

ENRICHING VOCABULARY FOR THE FOURTH GRADE STUDENTS OF ELEMENTARY SCHOOL USING TOTAL PHYSICAL RESPONSE

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ABSTRACT

The aim of this research is to find a significant difference between teaching vocabulary using TPR method and teaching vocabulary using conventional method and prove the influences of both. The research was conducted in the form of quasi experiment. The researcher did the experiment using these two classes as a comparison. To analyze the data the writer used statistical calculation of the t-test to determine the final calculation of t_0 (t- observation) that was done to measure the last score of the research test. In analyzing the data, the writer uses the comparative and the influences techniques. This techniques is to prove statistically whether any significant differences and influences between two variables. The processed and analyzed data through the following steps: describing the result of the test of each class, determining interval, mean, modus, median, deviation standard, variance of each class and the last is proving of t-test. The result of the statistic calculation indicated that t-observation (t_0) is higher than t-table (t_t), $5.82 > 2.462$, so the alternative hypothesis (H_a) is accepted and the null hypothesis (H_0) is rejected. And based on the comparison result, it was found that $z_h = 4.64$, $Z_{0.05} = 1.645$, $Z_{0.01} = 2.462$, it concludes that $2.462 < 4.64 > 1.645$, So H_0 rejected if $t_0 > t_{\alpha/2}$. According to the explanation above, we can interpret that teaching vocabulary using Total Physical Response is quite success. It can be proved by the data of students' score of experiment class is higher than controlled class.

A. Background of the Study

The aim of learning English in elementary schools is to introduce English as a foreign language to the elementary students for preparing themselves to go on studying at junior high schools. As we know listening, speaking, reading, and writing are the basic skills in learning a language, with all its aspect such as grammar, vocabulary, and sounds as the elements of language, which support the development of those skills. Therefore, one of the points to learn by students is vocabulary.

It is widely accepted that vocabulary teaching is a part of the syllabus, and taught in a well-planned and regular basis. Vocabulary is one of the most important elements in language besides grammar and pronunciation. In elementary schools, the students are given a set of simple vocabulary to encourage them to learn English, and words which they might find in their environment, such as things in the classroom, at home, around the school, names concerning body parts, and so on. But it is not easy to teach foreign language to elementary students around the age of six to twelve. They are active learners and cannot sit still for longer period. They need more exercise and movement. They also need more physical activities.

Children are different from adults in character. They have short attention and concentration, especially in memorizing vocabulary. The step to make them love vocabulary is started from the way to build it.

In fact, students often find problem in learning the words. The teacher who usually uses the conventional technique in teaching vocabulary as memorization technique does not

stimulate the student to build up their vocabulary because this technique only emphasizes on memorizing words which in many case make them feel bored. Asking children to memorize words with their meaning is usually ineffective, because they remember the meaning is in a short period and sometimes they forget it easily.

Students need something fun and easy to access and memorize words quickly when required. By using a suitable technique, the subject matter will be more interesting and the learning process can be more effective and efficient, therefore the purpose can be achieved.

Many factors influence students' achievement in learning English. One of them is technique or strategy. A technique or strategy is important for class organization. Teachers, especially English, have an important role in the learning process successfully. Not only mastering the subject matter, but also they have to give the materials with a suitable technique.

As a matter of fact, in daily teaching learning process, the students of SDN 3 Tangerang often find difficulties in understanding and memorizing vocabulary given by their teacher. They also lack attention and concentration. They don't pay attention to the teacher. They talk, ignore and play more when their teacher is giving the lesson. However, the students of SDN 3 Tangerang are active. They walk around the class and give a positive response to the teacher; they come forward when the teacher asks them to do so.

To overcome this problem, the writer tries to give an alternative technique to improve students' vocabulary by using Total Physical Response (TPR) method. This method could make the lesson more interesting and fun because they are very active in the learning process and it is quite suitable for elementary school students.

Total Physical response (TPR) heavily utilizes the imperative mood. Commands are an easy way to get learners to listen and to follow the teacher's commands such as; walk to the door, point to the window, point to the blackboard, etc.

