

INCREASING VOCABULARY MASTERY OF THE SEVENTH GRADE STUDENTS THROUGH SNOWBALL THROWING

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Abstract

The purpose of conducting this research was to prove whether the students' vocabulary mastery can be increased by using snowball throwing technique or not. This research was true-experimental research design. The population of this research was the seventh grade students of SMP Negeri 1 Ampibabo. The researcher took the students in seventh grade by using random sampling technique. The data were collected by using pre-test and post-test. The pre-test was conducted to measure the students' vocabulary mastery before treatment, while the post-test was conducted to measure the students' vocabulary after treatment. The data obtained from the test were analyzed statistically. The result of the data analysis showed that there was a significant difference between the result of experimental group and control group. It is proved that the result of t-counted (2.30) is higher than t-table (2.034). It means that the alternative hypothesis (Ha) was accepted and the null hypothesis (Ho) was rejected. Hence, the use of Snowball throwing technique can increase vocabulary mastery of the seventh grade students at SMPN 1 Ampibabo.

Keywords: Snowball Throwing Technique; Vocabulary Mastery.

INTRODUCTION

Language is a mean of communication that people used to convey their ideas, opinions, thoughts, and feelings to each other. English is the first foreign language in Indonesia which is important to transfer and gain knowledge, science and technology, art and culture, and establish international relationships.

English has been learned by students of junior high schools for many years. They have learned language skills: reading, writing, speaking and listening. In addition, they also have learnt language components: vocabulary, pronunciation, and grammar to help them develop their language skills. For example, by having vocabulary and knowing tenses, it is easy for the students to comprehend reading or to write paragraphs. In the field of education, the goals of teaching English in Indonesia can be seen in the following:

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1. Memiliki kemampuan mengembangkan kompetensi berkomunikasi dalam bentuk lisan secara terbatas untuk mengiringi tindakan (language accompanying action) dalam konteks sekolah.
 2. Memiliki kesadaran tentang hakikat dan pentingnya bahasa Inggris untuk meningkatkan daya saing bangsa dalam masyarakat global.
 3. Mengembangkan pemahaman peserta didik tentang keterkaitan dengan budaya.
- (Kepmendiknas, 2006:22)

There are four language skills that students have to be acquired: listening, speaking, reading, and writing. To achieve these skills, the students have to master the language components: grammar, vocabulary, and pronunciation. In other words, these language components must go hand in hand to successfully achieve the language skills.

The lack mastery of one component can affect the students' performance of the language skills. For example, if the students have limited English words or vocabularies, for instance, the students will find a serious problem when speaking English. He/she cannot speak fluently because they do not have a lot of words. The more words or vocabularies he or she has the easier she minds, ideas, opinions or intentions through speaking or writing.

Vocabulary is one of the language components that have an important role to support the four basics language skills. Vocabulary is very important in order to make people easier to express their opinions and ideas in their communication with other people. Having limited vocabulary, the students will find many difficulties in mastering language skills.

Napa (1991:1) states, "The fact that vocabulary is the component of language and there is no language exists without words. Words are signs or symbols for ideas. They are the means by which people exchange their language. The more words we can learn, the more ideas we should have, so we can communicate the ideas more effectively".

Harmer (1991:153) states, "We must have something to say, we have meaning that we wish to express and need to have stock of word that can describe how you feel at this moment, you have to be able to find a word which reflects the complexity of your feeling". Birley and Lubis (1988:7) state "Effective communication is not about how many words you use, but about which words you select to use. You can only select the best words for the best occasions if you have a large vocabulary to draw from." Both states mean by having large vocabulary in the students' mind, they can choose which words they will use in their communication or in their ideas with various ways.

In fact, students in seventh grade at Junior High School have lack of vocabulary. They must have motivation to increase their vocabulary mastery. It is a task for the teacher

of English to solve their problem. The teacher is required to have an appropriate technique of teaching.

