

IMPROVING VOCABULARY ACHIEVEMENT THROUGH TOTAL PHYSICAL RESPONSE AMONG GRADE FOUR ELEMENTARY SCHOOL PUPILS

Caroline V Katemba and Kisan Tampubolon
Department of English Education, Universitas Advent Indonesia,
Bandung, Indonesia

Abstract:

This research is on Improving Vocabulary Achievement Through Total Physical Response (TPR) among Grade Four Karyawangi Elementary School Pupils. It is administered to answer question "Is TPR method effective in improving the vocabulary achievement of the pupils?" The data were collected through pre test and post test, administered to 31 students and was analyzed by using t-test. The achievements showed that the mean of the pre-test was 23.06 and the mean of the post-test was 64.11, while the significant = $0.003 < \alpha = 0.05$, thus the conclusion that there is a significant difference in pupils' vocabulary achievement through Total Physical Response (TPR).

Key words: improving vocabulary through TPR, grade four

INTRODUCTION

English is a medium of communication which can help people to interact with one another. Since it is as an international language, it is possible for everyone to communicate with other people around the world if one has the ability to use it. In communication, students need vocabulary which can support them to produce and use meaningful sentences. That is why vocabulary is very important to be mastered. Students sometimes experience difficulties in using vocabulary which have been studied for some reasons.

Richards and Rodgers (1993) mention that TPR method is very effective when teaching and learning vocabulary because it requires initial attention to meaning. However, Richards and Rodgers (1993) estimate that some learners having problems with motor activity and coordination do not have to react to this method positively.

Asher (2009) argues TPR is one of the learning processes which involves the students actively in the classroom activities. It can be effective in delivering explicit instruction in

learning. The effectiveness of the TPR has been shown by the experts in some countries and has given significant improvement of students' achievement in learning English especially vocabulary in target language. As children are physically active by nature, TPR will make language learning especially vocabulary more effective because children feel fun during the learning. This method of instruction "injects the lesson with both physical activity and fun as the students playact their roles and respond to both simple yes/no questions and more complex questions about who, where, when, etc".

Joe's (2009) that TPR trains students to respond quickly and naturally while also teaching vocabulary in a fun, lively lesson. The usage of TPR emphasize in action so students are involved in activities in the process of learning. This circumstance is interesting to students. So by using this method students can accept the lesson easier and faster. Even though Total Physical Response Method is effective to teach vocabulary, teacher needs to think of media to set up the context in delivering the lesson of vocabulary to students. Besides teacher should be willing to create conducive learning.

Aji (2009) insists that teaching has not been an easy work, especially in teaching to elementary school students. Teacher is required to be careful in choosing the appropriate teaching strategy to them if he or she wants to get satisfactory result of teaching. Teaching English vocabulary to young learners need an extra work and an appropriate teaching technique which is adjusted to the students' need. Many strategies can be applied to teach young learners and give very enjoyable activities for them in learning English as a foreign language; one the techniques that are possible to implement is TPR. It involves the elements of fun that make them really enjoy following lesson. The way of teaching used to be based on TPR involves an activity dealing with movements and it is very possible to reduce learners' stress.

Sulkhanudin (2009) states TPR is effective in teaching vocabulary to the fourth graders in Sekolah Dasar Negeri (SDN) 03 Wanarata Tegal.

Indonesian Government has already run the policy and regulation for elementary schools to have English subject in the curriculum. It is one of the concerns of the Indonesian Government to face the era of globalization. It is hoped that the pupils will learn and comprehend English at an early stage. That's why Indonesian government starts English subject in grade one elementary school.

The aim of this study is to see the improvement vocabulary achievement through Total Physical Response among grade four karyawangi elementary school pupils only during the

second semester of the academic year 2009/2010 and to answer the statement of the problem, i.e. **“Is TPR method effective in improving the vocabulary achievement of the pupils?”**. This study involves the grade four karyawangi elementary school pupils in the academic year 2009/2010. The data gathered from the pre test and post test of the TPR.

Null Hypothesis : $H_0 : \mu_1 = \mu_2$ means to say that there is no significant difference in the pupils' vocabulary achievement through TPR.

Research Hypothesis : $H_1 : \mu_1 \neq \mu_2$ means to say that there is a significant difference in the pupils' vocabulary achievement through TPR.