B. Theoretical Frame Work and Research Hypothesis

1. Theoretical Frame Work

a. Vocabulary

1) Definition

Many definitions can be found about vocabulary from some experts, but the writer only chooses several of them which are important. Vocabulary is defined as follows:

- a) A list or collection words and phrases usually alphabetically arranged and explained or defined
- b) A sum or stock of words employed by a language group of individuals or work or in a field of knowledge
- c) A list of foreign language text book of the words or phrases taught or used (Merriam Webster, 1986)

Base on definitions below, vocabulary is a set of words known to person or either entity, or that are part of a specific language. The vocabulary of person is defined either as the set of all the words that are understood by that person or the set of all words likely to be used by that person when constructing new sentences. (Marry Finnochiaro, 1989).

2) Kinds of vocabulary

There are two kinds of vocabulary based on several aspects.

First, dealing with the characteristic of the words and kind of acquiring skill by Jo Ann Aeborsold and Marry Lee Field, vocabulary is divided into two kinds:

- a) Active vocabulary, it refers to language item which the learners can use appropriately in speaking and writing, it is also called as productive vocabulary
- b) Passive vocabulary, it refers to language item that can be recognized and understood in the context of reading and listening, it is also called receptive vocabulary.

Seconds, dealing with the user of language by Syah Nous Azimar, vocabulary is divided into:

- a) General vocabulary; the words that are used in general. There is no limitation of field and users.
- b) Special vocabulary; the words that are used in certain fields, jobs, professions or special science and technology. For example: politicians, journalists and lawyers.

3) Vocabulary for Elementary Students

A teacher needs to decide what vocabulary he/she is going to teach to the students. He/she selects the vocabulary that will be useful for the students in order to achieve the goal as stated in the previous chapter; students are able to communicate in English in a simple way. Before teaching vocabulary, a teacher should know the principle in teaching vocabulary. The common principles are:

- a) Based on the students' ability
- b) Suitable for the students' capability
- c) Taught gradually from the easiest to the most difficult

Students are able to understand English words that they encounter in their daily life. They are also able to use the words like in simple conversation. Teacher should decide what vocabulary is needed by elementary students. For example: if the theme is about "classroom"; teacher gives a list of words related to the classroom such as blackboard, wall, window, door, chair, table, etc. For speaking teacher could teach demonstrative, e.g. What is this? (point to the blackboard). This is a blackboard; What is that? (point to the door). That is a door, etc.

There are many language items that can be taught to elementary students such as colors, numbers, parts of body, things in the classroom, greetings, etc.

4) The technique of Teaching Vocabulary

Teaching vocabulary to students seems to be a simple thing to do. In fact, it requires more than translating some words from one language to another. Students need something fun and easy to access the vocabulary quickly when it is required for use. In this section, some techniques to teach and learn vocabulary are offered to facilitate students' need in accessing vocabulary.

What is the role of the teacher? And what is the role of students? Initially, the teacher is a director of all student behavior and the students are imitators of her nonverbal model. For the students at some point (usually after ten to twenty hours of instruction) some students will

be “ready” to speak. And at that point there will be role reversal with individual students directing the teacher and the other students. (faculty.ksu.edu.sa/.../...Total Physical Response)

First, the most common ways in which the vocabulary items are presented in the classroom are visual technique, verbal technique and translation. (Ruth Gairn and Stuart Redman,1986).

- a) Visual technique
They are extensively used for conveying and are particularly useful for teaching concrete items of vocabulary such as places, profession, description, action, and activities such as sport and verbs movement. The technique includes flashcards, photographs, blackboard drawing, wall chart, mime, and gesture.
- b) Verbal technique
They involve the use of spoken or written language. It includes the use of illustrative situation, use of synonym and definition, contrast and opposite, scales and examples.
- c) Translation
This is the last choice to present vocabulary when two of the previous techniques are done.

Second, beginner students learn their vocabulary using commands, using real objects, pictures and communication experiences.(Virginia French Allen, 1983). There are many ways to present vocabulary, teacher as a facilitator has to be able to choose a good and suitable technique to teach and enrich students’ vocabulary. In this research, the writer uses Total Physical Response (TPR) to teach students in SDN 3 Tangerang.