Snowball Throwing Learning Model is one technique of cooperative learning. This learning technique trains students to be more responsive to receive messages from other students in the form of snowballs made of paper, and conveys the message to his friend in a group. According to Bayor (2010 in Deni 2011:2) states, "Snowball Throwing is one of the active learning model which in practice involves a lot of students." The teacher's role here is only as giving guidance on the topic of early learning and subsequent demolition of the course of learning.

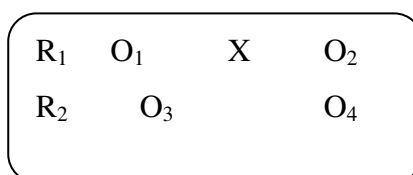
Snowball throwing is one of the techniques in cooperative learning. Because cooperative learning can be applied to almost any assignment in any curriculum for any learner, it means that we can apply snowball throwing for teaching vocabulary. Suprijono (1999) states, "learning environment and management system of cooperative learning for snowball throwing are provide opportunities for learning democracy, enhance the appreciation of students on academic learning and changing norms related to achievement, prepare students to learn about collaboration and social skills through active participation of learners in small groups, provide opportunities for active participation in the process of learning and learners in an interactive dialogue." Johnson (1989) States, "As an interaction model, cooperative learning endorses this general approach after receiving instruction from the facilitator, classes are organized into small group and given clear direction regarding expectations about outcomes and suggestions about group processes. The small group than work through the assignment until all group members successfully understand and complete it." Those states above explained how important and how effective the applying of cooperative learning in teaching English.

METHODOLOGY

In this research, the researcher used the true experimental research. There were two groups, control group and experimental group. Both groups got pre test and post test. The design that used is based on Best (1981:70) as follow:

Where :

- R₁ : experimental group
- R₂ : control group
- O₁O₃ : pre-test
- X : treatment
- O₂O₄ : post-test



Every research has population and sample. Best (1981:8) defines “Population is any group of individuals that have one or more characteristics in common that are of interest to the researchers”. The population of this research was the seventh grade students of SMP Negeri 1 Ampibabo. It consists of 6 parallel classes. Each class consists of 28-35 students. The total number of the population was 178.

The result of students’ score in pre test and post test were analyzed statically. To analyze the individual’s standard in pre-test and post test, the researcher used formula which is designed by Purwanto (1991:102) as follows:

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

Where:

- Np = individual score
- R = raw score
- SM = maximum score

Then, the researcher computed the mean score of experimental group and control group by using Arikunto’s formula (2006)

$$M = \frac{\sum x}{N}$$

Where:

- M = mean score
- $\sum X$ = number of students
- N = total score

After conducting the mean of pre test and post test, the researcher computed the mean score of the deviation the researcher used a formula proposed by Arikunto (2006):

$$\sum X^2 = \sum X^2 - \left(\frac{\sum X^2}{N}\right)$$

$$\sum Y^2 = \sum Y^2 - \left(\frac{\sum Y^2}{N}\right)$$

Where:

- $\sum X^2$ = the sum of deviation in experimental group
- $\sum Y^2$ = the sum of deviation control group
- N = number of students

Then, the researcher used t-test formula purposed by Arikunto (2006) as follows:

$$t = \frac{M_x - M_y}{\sqrt{\left(\frac{\sum X^2 + \sum Y^2}{N_x + N_y - 2}\right)\left(\frac{1}{N_x} + \frac{1}{N_y}\right)}}$$

Where:

M_x = mean score of experimental class

M_y = mean score of control class

X = sum of deviation in experimental class

y = sum of deviation in control class

N_x = number of students in experimental class

N_y = number of students in control class

The researcher knew the result of the hypothesis based on the analysis above. The researcher compared the result of t_{count} and t_{table} . If the t_{count} was higher than t_{table} , the researcher hypothesis accepted. It means that Snowball Throwing Technique can increase vocabulary of the seventh grade students in SMPN 1 Ampibabo. If the t_{count} was lower than t_{table} hypothesis of the research rejected. It means that Snowball Throwing Technique was not effective to increase students' vocabulary.

RESULT

The researcher conducted pre-test in experimental class on May 14th and in the control class on May 16th. It was intended to know the Students Ability before treatment. The result is showed below.

