APPLYING TOTAL PHYSICAL RESPONSE TO IMPROVE PRIMARY STUDENTS' VOCABULARY RETENTION

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Abstract: *This study explored the application of TPR method to vocabulary teaching in a primary school by carrying out the quasi-experimental method with two groups of students from Quang Son primary school in Tam Diep city, Ninh Binh Province. The data from this experiment is then evaluated and analysed to measure students' vocabulary retention. Based on the findings of the research, it can be concluded that, the students' progress during the teaching and learning activity by using TPR is better. TPR can improve the students' English vocabulary mastery in four aspects: meaning, spelling, pronunciation, and using the words. The most significant improvement was aspect of meaning and using the word in different context. Thus, by applying TPR students can remember the vocabulary longer. On the other words, TPR can enhance vocabulary retention for students.*

Keywords: *Total Physical Response, young learners, vocabulary, vocabulary retention.*

1. Introduction

With the trend of globalization, teaching English to young learners has been attracting a lot of attention all around the world, including Vietnam. In teaching English, teaching vocabulary is an indispensable activity. It is not only about helping students remember the meaning of words but also about helping them to hear words, pronounce words correctly and apply words in communication. So finding the effective teaching methods is an urgent demand of all teachers, especially Primary English teachers. Total Physical Response (TPR), developed by James Asher in 1960s, is a language teaching method which encourages people to combine language learning with physical actions. This study explored the application of TPR method to vocabulary teaching in a primary school by carrying out the quasi-experimental method with two groups of students from Quang Son primary school in Tam Diep city, Ninh Binh Province. In the process of the experiment, one group of students was taught by the TPR teaching method, another group of students was taught by the common traditional teaching method. The data from this experiment is then evaluated and analysed to measure students' vocabulary retention.

2. Theoretical frame of the study

2.1. Learning vocabulary and memorizing words

Learning vocabulary is a complex task. According to Ellis (1995) it involves various

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components: processing auditory and visual input, producing spoken and written output, and knowing the syntactic and semantic relations between words. Before being used to produce meaningful sentences, vocabulary has to be retained in the learners' memory.

Retention is defined as a memory storage process. Atkinson and Shiffrin (1968) described this process throught different stages. First, a new word would be detected by the sense organs and enters the sensory memory. Then, It is paid attention to and transferred to short-term memory. Repetition of information causes a new word to be transmitted to long-term memory. If maintenance rehearsal (repetition) does not occur, the word is removed from short-term memory and lost.

Thus, vocabulary retention can simply be understood as the ability to recall or remember things after an interval of time. Vocabulary retention is an essential factor affecting the success of vocabulary learning. "In language teaching, retention of what has been taught may depends on the quality of teaching, the interest of the learners, or the meaningfulness of the materials" [12].

Therefore, in order to transfer information accurately from working-memory to long-term memory, FL/L2 (foreign or second language) learners need to treat the information actively rather than passively, and interact with the information in meaningful ways [13]. FL/L2 learners also need to look for both relationships and differences between the new information and other information that is already in long-term memory, and link them together [2,11]. One way to transfer the new lexical terms from the short-term memory to the long-term memory is to build a connection through finding some elements "in the mental lexicon" [1, p.179], and attach the new lexical item to those elements [13].

Information transfer in the present research context referred to the transfer of target words from L2 learners' short-term memory to their long-term memory. Thus, learners required some vocabulary learning strategies to acquire information and transfer them to memory for consolidation purposes.

2.2. Total Physical Response

Total Physical Response is abbreviated as TPR. This is a language teaching method developed by the Dr. James - a professor of psychology at San Jose State University, California late 1960s. The TPR method was originated based on the foundation of Asher's own research and theories on second language acquisition. According to Asher (1977), the TPR method relies on the assumption that the human brain is biologically programmed to learn any natural language within interaction. The process of learning a second language or a foreign language is internalized as the process of learning the first language and this process allows for long period of listening and developing comprehension prior to production. For example, interactions between children and their parents often originated in the form of speaking only from the parents followed by a physical response from their kids. Children typically can not speak until they listen to language for a long time, however, they can apprehend what their parents say and respond to them by physical movements in the most natural way.

An other important conditions for successful language learning is the absence of stress. The first language acquisition takes place in a stress-free environ-ment with countless words

of encouragement, positive reinforcing from adults. Therefore, in the second language acquisition, Asher recommends that teachers focus on meaning interpreted through movement, rather than on ab-stract knowledge to liberate the learners from stressful situations to devote full energy to learning.

In short, TPR's nature is a language learning method based on the coordination of speech and action with the priority to develop speaking and listening skills in a comfortable learning environment.

3. Procedure of the study

In this study, we applied TPR to teach students vocabulary with a view to helping them to memorize vocabulary longer. We used Pre-test and Post-test. The Pre-test was the test students take before the treatment to help teachers better understand their students' ability. The Post-test was a test given to students after completion of the treatment It had conjunction with a pre-test to measure students' achievement as well as the effectiveness of the applied method. The pre-test was designed to check students' vocabulary before applying TPR method. The post-tests was designed to know about the English vocabulary retention of students after applying TPR method. One post test was given to the student as soon as all the lessons completed. The other one was given to students 3 weeks later after training.