- b. Total Physical Response Method
 - 1) Meaning of Total Physical Response Method

Total Physical Response is a language teaching method built around the coordination of speech and action; it attempts to reach language through physical activity. (Virginia French Allen, 1983)

Total Physical Response is limited to the trace theory of memory in psychology, which holds that the more often or the more intensively a memory connection is traced, the stronger the memory association will be and the more likely it will be recalled. Retracing can be done verbally (e.g., by rote repetition) and/ or in association with motor activity. (Jack C. Richard and Theodore S. Rodgers). Meaning in the target language can often be conveyed through actions. Memory is activated through learner response. Beginning foreign language instruction should address the right hemisphere of the brain, the part which controls nonverbal behavior. (Diana Larsen Freeman, 1986)

In addition, Romo Theresa said that: Total Physical Response for second language learning should be based on model of first language learning. The model has three vital aspects:

- a) Understanding the spoken language must come before speaking
- b) understanding is developed through body movement, and
- c) The listening period creates a readiness to speak.

- 2) Goal of Total Physical Response

The general objective of Total Physical Response is to teach oral proficiency at a beginning level. Comprehension is a means to an end; the ultimate aim is to teach basic

speaking skills. A Total Physical Response method course aims to produce learners who are capable of an uninhibited communication that is intelligible to a native speaker. Specific instructional objectives are not elaborated for as these will depend on the particular needs of the learners. (Jack C. Richard and Theodore S Rodgers)

Asher claiming that, TPR helps reduce the affective filter because it is less threatening than traditional language activities. Students do not have to produce language. Mistakes are unimportant and easily (and painlessly) corrected by the teacher. Language is remembered easily and long-term.

3) Characteristic of Total Physical Response

James Asher said, the characteristics of Total Physical Response method will be summed up as follows:

- a) Meaning in the target language can often be conveyed through actions. Memory is activated through learner response. The target language should be presented in chunks, not just word by word.
- b) The students' understanding of the target language should be developed before speaking.
Students can initially learn one part of the language rapidly by moving their bodies.
- c) The imperative is a powerful linguistic device through which the teacher can direct student behavior.
- d) Students can learn through observing actions as well as by performing the actions themselves.
- e) It is very important that students feel successful.
- f) Students should not be made to memorize fixed routines.
- g) Correction should be carried out in an unobtrusive manner.
- h) Students must develop flexibility in understanding novel combinations of target language chunks.
- i) Language learning is more effective when it is fun.
- j) Spoken language should be emphasized over written language.
- k) Students will begin to speak when they are ready.
- l) Students are expected to make errors when they first begin speaking. Teachers should be tolerant of them. Work on the fine details of the language should be postponed until students have become somewhat proficient.

In his book, Asher also explains about the characteristics of the teaching learning process using TPR, and the writer summarizes as follows:

- a) The first phase of a lesson is one of modeling.
- b) The instructor issues commands to a few students, then performs the actions with them.
- c) In the second phase, these same students demonstrate that they can understand the commands by performing them alone.
- d) The observers also have an opportunity to demonstrate their understanding.
- e) The teacher next recombines elements of the commands to have students develop flexibility in understanding unfamiliar utterances.
- f) These commands, which students perform, are often humorous.
- g) After learning to respond to some oral commands, the students learn to read and write them.
- h) When students are ready to speak, they become the ones who issue the commands.
- i) After students begin speaking, activities expand to include skits and games

4) Advantages and disadvantages of Total Physical Response Method

There are some advantages and disadvantages of Total Physical Response method in teaching learning process.

There are some explanations for advantages and disadvantages of Total Physical Response from BBC British Council (<http://www.teachingenglish.org.uk/think/methodology/tpr.shtml>). 2/12/2008

Advantages

- a) It is a lot of fun, students enjoy it and it can be a real stirrer in the class. It lifts the pace and the mood
- b) It is very memorable. It really helps students to remember phrases or words
- c) It is good for kinesthetic learners who need to be active in the class
- d) It can be used in large or small classes. It doesn't really matter how many students you have as long as you are prepared to take the lead, the students will follow
- e) It works well with mix ability classes. The physical actions get across the meaning effectively so that all the students are able to understand and use the target language
- f) It doesn't require a lot of preparation or materials. As long as you are clear what you want to practice (a rehearsal beforehand can help), it won't take a lot of time to get ready
- g) It is very effective with teenagers and young learners
- h) It involves both left and right brain learning.

From the benefits of Total Physical Response method above, it can be concluded that Total Physical Response method is really important in teaching learning process. It can reduce students' stress and students will be fun and will not be easily bored.