Table 1: The Result of Pre-Test in Experimental Group

No	Initial	Raw score			Total Score	Maximal score	Standard score
		MC	MW	JL			
1	ELM	5	3	1	9	30	30
2	AUR	6	6	2	14	30	46.66
3	IKB	4	6	1	11	30	36.66
4	IMW	3	4	1	8	30	26.66
5	QOV	5	6	2	12	30	40
6	MRS	3	5	1	9	30	30
7	DFR	4	4	1	9	30	30
8	ANS	0	1	0	1	30	3.33
9	ALY	3	7	0	10	30	33.33
10	DEB	5	7	2	14	30	46.66
11	LEX	5	7	1	13	30	43.33
12	FTR	6	4	0	10	30	33.33
13	DPP	2	2	0	4	30	13.33
14	YUL	3	5	2	10	30	33.33
15	MBD	1	3	0	4	30	13.33
16	IAS	5	7	3	15	30	16.66
17	NDH	6	5	3	14	30	46.66
18	VRN	5	5	1	11	30	36.66
19	HFZ	4	6	2	12	30	40
20	KRD	4	7	2	13	30	43.33
21	HDS	6	4	3	13	30	43.33
22	DZZ	4	5	0	9	30	30
23	RST	5	5	3	13	30	43.33
24	QNF	6	5	1	12	30	40
25	HDY	6	7	1	14	30	46.66
26	NES	6	6	3	15	30	50
27	RRD	4	6	4	14	30	46.66
Total					293	810	943.24

Table 2: The Result of Pre-test in Control Group

No	Initial	Raw Score			Total Score	Maximal Score	Standard Score
		MC	MW	JW			
1	NKI	4	3	0	7	30	23.33
2	FLD	2	2	0	4	30	13.33
3	FAT	3	4	0	7	30	23.33
4	YUL	9	9	3	21	30	70
5	NOV	4	6	1	11	30	36.66
6	SAF	1	3	0	4	30	13.33
7	MAK	4	5	0	9	30	30
8	STR	3	4	0	7	30	23.33
9	ISM	3	4	2	9	30	30
10	ADK	5	6	2	13	30	43.33
11	MUA	4	6	1	11	30	36.66
12	AMM	5	4	0	9	30	30
13	NRS	3	1	0	4	30	13.33
14	MAG	1	2	0	3	30	10
15	DIL	6	7	2	15	30	50
16	APR	2	2	0	4	30	13.33
17	ROB	4	6	1	11	30	36.33
18	FIR	2	3	0	5	30	16.66
19	YUN	4	6	2	12	30	40
20	FEL	2	2	0	4	30	13.33
21	RAS	3	3	0	6	30	20
22	EKP	5	5	1	11	30	36.66
23	MFR	0	1	0	1	30	3.33
24	BAY	5	6	0	11	30	20
25	RPK	4	4	1	9	30	20
26	DAR	5	6	1	12	30	40
27	NLL	5	5	0	10	30	33.33
28	ASR	4	5	0	9	30	30
Total					310	840	769.6

Having noted the pretest score, the researcher counted the mean score of the students by applying the mean scores and divided with the number of the students. The mean computation was as follow:

$$\begin{aligned}
 M_x &= \frac{\sum X}{N} & M_y &= \frac{\sum Y}{N} \\
 M_x &= \frac{943.24}{27} & M_y &= \frac{769.6}{28} \\
 M_x &= \mathbf{34.93} & M_y &= \mathbf{27.40}
 \end{aligned}$$

Post-test was given in experimental group on June 12th 2013 and the control group on June 14th 2013. It was given to know the students' ability after treatment. The result of the post-test was presented in the following table.