All the tests were in forms of multiple choice questions, matching gap filling and coloring with 20 test items and the time allowance was 30 minutes for each test. The three tests were in the same level and the same for both groups.

To evaluate how well the tests measure students' vocabulary, we were interested in two concepts: reliability and validity. Reliability represents the consistency of the test. Validity assesses the quality of the test. In this research, the validity and reliability of the tests were measured to give the accurate result.

Before giving the tests to students, the test materials were in terms of the validity in testing the vocabulary knowledge of the students. The tests were valid as the content can measure the students' ability and knowledge in vocabulary.

The reliability of the vocabulary tests was measured by using Kuder-Richardson 21.

The satisfactory reliability coefficient will range from 0 to 1 [8, p.80]. According to Lado (1961), If an English reading test has a reliability coefficient of 0.9 to 0.99, it will be highly reliable. Meanwhile, an English writing test will be highly reliable if it has a reliability coefficient from 0.7 to 0.79. In the data collected, students' scores and the reliability coefficient of the test items in the pre-test, the post-tesst 1 and the post-test 2, the calculation showed as: KR - 21 (pre-test) = 0.70; KR - 21 (post-test 1) = 0.73; KR - 21 (post-test 2) = 0.78. All the results were higher than 0.7 and lower than 0.79; Therefore, the test materials were valid and reliable.

All the pre/post-test scores of students were presented for calculating the reliability coefficient of the test items in Vocabulary Pre-test. However, the results in these appendices were only the correct answers of students not their final scores. In order to make the most

objective assessment about the scores of the two groups, we used the formula of Individual Scores as follows: $X = \frac{R}{N} \times 100$

4. Findings and discussion

At the beginning of the application procedure, the same pre-tests were given to students in both groups to check their vocabulary. All scores ranged from 20 to 75. More than 40% of the tests scored below 5. This is an objective and understandable number because there were vocabulary items that the students have not learnt before. Besides, the average score of students in control group was 44.6 and the average score of students in experimental group was 44,5 This result showed that the vocabulary of students in both groups before training was at the same level.

4.1. Data Analysis of the Post-test 1

Students of two groups were given the same post-test 1 after their lessons. Based on the data collected, the average score of students in control group is 53.2. This is a moderate result, not too high nor too low. The highest score was 85 and there was only three students reached this score, while there were 6 students got the very poor scores. In general, there was an increase in the student's score compared to the pre-test. However, there were still very bad grades and the ratio of good and excellent scores was not high..

The chart below shows the students' scores of the experimental group in post-test 1 which ranged from 40 to 100. Seen in the table, the average score of students in the experimental group in post-test 1 was 71 - a good result - much higher than that of students in the control group. There were 66.6% students got excellent and good scores, while there were only 13.3% students got poor scores and no students got very poor scores.

The mean scores of students in two groups had distinct difference. Students in experimental group taught with TPR method had mean score higher than ones in control group. And here was the comparison between the scores of post-test 1 of students in control and experimental group. From the result shown on the chart below, there was a appreciable difference between scores of students in control group and experimental group.

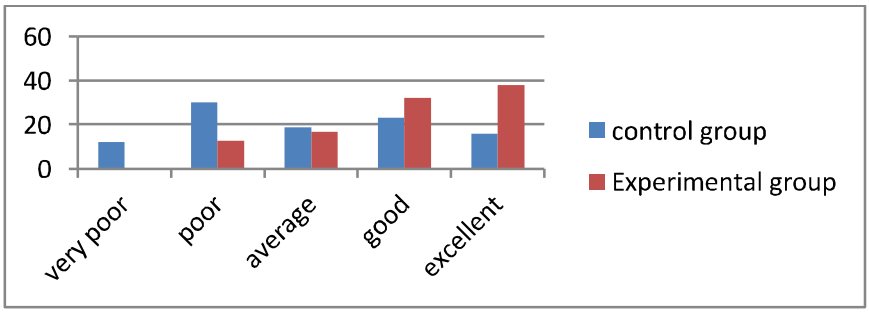

Figure 1. *The comparison between scores in post-test 1 of control and experimental group.*

Based on the chart above it was clear that both groups with two different teaching methods have positive results after 8 weeks of training. However, the mean scores of students in

two groups had distinct difference. Students in experimental group taught with TPR method had mean score higher than ones in control group. The percentage of students with very poor scores was 0% and the percentage of students with poor and enough scores in the experimental group is19,1% lower than the control group, while the percentage of students' scores at all remaining range is higher. Especially, the percentage of students who achieved an excellent score in the experimental group was 38,2%, which is 22.2% higher than that of the control group.

