Jurnal Kolaboratif Sains **Artikel 6**
ISSN 2623-2022 Volume 04, Nomor 08, Agustus 2021

Improving Reading Comprehension of the Grade Viii Students of SMPN 14 Palu Through Scanning Technique

Meningkatkan Pemahaman Membaca Siswa Kelas VIII SMPN 14 Palu Melalui Tekhnik Memindai

[1]Indah Permatasari, [2]Nur Sehang Thmarin, [3]Fikriani A. Omolu
[1,2,3]Language and Art Education Department, Teacher Training and Education Faculty, Muhammadiyah University
(*)Email Korespondensi: indahpermatasari05022@gmail.com)

Abstract
This research aims at improving students' reading comprehension in English lesson by using scanning technique. This research is design as a quasi-experimental research. Population of this research was grade VIII students of SMPN 14 Palu and sample was 56 students that consist of 28 students from Cut Nyak Dien class and 28 students from Hasanudin class. The sample was taken by applying purposive sampling technique. Students from Cut Nyak Dien class are classified into experimental group, while Hasanudin class' students are into control group. Research findings show that the t-counted was 3.268. By using level of significance 0.05 and the degree of freedom was 54, the t-table found is 2.015. This result indicates the t-counted value was higher than the t-table value. It means that the research hypothesis is accepted. In other words, the application of the scanning technique can effectively improve students' reading comprehension.

Keywords: *Improving; Reading Comprehension; Scanning Technique*

Abstrak
Penelitian ini bertujuan untuk meningkatkan pemahaman membaca siswa dalam pelajaran bahasa Inggris dengan menggunakan teknik Scanning. Penelitian ini dirancang sebagai penelitian eksperimental semu. Populasi penelitian ini adalah siswa kelas VIII SMPN 14 Palu dan sampel adalah 56 siswa yang terdiri dari 28 siswa dari kelas Cut Nyak Dien dan 28 siswa dari kelas Hasanudin. Sampel diambil menggunakan teknik purposive sampling. Siswa dari kelas Cut Nyak Dien diklasifikasikan ke dalam kelompok eksperimen, sedangkan siswa kelas Hasanudin ke dalam kelompok kontrol. Temuan penelitian menunjukkan bahwa t-hitung adalah 3,268. Dengan menggunakan tingkat signifikansi 0,05 dan tingkat kebebasan adalah 54, t-tabel yang ditemukan adalah 2,015. Hasil ini menunjukkan nilai t-hitung lebih tinggi dari nilai t-tabel. Ini berarti hipotesis penelitian diterima. Dengan kata lain, penerapan teknik pemindaian dapat secara efektif meningkatkan pemahaman membaca siswa.

Kata kunci: Peningkatan; Pemahaman Membaca; Teknik Scanning

INTRODUCTION

Reading is one of the languages skills learned by students to get information from many sources. For the students of Junior High Schools, reading many kinds of English books may increase their knowledge. By reading, the students can find out new ideas, concept, facts, experiences and attitudes.

The importance of reading is to understand the information of the text in any media as stated in curriculum 2013. Comprehending reading text is an important skill that has to be mastered by the students because most of the material of English subject using reading passages. In Indonesia, the content of National final Examination is mostly taken from reading text materials. That is why the students have to understand what the content of the materials is. In comprehending reading, the students must master many vocabularies, so they can easily comprehend the text.

In reading comprehension, the message imposed in the written form is the most important element that the students must recognize, because the primary purpose of reading is to know the thoughts expressed in the printed material. Therefore, reading comprehension is only a way of the students to arrive what they want to know from the reading text. However, the problem of reading is how the students comprehend the task or catch messages from the reading text. The most striking problems faced by the students in reading material are they get difficulties to identify the main idea and locate the specific information contained on the passages.

During the preliminary observation at SMPN 14 Palu, the researcher found some problems faced by the students regarding reading skill. First, the students were not able to comprehend the text because they had limited vocabulary. Second, the students had lack of motivation because reading activity made them feel bored and sleepy; they tended to discuss another topic instead of reading the materials. Last, the students kept silent when the teacher asked them to identify the information that was contained in the passages. For example, the students could not answer question, "where does the story take place?" Based on the problems, the researcher realizes that the students needed technique which makes them more interested in reading materials.

The researcher tries to propose scanning technique to solve reading problems explained previously. Scanning technique helps the students to comprehend the text they read. It is a technique of reading to find out specific information quickly. To scan a reading text, reader should start at the top of the page and then move your eyes quickly toward the bottom. Generally, scanning is a technique that is helpful when you are looking for the answer of questions using "WH" namely *who, what, where, when, why* and *how*. For example, "who" is a question used when students want to know characters of a text, or "where" is a question used when the students want to find out places in text. The students do not need to read the whole sentences in the text instead they just scan the name of a person or a place in the text. Using this technique, the researcher does the treatment to solve the reading problem of grade VIII students of SMPN 14 Palu.