Table 3: The Result of Post-Test In Experimental Group

No	Initial	Raw Score			Total Score	Maximal score	Standard Score
		MC	MW	JW			
1	ELM	10	10	8	28	30	93.33
2	AUR	10	10	9	29	30	96.66
3	IKB	10	9	7	26	30	86.66
4	IMW	10	10	8	28	30	93.33
5	QOV	10	10	7	27	30	90
6	MRS	10	8	7	25	30	83.33
7	DFR	8	10	6	24	30	80
8	ANS	10	9	9	28	30	93.33
9	ALY	10	10	9	29	30	96.66
10	DEB	10	10	7	27	30	90
11	LEX	10	10	7	27	30	90
12	FTR	10	10	6	26	30	86.66
13	DPP	8	10	8	26	30	86.66
14	YUL	10	8	8	26	30	86.66
15	MBD	9	10	7	26	30	86.66
16	IAS	10	8	7	25	30	83.33
17	NDH	8	10	6	24	30	80
18	NRN	8	10	6	24	30	80
19	HFZ	10	8	6	24	30	80
20	KRD	10	10	7	27	30	90
21	HDS	10	9	7	26	30	86.66
22	DZZ	8	10	5	23	30	76.66
23	RST	10	9	7	26	30	86.66
24	QNF	10	10	6	26	30	86.66
25	HDY	10	9	9	28	30	93.33
26	NES	10	10	10	30	30	100
27	RRD	9	10	7	26	30	86.66
Total					711	810	2369.9

Table 4: The Result of Post-Test In Control Group

No	Initial	Raw Score			Total Score	Maximal score	Standard Score
		MC	MW	JL			
1	NKI	6	7	4	17	30	56.66
2	FLD	5	5	6	16	30	53.33
3	FAT	5	6	5	16	30	53.33
4	YUL	10	10	7	27	30	90
5	NOV	10	5	4	19	30	63.33
6	SAF	6	5	5	16	30	53.33
7	MAK	7	8	5	20	30	66.66
8	STR	6	7	5	18	30	60
9	ISM	4	5	5	14	30	46.66
10	ADK	8	8	4	20	30	66.66
11	MUA	5	5	5	15	30	50
12	AMM	5	5	6	16	30	53.33
13	NRS	5	7	5	17	30	56.66
14	MAG	5	5	6	16	30	53.33
15	DIL	8	6	5	19	30	63.33
16	APR	5	5	4	14	30	46.66
17	ROB	6	7	5	18	30	60
18	FIR	7	5	5	17	30	56.66
19	YUN	8	6	5	19	30	63.33
20	FEL	5	5	4	14	30	46.66
21	RAS	5	5	6	16	30	53.33
22	EKP	8	8	5	21	30	70
23	MFR	8	5	6	19	30	60
24	BAY	5	5	5	15	30	50
25	RPK	5	5	2	12	30	40
26	DAR	10	5	4	19	30	63.33
27	NLL	8	8	0	16	30	53.33
28	ASR	5	6	4	15	30	50
TOTAL					459	840	1599.9

After computing the students mean scores in pretest, the researcher computed the students mean scores in posttest. The formula design used was same as in the pretest.

$$\begin{aligned}
 M_x &= \frac{\sum X}{N} & M_y &= \frac{\sum Y}{N} \\
 M_x &= \frac{2343.23}{27} & M_y &= \frac{1529.9}{28} \\
 M_x &= \mathbf{86.78} & M_y &= \mathbf{54.63}
 \end{aligned}$$

The result of the computation obviously showed that there were significant differences between the students mean score in pre-test and post-test. The students mean score in pretest 51.35 was lower than the students mean score in posttest 86.78. It proved that the students' achievement in posttest or after treatment was greatly increased.

After calculating the mean score of the students of both pre-test and post-test, the researcher computed the deviation and square deviation of the students' scores in pre-test and post-test. The result was presented in the following table.