4.2. The results of Data Analysis of the Post-test 2

Three weeks after the lessons, two groups took the post-test 2. The same language items were given to check the memory of students of both groups. The results are shown as follows:

Table 1. *The comparison of control group and experimental group*

Students' scores (X_1)	**Control group**		**Experimental group**		**Qualification**
	Frequencies (f)	**Percentage (%)**	**Frequencies (f)**	**Percentage (%)**	
20	0	12	0	0	Very poor
25	0		0		
30	3		0		
35	3		0		
40	6	30	2	12,7	Poor
45	3		2		
50	2		2		
55	2	18,8	2	17	Average
60	1		2		
65	2		2		
70	2	23,2	2	32,1	Good
75	2		3		
80	1		4		
85	3	16	3	38,2	Excellent
90	0		2		
95	0		2		
100			2		
$\sum X_1 = 1595$ $X_1 = 53,2$ $\sum X_2 = 2130$ $\overline{X_2} = 71$	**30**	**100**	**30**	**100**	

Looking at the data table above, it can be seen that there was a marked decrease in students' scores in the control group. The average score fall from 53.2 to 49.5. There were 6 very poor scores reappeared while the percentage of excellent and good scores decreased from 56.3% to 39.2% compared to the post test 1.

In the post test 2, the scores of students in the experimental group on the post-test 2 did not change much compared to the post-test 1. Among these tests, the lowest scores only stopped at 45 and there were 2 students got the highest score - 100. Meanwhile, the lowest score of students in the post test 1 was 40 and there was only one student scored 100 points.

From the average scores below, when the distance between the two mean scores of Experimental and Control groups was larger from 6.3 to 13.5, it can be seen that after three weeks, the difference is more significant in demonstrating the effectiveness of the TPR method in vocabulary teaching as well as enhancing vocabulary retention for students.

Table 2. *Mean scores of two groups in vocabulary tests*

	Pre-test	Post-test 1	Post-test 2
Experimental group	47	70.3	69.8
Control group	47,1	64	56.3
Difference	0,1	6.3	13.5

The comparison between the scores of two groups are also carried out to see if the difference is of great distinction or not, the results are shown as follows:

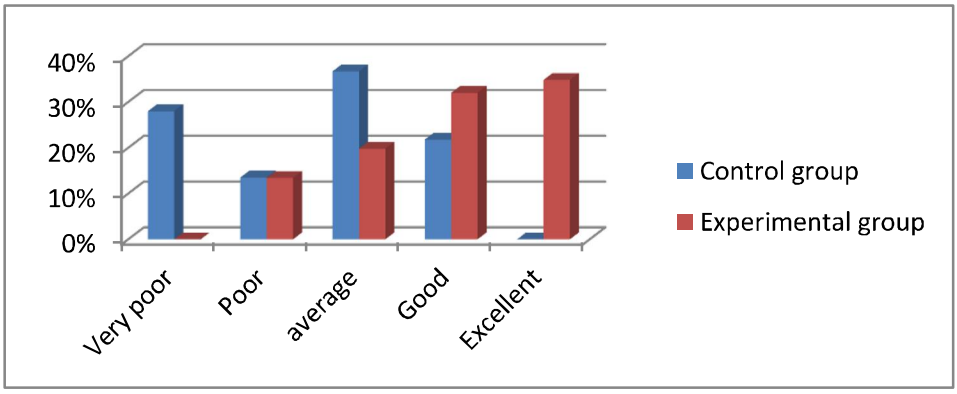

Figure 2. *Comparison between pre-test score and post-test 2 score of the experimental group*

As it can be seen in the chart above, there was a significant change in the pre-test score and post-test 2 score of students in experimental group. The post-test 2 was carried out three weeks after the training to check the memory of students after a period of time from the lessons. After eight weeks trained applying TPR method, the percentage of very poor scores of experimental group students was vanished. Instead of that, the percentage of good scores, especially excellent scores had a drastic increase. This was an significant evidence to the improvement in students' vocabulary memory when applying TPR method.

Consequently, the result of vocabulary tests proved that students who were taught using TPR method had improvement in vocabulary retention. Or in other words, using TPR method to teach vocabulary for third year students is proved effective.

5. Conclusion

Based on the findings of the research, it can be concluded that, the students' progress during the teaching and learning activity by using TPR is better. TPR can improve the students' English vocabulary mastery in four aspects: meaning, spelling, pronunciation, and using the words. The most significant improvement was aspect of meaning and using the

word in different context. It is supported by the result of the post-test is much higher than the result of the pre-test. Teaching using TPR method could help students have better and longer memory of words items. It was demonstrated by the result of the post-test 1 and post-test 2 in both groups. 3 weeks after the post-test 1, students took part in post-test 2. The average score of students in the two groups wassignificantly different. While the experimental group had a very small difference of about 0.5, the control group had a quite big difference of 7.7. Thus, by applying TPR students can remember the vocabulary longer. On the other words, TPR can enhance vocabulary retention for students. Hopefully, it will give a new perspective to the way of teaching vocabulary for Elementary level in order to improve the vocabulary mastery optimally.

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