.* Boston: Heinle.

Lunsford, A. A. 2010. *The St. Martin's Handbook*. Bedford: St. Martin's.

Puspitasari, M., & Ayuni. (2020). Using clustering technique to improve students' writing skills of descriptive text. *Elang An English Language Education   Journal*, 1-11.

Rahayu, Y. S., & Susilawati, S. (2019). Teaching Spoken Descriptive By Using Cue Cards. *An English Language Education Journal*, 43.

Ruddell, M Rapp. (2005). *Teaching Content Reading and Writing*. America: John Willey & Sons, Inc.