Table 5: Deviation Pre and Post Test Experimental Group

No	Initial	Post (X2)	Pre(X1)	X2 - X1 (X)	X.X
1	ELM	93.33	30	63.33	4010.6889
2	AUR	96.66	46.66	50	25000
3	IKB	86.66	36.66	50	25000
4	IMW	93.33	26.66	66.67	4444.8889
5	QOV	90	40	50	2500
6	MRS	83.33	30	53.33	2844.0889
7	DFR	80	30	50	2500
8	ANS	93.33	3.33	90	8100
9	ALY	96.66	33.33	63.33	4010.6889
10	DEB	90	46.66	43.34	1878.3556
11	LEX	90	43.33	46.67	2178.0889
12	FTR	86.66	33.33	53.33	2844.0889
13	DPP	86.66	13.33	73.33	5377.2889
14	YUL	73.33	33.33	40	1600
15	MBD	86.66	13.33	73.33	5377.2889
16	IAS	83.33	16.66	66.67	4444.8889
17	NDH	80	46.66	33.34	1111.5556
18	VRN	80	36.66	43.34	1878.3556
19	HFZ	80	40	40	1600
20	KRD	90	43.33	46.67	2178.0889
21	HDS	86.66	43.33	43.33	1877.4889
22	DZZ	76.66	30	46.66	2177.1556
23	RST	86.66	43.33	43.33	1877.4889
24	QNF	86.66	40	46.66	2177.1556
25	HDY	93.33	46.66	46.67	2178.0889
26	NES	100	50	50	2500
27	RRD	86.66	46.66	40	1600
TOTAL		2369.9	943.24	1413.3	123266

Table 6: Deviation Pre and Post Test in Control Group

No	Initial	Post (X2)	Pre (X1)	X2 - X1 (X)	X.X
1	NKI	56.66	23.33	33.33	1110.8889
2	FLD	53.33	13.33	40	1600
3	FAT	53.33	23.33	30	900
4	YUL	90	70	20	400
5	NOV	63.33	36.66	26.67	711.2889
6	SAF	53.33	13.33	40	1600
7	MAK	66.66	30	36.66	1343.9556
8	STR	60	23.33	36.67	1344.6889
9	ISM	46.66	30	16.66	277.556
10	ADK	66.66	43.33	23.33	544.2889
11	MUA	50	36.66	13.34	177.9556
12	AMM	53.33	30	23.33	544.2889
13	NRS	56.66	13.33	43.33	1877.6889
14	MAG	53.33	10	43.33	1877.4889
15	DIL	63.33	50	13.33	11.0889
16	APR	46.66	13.33	33.33	1110.8889
17	ROB	60	36.66	23.34	544.7556
18	FIR	56.66	16.66	40	1600
19	YUN	63.33	40	23.33	544.2889
20	FEL	46.66	13.33	33.33	1110.8889
21	RAS	53.33	20	33.33	1110.8889
22	EKP	70	36.66	33.34	1111.5556
23	MFR	60	3.33	56.67	3211.4889
24	BAY	50	20	30	900
25	RPK	40	20	20	400
26	DAR	63.33	40	23.33	544.2889
27	NLL	63.33	33.33	20	400
28	ASR	50	30	20	400
TOTAL		1599.9	769.6	829.8	27310

After having the result of deviation in experimental and control group, the researcher continued to calculate the mean deviation (*Md*) by using the formula as follows:

$$Md = \frac{\sum d}{N} \qquad Md = \frac{\sum d}{N}$$

$$Md = \frac{1413.3}{27} \qquad Md = \frac{829.8}{28}$$

$$Md = 52.34 \qquad Md = 29.63$$

The mean deviation in experimental group was 52.34 and the mean deviation in control group was 29.63

Before analyzing the data by using t-test formula, the researcher computed the sum of square deviation both experimental and control groups as in the following ways:

$$\begin{aligned}
 \sum x^2 &= \sum x^2 - \frac{(\sum x)^2}{n} \\
 &= 123266 - \frac{(1413.3)^2}{27} \\
 &= 123266 - \frac{1997417}{27} \\
 &= 123266 - 73978 \\
 \sum x^2 &= 49288 \\
 \sum y^2 &= \sum y^2 - \frac{(\sum y)^2}{n} \\
 &= 27310 - \frac{(829.8)^2}{28} \\
 &= 27310 - \frac{688568}{28} \\
 &= 27310 - 24592 \\
 \sum y^2 &= 2718
 \end{aligned}$$

As the result, the sum-squared deviation of experimental group is **49288** and the sum-squared deviation of control group is **2718**