Disadvantages

- a) Students who are not used to such things might find it embarrassing
- b) It is only really suitable for beginner levels
- c) Students are not generally given the opportunity to express their own thought in a creative way
- d) You can't teach everything with it and if used a lot it would become repetitive.

From the disadvantages above, it can be concluded that Total Physical Response (TPR) can make students uncreative, teaching and learning become monotonous and applicable only for beginner learners.

2. The Research Hypothesis

Based on the theoretical framework on the Total Physical Response and the framework of thought justification as described above, the researcher proposes the following research hypothesis: There is a significant difference between teaching vocabulary using TPR method and teaching vocabulary without using conventional method at the fourth grade of SDN 3 Tangerang.

C. Research Methodology

The research was conducted in the form of quasi experiment. This method was adopted because not all conditions could be strictly controlled by the researcher as the research in the

laboratory. The research subjects that would receive the treatment were groups that had been fixed (Campbell DT. and Stanley JC, 1966).

The population of the research is the fourth grade year students of SDN Tangerang 3. There are two classes, namely class 4A and 4B. The total number of population is 78 students.

The researcher did the experiment using these two classes as a comparison. The division of population into two (2) groups, i.e. class 4A and 4B was determined by the school management. Lists of names as well as registration numbers were based on the entrance test during enrollment.

D. Technique of Analyzing the Data

To analyze the data the writer used statistical calculation of the t-test to determine the final calculation of t_o (t- observation) that was done to measure the last score of the research test.

Analyzing the last result by using calculation of the t-test as follow:

1. To find the result of t-test of differences

$$z_h = \sqrt{\frac{SD_1^2}{n_1} + \frac{SD_2^2}{n_2}}$$

Note: SD1 and SD2 are deviation standard's score of each class

N1 and N2 are the total subject of each variable (variable X1 and X2)

2. To find the result of t-test of influences

$$t_o = \frac{MD}{\frac{SD}{\sqrt{N}}}$$

MD Mean of Differences; the average score from the differences gained scores, between X1 variable and X2 variable, which are calculated with the formula:

$$MD = \frac{\sum D}{N}$$

Note: N = Number of cases

$\sum D$ the total score between X1 variable and X2 variable.

D is gained with the formula: $D = X1 - X2$

SD2 the standard error from mean of differences which gained with the formula:

$$SD^2 = \frac{\sum D^2}{N-1} - \frac{(\sum D)^2}{df}$$

SD the standard deviation from the differences between score X1 variable and X2 variable in which is gained with the formula:

$$SD = \sqrt{SD^2}$$

E. Research Finding and Discussion

1. Analysis of the data

In analyzing the data, the writer uses the comparative and the influences techniques. This techniques is useful to prove statistically whether any significant differences and influences between two variables. The processed and analyzed data through the following steps: describing the result of the test of each class, determining interval, mean, modus, median, deviation standard, variance of each class and the last is proving of t-test.

a. Experiment class

The following is the result of the test that is using total physical response (TPR):

Table 4.1
Students' score of Experiment class

Students	Score	students	score	students	Score
1.	75	11.	47.5	21.	77.5
2.	80	12.	57.5	22.	62.5
3.	77.5	13.	100	23.	62.5
4.	60	14.	50	24.	40
5.	82.5	15.	57.5	25.	85
6.	45	16.	90	26.	55
7.	42.5	17.	62.5	27.	65
8.	52.5	18.	50	28.	32.5
9.	85	19.	65	29.	60
10.	47.5	20.	45	30.	77.5

Note: Score of data is range of student's score had been tested 2 times.

b. Controlled class

The following is the result of the test which is using conventional drill (controlled class)

Table 4.2
Students' score of controlled class

Students	score	students	score	students	Score
1	47.5	11	35	21	72.5
2	82.5	12	37.5	22	72.5
3	52.5	13	80	23	50
4	72.5	14	20	24	40
5	77.5	15	60	25	65
6	52.5	16	47.5	26	45
7	37.5	17	77.5	27	75
8	65	18	52.5	28	45
9	37.5	19	37.5	29	35
10	90	20	42.5	30	15

Note: Score of data is range of student's score had been tested 2 times.

After gaining the result of each class, then the writer calculates the comparison's result of t-test to find the differences and the influences of variable X1 and X2.