METHOD

In this research, the researcher employed a quasi-experimental research design that involves two groups namely the experimental group and control one. The researcher administered tests (pre-test and post-test) to both groups. The pre-test was administered to know students' prior knowledge. Then, the researcher treated the experimental one in six meetings using the scanning technique. After conducting the treatment, the students were tested again using a post-test. The design of this research is adopted from Sugiyono (2010:112) as follows:

O1 = Pre-test
O2 = Post-test
X = The treatment that the researcher gave to the experimental group by using Scanning technique.

The population of this research was the entire grade VIII of SMPN 14 Palu. The grade VIII was consisting of five classes.

Table 1. Quasi-Experimental Design

Group	PPre-test	Treatment	Post-test
Experimental	O_1	X	O_1
Control	O_2		O2

Table1, the total population of grade VIII is 141 students. In this research, the researcher selected the sample by using a purposive sampling technique. The researcher determined two groups as the sample. The groups selected were the experimental group and the control group. Cut Nyak Dien class became an experimental group and Hasanudin class became a control group. The researcher chose these classes because the researcher got information from the English teacher that almost all of the students in the two groups were still low in reading comprehension.

FINDINGS

Result of Pre-Test

The researcher presents the scores of two groups. This pretest results became the basic information of students' comprehension in reading before any treatment. The result of pre-test is presenting in the following tables:

Table 2. Pre-test Score of the Experimental Group (N=28)

Nu.	Initials	Individual Scores
1	ATH	68.2
2	AHA	63.6
3	AAS	63.6
4	AR	77.3
5	DP	59.1
6	DHP	77.3
7	DL	68.2
8	DAW	72.7
9	FMD	54.5
10	HD	72.7
11	Y	68.2
12	IRS	72.7
13	I	59.1
14	K	81.8
15	KH	59.1
16	RZA	63.6
17	C	54.5
18	MF	77.3
19	MH	63.6
20	MRR	63.6
21	MR	72.7
22	N	63.6
23	NR	54.5
24	NN	59.1
25	NAF	72.7
26	RR	63.6
27	RRY	72.7
28	RPN	54.5
	TOTAL	**1854.1**
	AVERAGE	**66.22**

Table 2 presents the result of students' score of pre-test in experimental group. The researcher found 18 students got scores under standard minimum score (70) of the junior high school and 10 students got scores above the standard. Then, the researcher computed the students' mean score using the following formula:

$M=\frac{\sum x}{N}=\frac{1854}{28}=66.22$

Thus, the mean score of the experimental class' pretest is 66.2. This score is then compared to the result of the control group.

The control group also followed the posttest. The results of the students' posttest in control group are listed in the following table:

Table 3. The Pre-test Score of the Control Group (N=28)

Nu.	Initials	Individual Scores
1	PA	63.6
2	AM	72.7
3	NNH	59.1
4	NF	63.6
5	NM	72.7
6	F	59.1
7	M	59.1
8	STD	72.7
9	R	63.6
10	N	63.6
11	I	68.2
12	PS	72.7
13	P	63.6
14	A	72.7
15	RT	59.1
16	RH	59.1
17	MRH	63.6
18	A	72.7
19	AY	81.8
20	RI	72.7
21	RA	63.6
22	PR	59.1
23	SN	54.5
24	RD	81.2
25	RJ	59.1
26	AA	68.2
27	Y	72.7
28	E	68.2
TOTAL		**1862.6**
AVERAGE		**66.52**

Table 2 indicates that there were 18 students who got scores under standard minimum score and others got good scores. Then, the researcher calculated the students mean score by using the following formula; $M=\frac{\sum X}{N}=\frac{1862.6}{28}=$ 66.52. This result is slightly different from the experimental group average score.

Result of the Post-Test

The post-test was given to the experimental and the control group. It aims to find out the difference in students' scores after teaching using the scanning technique and conventional technique. The data is presented in the following table:

Table 3. Post-test Score of the Experimental Group (N=28)

Nu.	Initials	Individual Scores
1	ATH	81.8
2	AHA	72.7
3	AAS	77.3
4	AR	90.9
5	DP	81.8
6	DHP	86.4
7	DL	95.4
8	DAW	63.6
9	FMD	63.6
10	HD	90.9

11	Y	77.3
12	IRS	81.8
13	I	72.7
14	K	95.4
15	KH	63.6
16	RZA	72.7
17	C	63.6
18	MF	90.9
19	MH	77.3
20	MRR	86.4
21	MR	68.2
22	N	77.3
23	NR	81.8
24	NN	72.7
25	NAF	81.8
26	RR	59.1
27	RRY	90.9
28	RPN	68.2
	TOTAL	**2186.1**
	AVERAGE	**78.07**

Table 3, the researcher found that 20 students get high scores and 8 students got scores under minimum standard. Then, the researcher calculated the students' mean score using the following formula; $M=\frac{\sum X}{N}=\frac{2186.1}{28}=$ 78.07. Having this score, it could be said that there is an improvement in students' score after getting treatment.