METHODOLOGY

Research Design and Method

The experimental quantitative research method was used in this study. The presentation of this design was described in the following formula:

Table 1
The Design of the Research

PRE-TEST	TREATMENT	POST-TEST
$\bar{X} 1$	T	$\bar{X} 2$

$\bar{X} 1$ = Students' scoring in pre-test. $\bar{X} 2$ = Students' scoring in post-test.

T = Treatment.

Participants

The participants were 31 elementary school pupils at SDN Karyawangi Bandung. Their ages were around 8-13 years old.

Locale and Time of the study

The research was done during the first semester of the school year 2009-2010 at SDN Karyawangi Bandung. The pre-test was administered on November 4, 2009 while the post-test was administered on November 25, 2009.

The Instrument

The researcher used a sample test of Total Physical Response that the researcher made, for both pre-test and post-test as a basic instrument for collecting data. The instrument that was used in gathering data was a vocabulary test by using TPR.

Data Collection

In gathering the data, the researcher used the following procedures: a. pre test: pre test was administered on November 4, 2009 and there were 31 participants. The pre test consisted of 40 items that was designed in form of commands words. b. post test: post test was done on November 25, 2009 and there were 31 participants, to see if there is any improvement in their vocabulary achievement after the implementation of TPR.

A . Pilot test

A pilot test was administered on October 21, 2009 to the grade four pupils at SDN Karyawangi Parongpong, Bandung

The reason for choosing this class is because the respondents have the similar age and English level with the subject of the study. The purpose of this pilot test is to measure the reliability of the instrument.

B. Pre-test

Pre-test was administered on November 4, 2009 and there were 31 participants. The pre-test consisted of 40 items that was designed in the form of command words.

This is the sample test of the pre test:

1. Stand up	2. Sit down
3. Take your book	4. Take your pen
5. Close your eyes	6. Open your eyes
7. Put your left hand on the table	8. Put your right hand on the table
9. Put your both hands on the table	10. Clap your hands once
11. Clap your hands twice	12. Clap your hands three times
13. Clap your hands five times	14. Jump once
15. Jump twice	16. Jump three times
17. Jump once then clap your hands twice	18. Jump three times then clap your hands three times
19. Touch your hair	20. Touch your left ear
21. Touch your right ear	22. Touch your nose
23. Touch your lips	24. Touch your teeth
25. Touch your right knee	26. Touch your left knee
27. Touch your right hand	28. Touch your left hand
29. Open your mouth	30. Close your mouth
31. Touch your head	32. Touch your chest

33. Touch your face	34. Touch your left arm
35. Touch your right arm	36. Touch your right elbow
37. Touch your left elbow	38. Touch your right foot
39. Touch your left foot	40. Touch your left shoulder

B. Post Test.

After doing the treatment on the Total Physical Response Method a post test was administered to the students to see whether there are improvement in the achievement of their vocabulary.

Instrument of Research

The researcher using sample test of Total Physical Response That the researcher made, for both pre test and post test as a basic for collecting data. The instrument that was used in gathering data was vocabulary test by using TPR. The sample test consisted of 40 items for pre test and post test.

Procedures followed in the teaching of TPR adapted from Mora (2009)

1. The teacher says the commands as he himself performs the action.
2. The teacher says the commands as both the teacher and the students then perform the action.
3. The teacher says the commands but only students perform the action.
4. The teacher tells one student at a time to do commands.
5. The roles of teacher and student are reversed. Students give commands to teacher and to other students.
6. The teacher and student allow for command expansion or produce new sentence.

Reliability of the Instrument

Before the items were used as a pre-test and post-test, the researcher made the pilot test first to find out the quality of the items, whether they are reliable and valid. The pilot test was conducted at SDN Karyawangi Parongpong Bandung. 25 students participated in answering the test.

The researcher used Chronbach's Alpha to measure the internal consistency based on the formula: $\alpha = \frac{rk}{1 + [k-1]r}$

And the result is interpreted using criteria as follow:

$\alpha > 0.9$ – excellent

$\alpha > 0.8$ – good

$\alpha > 0.7$ – acceptable

$\alpha > 0.6$ – questionable

$\alpha > 0.5$ – poor

$\alpha < 0.5$ – unacceptable

Determining the Significance

Probability is an opportunity of error for rejecting H_0 . The significance that was used in this research is 0.05 and the testing that was used is testing in one side. The α score explained the error that happened in making the conclusion, $\alpha = 0.05$ means that the result of the research was able to response if the error that was done in research was no more than 5%.