Table 4.3
The comparison score between teaching vocabulary using TPR (score X1) and without TPR (score X2)

Student	X ₁	X ₂	D (X ₁ -X ₂)	D ² (X ₁ -X ₂) ²
1	75	47.5	27.5	756.25
2	80	82.5	-2.5	6.25
3	77.5	52.5	25	625
4	60	72.5	-12.5	156.25
5	82.5	77.5	5	25
6	45	52.5	-7.5	26.25
7	42.5	37.5	5	25
8	52.5	65	-12.5	156.25
9	85	37.5	47.5	2256.25
10	47.5	90	-42.5	1806.25
11	47.5	35	12.5	156.25
12	57.5	37.5	20	400
13	100	80	20	400
14	50	20	30	900
15	57.5	60	-2.5	6.25
16	90	47.5	42.5	1806.25
17	62.5	77.5	-15	225
18	50	52.5	-2.5	6.25
19	65	37.5	27.5	756.25
20	45	42.5	2.5	6.25
21	77.5	72.5	5	25
22	62.5	72.5	-10	100
23	62.5	50	12.5	156.25
24	40	40	0	0
25	85	65	20	400
26	55	45	10	100
27	65	75	-10	100
28	32.5	45	-12.5	156.25
29	60	35	25	625
30	77.5	15	62.5	3906.25
N=30	∑X=1620	∑Y=1890	∑D= 202.5	∑D²=21668.75

From the table above, the writer looks for the mean, median, and standard deviation of each variable. Based on the result calculation, the writer got the result of mean of variable X1 64.03 and mean of variable X2 52.63. The median of variable X1 was 63.66 and the median of variable X2 was 49.21. The writer found that deviation standard of variable X1 was 16.64 and variable X2 was 19.22.

F. Test of Hypothesis

To prove the truth of the alternative hypothesis (H_a) and the null hypothesis (H₀), it is necessary to compare the t- value resulted from the calculation (t_o) with the t-value that in the table (t_t) as follows:

1. If t_0 is higher than critic value "t" mentioned in the table (with t_t), so the null hypothesis which stated there is no difference of mean of both sample is rejected: it means the difference of mean from both are significant.
2. If t_0 is lower than t_t , so the null hypothesis which stated there is no difference of mean from both samples accepted, it means the mean difference of both samples is not significant, but a difference happens by chance because of sampling error.

Based on the result of statistical calculation, it was found that there are significance influences from TPR technique to students' vocabulary achievement. It was showed from df at significance level 1 % is: 2.462, it is mean that H_0 accepted if $t_0 \geq t_\alpha$ ($t_0 = 5.82 \geq 2.462$). And also there are significant differences between teaching English using TPR and teaching English using conventional drill. It was showed from $z_h = 4.64$, $Z_{0.05} = 1.645$, $Z_{0.01} = 2.462$, it concludes that $2.462 < 4.64 > 1.645$, So H_0 rejected if $t_0 > t_\alpha/2$.

G. Interpretation of the data

Based on the formula above, the result of the statistic calculation indicated that t-observation (t_0) is higher than t-table (t_t), $5.82 > 2.462$, so the alternative hypothesis (H_a) is accepted and the null hypothesis (H_0) is rejected. And based on the comparison result, it was found that $z_h = 4.64$, $Z_{0.05} = 1.645$, $Z_{0.01} = 2.462$, it concludes that $2.462 < 4.64 > 1.645$, So H_0 rejected if $t_0 > t_\alpha/2$.

According to the explanation above, we can interpret that teaching vocabulary using Total Physical Response is quite success. It can be proved by the data of students' score of experiment class is higher than controlled class.

H. Conclusion

Based on the data stated previously, the writer concluded that teaching English using Total Physical Response (TPR) to enrich and improve students' vocabularies is more effective than without. It can be seen from the total scores of experiment class is higher than controlled class. And the result of analysis test show that t_0 (t-observation) is higher than t_t (t-table) in significance level 5% and 1% ($2.045 < 9.41 > 2.756$), so the alternative hypothesis (H_a) is accepted and the null hypothesis (H_0) is rejected. Totally, teaching English using Total Physical Response is more effective than without/ using conventional drill to enrich and improve the students' vocabulary at SDN 3 Tangerang.

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