Next, the table 4 below presents the score of control group. This table shows the students' scores after being taught using other technique. It presents as follows:

Table 4. Post-test Score of the Control Group (N=28)

Nu.	**Initials**	**Individual Scores**
1	PA	81.8
2	AM	90.9
3	NNH	72.7
4	NF	68.2
5	NM	81.8
6	F	68.2
7	M	63.6
8	STD	95.4
9	R	72.7
10	N	68.2
11	I	50
12	PS	68.2
13	P	59.1
14	A	63.6
15	RT	63.6
16	RH	63.6
17	MRH	72.7
18	A	63.6
19	AY	68.2
20	RI	81.8
21	RA	77.3
22	PR	63.6
23	SN	63.6
24	RD	72.7
25	RJ	72.7
26	AA	77.3
27	Y	54.5

28	E	72.7
	TOTAL	**1972.3**
	AVERAGE	**70.43**

Table 4 indicates that 13 students got high scores and 15 students obtained scores under the minimum standard. Then, the researcher calculated the students mean score by using the following formula; M=$\frac{\sum X}{N}$ =$\frac{1972.3}{28}$= 70.43. Getting this result, it can be stated that there is also an improvement in the pre-test and in post-test results of the control group.

In order to find out the significant difference between experimental group and control group, the researcher presents both of the results in the following table:

Table 5. Students' Score Deviation of the Experimental Group (N=28)

Nu.	Initials	Students' Score		Deviation	Square Deviations
		Pre-test	Post-Test	X2 - X1	X2
1	ATH	68.2	81.8	13.6	184.96
2	AHA	63.6	72.7	9.1	82.81
3	AAS	63.6	77.3	13.7	187.69
4	AR	77.3	90.9	13.6	184.96
5	DP	59.1	81.8	22.7	515.29
6	DHP	77.3	86.4	9.1	82.81
7	DL	68.2	95.4	13.6	184.96
8	DAW	72.7	63.6	-9.1	82.81
9	FMD	54.5	63.6	9.1	82.81
10	HD	72.7	90.9	18.2	331.24
11	Y	68.2	77.3	9.1	82.81
12	IRS	72.7	81.8	9.1	82.81
13	I	59.1	72.7	13.6	184.96
14	K	81.8	95.4	13.6	184.96
15	KH	59.1	63.6	4.5	20.25
16	RZA	63.6	72.7	9.1	82.81
17	C	54.5	63.6	9.1	82.81
18	MF	77.3	90.9	13.6	184.96
19	MH	63.6	77.3	13.7	187.69
20	MRR	63.6	86.4	22.8	519.84
21	MR	72.7	68.2	-4.5	20.25
22	N	63.6	77.3	13.7	187.69
23	NR	54.5	81.8	13.6	184.96
24	NN	59.1	72.7	13.6	184.96
25	NAF	72.7	81.8	9.1	82.81
26	RR	63.6	59.1	-4.5	20.25
27	RRY	72.7	90.9	18.2	331.24
28	RPN	54.5	68.2	13.7	187.69
	TOTAL	**1854.1**	**2186.1**	**304.7**	**4734.09**

Table 5 shows the calculation of mean deviation score of experimental group. The researcher counted the mean deviation score using the folowing formula as follows:

$$Mx=\frac{\sum x}{N}=\frac{\mathbf{304.7}}{28}=10.88$$

Next, the researcher calculated the mean deviation score of control group. The result of deviation value is presented in the following Table 6 shows the result of mean deviation of the control group. Then, the researcher. counted the mean deviation score by using formula as follows: $My=\frac{\sum y}{N}=\frac{\mathbf{109.7}}{28}=3.92$

Table 6. Students' Score Deviation of the Control Group (N=28)