Data Analysis Procedure

In analyzing whether there was a difference and improvement in the Total Physical Response, the researcher did the computation of the data. The computation of the data was 1)

to find the mean of the pre test and post test, 2) to find standard deviation of the pre test and post test, 3) to calculate of the data normal distribution data, 4) to find T-counted (t-test).

Null Hypothesis

$H_o : \mu_1 = \mu_2$ means to say that there is no significant difference in the pupils vocabulary achievement through TPR.

Research Hypothesis

$H_1 : \mu_1 \neq \mu_2$ means to say that there is a significant difference in the pupils vocabulary achievement through TPR.

Data of Test Result

To examine the null and alternative hypothesis, the researcher used t-test to prove whether the null hypothesis is accepted or rejected. The researcher used Statistical Package Service Solution (SPSS) to analysis the statistical result.

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FINDINGS AND DISCUSSION

The descriptive statistics of the pre test and post test scores showed that there is a significant difference in pupils' vocabulary achievement through TPR.

Table 3. Normality

	Shapiro-Wilk		
	Statistic	df	Sig.
Pre_Test	.950	31	.155
Post_Test	.966	31	.427

Table 2 Standardized item alpha

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.726	.769	40

It can be seen from the table above that the instrument were acceptable. The Cronbach's Alpha $\alpha = 0.769$.

Normal distribution

By having the scores from the pre-test, post-test and the t-test, the scores were calculated to see whether the scores were normally distributed or not. The participants were 31, it meant that the participants were big in size. The SPSS was employed to calculate the normal distribution of the data. The following is the hypothesis for normal distribution testing.

The interpretation of the table above, the significance of the pre test is 0.155. It means that the pre test score was normal. The significance of the post test is 0.427. It means that the post test score was normal. H_0 rejected if $\text{Sig} < \alpha$. $\alpha = 0.05$.

CONCLUSION

Based on the above calculation, it can be seen that TPR can improve the students' vocabulary achievement. It can be seen from the result of the pre test, post test and t-test. The pre test has mean of 23.06, post test has mean 64.11 and standard deviation of pre test was 4.06, post test was 8.64 and t-test was 0.003.

BIBLIOGRAPHY

- Aiyavoo, T, (2009), Act out the lesson for easy learning <http://www.hindu.com>. Date Accessed: September 06, 2009. Time: 11:10 AM
- Aji, (2009), Learning vocabulary through TPR <http://www.scribd.com>. Date Accessed: November 13, 2009. Time: 16:32 PM
- Aminudin, (2009), Teaching vocabulary through TPR <http://www.aminudin241072.wordpress.com>. Date Accessed: August 10, 2009. Time:10:15 AM
- Asher, J, (2009), Total Physical Response <http://www.tpr-world.com>. Date Accessed: August 10, 2009. Time: 09:12 AM
- Asher, J, (1974), The total physical response technique of learning. Journal of Special Education
- Cameron, Lynne, (2001). Teaching Language to Young Learners. New York: Cambridge University Press
- Diamond and Gutlohn,L, (2006), Learning vocabulary <http://www.Ldonline.org>. Date Accessed: November 13, 2009. Time: 15:26 PM
- Edge, J, (1993) Essential of English Language Teaching: Longman, New York
- ESL Café's Idea Cookbook, (2009), Teaching TPR <http://www.eslcafe.com>. Date Accessed: September 06, 2009. Time: 11:22 AM
- Harmer, J, (1991) The Practice of English Language Teaching: Longman Group, London
- Joe's, (2009), The effectiveness teaching vocabulary through TPR <http://www.teacherjoe.us/teachersTPR.htm>. Date Accessed: August 10, 2009. Time: 10:21 AM
- Kamil and Hilbert, (2007), Definition of vocabulary <http://www.prel.org>. Date Accessed: November 13, 2009. Time: 15:31 PM
- Kristin, (2009), Total Physical Response <http://www.kopertis2.org>. Date Accessed: September 06, 2009. Time: 09:23 AM