After that, the researcher continued to find out the significant score of both groups by using t-test formula as follows:

$$\begin{aligned}
 t &= \frac{Mx - My}{\sqrt{\left(\frac{\sum x^2 + \sum y^2}{Nx + Ny - 2}\right)\left(\frac{1}{Nx} + \frac{1}{Ny}\right)}} \\
 t &= \frac{52.34 - 29.63}{\sqrt{\left(\frac{49288 + 24592}{27 + 28 - 2}\right)\left(\frac{1}{27} + \frac{1}{28}\right)}} \\
 t &= \frac{22.71}{\sqrt{\left(\frac{73880}{53}\right)\left(\frac{28}{756} + \frac{27}{756}\right)}} \\
 t &= \frac{22.71}{\sqrt{\left(\frac{73880}{53}\right)\left(\frac{55}{756}\right)}} \\
 t &= \frac{22.71}{\sqrt{(1393.96)(0.07)}}
 \end{aligned}$$

$$t = \frac{22.71}{\sqrt{(97.57)}}$$

$$t = \frac{22.71}{9.87}$$

$$t = 2.30$$

Finally, after analyzing the data, it shows that the result of t-counted is 2.30.

DISCUSSION

Related to the result of students' pre-test, none of the students passed the test. The standard score at SMP Negeri 1 Ampibabo was 75. Meanwhile, the highest score in pre-test was 50. It shows that, there were no students who passed the test. The percentage of students who got score lower than 75 was 100%.

Related to the result of students' pre-test, none of the students passed the test. The standard score at SMP Negeri 1 Ampibabo was 75. The result just one students got 50. It shows the students have serious problem in their vocabulary mastery that, there were no students who passed the test. The percentage of students who got score lower than 75 was 100%.

In pre-test, there was 1 student who got the highest score and 1 student got the lowest score. In doing the pre-test, the students did not understand well about the meaning of vocabulary that always happen and exist in their real life. Not only the meaning of vocabulary, but also they got difficult to pronounce and spell the words correctly. It was surprising because the students have ever learnt it when they were still at elementary school.

The researcher had 6 meetings in this research, it means there were 6 treatments that the students got. In first meeting, the students learned about how to found the new vocabulary in their daily needs and things around them. After that, they should divide it into verb, Adjective, or Noun. At meeting 5 and 6, They got the evaluation meeting, this meeting was more difficult then meeting 1-4, because they should found new vocabulary and make it into a sentence in good order.

After 6 treatments have been done, the researcher found the result of this research by giving the students posttest. The result of pretest in experimental class showed a progress value of the students' mean scores from (34.93) in the pre-test was increased to (86.78) in the post-test, also, The researcher found that t-counted was 2.30. Then, to find out the significant difference between the two groups, the writer compared the value of t-counted (2.30) with the (2.034) value of t-table. It shows that the value of t-counted is higher than the value of the t-table. In conclusion, it showed that the hypothesis of the research was

accepted and the Null hypothesis of the research was rejected. In short, Snowball throwing techniques is an effective way to increase the students' vocabulary mastery.

CONCLUSION AND SUGGESTIONS

The result of data analysis showed that the percentage of t_{counted} was higher than the t_{table} . By looking at the result, it can be said that there was a significant increasing in student achievement. It means that the application of Snowball throwing technique can increase the ability of the seventh grade students at SMP N 1 Ampibabo in vocabulary mastery. Thus, it can be concluded that the research question or problem statement was solved because the technique which was used by the researcher is effective.

Referring to the importance of vocabulary mastery in mastering a language, the researcher would like to offer some suggestions as follow that might be important for the improvement. First, students are expected to apply snowball throwing technique not only in the school but also outside the school by using group form so that their vocabulary can increase. Second, in class the teacher should construct a teaching learning activity which involves the students actively. The application of snowball throwing technique is one of the alternatives in teaching vocabulary. Snowball throwing technique is effectively and much helpfully in increasing students' vocabulary. Thus, the researcher recommends the English teacher to apply this interesting technique at SMP level. Third, the school should provide a lot of media to support the teacher in teaching English especially for vocabulary mastery.

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