Nu.	Initials	Student's Score		Deviation	Square Deviations
		Pre-test	Post-Test	Y2 - Y1	Y2
1	PA	63.6	81.8	18.2	331.24
2	AM	72.7	90.9	18.2	331.24
3	NNH	59.1	72.7	13.6	184.96
4	NF	63.6	68.2	4.6	21.16
5	NM	72.7	81.8	9.1	82.81
6	F	59.1	68.2	9.1	82.81
7	M	59.1	63.6	4.5	20.25
8	STD	72.7	95.4	22.7	515.29
9	R	63.6	72.7	9.1	82.81
10	N	63.6	68.2	4.6	21.16
11	I	68.2	50	-18.2	331.24
12	PS	72.7	68.2	-4.5	20.25
13	P	63.6	59.1	-4.5	20.25
14	A	72.7	63.6	-9.1	82.81
15	RT	59.1	63.6	4.5	20.25
16	RH	59.1	63.6	4.5	20.25
17	MRH	63.6	72.7	9.1	82.81
18	A	72.7	63.6	-9.1	82.81
19	AY	81.8	68.2	-13.6	184.96
20	RI	72.7	81.8	9.1	82.81
21	RA	63.6	77.3	13.7	187.69
22	PR	59.1	63.6	4.5	20.25
23	SN	54.5	63.6	9.1	82.81
24	RD	81.2	72.7	-8.5	72.25
25	RJ	59.1	72.7	13.6	184.96
26	AA	68.2	77.3	9.1	82.81
27	Y	72.7	54.5	-18.2	331.24
28	E	68.2	72.7	4.5	20.25
TOTAL		**1862.6**	**1972.3**	**109.7**	**3584.43**

DISCUSSION

In this research, the researcher employed two groups during the teaching learning process. Subjects of the research consisted of 56 students, comes from Cut Nyak Dien and Hasanuddin class. The researcher decided Cut Nyak Dien class as the experimental group and Hasanuddin class as the control Group. Cut Nyak Dien class was given the treatment using scanning technique and Hasanuddin class was given with conventional technique. Then, the researcher administered two kinds of test for both groups, they are pre-test and post-test.

Based on the research finding, it shows that the mean scores of the pretest and posttest from the experimental and control group were different. Score of the control group did not reveal significant improvement. It could be seen from the mean score of the pretest was 66.52 and the mean score of posttest 70.43. There is only a slight difference between the two tests result. On the other hand, the students in the experimental group who were taught using scanning technique reveal significant improvement. It could be seen from the mean score of the pretest (66.62) and the mean score of the posttest (78.07). The students reading comprehension improved and the mean of the students' posttest score in the experimental group was bigger than the mean of students' scores in the control group (78.07 > 70.43). The result shows that the posttest result of the experimental group was better than the posttest result of the control group.

Scanning techniques can be one way of teaching English to develop reading comprehension. The students were happy when the researcher taught using the Scanning technique because they could find specific information in the reading text. However, it takes time to get them accustomed to this technique because this technique is new to them. Based on research, the difficulty in the reading was students having problem in classifying information contained in a text. When the researcher applied the scanning technique, students can reduce their difficulties in identifying text. The researcher taught

students by giving interesting topics that made them more active in class and worked together to find important information.

The use of scanning technique was proved effective in teaching reading. The students felt interested, they were fun, and enjoyable in learning reading when the researcher taught them. The scanning technique is very helpful for students during the teaching and learning process in class. Almost all students were enthusiastic when the researcher asked them to answer the clues during the learning teaching.

In applying the scanning technique, the researcher applied questions or clues which was who, where, when, what, why and how (5W + 1H). This can help the students to identify specific information in each text. Besides, researcher provided various topics in every meeting so the students do not get bored.

CONCLUSION AND SUGGESTION

The aim of this research is to find out whether the scanning technique is effective in teaching reading comprehension of grade VIII students of SMPN 14 Palu or not. The researcher found from the result of this research that there is a statistically significant effect of the Scanning technique on students' reading comprehension. It can be seen in the t-test formula. By t-test, the researcher could find a significant difference between two groups who taught by scanning technique and who taught by another technique. The t-test showed significantly different from the mean deviation square scores of the two groups namely the experimental group is 4615.69 while the control group is 3569.06. In other words, this research is effective to improve students' reading comprehension through scanning techniques.

The researcher gives some suggestions from the above conclusion as follows: first, the researcher suggests Scanning Technique to be used in English Teaching especially in reading texts; second, the English teacher should be more mindful of their students' situation if the teachers' technique or media used bores the students, the teacher must consider using other techniques.

REFERENCES

Departemen Pendidikan Nasional, (2017). *Kurikulum 2013 Mata Pelajaran Bahasa Inggris*: *Sekolah Menengah Pertama (SMP) Madrasah Tsanawiyah (MTs)*. Jakarta: Departemen Pendidikan Nasional.

Purnama, H.Y. (2012) The Effectiveness of The Use of Scanning Strategy to Improve Students Reading Achievement of the Second Year of Mts N Wonosegoro in the Academic Year 2011/2012. *Public Thesis*. Bandung: STAIN Salatiga.

Sugiyono. (2010). *Metode Penelitian Kuantitatif dan Kualitatif R&D*. Bandung: Alfabeta.

Thamrin, N.S. (2012). Scanning Technique In Developing Students Reading Comprehension. Jurnal Kreatif Vol 15 No.1.http://Jurnal.Untad.ac.id/jurnal/Index.php/kreatif/article/view/3117