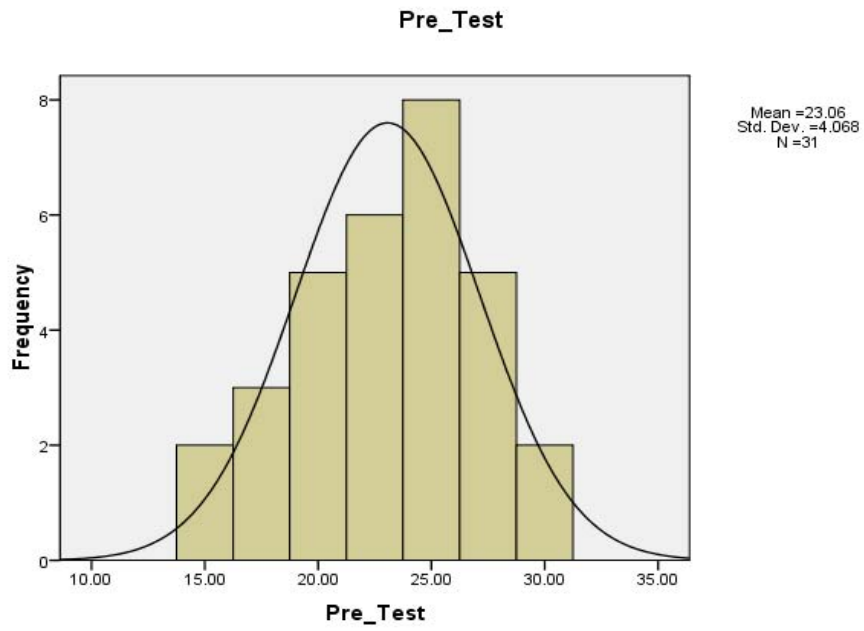
- Linse, L, (2009), The advantages of TPR <http://www.foreignlanguagesweb.com>. Date Accessed: September 06, 2009. Time: 10:55 AM
- Manser, (1991). Oxford Learner's Pocket Dictionary. New Edition. New York: Oxford University Press
- Mora, J.K., (2009), Learning another language through actions <http://www.coe.sdsu.edu>. Date Accessed: August 10, 2009. Time: 09:24 AM
- Nunan, D, (1991) Language Teaching Methodology: Prentice Hall International Ltd
- Richard and Rogers, (1993) Approach and Method on Language Teaching: Cambridge University Press, New York
- Scrivener, (2009), Teaching vocabulary <http://www.dspace.upce.cz>. Date Accessed: September 06, 2009. Time: 11:05 AM
- Stahl, S, (2005), Learning vocabulary <http://www.Ldonline.org>. Date Accessed: November 13, 2009. Time: 15:42 PM
- Steven, W.C., (2009), TPR still a very good idea <http://www.web1.hpu.edu>. Date Accessed: September 06, 2009. Time: 09:44 AM
- Sulkhanudin, (2009), <http://www.perpus.upstegal.ac.id>. Date Accessed: November 08, 2009. Time: 10:09 AM
- Young, D, (2007), Definition of vocabulary <http://www.prel.org>. Date Accessed: November 13, 2009. Time: 15:33 PM

**Table.
Normal**

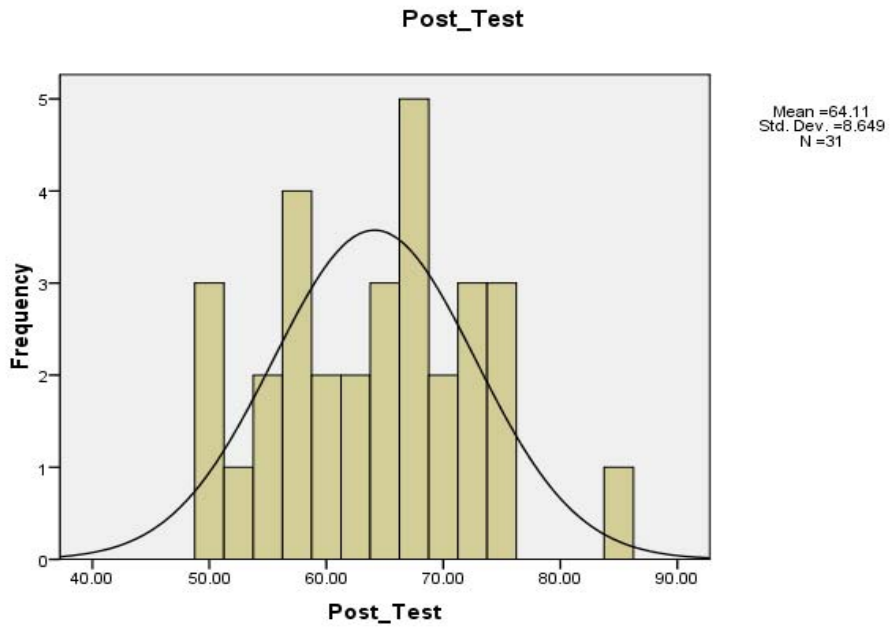
Table 4 .Descriptives			
			Statistic
Pre_Test	Mean		23.0645
	Median		22.5000
	Variance		16.546
	Std. Deviation		4.06764
	Minimum		15.00
	Maximum		30.00
	Range		15.00
Post_Test	Mean		64.1129
	Median		65.0000
	Variance		74.812
	Std. Deviation		8.64938
	Minimum		50.00
	Maximum		85.00
	Range		35.00

Distribution Calculation

Graph Pre-test



Graph Post-test



T-counted (t-test)

Table 5 Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre_Test	23.0645	31	4.06764	.73057
	Post_Test	64.1129	31	8.64938	1.55348

Table 6 Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pre_Test & Post_Test	31	.512	.003

From the computed data above, it is found that the significance of pre test and post test is 0.003. If the significance the pre test and post test was 0.003, it means that there is a significant difference in the pupils' vocabulary achievement through TPR. H_0 is rejected if $\text{Sig} < \alpha$. $\alpha = 0.05$. This shows that there is a significant difference in pupils' vocabulary achievement through TPR.

CONCLUSION

Based on the above calculation, it can be seen that TPR can improve the students' vocabulary achievement. It can be seen from the result of the pre test, post test and t-test. The pre test has mean of 23.06, post test has mean 64.11 and standard deviation of pre test was 4.06, post test was 8.64 and t-test was 0.003.

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- Aiyavoo, T, (2009), Act out the lesson for easy learning <http://www.hindu.com>. Date Accessed: September 06, 2009. Time: 11:10 AM
- Aji, (2009), Learning vocabulary through TPR <http://www.scribd.com>. Date Accessed: November 13, 2009. Time: 16:32 PM
- Aminudin, (2009), Teaching vocabulary through TPR <http://www.aminudin241072.wordpress.com>. Date Accessed: August 10, 2009. Time:10:15 AM
- Asher, J, (2009), Total Physical Response <http://www.tpr-world.com>. Date Accessed: August 10, 2009. Time: 09:12 AM
- Asher, J, (1974), The total physical response technique of learning. Journal of Special Education
- Cameron, Lynne, (2001). Teaching Language to Young Learners. New York: Cambridge University Press
- Diamond and Gutlohn,L, (2006), Learning vocabulary <http://www.Ldonline.org>. Date Accessed: November 13, 2009. Time: 15:26 PM
- Edge, J, (1993) Essential of English Language Teaching: Longman, New York
- ESL Café's Idea Cookbook, (2009), Teaching TPR <http://www.eslcafe.com>. Date Accessed: September 06, 2009. Time: 11:22 AM

- Harmer, J, (1991) The Practice of English Language Teaching: Longman Group, London
- Joe's, (2009), The effectiveness teaching vocabulary through TPR <http://www.teacherjoe.us/teachersTPR.htm>. Date Accessed: August 10, 2009. Time: 10:21 AM
- Kamil and Hilbert, (2007), Definition of vocabulary <http://www.prel.org>. Date Accessed: November 13, 2009. Time: 15:31 PM
- Kristin, (2009), Total Physical Response <http://www.kopertis2.org>. Date Accessed: September 06, 2009. Time: 09:23 AM
- Linse, L, (2009), The advantages of TPR <http://www.foreignlanguagesweb.com>. Date Accessed: September 06, 2009. Time: 10:55 AM
- Manser, (1991). Oxford Learner's Pocket Dictionary. New Edition. New York: Oxford University Press
- Mora, J.K., (2009), Learning another language through actions <http://www.coe.sdsu.edu>. Date Accessed: August 10, 2009. Time: 09:24 AM
- Nunan, D, (1991) Language Teaching Methodology: Prentice Hall International Ltd
- Richard and Rogers, (1993) Approach and Method on Language Teaching: Cambridge University Press, New York
- Scrivener, (2009), Teaching vocabulary <http://www.dspace.upce.cz>. Date Accessed: September 06, 2009. Time: 11:05 AM
- Stahl, S, (2005), Learning vocabulary <http://www.Ldonline.org>. Date Accessed: November 13, 2009. Time: 15:42 PM
- Steven, W.C., (2009), TPR still a very good idea <http://www.web1.hpu.edu>. Date Accessed: September 06, 2009. Time: 09:44 AM
- Sulkhanudin, (2009), <http://www.perpus.upstegal.ac.id>. Date Accessed: November 08, 2009. Time: 10:09 AM
- Young, D, (2007), Definition of vocabulary <http://www.prel.org>. Date Accessed: November 13, 2009. Time: 15:33 PM